NATIONALBOARDOFACCREDITATION

SELF ASSESSMENT REPORT (SAR)

FOR FIRST TIME ACCREDITATION OF

UNDERGRADUATE ENGINEERING PROGRAM (TIER-II)

(Electronics & Communication Engineering)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Shri Ram Ki Nangal, Via Sitapura, RIICO
OPP. EPIP Gate, Tonk Road
Jaipur 302022

September-2018

CONTENTS

Part A: Institutional Information

1. Name and Address of the Institution : Jaipur Engineering College and Research Centre, Jaipur Shri Ram Ki Nangal, Via Sitapura, RIICO, OPP. EPIP Gate, Tonk Road, Jaipur 302022

2. Name and Address of the Affiliating University : Rajasthan Technical University, Kota and Akelgarh Rawatbhata Road, Kota 324010

3. Year of establishment of the Institution : 2000

4. Type of Institution:

University	
Deemed University	
Government Aided	
Autonomous	
Affiliated	Yes

5. Ownership Status:

Central Government	
State Government	
Government Aided	
Self Financing	Yes
Trust	
Society	
Section 25 Company	
Any Other (Please Specity)	

6. Other Academic Institutions of the Trust/Society /Company etc, if any

Name of the Institutions (S)	**Year of Establishment**	**Programs of Study**	**Location**
JECRC UDML College of Engineering	Establishment 2007 Year of Closure 2014	CE, CSE, ECE, IT, ME	Kukas, Jaipur
JECRC University	2012	School of Engineering, School of Law, School of Design, School of Hotel Management, School of Management, School of Science and Humanities.	Goner Road, Ramchandrapura, Jaipur
JECRC School of Management	Establishment 2004 Year of Closure 2014	School of Management	Tonk Road, Sitapura, Jaipur
JECRC College of Pharmacy	Establishment 2008 Year of Closure 2010	Pharmacy	Tonk Road, Sitpaura, Jaipur
Mahatma Gandhi Institute of Applied Science	Establishment 2003 Year of Closure 2012	Applied Science	Tonk Road, Sitapura, Jaipur

7. Details of all the programs being offered by the Institution Under Consideration:

1st Shift

S. No	Program Name (B.Tech)	Year	Intake	Increase Intake, if any	Year of Increase	AICTE approval	Accreditation Status
1	Electrical Engineering-60 Electronics & Communication Engineering-60 Computer Science and Engineering-60	2000	180	-	-	13.07.2000	-
2	Electrical Engineering-60 Electronics & Communication Engineering-60 Computer Science and Engineering-60	2001	240	IT-60	2001	14.06.2001	-

	Information Technology-60						
3	Electrical Engineering-60 Electronics & Communication Engineering-60 Computer Science and Engineering-90 Information Technology-60 Biotech-30	2002	300	Biotech-30 CSE-30	2002	20.06.2002	-
4	Electrical Engineering-60 Electronics & Communication Engineering-60 Computer Science and Engineering-90 Information Technology-60 Biotech-30 Mechanical Engineering-60	2003	360	ME-60	2003	12.05.2003	-
5	Electrical Engineering-60 Electronics & Communication Engineering-90 Computer Science and Engineering-120 Information Technology-60 Biotech-30 Mechanical Engineering-60 MBA-60	2004	480	ECE-30 CSE-30 MBA-60	2004	25.06.2004	-
6	Electrical Engineering-60 Electronics & Communication Engineering-90 Computer Science and Engineering-120 Information Technology-60 Biotech-30 Mechanical Engineering-60 MBA-60	2005	480	-	-	27.06.2005	-
7	Electrical Engineering-60 Electronics & Communication Engineering-90 Computer Science and	2006	480	-	-	20.06.2006	-

	Engineering-120 Information Technology-60 Biotech-30 Mechanical Engineering-60 MBA-60						
8	Electrical Engineering-60 Electronics & Communication Engineering-90 Computer Science and Engineering-120 Information Technology-60 Biotech-30 Mechanical Engineering-60 MBA-60	2007	480	-	-	21.05.2007	-
9	Electrical Engineering-30 Electronics & Communication Engineering-120 Computer Science and Engineering-120 Information Technology-90 Mechanical Engineering-60 MBA-60	2008	480	ECE-30 IT-30 **Decrease-** EE-30 Biotech-30	-	22.07.2008	-
10	Civil Engineering-60 Electrical Engineering-60 Electronics & Communication Engineering-120 Computer Science and Engineering-120 Information Technology-90 Mechanical Engineering-90 MBA-60	2009	600	EE-30 ME-30 CE-60	2009	23.08.2010	2 Branch (CSE & ECE) dated 02.03.2009
11	Civil Engineering-60 Electrical Engineering-60 Electronics & Communication Engineering-120 Computer Science and Engineering-120 Information Technology-90 Mechanical Engineering-90 MBA-60	2010	600	-	-	23.08.2010	2 Branch (CSE & ECE) dated 02.03.2009
12	Civil Engineering-60 Electrical Engineering-60	2011	660	ECE-60	2011	01.09.2011	2 Branch (CSE & ECE)

	Electronics & Communication Engineering-180						dated 02.03.2009
	Computer Science and Engineering-120						
	Information Technology-90						
	Mechanical Engineering-90						
	MBA-60						
13	Civil Engineering-120	2012	870	CE-60 ECE-60 ME-30 ME-II-60	2012	10.05.2012	-
	Electrical Engineering-60						
	Electronics & Communication Engineering-240						
	Computer Science and Engineering-120						
	Information Technology-90						
	Mechanical Engineering-120						
	Mechanical Engineering-II-60						
	MBA-60						
14	Civil Engineering-120	2013	1050	EE-60 CSE-60 CSE-II-60	2013	19.03.2013	-
	Electrical Engineering-120						
	Electronics & Communication Engineering-240						
	Computer Science and Engineering-180						
	Information Technology-90						
	Mechanical Engineering-120						
	Mechanical Engineering-II-60						
	Computer Science-II-60						
	MBA-60						
15	Civil Engineering-120	2014	990	Decreased seats MBA -60	-	02.07.2014	-
	Electrical Engineering-120						
	Electronics & Communication Engineering-240						
	Computer Science and Engineering-180						
	Information Technology-90						
	Mechanical Engineering-120						
	Mechanical Engineering-II-60						
	Computer Science-II-60						
16	Civil Engineering-120	2015	990	-	-	07.04.2015	-

	Electrical Engineering-120 Electronics & Communication Engineering-240 Computer Science and Engineering-180 Information Technology-90 Mechanical Engineering-120 Mechanical Engineering-II-60 Computer Science-II-60						
17	Civil Engineering-120 Electrical Engineering-120 Electronics & Communication Engineering-240 Computer Science and Engineering-180 Information Technology-90 Mechanical Engineering-120 Mechanical Engineering-II-60 Computer Science-II-60	2016	990	-	-	05.04.2016	-
18	Civil Engineering-120 Electrical Engineering-120 Electronics & Communication Engineering-240 Computer Science and Engineering-180 Information Technology-90 Mechanical Engineering-120 Mechanical Engineering-II-60 Computer Science-II-60	2017	990	-	-	30.03.2017	-
19	Civil Engineering-120 Electrical Engineering-120 Electronics & Communication Engineering-240 Computer Science and Engineering-180 Information Technology-90 Mechanical Engineering-120 Mechanical Engineering-II-60	2018	990	-	-	04.04.2018	CSE,ECE,ME Eligible and applying Ist time IT,EE,CE-Eligible but not applied

	Computer Science-II-60						

2nd Shift

S. No	Program Name (B.Tech)	Year of Start	Intake	Increase Intake, if any	Year of Increase	AICTE approval	Accreditation
1	Mechanical Engineering-60	2012	60	-	-	10.05.2012	-
2	Computer Science and Engineering-60 Mechanical Engineering-60	2013	120	60	2013	19.03.2013	-
3	Computer Science and Engineering-60 Mechanical Engineering-60	2014	120	-	-	02.07.2014	-
4	Computer Science and Engineering-60 Mechanical Engineering-60	2015	120	-	-	07.04.2015	-
5	Computer Science and Engineering-60 Mechanical Engineering-60	2016	120	-	-	05.04.2016	-
6	Computer Science and Engineering-60 Mechanical Engineering-60	2017	120	-	-	30.03.2017	-
7	Computer Science and Engineering-60 Mechanical Engineering-60	2018	120	-	-	04.04.2018	CS & ME Eligible but not applied

Write Applicable One:

- Applying first time
- Granted Provisional Accreditation for two/three years for the period (specify period)
- Granted accreditation for 5/6 years for the period (specify period)
- No accredited (Specify visit dates, year)
- Withdrawn (Specify vision dates, year)
- Not eligible for accreditation
- Eligible but not applied

8. Program to be Considered for Accreditation vide this application:

S. No	Program name
1	Computer Science and Engineering
2	Electronics & Communication Engineering
3	Mechanical Engineering

9. Total Number of employees in the Institution:

A. Regular* Employee (Faculty and Staff)

Items		CAY+1 (2018-19)	CAY		CAYm1		CAYm2	
		No. of Faculty	Min	Max	Min	Max	Min	Max
Faculty in Engineering	M	122	120	132	114	129	102	117
	F	58	57	71	56	61	39	61
Faculty in Math, Science & Humanities	M	10	9	14	13	17	15	17
	F	18	20	25	24	29	21	28
Non-Teaching Staff	M	111	91	106	87	100	81	93
	F	13	12	14	12	13	9	12

B. Contractual Staff Employees (Faculty and Staff): (Non Covered in Table A)

C.

Items		CAY+1 (2018-19)	CAY		CAYm1		CAYm2	
		No. of Faculty	Min	Max	Min	Max	Min	Max
Faculty in Engineering	M	0	7	7	7	7	6	6
	F	0	0	0	0	0	0	0
Faculty in Math, Science & Humanities	M	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
Non-Teaching Staff	M	1	0	0	0	0	0	0
	F	0	0	0	0	0	0	0

10. Total Number of Engineering Students:

Item	CAY+1 (2018-19)	CAY	CAYm1	CAYm2
Total No. of boys	3312	3457	3499	3410
Total No. of Girls	686	750	811	815
Total No. of Students	3998	4207	4310	4225

11. Vision of the Institution:
    - To become a renowned centre of outcome based learning and work toward academic, professional, cultural and social enrichment in the lives of individuals and communities.

12. Mission of the Institution:
    - Focus on evaluation of learning outcome and motivate students to inculcate research aptitude by project based learning.
    - Identity based on informed perception of Indian, regional and global needs and the areas of focus and provide platform to gain knowledge and solutions.
    - Offer opportunities for interaction between academia and industry.
    - Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

13. Contact Information of the Head of the Institution and NBA Coordinator, If designated:
    1. Name : Dr. Vinay Kumar Chandna
    2. Designation : Principal
    3. Mobile No. : 9891406784
    4. Email ID : principal@jecrcmail.com

14. NBA Coordinator, if designated:
    1. Name : Mr. Manish Jain
    2. Designation : Dy. Director (Special Projects)
    3. Mobile No. : 7229823455
    4. Email ID : dydirector.sp@jecrc.ac.in

Part B: Criteria Summary

Name of the Program: Electronics & Communication Engineering

S.No.	Criteria	Mark/ Weight
	Program Level Criteria	
1	Vision, Mission and Program Educational Objectives	60
2	Program Curriculum and Teaching – Learning Processes	120
3	Course Outcomes and Program Outcomes	120
4	Students' Performance	150
5	Faculty Information and Contributions	200
6	Facilities and Technical Support	80
7	Continuous Improvement	50
	Institute Level Criteria	
8	First Year Academics	50
9	Student Support Systems	50
10	Governance, Institutional Support and Financial Resources	120
	Total	1000

CRITERION 1	Vision, Mission and Program Educational Objectives	60

1. VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

1.1 State the Vision and Mission of the Department and Institute (5)

(Vision statement typically indicates aspirations and Mission Statement states the broad approach to achieve aspirations)

(Here Institute Vision and Mission statements have been asked to ensure consistency with the department Vision and Mission statements; the assessment of the Institute Vision and Mission will be taken up in Criterion 10)

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VISION OF ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics & Communication Engineering to meet the needs of Global Industry.

MISSION OF ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

M1. To equip the students with strong foundation of basic sciences and domain knowledge of Electronics & Communication Engineering, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.

M2. To induce the habits of lifelong learning in order to continuously enhance overall performance.

M3. Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.

M4. To make the students responsive towards the ethical, social, environmental and economical growth of the society.

VISION OF JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

To become a renowned center of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

MISSION OF JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.

M3. Offer opportunities for interaction between academia and industry.

M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Vision of the Institute / Vision of the Department	To become a renowned center of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.
To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	H

Table 1.1.1: Mapping of Institute vision with department Vision

Justification:

The above table shows the consistency of Vision of institue with vision of the department. The reasons behind marking High, Medium and Low are as follows:

Vision is divided into keywords and then correlation is checked with vision of institute.

After taking the feedback from all the faculty members of the department if the consistency found is above 90%, (✓) is marked. If consistency is found between 75-90%, the particular block is left blank.

Why High:

If (✓) is marked in all blocks i.e. all the keywords of vision are found consistent with the vision of institute so it must be rated high.

Medium:

If ✓ is marked in 50% or above blocks i.e. Vision is moderately consistent with the vision of the department.

Vision of Institute / Keywords Of Vision of ECE	To become a renowned center of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.
Contribute in scientific education	✓
Contribute in technical education	✓
Contribute to society	✓
Global existence	✓

Table 1.1.2: Justification of mapping of Institute vision with department Vision

Mapping of Institute Mission with department Mission

Mission of the Institute / Mission of the Department	Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.	Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.	Offer opportunities for interaction between academia and industry.	Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.
To equip the students with strong foundation of basic sciences and domain knowledge of Electronics & Communication Engineering, so that they are able to creatively apply their knowledge to design	H	M	H	M

solution of problems arising in their career path.				
To induce the habits of lifelong learning in order to continuously enhance overall performance.	H	M	H	H
Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	H	H	H	H
To make the students responsive towards the ethical, social, environmental and economical growth of the society.	M	H	H	H

Table 1.1.3: Mapping of Institute Mission with department Mission

Justification:

The above table shows the consistency of mission of institue with mission of the department. The reasons behind marking High, Medium and Low are as follows:

Mission is divided into keywords and then correlation is checked with mission of institute.

After taking the feedback from all the faculty members of the department if the consistency found is above 90%, (✓) is marked. If consistency is found between 75-90%, the particular block is left blank.

Why High:

If (✓) is marked in all blocks i.e. all the keywords of mission are found consistent with the mission of institute so it must be rated high.

Medium:

If ✓ is marked in 50% or above blocks i.e. mission is moderately consistent with the mission of the department.

Mission of Institute / M1 of ECE Keywords	Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.	Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.	Offer opportunities for interaction between academia and industry.	Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.
Knowledge of basic sciences	✓		✓	
Knowledge of ECE	✓	✓	✓	✓
Apply knowledge for designing.	✓	✓	✓	✓

Table 1.1.4: Justification of **mapping of Institute Mission with department Mission 1**

Mission of Institute / M2 of ECE Keywords	Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.	Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.	Offer opportunities for interaction between academia and industry.	Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.
Lifelong learning	✓	✓	✓	✓
Overall performance	✓		✓	✓

Table 1.1.5: Justification of **mapping of Institute Mission with department Mission 2**

Mission of Institute / M3 of ECE Keywords	Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.	Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.	Offer opportunities for interaction between academia and industry.	Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.
Communication skills	✓	✓	✓	✓
Team work	✓	✓	✓	✓

Table 1.1.6: Justification of **mapping of Institute Mission with department Mission 3**

Mission of Institute / M4 of ECE Keywords	Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.	Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.	Offer opportunities for interaction between academia and industry.	Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.
Ethical values		✓	✓	✓
Social responsibility	✓	✓	✓	✓
Environmental growth		✓	✓	✓
Economical growth	✓	✓	✓	✓

Table 1.1.7: Justification of **mapping of Institute Mission with department Mission 4**

1.2 State the Program Educational Objectives (PEOs) (5)

(State the PEOs (3 to 5) of program seeking accreditation)

Program Educational Objectives

PEO1. To provide students with the fundamentals of engineering sciences with more emphasis in Electronics & Communication Engineering by way of analyzing and exploiting electronics & communication challenges.

PEO2. To train students with good scientific and Electronics & Communication Engineering knowledge so as to comprehend, analyze, design and create electronics & communication based novel products and solutions for the real life problems.

PEO3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate Electronics & Communication Engineering with social issues.

PEO4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful Electronics & Communication Engineering professional career.

PEO5. To prepare students to excel in electronics & communication based industry and higher education by educating students in Electronics & Communication Engineering field along with high moral values and knowledge.

1.3. Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

(Describe where (websites, curricula, posters etc.) the Vision, Mission and PEOs are published and detail the process which ensures awareness among internal and external stakeholders with effective process implementation)

(Internal stakeholders may include Management, Governing Board Members, faculty, support staff, students etc. and external stakeholders may include employers, industry, alumni, funding agencies, etc.)

Places/person where Vision, Mission and PEOs are published and disseminated

- College Website www.jecrc.in
- Departmental News Letter
- College Magazine
- Department Library
- Faculty Course File
- HOD Office
- Board Room
- Board of Governers Meeting
- Placement Office`
- Alumini Connect Cell
- Faculty Rooms
- Class Rooms
- Notice Boards
- Laboratories
- Student
- Faculty
- Alumni
- Parents
- Professional Bodies (IEEE, IETE, CSI, ISTE)
- Industry persons

1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

(Articulate the process for defining the Vision and Mission of the department and PEOs of the program)

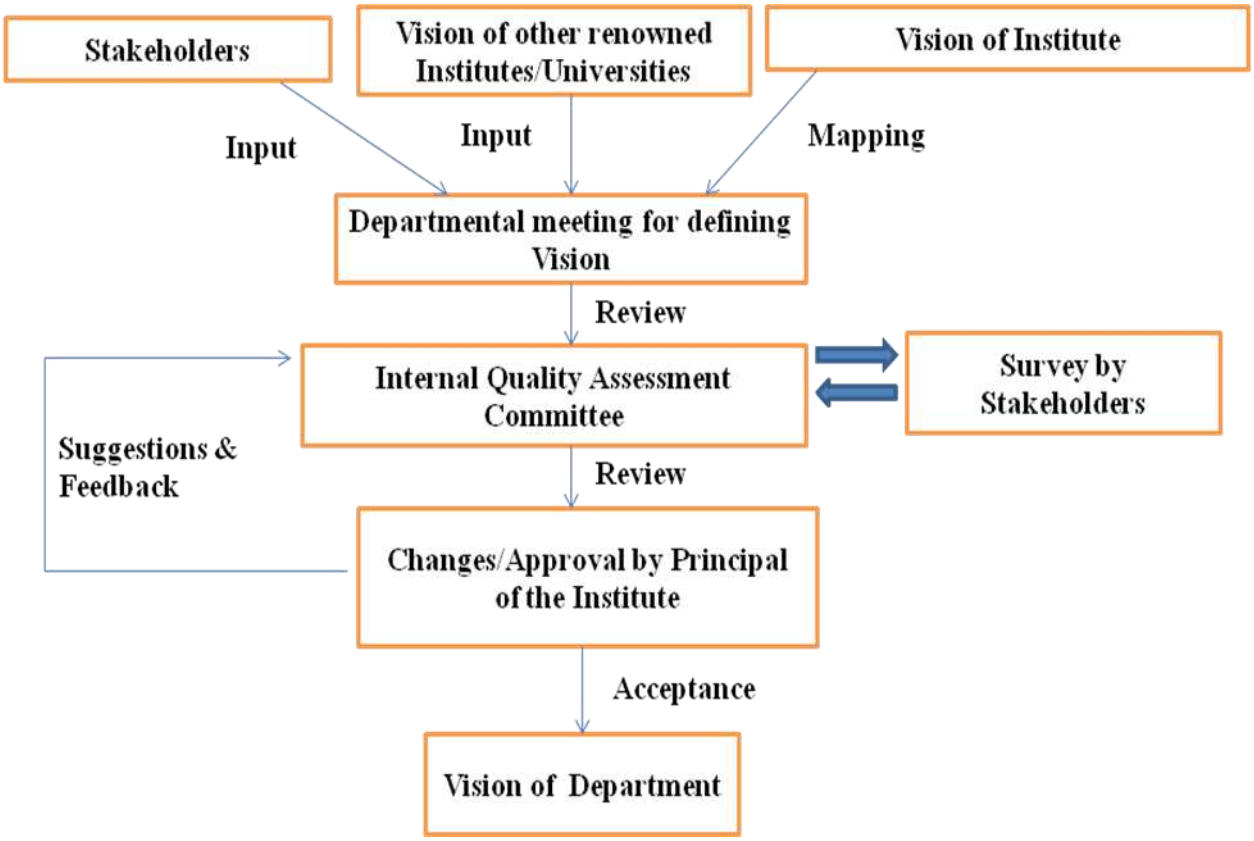
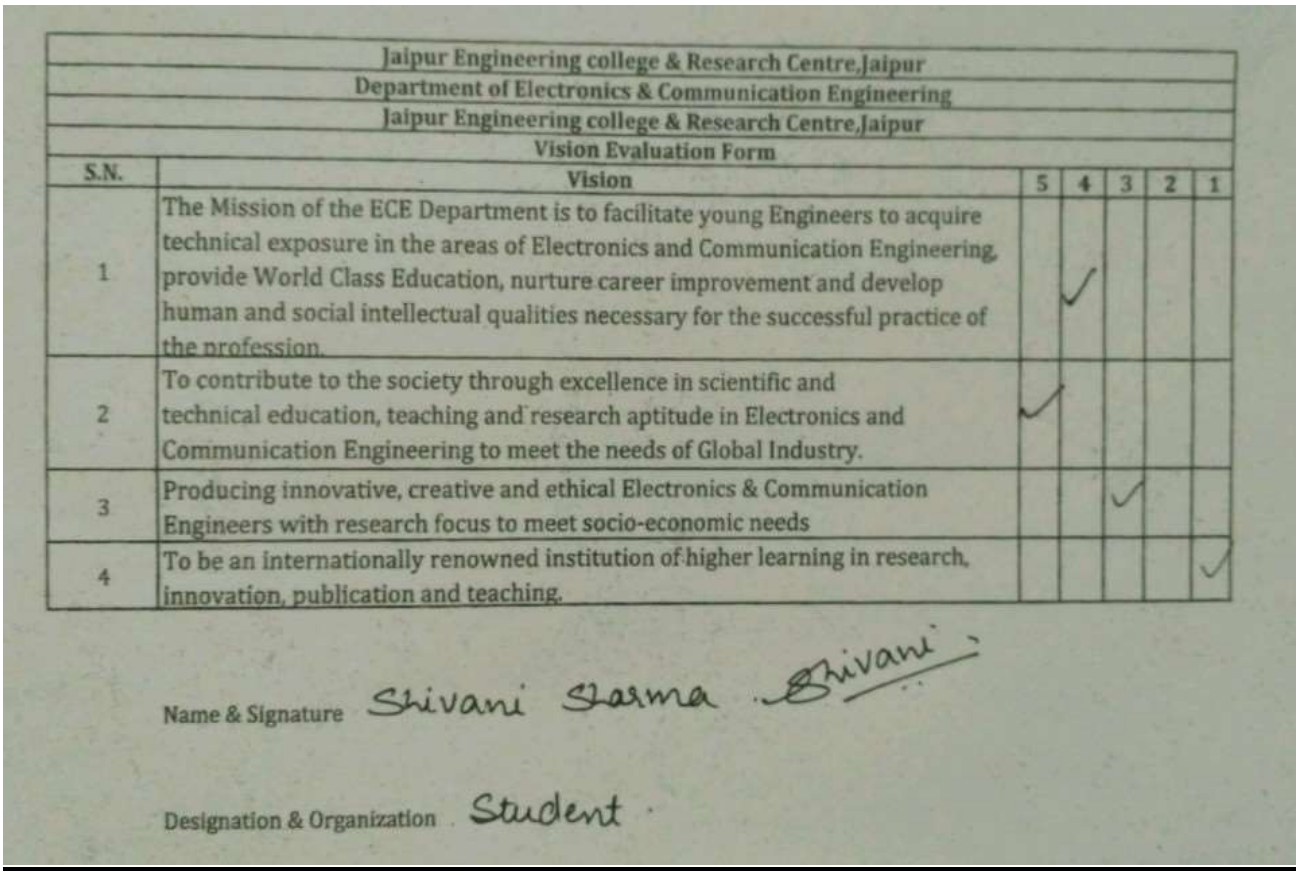


Figure 1.1 Flowchart of defining Vision

With the active participation of HOD, Internal Quality Assessment Committee, faculty members and staff along with the continuous feedback from stakeholders, the Vision and Mission statement of the department was developed in alignment with Vision and Mission of the Institute.

- These statements are discussed further among faculty members before finalization.
- These statements are discussed among students also before finalization.
- The new Vision and Mission statements are sent to the Internal Quality Assessment Committee for changes.

Finally the Vision and Mission are approved by the Principal of Institution.



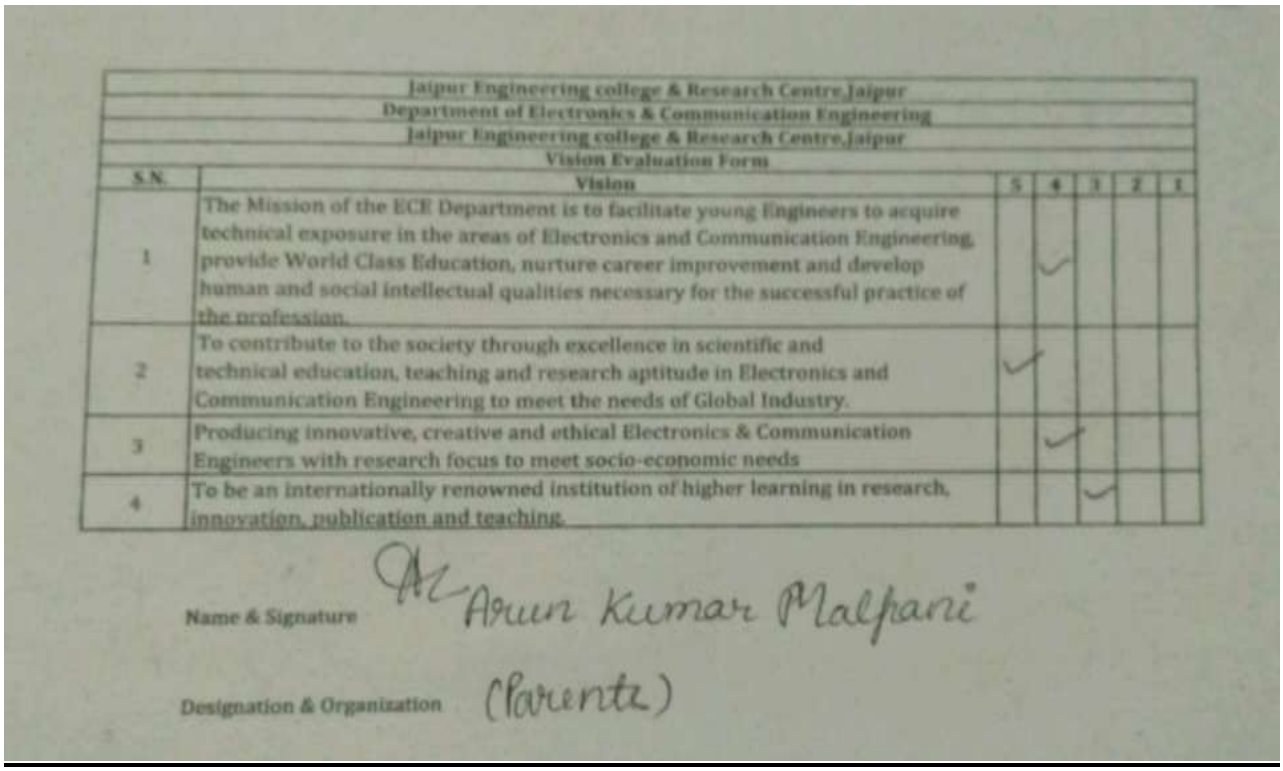
Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Vision Evaluation Form

S.N.	Vision	5	4	3	2	1
1	The Mission of the ECE Department is to facilitate young Engineers to acquire technical exposure in the areas of Electronics and Communication Engineering, provide World Class Education, nurture career improvement and develop human and social intellectual qualities necessary for the successful practice of the profession.		✓			
2	To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	✓				
3	Producing innovative, creative and ethical Electronics & Communication Engineers with research focus to meet socio-economic needs			✓		
4	To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.					✓

Name & Signature Shivani Sharma Shivani

Designation & Organization Student

Student Feedback Form of Vision



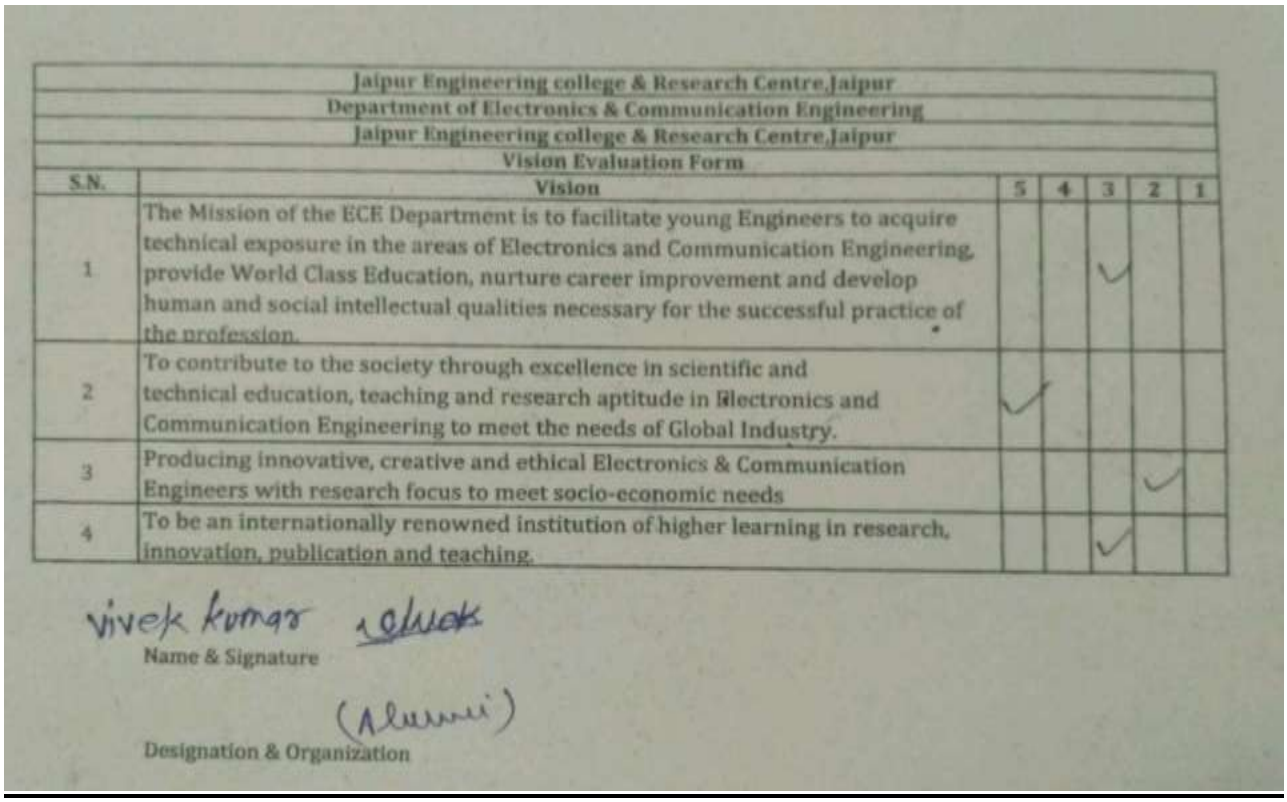
Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Vision Evaluation Form

S.N.	Vision	5	4	3	2	1
1	The Mission of the ECE Department is to facilitate young Engineers to acquire technical exposure in the areas of Electronics and Communication Engineering, provide World Class Education, nurture career improvement and develop human and social intellectual qualities necessary for the successful practice of the profession.		✓			
2	To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	✓				
3	Producing innovative, creative and ethical Electronics & Communication Engineers with research focus to meet socio-economic needs		✓			
4	To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.			✓		

Name & Signature Arun Kumar Malpani

Designation & Organization (Parents)

Parents Feedback Form of Vision



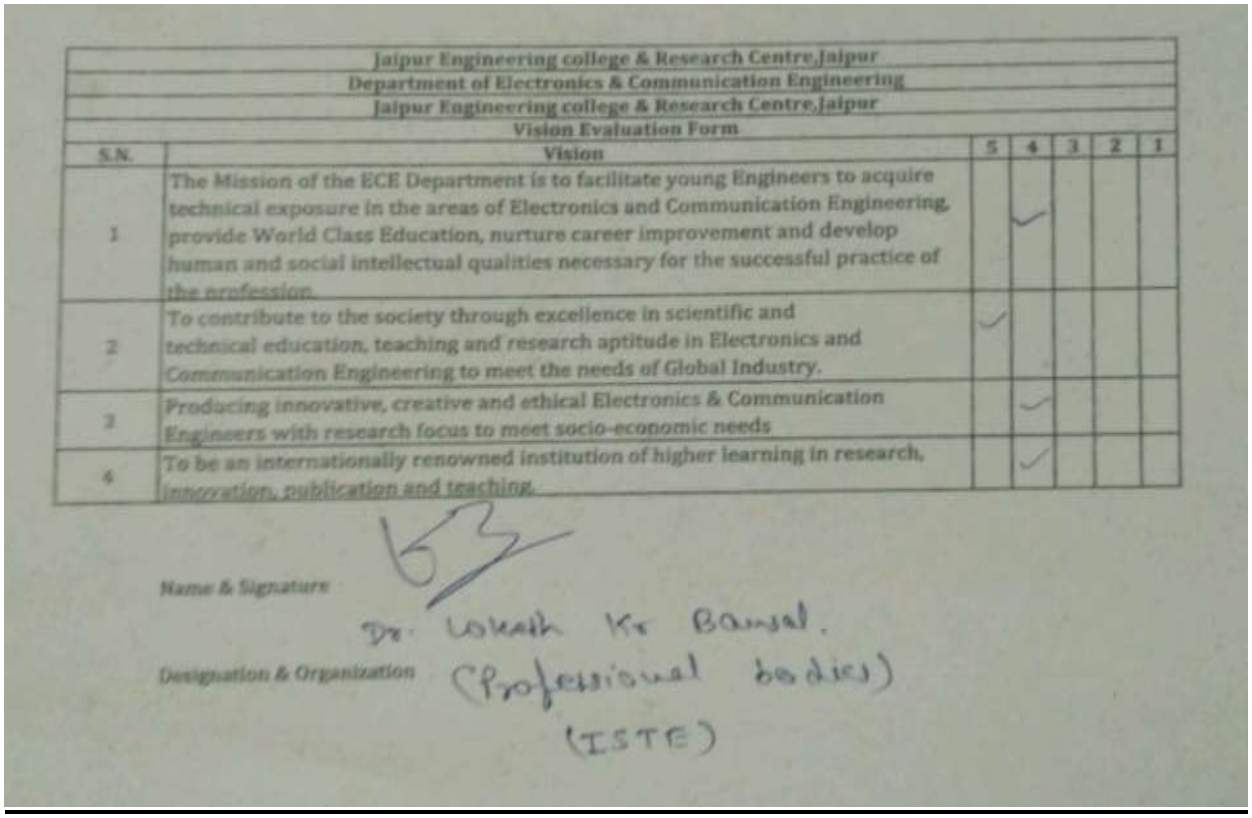
Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Vision Evaluation Form

S.N.	Vision	5	4	3	2	1
1	The Mission of the ECE Department is to facilitate young Engineers to acquire technical exposure in the areas of Electronics and Communication Engineering, provide World Class Education, nurture career improvement and develop human and social intellectual qualities necessary for the successful practice of the profession.			✓		
2	To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	✓				
3	Producing innovative, creative and ethical Electronics & Communication Engineers with research focus to meet socio-economic needs				✓	
4	To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.			✓		

vivek kumar
Name & Signature

(Alumni)
Designation & Organization

Alumni Feedback Form of Vision



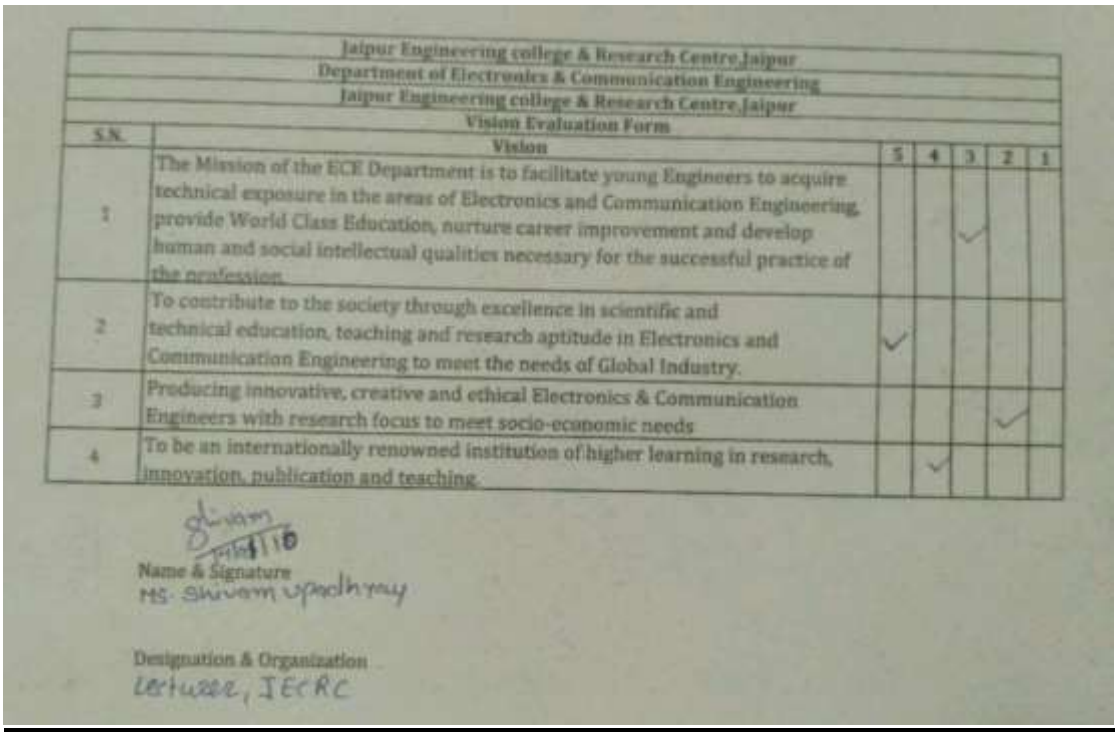
Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Vision Evaluation Form

S.N.	Vision	5	4	3	2	1
1	The Mission of the ECE Department is to facilitate young Engineers to acquire technical exposure in the areas of Electronics and Communication Engineering, provide World Class Education, nurture career improvement and develop human and social intellectual qualities necessary for the successful practice of the profession.		✓			
2	To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	✓				
3	Producing innovative, creative and ethical Electronics & Communication Engineers with research focus to meet socio-economic needs		✓			
4	To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.		✓			

Name & Signature

Dr. Lokesh Kr Bansal.
Designation & Organization (Professional bodies)
(ISTE)

Professional body Feedback Form of Vision



Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Vision Evaluation Form

S.N.	Vision	5	4	3	2	1
1	The Mission of the ECE Department is to facilitate young Engineers to acquire technical exposure in the areas of Electronics and Communication Engineering, provide World Class Education, nurture career improvement and develop human and social intellectual qualities necessary for the successful practice of the profession.			✓		
2	To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics and Communication Engineering to meet the needs of Global Industry.	✓				
3	Producing innovative, creative and ethical Electronics & Communication Engineers with research focus to meet socio-economic needs				✓	
4	To be an internationally renowned institution of higher learning in research, innovation, publication and teaching		✓			

Name & Signature
MS. Shivam Upadhyay

Designation & Organization
Lecturer, JECRC

Faculty Feedback Form of Vision

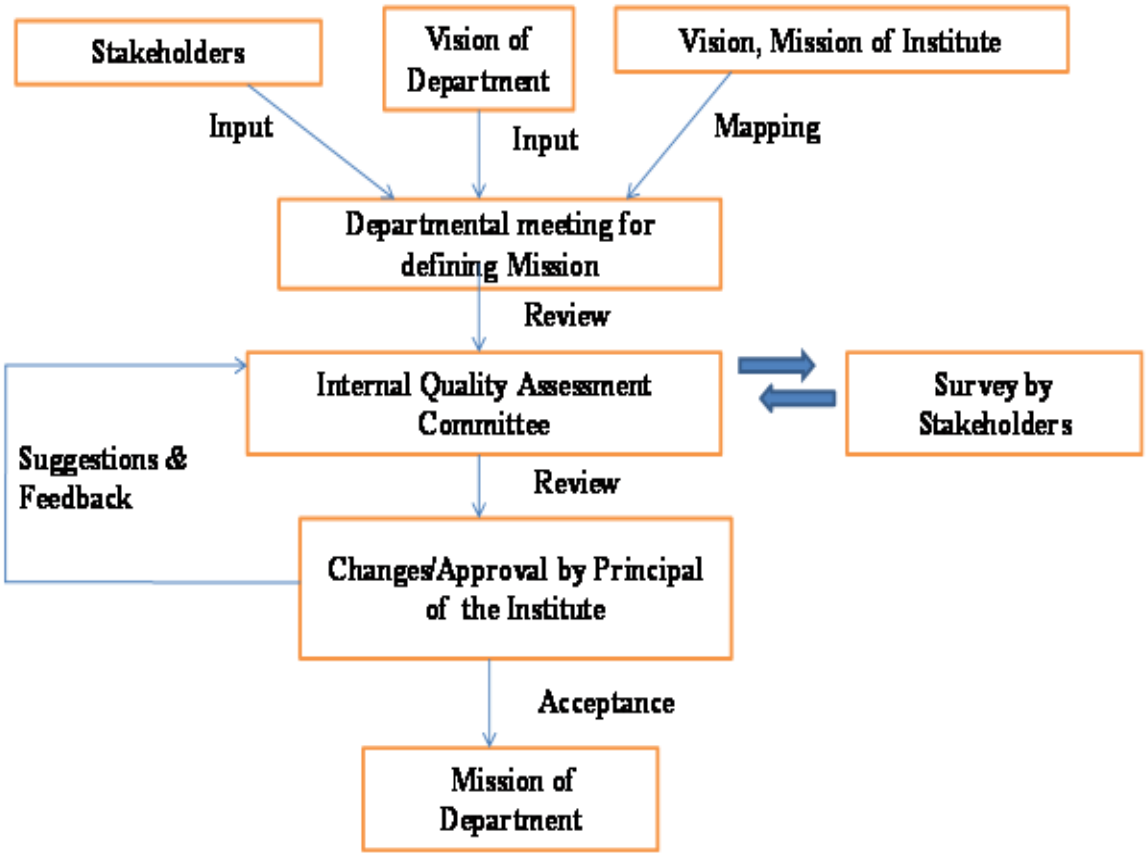
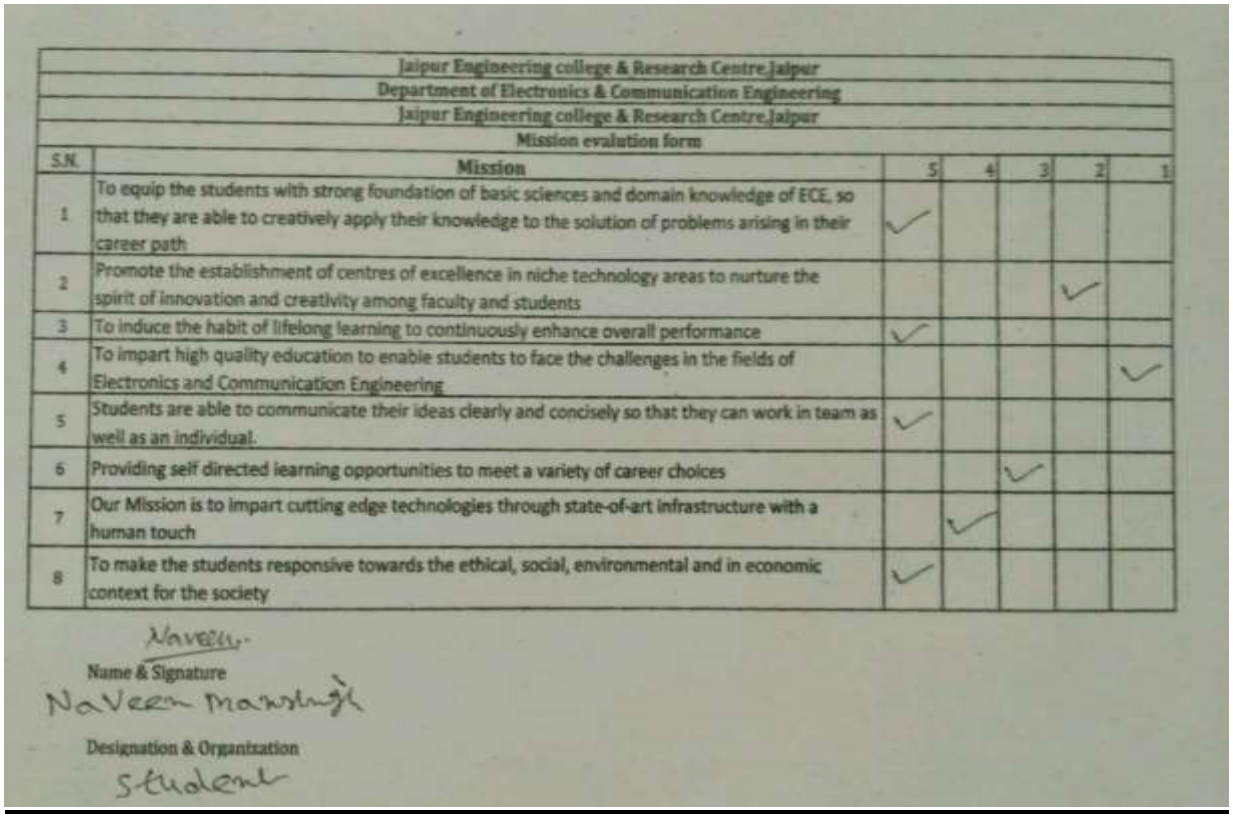


Figure 1.2 Flowchart of defining Mission

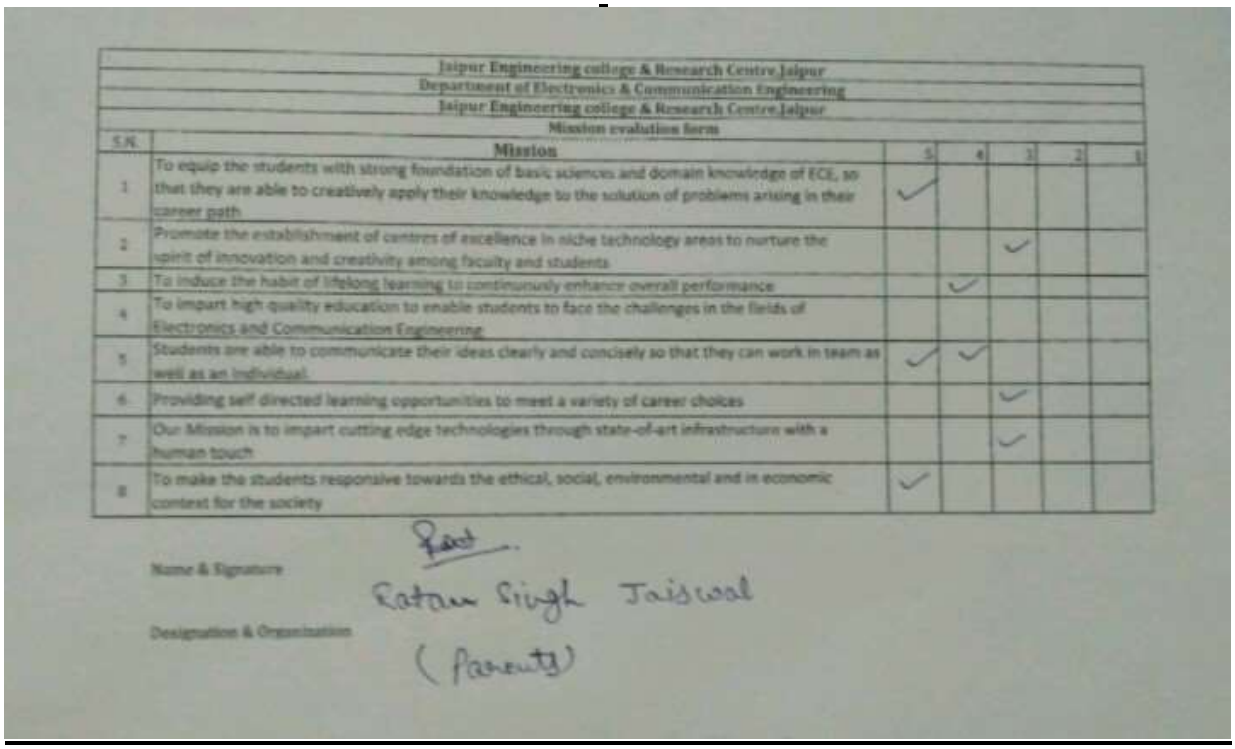


Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Mission evalution form

S.N.	Mission	5	4	3	2	1
1	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution of problems arising in their career path	✓				
2	Promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students				✓	
3	To induce the habit of lifelong learning to continuously enhance overall performance	✓				
4	To impart high quality education to enable students to face the challenges in the fields of Electronics and Communication Engineering					✓
5	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	✓				
6	Providing self directed learning opportunities to meet a variety of career choices			✓		
7	Our Mission is to impart cutting edge technologies through state-of-art infrastructure with a human touch		✓			
8	To make the students responsive towards the ethical, social, environmental and in economic context for the society	✓				

Naveen.
Name & Signature
Naveen Mawlingk
Designation & Organization
Student

Student Feedback Form of Mission

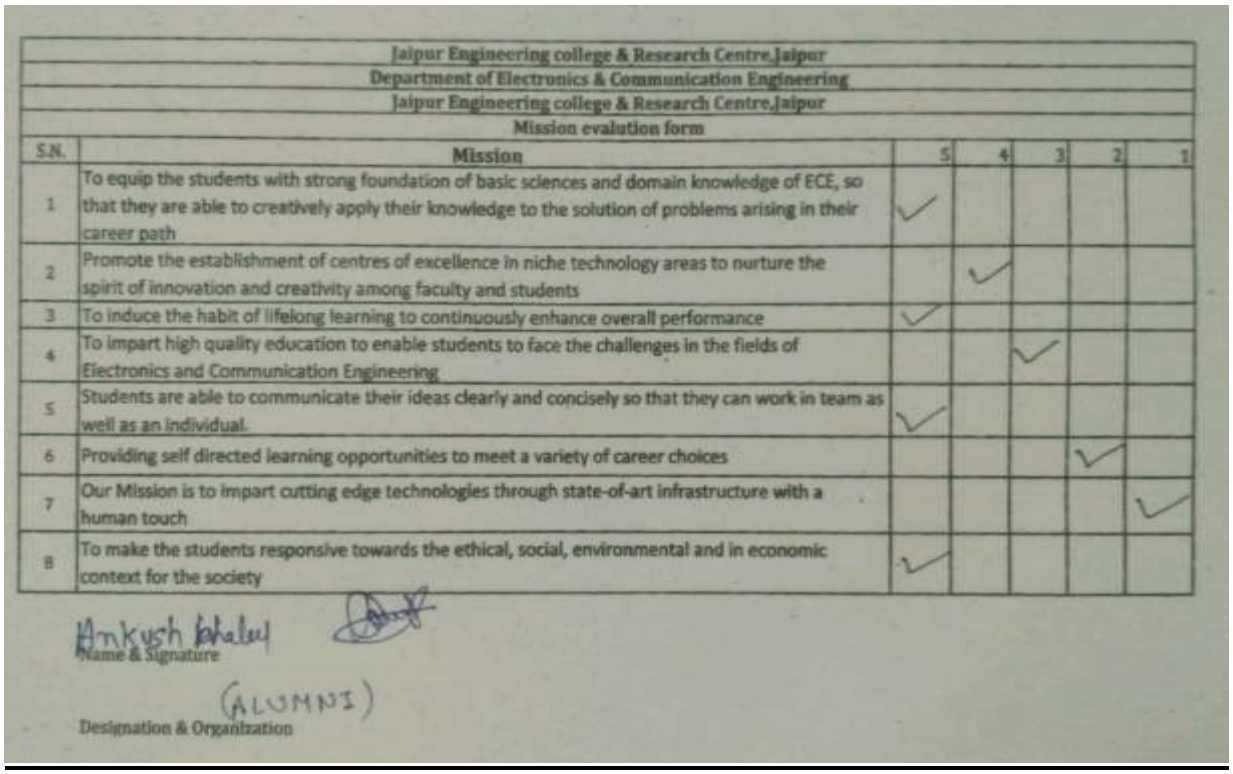


Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Mission evalution form

S.N.	Mission	5	4	3	2	1
1	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution of problems arising in their career path	✓				
2	Promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students			✓		
3	To induce the habit of lifelong learning to continuously enhance overall performance		✓			
4	To impart high quality education to enable students to face the challenges in the fields of Electronics and Communication Engineering					
5	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	✓	✓			
6	Providing self directed learning opportunities to meet a variety of career choices			✓		
7	Our Mission is to impart cutting edge technologies through state-of-art infrastructure with a human touch			✓		
8	To make the students responsive towards the ethical, social, environmental and in economic context for the society	✓				

Ratan
Name & Signature
Ratan Singh Jaiswal
Designation & Organization
(Parents)

Parents Feedback Form of Mission



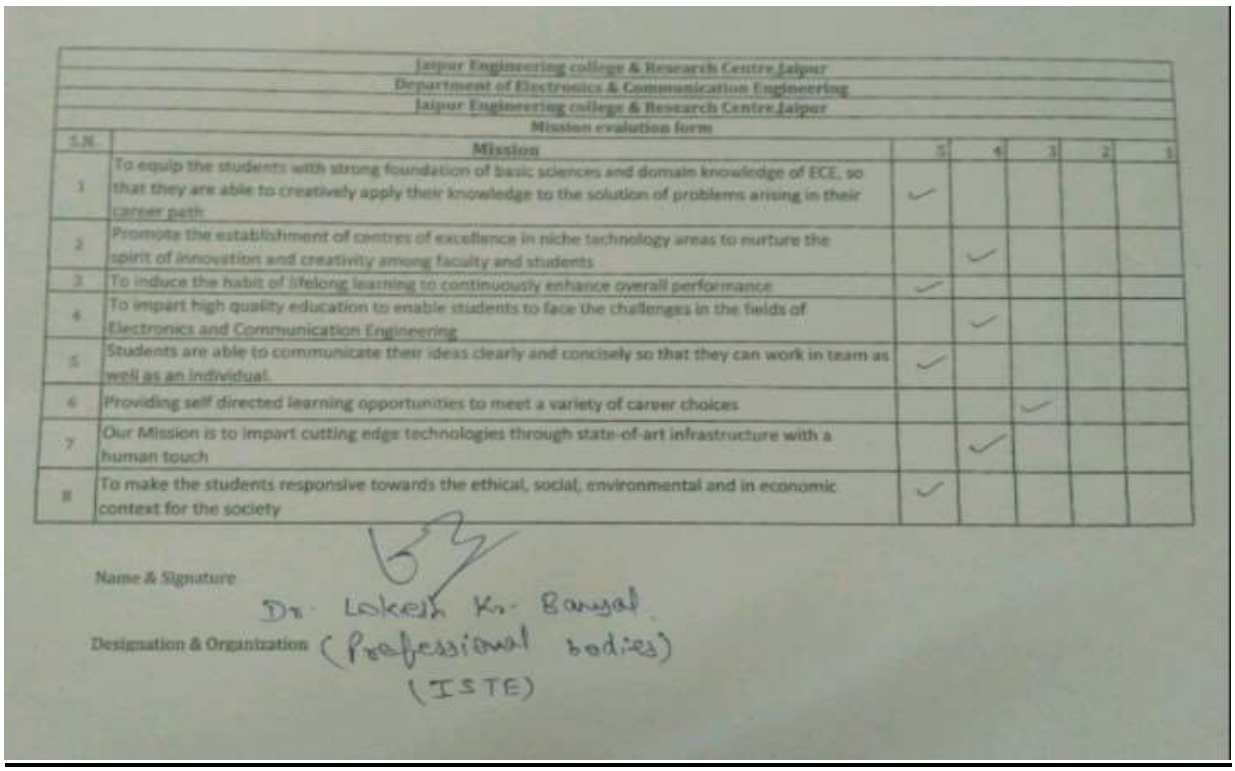
Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Mission evalution form

S.N.	Mission	5	4	3	2	1
1	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution of problems arising in their career path	✓				
2	Promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students		✓			
3	To induce the habit of lifelong learning to continuously enhance overall performance	✓				
4	To impart high quality education to enable students to face the challenges in the fields of Electronics and Communication Engineering			✓		
5	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	✓				
6	Providing self directed learning opportunities to meet a variety of career choices				✓	
7	Our Mission is to impart cutting edge technologies through state-of-art infrastructure with a human touch					✓
8	To make the students responsive towards the ethical, social, environmental and in economic context for the society	✓				

Name & Signature: Ankush Bhalerao

Designation & Organization: (ALUMNI)

Alumni Feedback Form of Mission



Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
Mission evalution form

S.N.	Mission	5	4	3	2	1
1	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution of problems arising in their career path	✓				
2	Promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students		✓			
3	To induce the habit of lifelong learning to continuously enhance overall performance	✓				
4	To impart high quality education to enable students to face the challenges in the fields of Electronics and Communication Engineering		✓			
5	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	✓				
6	Providing self directed learning opportunities to meet a variety of career choices			✓		
7	Our Mission is to impart cutting edge technologies through state-of-art infrastructure with a human touch		✓			
8	To make the students responsive towards the ethical, social, environmental and in economic context for the society	✓				

Name & Signature: Dr. Lokesh Kr. Bansal

Designation & Organization: (Professional bodies) (ISTE)

Professional body Feedback Form of Mission

PEOs are the characteristics of graduates of a program, which enable the students to become successful professionals in their field. The department has documented measurable PEOs for its Bachelor of Technology in Computer Science Engineering programmed taking into account the program's constituencies and the mission of college. The PEOs are established in the light of the vision and mission statements of the department.

Our process for establishing and revising Program Educational Objectives (PEOs) is depicted in Figure 1.3 below. Vision and Mission of the Institute, Department and Graduate attributes recommended by NBA are taken as directorial factors in forming the PEOs. Stakeholder inputs are obtained through extensive surveys with follow-up telephone calls by the Department HOD and associated faculties.

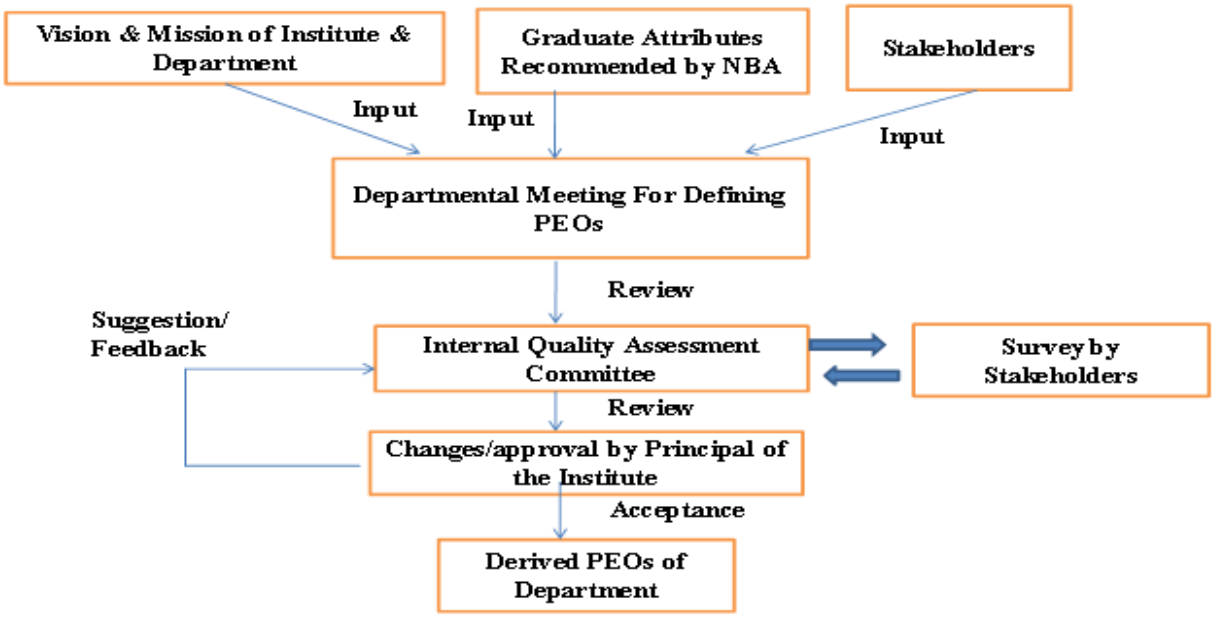
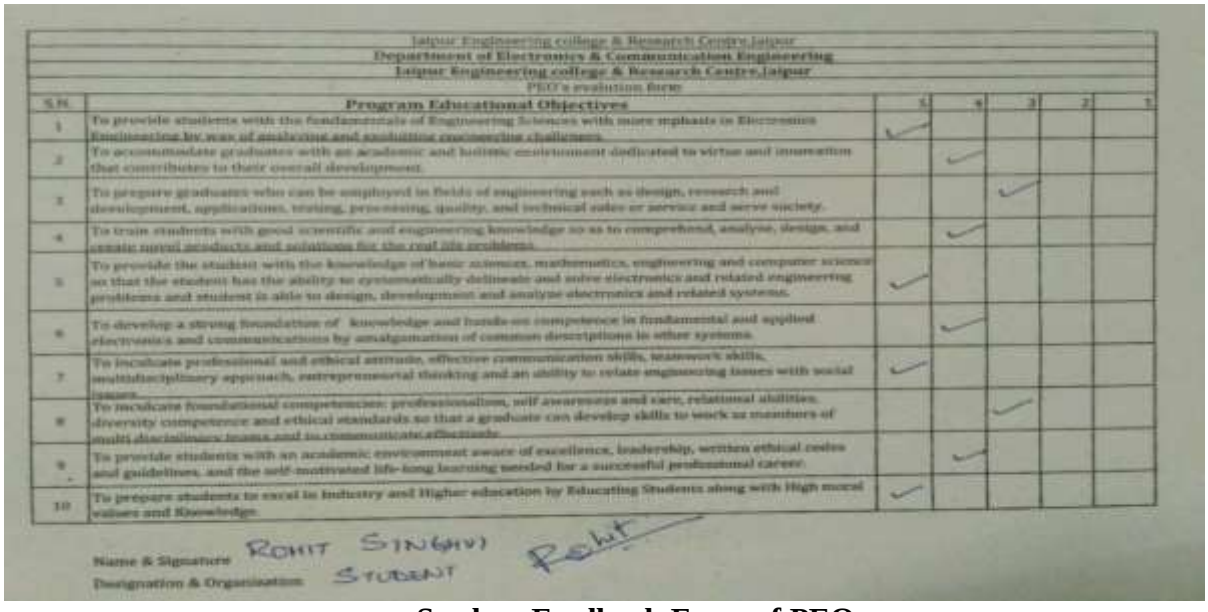


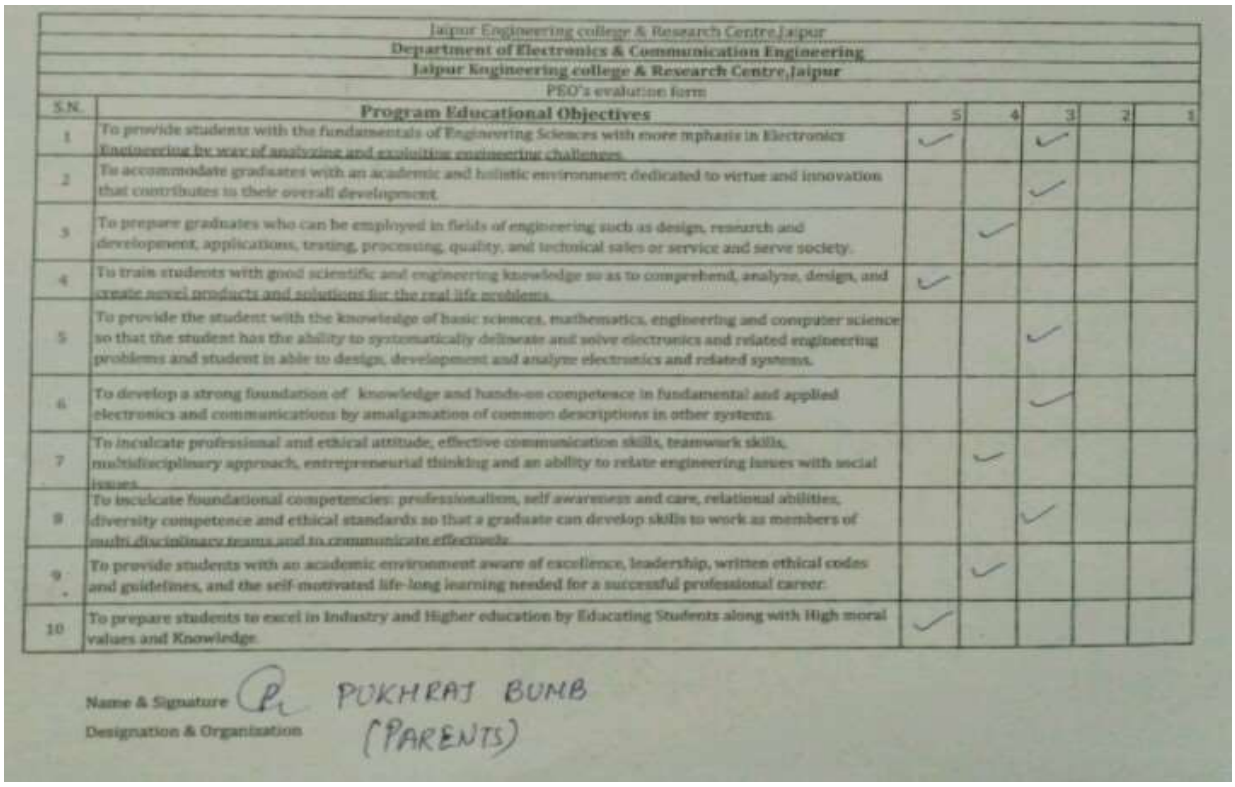
Figure 1.3 Flowchart of defining PEO


Jaipur Engineering college & Research Centre Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
PEO's evaluation form

S.N.	Program Educational Objectives	5	4	3	2	1
1	To provide students with the fundamentals of Engineering Sciences with more emphasis in Electronics Engineering by way of analyzing and exploiting engineering challenges.	✓				
2	To accommodate graduates with an academic and holistic environment dedicated to virtue and innovation that contributes to their overall development.		✓			
3	To prepare graduates who can be employed in fields of engineering such as design, research and development, applications, testing, processing, quality, and technical sales or service and serve society.			✓		
4	To train students with good scientific and engineering knowledge so as to comprehend, analyse, design, and create novel products and solutions for the real life problems.		✓			
5	To provide the student with the knowledge of basic sciences, mathematics, engineering and computer science so that the student has the ability to systematically delineate and solve electronics and related engineering problems and student is able to design, development and analyse electronics and related systems.	✓				
6	To develop a strong foundation of knowledge and hands-on competence in fundamental and applied electronics and communications by amalgamation of common descriptions in other systems.		✓			
7	To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.	✓				
8	To inculcate foundational competencies: professionalism, self awareness and care, relational abilities, diversity competence and ethical standards so that a graduate can develop skills to work as members of multi-disciplinary teams and to communicate effectively.			✓		
9	To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful professional career.		✓			
10	To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.	✓				

Name & Signature ROHIT SINGHVI Rohit
Designation & Organization STUDENT

Student Feedback Form of PEO

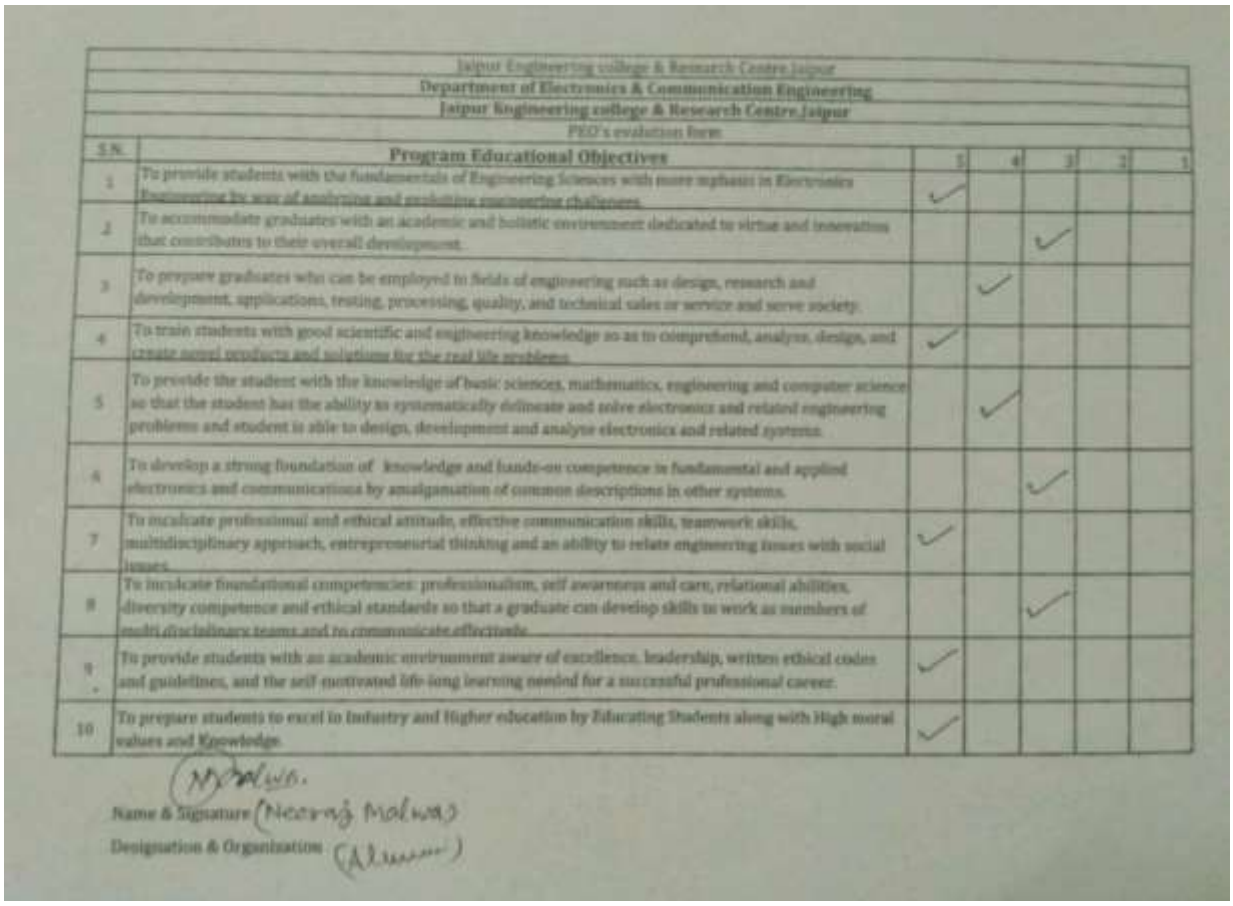


Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
PEO's evaluation form

S.N.	Program Educational Objectives	5	4	3	2	1
1	To provide students with the fundamentals of Engineering Sciences with more mphasis in Electronics Engineering by way of analyzing and exploiting engineering challenges	✓		✓		
2	To accommodate graduates with an academic and holistic environment dedicated to virtue and innovation that contributes to their overall development.			✓		
3	To prepare graduates who can be employed in fields of engineering such as design, research and development, applications, testing, processing, quality, and technical sales or service and serve society.		✓			
4	To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.	✓				
5	To provide the student with the knowledge of basic sciences, mathematics, engineering and computer science so that the student has the ability to systematically delineate and solve electronics and related engineering problems and student is able to design, development and analyze electronics and related systems.			✓		
6	To develop a strong foundation of knowledge and hands-on competence in fundamental and applied electronics and communications by amalgamation of common descriptions in other systems.			✓		
7	To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.		✓			
8	To inculcate foundational competencies: professionalism, self awareness and care, relational abilities, diversity competence and ethical standards so that a graduate can develop skills to work as members of multi disciplinary teams and to communicate effectively.			✓		
9	To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self motivated life-long learning needed for a successful professional career.		✓			
10	To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.	✓				

Name & Signature PUKHRAJ BUMB
Designation & Organization (PARENTS)

Parents Feedback Form of PEO



Jaipur Engineering college & Research Centre,Jaipur
Department of Electronics & Communication Engineering
Jaipur Engineering college & Research Centre,Jaipur
PEO's evaluation form

S.N.	Program Educational Objectives	5	4	3	2	1
1	To provide students with the fundamentals of Engineering Sciences with more mphasis in Electronics Engineering by way of analyzing and exploiting engineering challenges	✓				
2	To accommodate graduates with an academic and holistic environment dedicated to virtue and innovation that contributes to their overall development.			✓		
3	To prepare graduates who can be employed in fields of engineering such as design, research and development, applications, testing, processing, quality, and technical sales or service and serve society.		✓			
4	To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.	✓				
5	To provide the student with the knowledge of basic sciences, mathematics, engineering and computer science so that the student has the ability to systematically delineate and solve electronics and related engineering problems and student is able to design, development and analyze electronics and related systems.		✓			
6	To develop a strong foundation of knowledge and hands-on competence in fundamental and applied electronics and communications by amalgamation of common descriptions in other systems.			✓		
7	To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.	✓				
8	To inculcate foundational competencies: professionalism, self awareness and care, relational abilities, diversity competence and ethical standards so that a graduate can develop skills to work as members of multi disciplinary teams and to communicate effectively.			✓		
9	To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self motivated life-long learning needed for a successful professional career.	✓				
10	To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.	✓				

Name & Signature (Neeraj Malwa)
Designation & Organization (Alumni)

Alumni Feedback Form of PEO

1.5. Establish consistency of PEOs with Mission of the Department (15)

(Generate a "Mission of the Department – PEOs matrix" with justification and rationale of the mapping)

Note: M1, M2,….Mn are distinct elements of Mission statement. Enter correlation levels 1, 2 or 3as defined below:

1: slight (Low) 2: Moderate (Medium) 3: Substantial (High)

If there is no correlation put"-"

MISSION / PEO's	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
To provide students with the fundamentals of engineering sciences with more emphasis in Electronics & Communication Engineering by way of analyzing and exploiting electronics & communication challenges.	H	M	H	M
To train students with good scientific and Electronics & Communication Engineering knowledge so as to comprehend, analyze, design and create electronics & communication based novel products and solutions for the real life problems.	H	H	H	M
To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate Electronics & Communication Engineering with social issues.	M	M	H	H
To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful Electronics & Communication Engineering professional career	M	H	M	H
To prepare students to excel in electronics & communication based industry and higher education	H	H	M	M

by educating students in Electronics & Communication Engineering field along with high moral values and knowledge				

Table 1.5.1: Mapping of PEOs with Mission

Justification:

The above table shows the consistency of PEOs with Mission of the department. The reasons behind marking High, Medium and Low are as follows:
PEO's are divided into keywords and then correlation is checked with all missions.
After taking the feedback from all the faculty members of the department if the consistency found is above 90%, (✓) is marked. If consistency is found between 75-90%, the particular block is left blank.

Why High:

If (✓) is marked in all blocks i.e. all the keywords of PEO are found consistent with the mission so it must be rated high.

Medium:

If ✓ is marked in 50% or above blocks i.e. PEO is moderately consistent with the mission of the department.

PEO 1 Keywords ⇩ / MISSION ⇨	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
Fundamentals of Engineering Sciences.	✓		✓	
Analyzing and exploiting engineering challenges.	✓	✓	✓	✓

Table 1.5.2: Justification of mapping of PEO 1 with Mission

PEO 2 Keywords ⇩ / MISSION ⇨	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
Good scientific and engineering knowledge.	✓	✓	✓	
Create novel products and solutions for the real life problems.	✓	✓	✓	✓

Table 1.5.3: Justification of mapping of PEO 2 with Mission

MISSION / PEO 3 Keywords	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
Professional and ethical attitude.	✓	✓	✓	✓
Communication skills, teamwork skills.		✓	✓	✓
Multidisciplinary approach.	✓		✓	✓
Entrepreneurial thinking.		✓	✓	✓
Relate engineering issues with social issues.	✓	✓	✓	✓

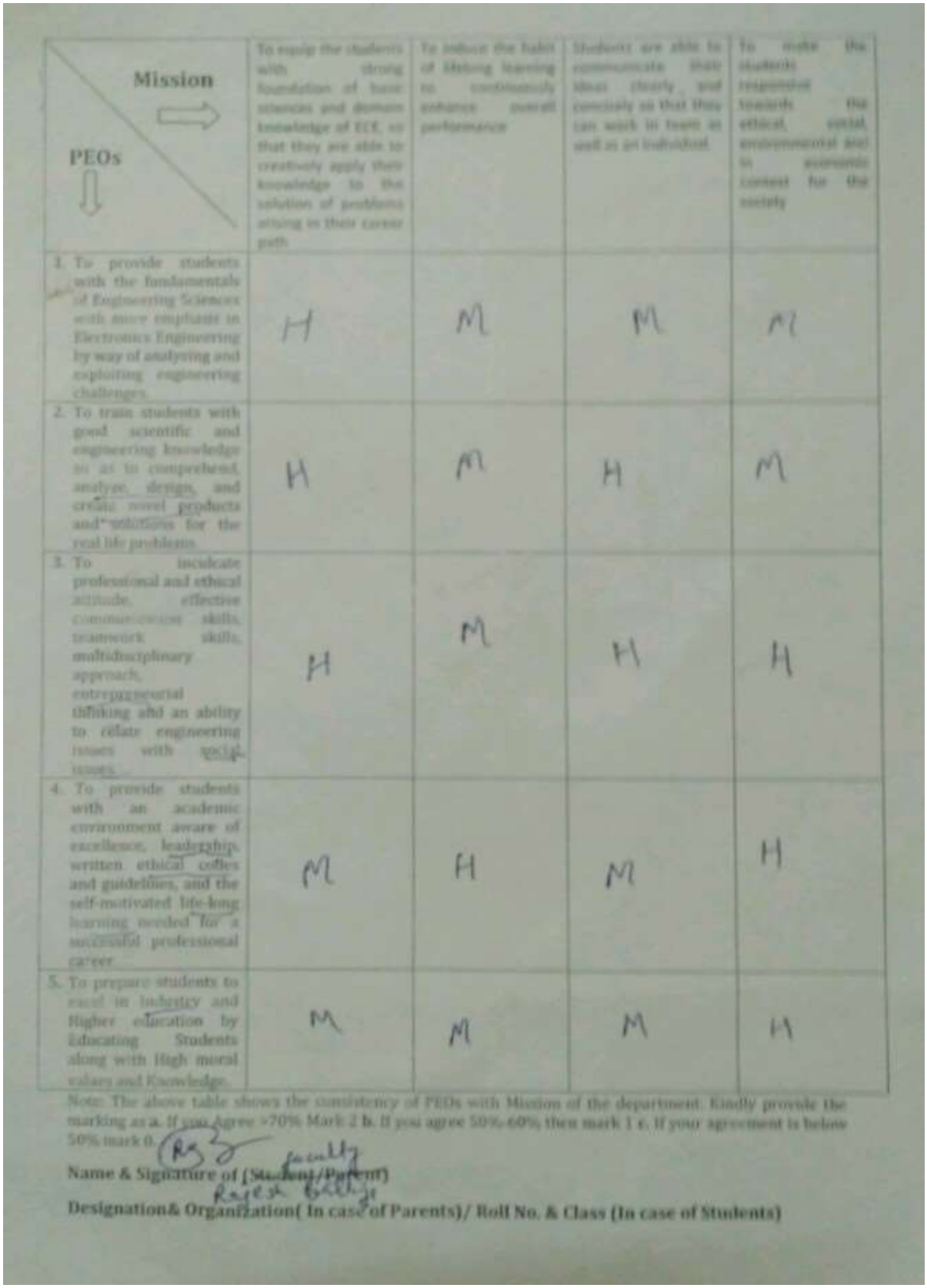
Table 1.5.4: Justification of mapping of PEO 3 with Mission

MISSION / PEO4 Keywords	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
Academic environment aware of excellence, leadership, written ethical codes.	✓	✓	✓	✓
Successful professional career.	✓	✓	✓	✓
Self-motivated life-long learning.		✓		✓

Table 1.5.5: Justification of mapping of PEO 4 with Mission

MISSION / PEO5 Keywords	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.	To induce the habits of lifelong learning in order to continuously enhance overall performance.	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.	To make the students responsive towards the ethical, social, environmental and economical growth of the society.
Excel in Industry and Higher education.	✓	✓	✓	
High moral values and Knowledge.	✓	✓		✓

Table 1.5.6: Justification of mapping of PEO 5 with Mission



Mission / PEOs	To equip the students with strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution of problems arising in their career path	To induce the habit of lifelong learning to continuously enhance overall performance	Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual	To make the students responsible towards the ethical, social, environmental and in economic context for the society
1. To provide students with the fundamentals of Engineering Sciences with more emphasis in Electronics Engineering by way of analyzing and exploiting engineering challenges.	H	M	M	M
2. To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.	H	M	H	M
3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.	H	M	H	H
4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful professional career.	M	H	M	H
5. To prepare students to excel in industry and higher education by Educating Students along with High moral values and Knowledge.	M	M	M	H

Note: The above table shows the consistency of PEOs with Mission of the department. Kindly provide the marking as a. If you Agree >70% Mark 2 b. If you agree 50%-60% then mark 1 c. If your agreement is below 50% mark 0.

Name & Signature of (Student/Parent) faculty

Designation& Organization(In case of Parents)/ Roll No. & Class (In case of Students)

Faculty Feedback Form of PEO

CRITERION 2	Program Curriculum and Teaching – Learning Processes	120

2.1 PROGRAM CURRICULUM (20)

2.1.1 State the process used to identify extent of compliance of the university curriculum for attaining the program outcomes and program specific outcomes as mentioned in annexure I. Also mention the identified curricular gaps, If any (10)

(State the process details; also mention identified curricular gaps).

Note: *In case all POs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 20.*

Jaipur Engineering College and Research Centre is affiliated to Rajasthan Technical University, Kota. So, the program curriculum is as per the scheme and syllabus described by RTU, Kota. The Curriculum maintains a balance in the composition of Basic Science, Humanities and Professional Ethical courses, Computer Programming based subjects along with Basic and Advanced branch related subjects.

Below is the scheme specified by RTU for Electronics & Communication engineering:

For CAYm1 (2016-17), CAYm2 (2015-16) and CAYm3 (2014-15)

Scheme of Teaching & Examination for I year B. Tech I Semester Effective from the Session: 2012 – 2013 (Common to all branches of Engineering)										
I	Electronics & Communication Engineering	Teaching Hrs			Exam Hrs (Theory Paper)	Marks Allocation				
Course Code	Subject	L	T	P		Theory	Term test	Sessional	Practical Exam	Total
101	Communicative English	3	1	-	3	80	20			100
102	Engineering Mathematics-I	3	1	-	3	80	20			100
103	Engineering Physics-I	3	1	-	3	80	20			100
104	Engineering Chemistry	3	1	-	3	80	20			100
105	Basic Electrical & Electronics Engineering	3	0	-	3	80	20			100
	Total	15	4			400	100			500
106	Engineering Physics Lab-I	-	-	2				45	30	75
107	Engineering Chemistry Lab			2				45	30	75
108	Electrical & Electronics Lab	-	-	2				60	40	100
109	Practical	-	-	3				60	40	100

	Geometry									
110	Workshop Practice	-	-	2				60	40	100
111	Discipline & Extra Curricular Activities	-	-					50		50
	Grand Total	15	4	11		400	100	320	180	1000

Scheme of Teaching & Examination for I year B. Tech II Semester
Effective from the Session: 2012 – 2013
(Common to all branches of Engineering)

II	Electronics & Communication Engineering	Teaching Hrs			Exam Hrs (Theory Paper)	Marks Allocation				
Course Code	Subject	L	T	P		Theory	Term test	Sessional	Practical Exam	Total
201	Communication Techniques	2			3	80	20			100
202	Engineering Mathematics-II	3	1		3	80	20			100
203	Engineering Physics-II	2	1		3	80	20			100
204	Chemistry & Environmental Engineering	3	1		3	80	20			100
205	Engineering Mechanics	3	1		3	80	20			100
206	Fundamentals of Computer Programming	3			3	80	20			100
	Total	16	4			480	120			600
207	Engineering Physics Lab-II			2				30	20	50
208	Chemistry & Environmental Engineering Lab			2				30	20	50
209	Computer programming lab			2				45	30	75
210	Machine Drawing			3				60	40	100
211	Communication Technique Lab			2				45	30	75
212	Discipline & Extra Curricular Activities							50		50
	Grand Total	16	4	11		480	120	260	140	1000

For CAY (2017-18)

Scheme of Teaching & Examination for I year B. Tech. I Semester

Effective from the session: 2017-18

		Course Title	L	T	P	Marks		
S. No.	Subject Code	Theory Papers				IA	External	Total
1	MA-101	Engineering Mathematics-I	3	1	0	20	80	100
2	HU-101/ HU-103	Communication Skills / Human Values	3	0	0	20	80	100
3	PY-101/ CY-101	Engineering Physics/ Engineering Chemistry	3	1	0	20	80	100
4	CS-101	Computer Programming-I	3	0	0	20	80	100
5	CE-101	Environmental Engineering and Disaster Management	3	0	0	20	80	100
		Total	15	2	0	100	400	500
		Practical						
6	HU-102/ HU-104	Communication Skills Lab./ Human Values: Activities	0	0	2	45	30	75
7	PY-102/ CY-102	Engineering Physics Lab/ Engineering Chemistry Lab	0	0	2	45	30	75
8	CS-102	Computer Programming-I Lab.	0	0	2	60	40	100
9	CE-102	Computer Aided Engineering Graphics	0	0	3	60	40	100
10	ME-101	Mechanical Workshop Practice	0	0	2	60	40	100
11		Discipline & Extra Curricular Activity	0	0	0	50	0	50
		Total	0	0	11	320	180	500
		Grand Total	15	2	11	420	580	1000

(Total 28 periods per week)
L = Lecture, T = Tutorial, P = Practical, IA=Internal Assessment

Scheme of Teaching & Examination for I year B. Tech. II Semester

Effective from the session: 2017-18

		Course Title	L	T	P	Marks		
S. No.	Subject Code	Theory Papers				IA	External	Total
1	MA-102	Engineering Mathematics-II	3	1	0	20	80	100
2	HU-103/ HU-101/	Human Values/ Communication Skills	3	0	0	20	80	100
3	CY-101/ PY-101	Engineering Chemistry/ Engineering Physics	3	1	0	20	80	100
4	CS-103	Computer Programming-II	3	0	0	20	80	100
		Elective (any two)*						
5	EE-101	Basic Electrical and Electronics	3 3	0 0	0 0	20 20	80 80	100 100

		Engineering						
6	CE-103	Basic Civil Engineering						
7	ME-102	Basic Mechanical Engineering						
8	OE-101	Engineering Mechanics						
		Total	18	2	0	120	480	600
		Practical						
9	HU-104/ HU-102	Human Values: Activities Communication Skills Lab.	0	0	2	45	30	75
10	CY-102/ PY-102	Engineering Chemistry Lab/ Engineering Physics Lab	0	0	2	45	30	75
11	CS-104	Computer Programming-II Lab	0	0	2	60	40	100
12	ME-104	Computer Aided Machine Drawing	0	0	3	60	40	100
13		Discipline & Extra Curricular Activity	0	0	0	50	0	50
		Total	0	0	9	260	140	400
		Grand Total	18	2	9	380	620	1000

(Total 29 periods per week)
L = Lecture, T = Tutorial, P = Practical, IA=Internal Assessment

Table 2.1.1.a Scheme for First Year

Scheme of Teaching & Examination for II year B. Tech. III Semester							
BRANCH CODE	EC	EC					
Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				
SEMESTER III	Title	L	T	P	*IA*	*Exam*	Total
3EC1A	Electronic Devices & Circuits	3	0		20	80	100
3EC2A	Data Structures & Algorithms	3	0		20	80	100
3EC3A	Digital Electronics	3	0		20	80	100
3EC4A	Circuit Analysis & Synthesis	3	1		20	80	100
3EC5A	Electromagnetic Properties Of Materials	3	0		20	80	100
3EC6A	Advanced Engineering Mathematics-I	3	1		20	80	100
	Total						600
3EC7A	Electronic Instrumentation Workshop			2	45	30	75
3EC8A	Computer Programming Lab-I			2	45	40	75
3EC9A	Electronic Device Lab			2	45	40	75
3EC10A	Digital Electronics Lab			2	45	30	75
3EC11A	Business Entrepreneurship			2	30	20	50
3ECDCA	Discipline & Extra Curricular Activity						50
	Total						400
	Grand Total	18	2	10			1000
Scheme of Teaching & Examination for II year B. Tech. IV Semester							
BRANCH CODE	EC	EC					
Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				

SEMESTER - IV	Title	L	T	P	*IA*	*Exam*	Total
4EC1A	Analog Electronics	3	0		20	80	100
4EC2A	Random Variables & Stochastic Processes	3	1		20	80	100
4EC3A	Electronic Measurement & Instrumentation	3	0		20	80	100
4EC4A	Electromagnetic Field Theory	3	1		20	80	100
4EC5A	Optimization Techniques	3	1		20	80	100
4EC6A	Advanced Engineering Mathematics-II	3	1		20	80	100
	Total						600
4EC7A	Computer Programming Lab-II			2	60	40	100
4EC8A	Analog Electronics Lab			2	60	40	100
4EC9A	Measurement & Instrumentation Lab			2	60	40	100
4EC10A	Humanities & Social Sciences			2	30	20	50
4ECDCA	Discipline & Extra Curricular Activity						50
	Total						400
	Grand Total	18	4	8			1000
Scheme of Teaching & Examination for III year B. Tech. V Semester							
BRANCH CODE	EC	EC					
Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				
SEMESTER - V	Title	L	T	P	*IA*	*Exam*	Total
5EC1A	Signals & Systems	3	1		20	80	100
5EC2A	Linear Integrated Circuits	3	0		20	80	100
5EC3A	Telecommunication Engg.	3	0		20	80	100
5EC4A	Analog Communication	3	1		20	80	100
5EC5A	Microwave Engineering -I	3	0		20	80	100
5EC6A	Elective (any one of the following)						
5EC6.1A	Biomedical Instrumentation	3	0		20	80	100
5EC6.2A	Advanced Data Structures						
5EC6.3A	Computer Oriented Numerical & Statistical Methods						
	Total						600
5EC7A	Electronic Engineering Design Lab			2	45	30	75
5EC8A	Microwave Engg. Lab			2	45	30	75
5EC9A	Communication Lab-I			2	45	30	75
5EC10A	Signal Processing Lab			2	45	30	75
5EC11A	Professional Ethics and Disaster Management			2	30	20	50
5ECDCA	Discipline & Extra Curricular Activity						50
	Total						400
	Grand Total	18	2	10			1000
Scheme of Teaching & Examination for III year B. Tech. VI Semester							
BRANCH CODE	EC	EC					
Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				

SEMESTER - VI	Title	L	T	P	*IA*	*Exam*	Total
6EC1A	Microwave Engg.-II	3	1		20	80	100
6EC2A	Microprocessors	3	0		20	80	100
6EC3A	Industrial Electronics	3	0		20	80	100
6EC4A	Digital Communication	3	1		20	80	100
6EC5A	Control Systems	3	0		20	80	100
6EC6A	Elective (any one of the following)						
6EC6.1A	Neural Networks	3	0		20	80	100
6EC6.2A	Parallel Computation & Architecture						
6EC6.3A	Optical Fiber Communication						
	Total						600
6EC7A	Communication Lab-II			3	45	30	75
6EC8A	Microprocessor Lab			2	45	30	75
6EC9A	RF Simulation Lab			3	45	30	75
6EC10A	Industrial Electronics Lab			2	45	30	75
6EC11A	Personality Development & General Aptitute			2	30	20	50
6ECDCA	Discipline & Extra Curricular Activity						50
	Total						400
	Grand Total	18	2	10			1000

Scheme of Teaching & Examination for IV year B. Tech. VII Semester

BRANCH CODE	EC	EC					
Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				
SEMESTER - VII	1	L	T	P	*IA*	*Exam*	Total
7EC1A	Antenna & Wave Propagation	3	0		20	80	100
7EC2A	Digital Signal Processing	3	1		20	80	100
7EC3A	Digital Image Processing	3	1		20	80	100
7EC4A	Wireless Communication	3	0		20	80	100
7EC5A	VLSI Design	3	0		20	80	100
7EC6A	Elective (any one of the following)						
7EC6.1A	Advanced Microprocessors	3	0		20	80	100
7EC6.2A	Artificial Intelligence and Expert Systems						
7EC6.3A	VHDL						
	Total						600
7EC7A	Signal & Image Processing Lab			3	60	40	100
7EC8A	Wireless Communication Lab			3	60	40	100
7EC9A	Practical Training & Industrial Visit			2	60	40	100
7EC10A	Project-I			2	50		50
7ECDCA	Discipline & Extra Curricular Activity						50
	Total						400
	Grand Total	18	2	10			1000

Scheme of Teaching & Examination for IV year B. Tech. VIII Semester

BRANCH CODE	EC	EC

Course Code	ELECTRONICS AND COMMUNICATION ENGG		Hrs. / Week				
SEMESTER - VIII	1	L	T	P	*IA*	*Exam*	Total
8EC1A	IC Technology	3	0		20	80	100
8EC2A	Radar & TV Engineering	3	1		20	80	100
8EC3A	MEMS and Nanotechnology	3	1		20	80	100
8EC4.1A	Computer Networks	3	0		20	80	100
8EC4.2A	Operating Systems						
8EC4.3A	Microcontroller and Embedded Systems						
	Total						400
8EC5A	RF Fabrication Lab			3	60	40	100
8EC6A	Industrial Economics & Management.			2	30	20	50
8EC7A	VLSI & Optical Fiber Lab			3	60	40	100
8EC8A	Project -II			4	120	80	200
8EC9A	Seminar			2	60	40	100
8ECDCA	Discipline & Extra Curricular Activity						50
	Total						600
	Grand Total	12	2	14			1000

Table 2.1.1.b Scheme for Second-Final Year (CAY, CAYm1, CAYm2 and CAYm3)

2nd Year: Electronics & Communication Engineering										
III Semester										
Sr. No.	Course Code	Category	Course Title	Hours			Marks			Credits
				L	T	P	IA	ETE	Total	
1	3EC2-01	BSC	Advanced Engineering Mathematics-I	3	0	0	30	120	150	3
2	3EC1-02/ 3EC1-03	HSMC	Technical Communication/Managerial Economics and Financial Accounting	2	0	0	20	80	100	2
3	3EC4-04	PCC	Digital System Design	3	0	0	30	120	150	3
4	3EC4-05	PCC	Signal & Systems	3	0	0	30	120	150	3
5	3EC4-06	PCC	Network Theory	3	1	0	40	160	200	4
6	3EC4-07	PCC	Electronics Devices	3	1	0	40	160	200	4
7	3EC4-21	PCC	Electronics Devices Lab	0	0	2	30	20	50	1
8	3EC4-22	PCC	Digital System Design Lab	0	0	2	30	20	50	1
9	3EC4-23	PCC	Signal Processing Lab	0	0	2	30	20	50	1
10	3EC3-24	ESC	Computer Programming Lab-I	0	0	2	30	20	50	1
11	3EC7-30	Training Exam	Training seminar						50	1
12	3EC8-00	SODECA	Social Outreach, Discipline & Extra Curricular Activities						25	0.5
			TOTAL	17	2	8			1225	24.5

Table 2.1.1.c Scheme for Second Year (2018-19 Onwards)

Each Course under the program has some defined course outcomes that emphasize on contribution to different POs leading to eventual attainment of POs upon successful completion of all courses. Each course has sufficient weight age to fundamental concepts, tools and techniques and emphasis on practical implementations. This provides a strong correlation between the course outcomes and programme outcomes, developing necessary skills in students, making them proficient engineers. The whole curriculum under Electronics & communication Engineering is divided according to below specified categories:

Course Components	Mapped POs	Total Hours	% Contribution
Basic Science (All 1st year Subjects plus Mathematics) **and Professional Ethics**	**PO1, PO2, PO9, PO12**	**57 + 22 = 79**	**33.47%**
Basic Electronics (EDC, EMFT, EMI, CA, DE, AE, EPM, etc.)	**PO1, PO2, PO3, PO4, PO9, PO10, PO12**	**76**	**32.2%**
Advanced Electronics (VHDL, VLSI, MES, DIP, ICT, MW, Projects, Seminar, etc.)	**PO1-PO12**	**74**	**31.36%**
Computer Programming	**PO1, PO2, PO5**	**7**	**2.97%**
Total Number of Hours /week		**236**	**100%**

Table 2.1.1.d Component Categorization of Course Curriculum

The course Components are thus directly and quantitatively assessed, and are tied to the program outcomes as shown in the course syllabi. Therefore if the course outcomes are met, the program outcomes are met.

PROGRAM OUTCOMES	
PO1	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and Electronics & Communication Engineering specialization to the solution of complex electronics and communication engineering problems.
PO2	**Problem analysis:** Identify, formulate, research literature, and analyze complex Electronics & Communication Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/development of solutions:** Design solutions for complex Electronics & Communication Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of electronics and communication engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modelling to complex Electronics & Communication Engineering activities with an understanding of the limitations.

PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Electronics & Communication Engineering practice.
PO7	**Environment and sustainability:** Understand the impact of the professional Electronics & Communication Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the Electronics & Communication Engineering practice.
PO9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	**Communication:** Communicate effectively on complex Electronics & Communication Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project management and finance:** Demonstrate knowledge and understanding of the Electronics & Communication Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of Electronics & Communication Engineering changes.

PROGRAM SPECIFIC OUTCOMES	
PSO1	Ability to apply the concepts of Embedded Systems and its applications.
PSO2	Ability to apply Field Programmable Gate Array based applications.

Table 2.1.1.e List of Program Outcomes and Program Specific Outcomes

Following is the table for all courses along with their mapping with POs:

Basic Science and Professional Ethics														
Semester - I														
S. No.	**Course Code**	**Course Name**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
1	MA-101	Engineering Mathematics-I	H	M	L	-	L	L	M	-	H	M	-	L
2	HU-103	Human Values	-	-	M	-	-	H	M	H	M	L	-	L
3	PY-101	Engineering Physics	M	L	L	-	-	L	-	-	L	L	-	L
4	CS-101	Computer Programming-I	H	M	M	M	M	L	L	-	-	L	-	H
5	CE-101	Environmental Engineering and Disaster Management	M	L	L	L	-	M	M	L	L	L	-	L
6	HU-104	Human Values: Activities	-	-	L	-	-	H	H	H	L	L	-	L
7	PY-102	Engineering Physics Lab	M	L	L	-	-	L	-	-	L	L	-	L
8	CS-102	Computer Programming-I Lab.	M	H	M	L	-	-	-	-	M	L	-	L
9	CE-102	Computer Aided Engineering Graphics	H	-	-	-	-	-	-	-	M	M	-	L
10	ME-101	Mechanical Workshop Practice	H	-	-	-	-	-	-	-	M	M	-	L
Semester - II														
S. No.	**Course Code**	**Course Name**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
11	MA-102	Engineering Mathematics-II	H	M	L	-	L	L	M	-	H	M	-	L
12	HU-101	Communication Skills	-	L	M	-	-	L	-	-	H	H	-	L
13	CY-101	Engineering Chemistry	M	L	L	L	-	L	L	-	-	L	-	-
14	CS-103	Computer Programming-II	M	M	M	M	M	M	M	-	-	M	-	M
15	CE-103	Basic Civil Engineering	M	L	L	-	-	L	L	L	L	L	L	L
16	ME-102	Basic Mechanical Engineering	M	-	L	M	L	L	M	M	L	L	-	L
17	HU-102	Communication Skills Lab.	-	L	-	-	-	L	-	-	H	H	-	L
18	CY-102	Engineering Chemistry Lab	M	M	-	L	-	-	-	-	L	M	-	-
19	CS-104	Computer Programming-II Lab	M	M	H	L	-	-	-	-	M	L	M	L
20	ME-104	Computer Aided Machine Drawing	H	M	M	-	M	M	M	-	-	M	-	M
Semester III Onwards														
S. No.	**Course Code**	**Course Name**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
21	3EC6A	Advanced Engineering Mathematics-I	M	L	L	L	-	-	-	-	-	-	-	L
22	3EC11A	Business Entrepreneurship	M	-	-	-	-	L	L	L	L	-	L	L
23	4EC5A	Optimization Techniques	M	M	L	L	-	-	-	-	L	-	-	L
24	4EC6A	Advanced Engineering Mathematics-II	M	M	L	L	-	-	-	-	-	-	-	L

25	4EC10A	Humanities & Social Sciences	M	-	-	-	-	L	L	-	-	-	-	L
26	5EC11A	Professional Ethics and Disaster Management	M	-	L	-	-	L	-	H	-	-	-	L
27	6EC11A	Personality Development & General Aptitude	M	-	M	-	-	M	-	-	L	M	-	M
28	8EC6A	Industrial Economics & Management.	-	M	M	L	L	-	-	L	M	H	M	M

Basic Electronics

S. No.	Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	3EC1A	Electronic Devices & Circuits	H	M	L	-	L	-	-	-	-	-	-	-
2	3EC3A	Digital Electronics	H	M	M	-	L	L	L	-	L	-	L	L
3	3EC4A	Circuit Analysis & Synthesis	M	M	L	L	L	-	-	-	-	-	-	-
4	3EC5A	Electromagnetic Properties Of Materials	H	H	L	-	-	L	L	-	L	L	-	M
5	3EC7A	Electronic Instrumentation Workshop	M	L	L	L	-	-	-	-	-	-	L	L
6	3EC9A	Electronic Device Lab	M	L	-	L	-	-	-	-	-	-	-	L
7	3EC10A	Digital Electronics Lab	H	M	M	H	L	L	M	-	L	-	L	
8	4EC1A	Analog Electronics	M	M	-	L	-	-	-	-	-	-	-	L
9	4EC2A	Random Variables & Stochastic Processes	H	H	M	M	H	L	-	-	-	M	M	H
10	4EC3A	Electronic Measurement & Instrumentation	M	M	L	M	-	-	-	-	-	-	-	L
11	4EC4A	Electromagnetic Field Theory	M	M	L	M	L	L	L	-	L	L	L	M
12	4EC8A	Analog Electronics Lab	H	M	-	M	-	-	-	-	-	-	-	L
13	4EC9A	Measurement & Instrumentation Lab	M	M	L	L	-	-	-	-	-	-	-	L
14	5EC1A	Signals & Systems	M	M	M	M	L	-	-	-	-	-	-	L
15	5EC2A	Linear Integrated Circuits	M	M	L	M	-	L	L	-	L	-	L	L
16	5EC3A	Telecommunication Engineering	H	H	H	-	-	M	M	-	-	-	-	M
17	5EC4A	Analog Communication	M	M	M	M	L	L	L	-	L	-	L	L
18	5EC6.1 A	Biomedical Instrumentation	M	M	L	-	-	L	-	-	-	-	L	M
19	5EC7A	Electronic Engineering Design Lab	M	L	M	L	M	-	-	-	-	-	L	L
20	5EC9A	Communication Lab-I	M	M	-	-	-	-	-	-	-	-	-	L
21	6EC2A	Microprocessors	H	M	M	M	M	L	-	-	-	-	M	M
22	6EC3A	Industrial Electronics	M	M	M	-	-	-	-	-	-	-	L	H
23	6EC5A	Control Systems	H	H	L	-	L	-	-	-	-	L	-	L
24	6EC8A	Microprocessor Lab	M	L	-	-	L	L	-	-	-	-	M	L
25	6EC10A	Industrial Electronics Lab	M	-	M	-	L	-	-	-	-	-	L	L
26	7EC9A	Practical Training & Industrial Visit	M	L	L	L	-	L	L	M	L	M	L	M
27	8EC2A	Radar & TV Engineering	M	L	L	L	-	M	L	-	-	-	-	M

Advanced Electronics

S. No.	Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12

1	5EC5A	Microwave Engineering -I	H	M	M	M	L	L	L	-	-	-	-	-
2	5EC8A	Microwave Engineering Lab	M	M	L	L	L	L	-	-	-	-	-	-
3	5EC10A	Signal Processing Lab	H	M	L	L	H	L	-	-	L	-	L	L
4	6EC1A	Microwave Engineering -II	H	H	L	L	L	L	-	-	-	-	-	-
5	6EC4A	Digital Communication	H	M	L	M	-	-	L	-	-	-	L	L
6	6EC6.3 A	Optical Fiber Communication	M	L	L	-	L	L	L	-	-	-	-	L
7	6EC7A	Communication Lab-II	H	M	L	L	L	L	L	-	L	-	L	L
8	6EC9A	RF Simulation Lab	M	M	M	M	H	L	-	-	L	-	L	M
9	7EC1A	Antenna & Wave Propagation	H	M	M	M	H	H	H	-	M	M	M	M
10	7EC2A	Digital Signal Processing	M	M	M	M	L	-	-	-	L	-	M	M
11	7EC3A	Digital Image Processing	H	M	M	L	L	L	-	-	L	L	L	M
12	7EC4A	Wireless Communication	M	L	L	L	L	M	L	-	L	L	L	M
13	7EC5A	VLSI Design	H	M	M	M	M	-	M	-	-	-	-	M
14	7EC6.3 A	VHDL	M	M	-	M	H	-	-	-	L	-	M	M
15	7EC7A	Signal & Image Processing Lab	M	M	M	M	H	L	-	-	L	-	M	M
16	7EC8A	Wireless Communication Lab	M	M	M	M	-	M	L	-	L	-	M	M
17	7EC10A	Project-I	H	H	H	M	H	M	M	L	H	M	M	H
18	8EC1A	IC Technology	H	H	M	-	-	L	M	-	-	-	-	H
19	8EC3A	MEMS and Nanotechnology	H	M	M	H	-	M	M	-	L	L	L	H
20	8EC4.3 A	Microcontroller and Embedded Systems	H	M	L	L	M	L	L	-	L	M	M	M
21	8EC5A	RF Fabrication Lab	M	L	L	L	H	-	-	-	-	-	-	L
22	8EC7A	VLSI & Optical Fiber Lab	H	M	L	L	L	M	M	-	-	-	L	M
23	8EC8A	Project -II	H	H	H	M	H	M	M	L	H	M	M	H
24	8EC9A	Seminar	H	-	-	-	-	M	M	M	H	H	M	H
Computer Programming														
S. No.	**Course Code**	**Course Name**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
1	3EC2A	Data Structures & Algorithms	M	M	-	L	M	-	-	-	-	-	-	-
2	3EC8A	Computer Programming Lab-I	M	M	L	L	H	-	-	-	-	L	M	L
3	4EC7A	Computer Programming Lab-II	H	M	M	L	H	-	-	L	L	-	L	L

Table 2.1.1.f Mapping of POs with each Course

Program Outcome	Subjects mapped with				Total	Priority
	Basic science & Professional Ethics	Basic Electronics	Advanced Electronics	Computer Programming		
PO1	**28.05**	**32.93**	**29.27**	**3.66**	**93.9**	**1**
PO2	**23.17**	**31.71**	**28.05**	**3.66**	**86.59**	**3**
PO3	**26.83**	**26.83**	**26.83**	**2.44**	**82.93**	**4**
PO4	**14.6**	**20.73**	**25.61**	**3.66**	**64.63**	**5**
PO5	**8.537**	**15.85**	**23.17**	**3.66**	**51.22**	**8**
PO6	**23.17**	**17.07**	**23.17**	**0**	**63.41**	**6**

PO7	**15.85**	**10.98**	**18.29**	**0**	**45.12**	**9**
PO8	**9.756**	**1.22**	**3.659**	**1.22**	**15.85**	**11**
PO9	**24.39**	**8.537**	**18.29**	**1.22**	**52.44**	**7**
PO10	**26.83**	**6.098**	**9.756**	**1.22**	**43.9**	**10**
PO11	**4.878**	**17.07**	**20.73**	**2.44**	**45.12**	**9**
PO12	**31.71**	**29.27**	**25.61**	**2.44**	**89.02**	**2**
Formula: (No. of Subjects mapped to Particular PO under a particular category) divided by (Total No. of Subjects i.e. 82)						

Table 2.1.1.g Subject Contributions for PO Attainment

PO Attainment Analysis for CAY (2017-18)			
POs	**Target**	**Achieved**	**Difference**
PO1	65	51	14
PO2	63.3	47.67	15.63
PO3	56.67	43	13.67
PO4	63.33	46.33	17
PO5	70.18	52.63	17.55
PO6	59.26	46.3	12.96
PO7	62.5	49.58	12.92
PO8	60.42	50.83	9.59
PO9	61.67	43.33	18.34
PO10	65	48.67	16.33
PO11	66.67	47.67	19
PO12	66.6	51	15.6

Table 2.1.1.h Analysis Summary for PO-Attainment for CAY (2017-18)

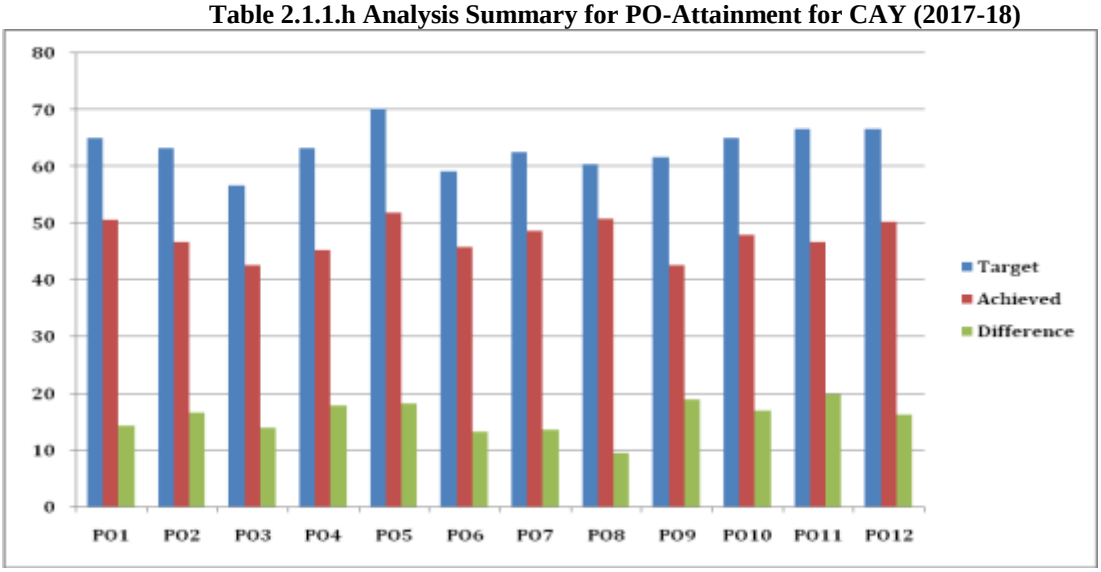


Figure 2.1.1.a Bar Chart Showing Analysis of PO Attainment for CAY (2017-18)

PO Attainment Analysis for CAYm1 (2016-17)			
POs	**Target**	**Achieved**	**Difference**
PO1	65	48	17
PO2	63.3	44	19.3
PO3	56.67	39	17.67
PO4	63.33	43.33	20
PO5	70.18	49.47	20.71
PO6	59.26	42.59	16.67
PO7	62.5	45	17.5
PO8	60.42	45.42	15
PO9	61.67	40.33	21.34
PO10	65	45	20
PO11	66.67	44.33	22.34
PO12	66.6	46.67	19.93

Table 2.1.1.i Analysis Summary for PO-Attainment for CAYm1 (2016-17)

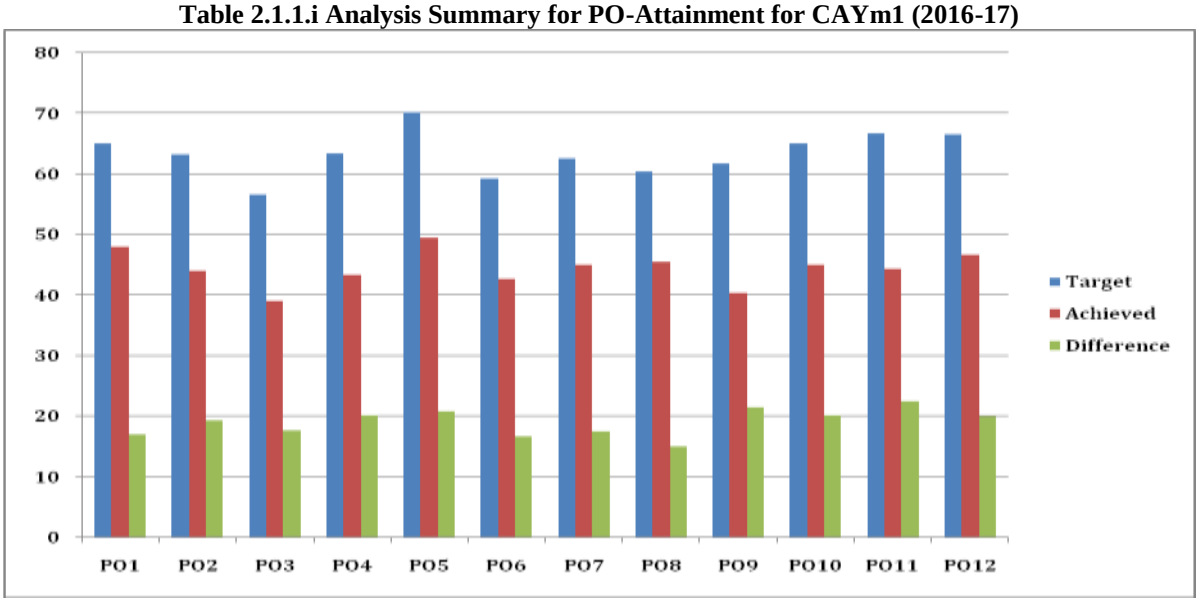


Figure 2.1.1.b Bar Chart Showing Analysis of PO Attainment for CAYm1 (2016-17)

PO Attainment Analysis for CAYm2 (2015-16)			
POs	**Target**	**Achieved**	**Difference**
PO1	65	41.33	23.67
PO2	63.3	38.33	24.97
PO3	56.67	34.33	22.34
PO4	63.33	38.67	24.66
PO5	70.18	42.81	27.37
PO6	59.26	38.15	21.11

PO7	62.5	40	22.5
PO8	60.42	41.25	19.17
PO9	61.67	36.33	25.34
PO10	65	40	25
PO11	66.67	39	27.67
PO12	66.67	42.33	24.34

Table 2.1.1.j Analysis Summary for PO-Attainment for CAYm2 (2015-16)

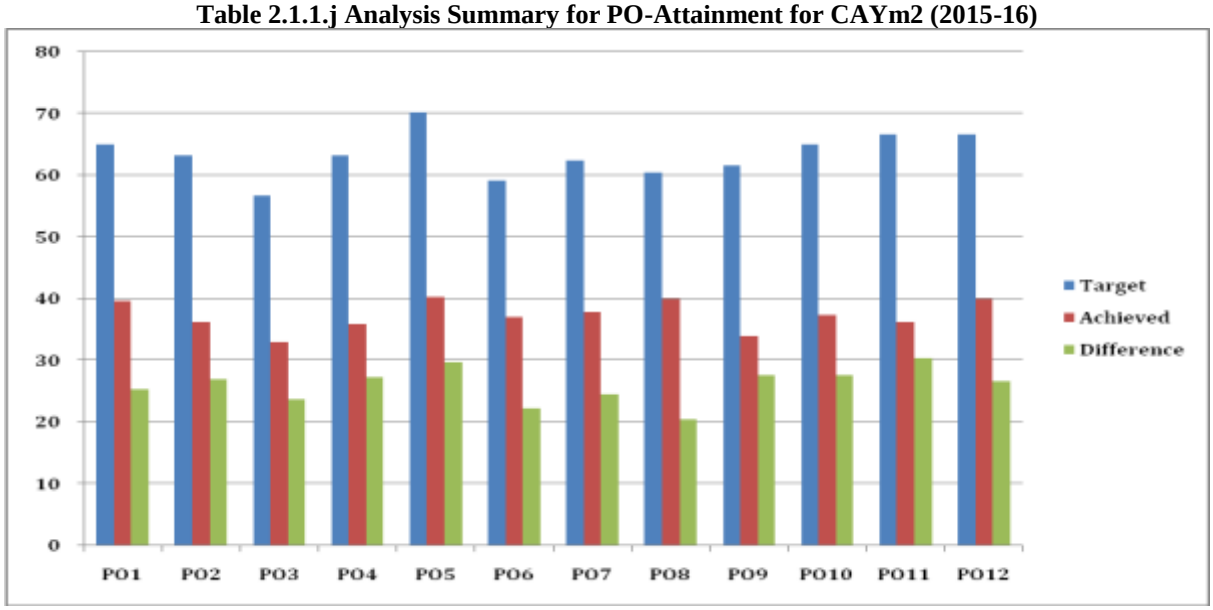


Figure 2.1.1.c Bar Chart Showing Analysis of PO Attainment for CAYm2 (2015-16)

Comparative Analysis of PO attainment				
POs	**Target**	**2017-18**	**2016-17**	**2015-16**
PO1	65	51	48	41.33
PO2	63.3	47.67	44	38.33
PO3	56.67	43	39	34.33
PO4	63.33	46.33	43.33	38.67
PO5	70.18	52.63	49.47	42.81
PO6	59.26	46.3	42.59	38.15
PO7	62.5	49.58	45	40
PO8	60.42	50.83	45.42	41.25
PO9	61.67	43.33	40.33	36.33
PO10	65	48.67	45	40
PO11	66.67	47.67	44.33	39
PO12	66.6	51	46.67	42.33

Table 2.1.1.k Comparative Analysis of PO-Attainment

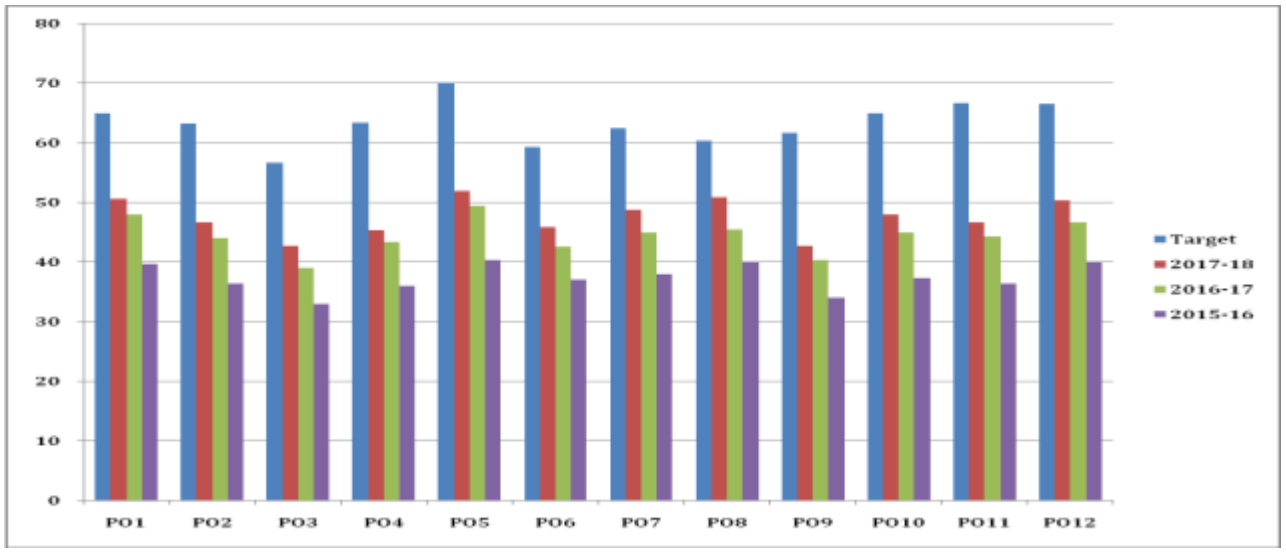


Figure 2.1.1.d Bar Chart Showing Comparative Analysis of PO Attainment

Methods used by department for compliance of the University curriculum for PO attainment:

- Lectures (Chalk and Talk)
- External/ Internal Special Lecture
- Technical Seminars
- Projects
- Industrial Visits and Technical Trainings
- Workshops
- Technical Activities
- E-Books, GATE/PSU Notes/Classes
- Placement Oriented Activities
- Personality Enhancement Activities
- Conferences
- Govt. Initiatives for E-Resources (Virtual lab, Swayam, NPTEL)
- Intershala
- ICT based Learning through NITTTR Chandigarh
- Social Activities

Gap Identification Process

Following are the criteria used to determine extent of compliance of university curriculum for attainment of POs:

- Course Outcome (CO) Identification
- CO-PO Mapping
- Identification of Curriculum Gap through tool assessment

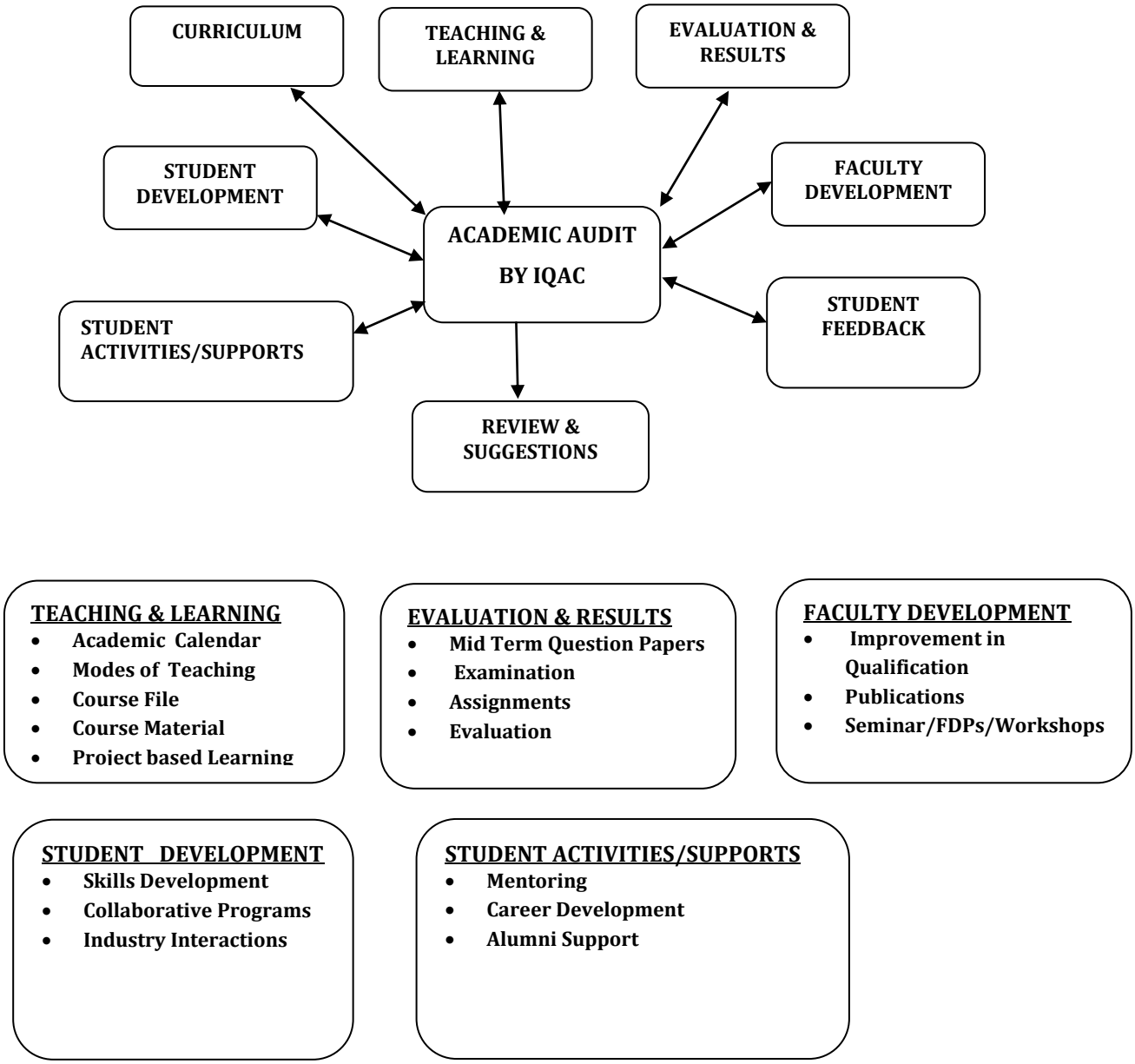


Figure 2.1.1.e Roles of Academic Audit by IQAC team for Gap analysis

To attain POs, if some components are not included in the curriculum provided by RTU, then our department makes additional efforts to impart such knowledge by covering aspects through **"CONTENT BEYOND SYLLABUS"** that is identified by a proper "GAP analysis" process. Following table gives an insight of various PO attainment tools through which gap analysis is done for the department of Electronics and Communication Engineering.

Tool Name	Activity for Tool Assessment	Analysis through Tool	Observation/Gap	Gap Recovery	PO/PSO Attainment
ACADEMIC ASSESSMENT TOOL	***MTT Result***	Student performance based on Theory and Practical Exams	Students' Performance below Target	Assignments, Extra Classes, Invited Talks, Re-Tests, OBTs, etc.	PO1, PO2
	Final RTU Result				
	Labs/Experiments				
	Projects	Application/Industry	Students lag in relating	Project	PO3, PO5,

	Industrial Trainings	based Learning	theoretical aspects in Practical terms	Competitions, Technical trainings, Industry Interaction through visits, etc.	PO11, **PSO1, PSO2**
PLACEMENT TOOL	***Final Placed Strength***	Ability to select for job	Students lag in communication-skills and Lack of Reasoning Aptitude	Face Classes, Expert talks	PO10, PO12
	Mentoring	Guide the students to to enhance the Inter-Personal skills	Students are not rich in their soft-skills and they are also not motivated	Class Coordinators, Mentors for Placement, GD/PI Classes, Mocks	PO10, PO12
	Soft-Skills				
	Higher Studies	Proportion of students who go for higher education/Govt. Jobs	Very Low percentage of selections in PSUs and GATE reflects their poor Technical knowledge	Govt. Job Portal, Technical talks, Course Material for higher studies	PO1, PO2
	PSU/GATE				
BEYOND CURRICULUM TOOL	***Technical Events***	Encouragement to implement Theoretical aspects through Participation	Participation in-house and outside college by few students only reflects lack of interest and confidence	Technical Events, Technical Seminars, etc.	PO2, PO3, PO5, PO9, PO10, **PSO1**
	Social Events/Extra Activity	To indulge students in society for Ethics inputs	Students lack in creating a linkage between social and professional aspects	Blood Donation, Vande Mataram, Clean Campaign, Marathon, etc.	PO6, PO8, PO9
	Conference/Workshops	To impart Research/Industry oriented skill-set along with work- culture	Very less interest and involvement in R & D works and industrial working ethics are missing	National/International Conferences, Workshops, Seminars, Industrial visits, etc.	PO1, PO3, PO4, PO10, **PSO1, PSO2**
	Industrial Visits				
	E-Resources	Motivation for Universal Learning approaches	Students are not updated in terms of latest technologies	Swayam portal, EdX, NPTEL videos/lectures, e-Books, etc	PO1, PO10, PO12

Table 2.1.1.l Tool Analysis for Gap identification with PO/PSO mapping

Identified Gaps:

- Students lag in relating theoretical aspects in Practical terms
- Students lag in communication-skills and Lack of Reasoning Aptitude
- Students are not rich in their soft-skills and they are also not motivated
- Low percentage of selections in PSUs and GATE
- Students lack in creating a linkage between social and professional aspects
- Poor interest and involvement in R & D works

2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

(Provide details of the additional course/learning material/content/laboratory experiments/projects etc., arising from the gaps identified in 2.1.1 in a tabular form in the format given below)

CAY 2018-19						
S. No.	**Gap**	**Action Taken (Department Activity)**	**Date-Month-Year**	**Resource Person with designation**	**Number of Students Participated**	**PO/PSO Attainment**
Technical Events						
1	Students lag in relating theoretical aspects in Practical terms	Expert Talk On Block Chain Technology	15.09.2018	Dr. Rajiv Mathur, CTO, Chainvine Ltd.	55	PO2, PO3, PO9
2		Project Exhibition	15.09.2018	Mr. Vikas sharma	60	PO2, PO3, PO9, **PSO1**
Industrial Trainings/Industrial Visits/Workshops						
3	1. Students lag in relating theoretical aspects in Practical terms 2. Poor interest and involvement in R & D works	Smart City Expo Visit	26.09.2018 & 27.09.2018	Mr. Siddharth Chaturvedi	78	PO1, PO2, PO3, P12
4		Industrial Visit at Tesca Technologies Pvt. Ltd	05.07.2018 & 06.07.2018	Mr. Raj Kumar Jain	110	PO1, PO2, PO3, PO5, **PSO1**
5		Workshop on Embedded Systems and IOT	10.07.2018 to 13.07.2018	Harish and Ribia, TechieNest	121	PO1, PO2, PO3, PO5, **PSO1**
6		Workshop on VLSI Technology	10.07.2018 to 13.07.2018	Mr. Ravindra Singh Shekhawat, IIHT	125	PO1,PO2, PO3, PO5
Seminar/Expert Talk						
7	Poor interest and involvement in R & D works	Seminar on App Developement	05.07.2017 & 06.07.2018	Mr. Bijendra Singh Ratiya	92	PO1,PO2, PO3, PO5
8		Seminar on IOT and Phython	18.07.2018 & 19.07.2018	Mr. Siddharth, TechieNest	144	PO1,PO2, PO3, PO5
9	Students are not rich in their soft-skills and they are also not motivated	Expert Talk on Foreign Policy in classrooms	06.07.2018	Mr. Ashok Kumar, Section Officer, Ministry of External Affairs	56	PO1, PO2, PO3, P12

10		Expert Talk and Practical Session on Yoga and Meditation	05.07.2017 & 06.07.2018	Mr. Mukesh Agarwal and Ms.Chitra	85	PO6, PO8, PO9, PO12
11		Expert Talk on opportunities in PSUs	15.09.2018	Mr. Vaibhav Jain Sr. technical advisor Earnst & young ltd.	33	PO1, PO2, PO3, PO5
Social Activity						
12	Students lack in creating a linkage between social and professional aspects	Vande Mataram	06.10.2018	Mr. Ashutosh Sharma, SDO, JECRC	389	PO6, PO8, PO9, PO12
13		Clean India Camp	02.10.2017	Dr. Vinita Mathur, JECRC	58	PO6, PO8, PO9, PO12

CAY 2017-18

S. No.	Gap	Action Taken (Department Activity)	Date-Month-Year	Resource Person with designation	Number of Students Participated	PO/PSO Attainment
Technical Events						
1	Students lag in relating theoretical aspects in Practical terms	Game of Drones	28-03-2018	Mr. Siddharath Singh, Director (Techienest Pvt. Ltd.)	42	PO2, PO3, PO9, **PSO1**
2		Quizholic	28-03-2018	Mr. Siddharath Singh, Director (Techienest Pvt. Ltd.)	100	PO2, PO3, PO9
3		TechnoInBuzz	26-03-2018	Mr. Siddharath Singh, Director (Techienest Pvt. Ltd.)	30	PO2, PO3, PO9
4		Renovator	28-03-2018	Prof. Arun Chopra, AP, JECRC Univ.	56	PO2, PO3, PO9
5		Robowar	27-03-2018	Mr. Manish Jain (Dy. Director, JECRC)	24	PO2, PO3, PO9, **PSO1**
6		Line-Follower	26-03-2018	Dr. Manish Gupta, AP, JECRC Univ.	50	PO2, PO3, PO9, **PSO1**

7		Formula Zero	28-03-2018	Mr. Manish Jain (Dy. Director, JECRC)	115	PO2, PO3, PO9
8		RoboSoccer	25-03-2018	Mr. Sanjay Banal, Director (Project Lab India)	90	PO2, PO3, PO9, **PSO1**
9		Technophillia	28-03-2018	Prof. K. M. Singh, JECRC University	58	PO2, PO3, PO9
10		Tech Tambola	26-03-2018		59	PO2, PO3, PO9
11		Phoneix	26-03-2018	Mr. Rahul Sharma, Dy. Manager (Genus Pvt.Ltd.)	76	PO2, PO3, PO9
12		SumoWar	26-03-2018	Mr. Naveen Panwar, Director (IIST)	42	PO2, PO3, PO9
13		Hackathon	30-03-2018 & 31-03-2018	Mr. Sunil Jangid, HOD IT, JECRC	105	PO2, PO3, PO9, PO5
15	Students lack in creating a linkage between social and professional aspects	MUN	07.04.2018 & 08.04.2018	Ms. Anshul Mittal, SDO, JECRC	14	PO2, PO3, PO9, PO10
Industrial Trainings/Industrial Visits/Workshops						
16	Students lag in relating theoretical aspects in Practical terms	Embedded Systems & Robotics organized by TechiNest Pvt.	22-01-2018 & 12-02-2018	Mr. Siddharath Singh, Director (Techienest Pvt. Ltd.)	56	PO1, PO2, PO3, PO5, **PSO1**
17		Embedded & Robotics organized by SaKRobotix	19-01-2018 & 22-02-2018	Mr. Sakya Singha Mahapatra (Senior Trainer, SaKRobotix)	66	PO1, PO2, PO3, PO5, **PSO1**
18		Workshop on CCNA Networking	20-04-2018	Mr. Neeraj panwar (Trainer, IIHT)	58	PO1, PO2, PO3, PO5
19		Workshop on SPYBOT- Spy Robotic Workshop organized by TechiNest Pvt. Ltd	19-08-2017	Mr. Saurabh (Trainer, Techienest)	215	PO1, PO2, PO3, PO5, **PSO1**

20		Workshop on Redhat Technology	17-01-2018 to 31-01-2018	Mr. Alok Srivastava (Senior Trainer, Redhat)	120	PO1,PO2, PO3, PO5
21	Poor interest and involvement in R & D works	Industrial Visit Genus Power Infrastructures Ltd	23-03-2018	Mr. Manish Sharda (Manager-Technical)	50	PO1,PO2, PO3, PO5
23		Industrial Visit PHILIPS LIGHTING	23-03-2018	Mr. Suresh Negi (Manager-Production)	51	PO1,PO2, PO3, PO5
Seminar/Expert Talk						
25	Poor interest and involvement in R & D works	Seminar on Embedded System by Aptron	09-02-2018	Mr. Chetan Prakash, Trainer (Aptron India, Noida)	75	PO2, PO3, PO5, **PSO1**
26		Seminar by HUAWEI	29-07-2017 & 30-07-2017	Mr. Atul Rajput (Manager, Indovision, Noida)	550	PO2, PO3
27		Seminar by Engineer's Academy		Mr. Atul Gupta (BDM, Jaipur)	180	PO1, PO2, PO3
28		Invited Talk	12-03-2018	Mr. Anshul Gupta (DBA-Infosys Ltd.)	62	PO1, PO2, PO3
29		Expert Talk by Dr. Rajeev Gupta	17-02-2018	Dr. Rajiv Gupta (Pro-VC, RTU, Kota)	56	PO12
Conferences/FDP						
30	Students are not rich in their soft-skills and they are also not motivated	International Conference	06-04-2018 & 07-04-2018	Mr. Gunjan Saxena (GM, BSNL Jaipur), Dr. Satyasai Jagannath Nanda (Asst. Prof.-MNIT, Jaipur), Prof. Ram Rattan (Dean Engg.-JECRC Univ., Jaipur)	57	PO1, PO3, PO4, PO10, **PSO1, PSO2**
31	Poor interest and involvement in R & D	National Conference	27-03-2018 & 28-03-2018	Mr. Siddharath Singh, Director (Techienest Pvt. Ltd.)	42	PO1, PO3, PO4, PO10

32	works	FDP Embedded Systems (ICT51)	19-03-2018 to 23-03-2018	NITTTR, Chandigarh	7	PO6, PO7, PO12, **PSO1**
Social Activity						
33	Students lack in creating a linkage between social and professional aspects	Blood Donation Camp	11.10.2017	Mr. Kuldeep Sharma, ME	80	PO6, PO8, PO9, PO12
34		Clean India Camp	02.10.2017	Mr. Ranjeet Pandey, IT	54	PO6, PO8, PO9, PO12
35		National Anthem	08.11.2017	Mr. Anshul Mittal, SDO, JECRC	64	PO6, PO8, PO9, PO12

Table 2.1.2.a Activities during CAY (2017-18)

Photographs for CAY (2017-18)

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Game of Drones

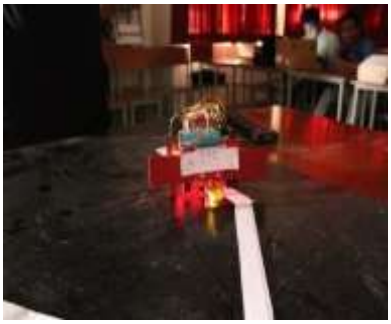
Quizholic

TechTambola

RoboSoccer Formula zero

TechnoPhila

Phoenix



Line Follower

RoboWar

RoboWar

RoboSoccer

Embedded Systems

Workshop by RED HAT ACADEMY

RTDEEE

Expert Talk

Industrial Visit

CAYm1 2016-17				
S. No.	**Department Activity**	**Level of Activity**	**Number of Participants**	**PO Attainment**
Technical Events				
1	Game of Drones	National	42	PO2, PO3, PO5
2	Quizholic	National	98	PO1, PO2
3	TechinoBuzz	National	58	PO9, PO10
4	Renovator	National	30	PO2, PO3, PO5
5	Robowar	National	35	PO2, PO3, PO5
6	Line follower	National	28	PO2, PO3, PO5
7	Formula Zero	National	40	PO2, PO3, PO5
8	RoboSoccer	National	31	PO2, PO3, PO5
9	Technical Hack	National	30	PO2, PO3, PO5
10	Phoenix	National	28	PO2, PO12
11	SumoWar	National	20	PO2, PO3, PO9, PO11
Industrial Trainings/Industrial Visits/Workshops				
12	Embedded System training by TechiNest	National	55	PO1, PO2, PO3, PO5
Conferences/FDP				
13	National Conference	National	75(Papers)	PO1, PO3, PO4, PO10
Social Activity				
14	Blood Donation Camp	National	96	PO6, PO8, PO9, PO12
15	Clean India Camp	National	70	PO6, PO8, PO9, PO12
16	National Anthem	National	92	PO6, PO8, PO9, PO12

Table 2.1.2.b Activities during CAYm1 (2016-17)

CAYm2 2015-16				
S. No.	**Department Activity**	**Level of Activity**	**Number of Participant**	**PO Attainment**
Technical Events				
1	RoboWar	National	35	PO2, PO3, PO5
2	Line Follower	National	28	PO2, PO3, PO5
3	Formula Zero	National	40	PO2, PO3, PO5
4	RoboSoccer	National	31	PO2, PO3, PO5
5	Combatant	National	25	PO2, PO3, PO5
6	Junkyard	National	27	PO2, PO3, PO5
7	Reverse Engineering	National	32	PO2, PO3, PO5
Industrial Trainings/Industrial Visits/Workshops				
8	Training on Mobile Controlled Robotics for 2nd year	National	46	PO1,PO2,PO3
9	Training on Mobile Controlled Robotics for 3rd year	National	55	PO1,PO2,PO3
10	Training on MATLAB	National	55	PO1, PO2, PO3, PO5
FDP				
11	VLSI	National	40	PO6, PO7, PO12
12	Embedded System	National	42	PO6,po7,PO12
Social Activity				
13	Blood Donation Camp	National	96	PO6, PO8, PO9, PO12
14	Clean India Camp	National	70	PO6, PO8, PO9, PO12
15	National Anthem	National	92	PO6, PO8, PO9, PO12

Table 2.1.2.c Activities during CAYm2 (2015-16)

Content beyond the Syllabus (CAY 2017-18)								
S. No.	**Course Name**	**Course Code**	**Topic(s) as Content beyond Syllabus**	**Mode of Conduction**	**Resource Person with Designation**	**% of Students**	**Learning Outcomes**	**Relevance to POs and/ PSOs**
1	Electronic Devices & Circuits	3EC1A	The Silicon-Controlled Rectifier (SCR),The Shockley Diode	Expert lectures from industries/Academicians	Mr. Vinayak Gupta	70%	Knowledge about oscillator circuits	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12
2	Data Structures & Algorithms	3EC2A	Bucket and radix sort, Hashing	Video Lecture, PPT	--	60%	Knowledge about new sorting and hashing	PO1, PO2, PO4, P11, P12
3	Digital Electronics	3EC3A	Five-Variable K- Map; Overview of Memory SRAM, DRAM; Programmable Logic Devices (PLDs); Concept of Moore and Mealy	Lecture	--	60%	Knowledge about sequential circuits	PO1, PO2, PO3, PO4
4	Circuit Analysis & Synthesis	3EC4A	Resonance in Circuits	Video Lecture	--	68%	Knowledge about Resonance in Circuits	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12
5	Electromagnetic Properties Of Materials	3EC5A	Introduction on Nanotechnology and MEMS, Piezoelectricity & its application	Video Lecture, PPT	Ms. Geetika Mathur (AP)	70%	Knowledge about Piezoelectric materials, piezoelectricity and its applications	PO1, PO3, PO12
6	Advanced Engineering Mathematics-I	3EC6A	Rouche's Theorem & its Applications	PPT	--	60%	Knowledge about Rouche's theorem and its applications	PO1, PO2, PO12
7	Analog Electronics	4EC1A	Modulation Techniques	PPT	Mr. Mangilal (AP)	70%	Knowledge about oscillator circuits	PO1, PO2, PO4
8	Random Variables & Stochastic Processes	4EC2A	Application of probability distributions and Stochastic process in Research	Lecture	--	75%	Knowledge about the Practical utility of these topics	PO1, PO2, PO3, PO4, PO5, PO10, PO11, PO12
9	Electronic Measurement & Instrumentation	4EC3A	Different types of AC bridges	PPT	--	64%	Knowledge about signal generation by different AC bridges	PO1, PO2, PO3, PO4, PO12

10	Electromagnetic Field Theory	4EC4A	Transmission Lines	video lecture	--	71%	knowledge about the transmission lines and their application	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO11, PO12
11	Optimization Techniques	4EC5A	Game Theory & Dual Simplex Method	PPT	--	60%	Knowledge about application of Game theory	PO1, PO3, PO12
12	Advanced Engineering Mathematics-II	4EC6A	Application of Numerical Analysis in Engineering	PPT	--	70%	Knowledge about numerical analysis in Electronics problems	PO1, PO3, PO9, PO12
13	Signals & Systems	5EC1A	Decimation & interpolation	PPT	--	70%	analysis of signals sampling by decimation and interpolation	PO1, PO2, PO4, PO6, PO12
14	Linear Integrated Circuits	5EC2A	Pole-Zero Compensation	Lecture	Mr. Rakesh Kumar Kardam (AP)	70%	Knowledge about COMPENSATION TECHNIQUES	PO1, PO2, PO3, PO4,
15	Telecommunication Engg.	5EC3A	1. Landline Telephony 2. Introduction to Mobile Communications	PPT + Video Lecture	--	78%	1. Landline telephony fundamentals 2. Generations of Mobile Communication	PO1, PO2, PO3, PO6, PO7, PO12
16	Analog Communication	5EC4A	Multiplexing of Pulse Analog Signal	Lecture	Mr. Sandeep Dotya	70%	Knowledge about TDM AND FDM	PO1, PO2, PO3, PO4, PO5,
17	Microwave Engg. –I	5EC5A	Smart Antenna	Video lecture	--	73%	Knowledge about microwave based devices	PO1, PO2, PO3, PO4, PO5
18	Biomedical Instrumentation	5EC6.1A	Body Temperature, Stethoscope	Lecture	--	65%	Knowledge about device which is most commonly used in Bio medical Instrumentation	PO1, PO6, PO10, PO12
19	Microwave Engg.-II	6EC1A	Microwave based RADAR	Video lecture	--	71%	Knowledge about microwaves n their applications in real world	PO1, PO2, PO3, PO4, PO5
20	Microprocessor	6EC2A	8086 Microprocessor	Video Lecture	--	72%		PO1, PO2, PO3, PO4, PO5

21	Industrial Electronics	6EC3A	Power Factor Improvement, Harmonic Reduction	Lecture	--	77%	Factors affecting performance of power systems and how to mitigate them	PO1, PO2
22	Digital Communication	6EC4A	Satellite Communication, Radio Communication, CDMA, GSM	Video Lecture	--	71%	Knowledge about latest technologies like 4G and 5G and use of FM in radio communication	PO1, PO2, PO3, PO4, PO7, PO11, PO12
23	Control Systems	6EC5A	Sampled Data control systems	Lecture	--	68%	Knowledge about the control system and knowledge of stability analysis	PO1, PO2, PO5
24	Optical Fiber Communication	6EC6.3A	Introduction to photonics, Fiber Bragg Grating, Wavelength routing and switching networks	Lecture	--	70%	students came to know about the devices based on photonics	PO1, PO2, PO7, PO12
25	Antenna & Wave Propagation	7EC1A	Antenna Defects	Lecture	--	65%	Students learnt about minimizing the size of antenna and its effects on various antenna parameters	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PO10, PO11, PO12
26	Digital Signal Processing	7EC2A	Multirate Signal Processing, Adaptive Processing, Auto correlation	Video Lecture	--	68%	Students learnt about Signal Processing	PO1, PO2, PO4, PO5, PO6, PO8
27	Digital Image Processing	7EC3A	Steganography & Watermarking	Video Lecture	--	73%	Students learnt about invisible steganography	PO1, PO2, PO4, PO5, PO6, PO8
			Compressive Sensing and walsh transform	PPT, Video Lecture	Mr. Atul Sharma (GIT)	68%	Able to learn advancement in transformation of digital images	PO1, PO2, PO3, PO5, P09, PO10, PO11
28	Wireless Communication	7EC4A	Capacity of Fading Channels , Wireless Ad hoc networks	Lecture	Dr. Ramesh Bharti, Jagannath Univ., Jaipur	67%	Learning of Capacity of Fading Channels & Wireless Ad hoc networks	PO1, PO2, PO3, PO4
29	VLSI Design	7EC5A	Stick Diagram and its Application	lecture	Dr. Sandeep Vyas	70%	learn about fundamental of CMOS design using stick dia.	PO1, PO2, PO3, PO4
30	VHDL	7EC6.3A	Introduction to Verilog	PPT	--	72%	Learning advanced HDL	PO1, PO2,

			Language					PO3, PO5,
31	IC Technology	8EC1A	Crystal structure	Video lecture	--	67%	Basic of crystal.	PO1, PO2, PO3, PO6, PO7, PO12
32	Radar & TV Engineering	8EC2A	HDTV, Optical LED, Remote Sensing	Lectures	--	68%	Students learned about advance Screen technology.	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12
33	MEMS and Nanotechnology	8EC3A	History of nanotechnology	Video Lecture	--	72%	Students learnt about Nanotechnology	PO1, PO2, PO3, PO4, PO9, PO11, PO12
34	Microcontrollers and Embedded Systems	8EC4.3A	PIC & ARM processor	Video Lecture	--	62%	Able to learn about the ARM processor	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12

Content beyond the Syllabus (CAYm1 2016-17)

S. No.	Course Name	Course Code	Topic(s) as Content beyond Syllabus	Mode of Conduction	Resource Person with Designation	% of Students	Learning Outcomes	Relevance to POs and/ PSOs
1	Electronic Devices & Circuits	3EC1A	The DIAC ,Photodiodes – Basic principles	Expert lectures from industries/Academicians	Mr. Arun Chopra (AP)	65%	student will learn about power MOSFET and able to understand different MosfeT	PO1, PO2, PO5
2	Digital Electronics	3EC3A	Five-Variable K- Map; Overview of Memory SRAM, DRAM	Lecture	--	65%	Knowledge about digital memory circuits	PO1, PO2, PO3, PO4
3	Circuit Analysis & Synthesis	3EC4A	Resonance in Circuits	Video Lecture	--	68%	Knowledge about Resonance in Circuits	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12
4	Electromagnetic Properties Of Materials	3EC5A	Piezoelectric Sensor Materials, Metamaterials and Microsystems, Introduction of Nanotechnology	Video Lecture, Lecture	--	68%	Knowledge about Piezoelectric Materials, Metamaterials, Microsystems and Nanotechnology	PO1, PO2,PO3,PO12
5	Analog Electronics	4EC1A	Types of Transducer	Lecture	Mangilal (AP)	60%	Knowledge about application of transducer and antenna in	PO2, PO3, PO5

							electronics	
6	Random Variables & Stochastic Processes	4EC2A	Application of probability distributions and Stochastic process in Research	Lecture	--	70%	Knowledge about the Practical utility of these topics	PO1, PO2, PO3, PO4, PO5, PO10, PO11, PO12
7	Electronic Measurement & Instrumentation	4EC3A	PMMC Instruments, Galvanometer	PPT	--	63%	Knowledge about construction and basic principle of working	PO1, PO2
8	Electromagnetic Field Theory	4EC4A	Transmission Lines	Video lecture	--	83%	knowledge about the transmission lines and their application	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO11, PO12
9	Optimization Techniques	4EC5A	Game Theory & Dual Simplex Method	PPT	--	60%	Knowledge about application of Game theory	PO1, PO3, PO12
10	Advanced Engineering Mathematics-II	4EC6A	Application of Numerical Analysis in Engineering	PPT	--	70%	Knowledge about numerical analysis in Electronics problems	PO1, PO3, PO9, PO12
11	Signals & Systems	5EC1A	application of CTFS and DTFS	PPT	--	60%	knowledge of CTFS and DTFS with application	PO1, PO3, PO6, PO9
12	Linear Integrated Circuits	5EC2A	Step-Response of Op-Amp	Lecture	Mr. Arun Chopra	70%	Knowledge about Step-response of OP-AMP	PO1, PO3, PO2
13	Telecommunicati on Engg.	5EC3A	Filters for mobile communications	PPT	--	86%	Brief about types of Filters that are used in mobile communication	PO1, PO2, PO3, PO6, PO7, PO12
14	Analog Communication	5EC4A	Hillbert Transform	Lecture	Mr. Sandeep Dotya	70%	Knowledge about Hillbert transform	PO1, P02, P03, P04
15	Microwave Engg. -I	5EC5A	MMIC practical applications	Guest lecture	--	73%	Student learnt about MMIC fabrication steps and their applications	PO2, PO5
16	Biomedical Instrumentation	5EC6.1A	Fluoroscopy	Lecture	--	70%	Student learnt about pulse sensor and read surgical procedure and	PO1, PO6, PO10, PO12
17	Microwave Engg.-II	6EC1A	Microwave passive components	Lecture	--	68%	Student learnt about Solid State Devices used at microwave freq.	PO2, PO5, PO12
18	Microprocessors	6EC2A	assembly language	Lecture	Mr. Lokesh Sharma	70%	Student learnt about	PO1, PO2, PO3, PO4,

							advance of micro processor	PO5
19	Industrial Electronics	6EC3A	Power Factor Improvement Harmonic Reduction	Lecture	--	69%	Student learnt about Power Factor Improvement methods	PO1, PO2, PO12
20	Digital Communication	6EC4A	Satellite Communication, CDMA, GSM	Lecture	Mr. P. L. Gupta	65%	Student learned and analysed GSM,CDMA	PO1, PO2, PO4
21	Control Systems	6EC5A	Error Analysis using MATLAB	Lecture	--	69%	Student learned and analysed error signal by using of MATLAB	PO1, PO2, PO3
22	Optical Fiber Communication	6EC6.3A	Network protection and survivability	Lecture	Mr. Vikas Sharma	65%%	Student learned about the types of network security	PO1, PO7, PO12
23	Antenna & Wave Propagation	7EC1A	Wearable Antenna	Lecture	--	69%	Students learnt applications of antennas.	PO1, PO4, PO5, PO6, PO11, PO12
24	Digital Signal Processing	7EC2A	Adaptive Processing, Multirate Processing	Lectures	Mr. S.K.Singh	68%	Student will learn about signal processing	PO1, PO2, PO4, PO5, PO6, PO8
25	Digital Image Processing	7EC3A	Biometric fingerprint Image Sensing	PPT video lecture	Mr. Rahul Jain (GIT)	70%	Students will learn about fingerprint sensing	PO1, PO4, PO5, PO6, PO11, PO12
26	Wireless Communication	7EC4A	Capacity of Fading Channels, Wireless Ad hoc networks	Lecture	Dr. Ramesh Bharti, Jagannath Univ. , Jaipur	65%	Learning of Capacity of Fading Channels & Wireless Ad hoc networks	POI, PO2, PO3, PO4
27	VLSI Design	7EC5A	Tanner Tool	PPT video lecture	DR. KM Singh	70%	student learned about using advanced tanner tool to design CMOS	PO1, PO2, PO3, PO4, PO5, PO6, PO11, PO12
28	VHDL	7EC6.3A	Programming Logic Arrays	Video Lectures	--	68%	Students learned programming logic arrays	PO1, PO2, PO3, PO5
29	IC Technology	8EC1A	GaAs technology	lecture	--	69%	Students learned about current technology.	PO1, PO2, PO3, PO7, PO12
30	Radar & TV Engineering	8EC2A	HDTV, Optical LED, Remote Sensing	Lectures	--	65%	Students learned about advance Screen technology.	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12
31	MEMS and Nanotechnology	8EC3A	Nanotechnology in Polymers	SPL	--	63%	students learnt about the use of nanotech in polymers	PO1, PO2, PO3, PO4, PO9, PO11, PO12

32	Microcontrollers and Embedded Systems	8EC4.3A	PIC Controller	Lecture	--	62%	students learnt about the kernel structure	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12

Content beyond the Syllabus (CAYm2 2015-16)

S. No.	Course Name	Course Code	Topic(s) as Content beyond Syllabus	Mode of Conduction	Resource Person with Designation	% of Students	Learning Outcomes	Relevance to POs and/ PSOs
1	Electronic Devices & Circuits	3EC1A	Photodiodes – Basic principles Regulated power supply	Expert lectures from industries/Academicians	Mr. Deepak sankhala (AP)	60%	Able to solve and understanding the basic circuits and working of different diode	PO1, PO2, PO5
2	Digital Electronics	3EC3A	Five-Variable K- Map	Lecture	--	45%	Complexity of K-Map	PO1, PO2, PO3, PO4
3	Circuit Analysis & Synthesis	3EC4A	Photodiodes – Basic principles	Video Lecture	--	68%	Knowledge about Resonance in Circuits	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12
4	Electromagnetic Properties Of Materials	3EC5A	Metamaterials, Introduction on Nanotechnology	Lecture, Video Lecture	--	68%	Introduction of Nanotechnology and knowledge of Metamaterials	PO1, PO2, PO12
5	Analog Electronics	4EC1A	Basics of antenna	Lecture	Mr. Mangilal (AP)	70%	Understanding basic circuits and working of different oscillators	PO1, PO2, PO3, PO5
6	Random Variables & Stochastic Processes	4EC2A	Application of Stochastic process in Research	Lecture	--	70%	Knowledge about the Practical utility of these topics	PO1, PO2, PO3, PO5, PO10, PO11, PO12
7	Electronic Measurement & Instrumentation	4EC3A	Operational Amplifier and its various application	Lecture	--	72%	Able to understand working principle of signal generators	PO1, PO2, PO4
8	Electromagnetic Field Theory	4EC4A	Transmission Lines	video lecture	--	63%	knowledge about the transmission lines and their application	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO11, PO12
9	Signals & Systems	5EC1A	Discrete Fourier and Z Transform Analysis of Recursive & Non-Recursive systems	Lecture	--	60%	Knowledge about the discrete Fourier and Z transform and its application	PO1, PO3,PO6,PO9

10	Linear Integrated Circuits	5EC2A	Response of op-amp	Lecture	Mr. Deepak Sankhala	60%	Knowledge about the OP-AMP	PO1, PO2, PO3,
11	Telecommunication Engg.	5EC3A	Digital Switching	PPT	--	82%	New digital schemes of switching are described	PO1, PO2, PO3, PO6, PO7, PO12
12	Analog Communication	5EC4A	Bessel Function	Lecture	Mr. Sandeep Dotya	80%	Brief knowledge of mathematical Bessel function	PO1, PO2, P03
13	Microwave Engg. –I	5EC5A	Microwave filters	Expert lectures from industries/Academicians	Ms. Poonam Rathore	68%	Able to solve and understanding the microwave applications	PO1, PO2, PO4
14	Biomedical Instrumentation	5EC6.1A	Body Temperature, Laparoscope	Lecture	--	59%	Able to understand body temperature and laparoscope benefits	PO1, PO10, PO12
15	Microwave Engg.-II	6EC1A	Microwave based smart antenna	Guest lectures	Mr. Dinesh Nagar	70%	Able to solve and understanding the microwave based devices and their uses	PO1, PO2, PO3, PO5
16	Industrial Electronics	6EC3A	Power Factor Improvement Harmonic Reduction	Lecture	--	72%	Student learnt about Power Factor Improvement methods	PO1, PO2, PO12
17	Digital Communication	6EC4A	Satellite communication, CDMA, GSM	Lecture	Mr. Ashutosh sharma	69%	Student learnt about Satellite Communication	PO1, PO2, PO4
18	Control Systems	6EC5A	Stability analysis of digital control system – An Introduction	Lecture	--	65%	Gained knowledge about the stability of digital control system	PO1, PO2, PO3
19	Optical Fiber Communication	6EC6.3A	concepts of SONET/SDH Network	Lecture	Shikha Gaur	60%	Gained knowledge about optimal networking	PO1, PO7, PO12
20	Antenna & Wave Propagation	7EC1A	Different feeding techniques in antenna	Lecture	--	69%		PO1, PO7, PO12
21	Digital Signal Processing	7EC2A	Multirate Processing	Lectures	Mr. S. S. Shekhawat	62%	learn about multirate DSP	PO1, PO2, PO4, PO5, PO6, PO8
22	Digital Image Processing	7EC3A	Biometric fingerprint Image Sensing	PPT, video lecture	Mr. Ashish Kulshrestha	68%	Students will learn about image recognition using biometrics.	PO1, PO4, PO5, PO6, PO11, PO12
23	Wireless	7EC4A	Concept of 4G/5G	Lecture	Mr. Manish Joshi,	69%	Students learned about	PO1, PO2,PO7, PO12

	Communication		Technology		Amcipher Labs, Jaipur		4G/5G technology	
24	VLSI Design	7EC5A	Fermi Energy Level and Fermi-Dirac distribution	PPT, lecture	Dr. K. M. Singh	68%	Students learned about energy distribution concept in semiconductor design	PO1, PO2, P03
25	VHDL	7EC6.3A	Introduction to Verilog	PPT	--	69%	Students learned fundamental of the language	PO1, PO2, PO3, PO5
26	IC Technology	8EC1A	Novel devices	lecture	--	65%	Earn information about upcoming future of fabrication	PO1, PO2, PO3, PO7, PO12
27	Radar & TV Engineering	8EC2A	HDTV, Optical LED, Remote Sensing	Lectures	--	64%	Students learned about advance Screen technology	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12
28	MEMS and Nanotechnology	8EC3A	Medical application of Nanotechnology	SPL	--	71%	Students learnt about medical application of nanotechnology	PO1, PO2, PO3, PO4, PO7, PO12
29	Microcontrollers and Embedded Systems	8EC4.3A	PIC controller	Video lecture	--	68%	students learnt about the kernel structure	PO1, PO2, PO3, PO5, PO9, PO10, PO11, PO12

Table 2.1.2.d Delivery details of Content beyond Syllabus topics for Gap Fulfilment

2.2. Teaching -Learning Processes (100)

2.2.1. Describe Processes followed to improve quality of Teaching & Learning (25)

(Processes may include adherence to academic calendar and improving instruction methods using pedagogical initiatives such as real world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data etc. encouraging bright students, assisting weak students etc. The implementation details and impact analysis need to be documented)

- Faculty members are oriented towards Outcome Based Education (OBE) and are actively utilizing the OBE to cater the learning needs of students by innovative ways.
- As per RTU norms, rather than referring Academic Calendar published on the university's website, the department publishes its own Academic Calendar involving the regular teaching plan as well as other extra student centric activities. It also includes the intimation of regular Midterm examinations and class tests.

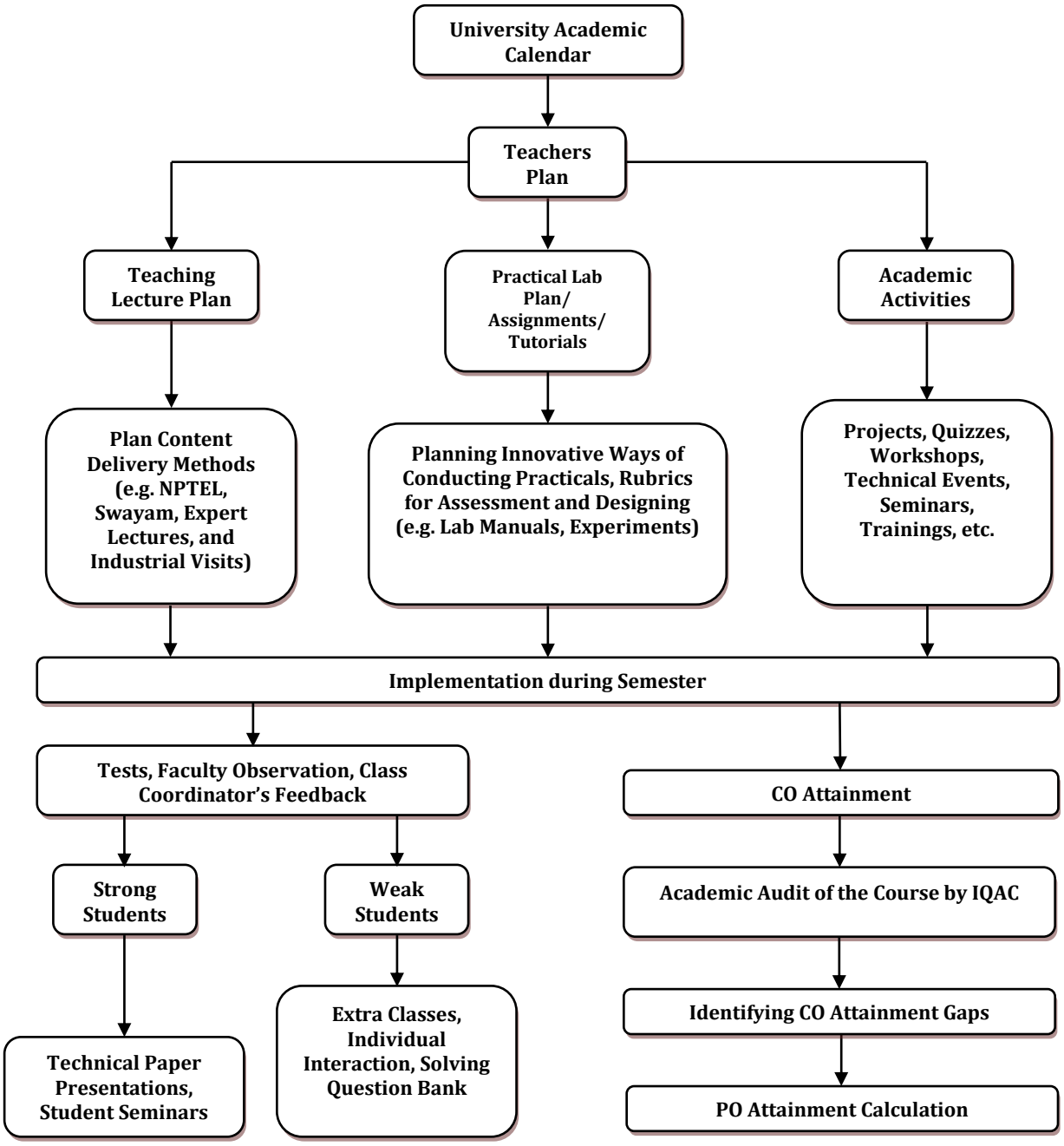


Figure 2.2.1.a Teaching-Learning Processes

- Lecture Delivery is made innovative in the department by inculcating various methods in the teaching learning process like recalling prior related topics, generating questions, responding to generated queries, etc. All these methods are generally performed in cooperative approach like Group Discussions and Seminars.
- In labs, the delivery to the students is performed with the help of latest software and performance of each student is evaluated in the Lab Performance Report. Viva voce and seminars are taken in the respective labs.

- Experiments in the laboratories are conducted as per the university guidelines. Some discussions are made beyond syllabus relevant to the course. Laboratory manuals explaining the details of the experiment are available with the course teacher and are given to students during the semester.
- Faculty members not only provide well written unit wise notes but also focuses on the materials provided online by the well renowned universities. They focus on the video lecture material provided to the students online e.g. NPTEL, SWAYAM. It enhances the capability of students to not only understand the context but also its practical approaches.
- Oral Questionnaire and Query Session in each lecture delivery of respective subjects.
- Class Tests and Assignments are being taken by faculty members for each respective subject.
- Performance Report is discusses to the students on regular basis.
- Mentoring sessions are conducted to provide guidance to students towards achieving professional requirements and assessment of his/her academic progress as well as personal growth. One-one discussion, interaction between faculty member and students has increased confidence levels of the students.
- Projects are mandatory for VII Semester and VIII Semester students. Students make their minor and major projects under the supervision of their respective Guide Faculty members.
- Faculty Development Programs are organized in the department to ensure that the faculty members have the knowledge of latest technologies.
- The department has provision of showing answer sheets of internal examination to the students. They can compare their answer with other students and also with text books. They can discuss with respective subject teacher. Faculty members are use assignments, tutorials, quiz etc. This has added value to the system.
- The department gives emphasis on concept building and exposure of latest knowledge of the subject. For this following measures are taken: practical exposure, communication skill and social responsibilities.
- For developing communication skills, group discussions, presentation on theory based and general topics are regularly carried out in the class.
- Course outcomes are defined not only for the subjects but their respective labs also. Then course outcomes are mapped with the program outcomes. This mapping depicts the achievement of the particular learning outcome.
- The examination evaluation is also performed on the basis of course outcomes which ensure the result of the achievement of outcomes. Generally this criterion for achievement is 60%.
- The midterm exams are evaluated on the basis of course outcomes. 60% achievement of each student in the respective subject ensures the achievement of the course outcome. If any student doesn't achieve the required criteria, he/she is given the assignments related to those course outcomes in which the student did not secure 60% marks.
- The bright students having high academic track records are encouraged by faculty members to achieve university ranks, also encouraged to take up competitive examinations

like GATE, GRE etc. The faculty members encourage the students, those having orientation towards research to do research work and publish their research work in National & International Conferences and Journals.

1. ACADEMIC CALENDAR

Institutional calendar is prepared and aligned with academic calendar of RTU. In addition to events proposed by the college in academic calendar, our department introduces many other events and activities that are beneficial in overall development of the students. Also, training and placement skill development program is also a part of our academic calendar so that the students can gain on technical as well as personality development that consequently make them employable.

Sample Academic Calander for E**ven Semester CAY 2017-18)** is shown below

ACADEMIC CALENDAR (EVEN SEMESTER CAY 2017-18)		
S. No.	**Activity**	**Date(s)**
1	Commencement of Classes B. Tech 6th & 8th Semesters*	13-12-2017
2	Commencement of Classes B. Tech 4th Semester*	05-01-2018
3	JECRC Hackathon 1.0	10-01-2018 to 11-01-2018
4	1st Project Presentation of VIII sem. Section-A	19-01-2018
5	1st Attendance Compilation, Display on Notice Board & SMS to Parents	20-01-2018
6	1st Project Presentation of VIII sem. Section-B	20-01-2018
7	1st Industrial Visit	24-01-2018
8	1st Project Presentation of VIII sem. Section-C	25-01-2018
9	1st Project Presentation of VIII sem. Section-D	27-01-2018
10	1st Invited Talk	27-01-2018
11	2nd Attendance Compilation, Display on Notice Board & Letters to Parents	03-02-2018
12	MTT- 1 of B. Tech 6th & 8th Semesters	07-02-2018 to 09-02-18
13	2nd Project Presentation of VIII sem. Section-A	16-02-2018
14	2nd Industrial Visit	16-02-2018
15	2nd Project Presentation of VIII sem. Section-B	17-02-2018
16	3rd Attendance Compilation, Display on Notice Board & SMS to Parents	17-02-2018
17	2nd Project Presentation of VIII sem. Section-C	23-02-2018
18	2nd Project Presentation of VIII sem. Section-D	24-02-2018
19	2nd Invited Talk	24-02-2018
20	MTT- 1 of B. Tech 4th Semester	05-03-2018 to 07-03-18
21	3rd Project Presentation of VIII sem. Section-A	09-03-2018
22	3rd Project Presentation of VIII sem. Section-B	10-03-2018
23	4th Attendance Compilation, Display on Notice Board & Letters to Parents	10-03-2018

24	3rd Project Presentation of VIII sem. Section-C	16-03-2018
25	3rd Invited Talk	16-03-2018
26	3rd Project Presentation of VIII sem. Section-D	17-03-2018
27	3rd Industrial Visit	17-03-2018
28	ICT based FDP program "Embedded Systems" (ICT 51)	19-03-2018 to 23-03-2018
29	4th Project Presentation of VIII sem. All Sections	24-03-2018
30	5th Attendance Compilation, Display on Notice Board & SMS to Parents	24-03-2018
31	National Conference	24-03-2018
32	MTT- 2 of B. Tech 6th & 8th Semesters	31-03-2018 to 02-04-18
33	2nd International Conference RTDEEE-2018	06-04-2018 to 07-04-18
34	Commencement of 8th Semester Theory Exams	12-04-2018
35	Commencement of 6th Semester Theory Exams	13-04-2018
36	6th Attendance Compilation of 4th Sem., Display on Notice Board & Letters to Parents	14-04-2018
37	MTT- 2 of B. Tech 4th Semester	23-04-2018 to 25-04-18
38	Final Project Presentation of 8th Semester	24-04-2018 to 05-05-2018
39	Commencement of 4th Semester Practical Exams	26-04-2018
40	Commencement of 6th Semester Practical Exams	01-05-2018
41	Commencement of 8th Semester Practical Exams	07-05-2018
42	Practical Training (After 6th Semester)	07-05-2018 to 17-07-2018
43	Commencement of 4th Semester Theory Exams	09-05-2018
44	Summer Vacation	12-05-2018 to 01-07-2018

2. Maintenance of Course files

For each course, a course file is prepared by the teaching faculty. The contents of course file include following attributes:

- Vision and Mission of College
- Vision and Mission of department
- RTU scheme
- Syllabus of Course
- Program outcomes and Program Specific Outcomes
- Course Outcomes
- Mapping between COs and POs
- Lecture Plan
- MTT details including Question paper, Paper solution, Award List, Result analysis, List of weak students, Assignments, Improvement Paper for weak students, etc.

- Previous years RTU Question papers
- Lecture Notes

Lecture plan

Lecture plan includes division of every course in 40 lectures minimum with specification of each lecture number and content wise. It also includes the modes through which any topic will be conducted and any changes in actual delivery dates against defined deployed dates and mention reason for that too. The Lecture plan exclusively includes a number of **"Content beyond syllabus"** topics that shall be covered in course of time.

Shown below is the actual Lecture Plan filled format:

LECTURE PLAN					
Subject: Telecommunication Engineering			**Year: III**		
Subject Code: 5EC3A			**Semester: V**		
No. of Lecture Req. /(Aval.): 38/(40)					
Semester Starting: 15.07.2017					
Semester Ending: 05.11.2017					
Unit No./ Total lect. Req.	**Topics**	**Lect. Req.**	**Lect. No.**	**Date of Delivery**	**Remark/ Actual lect. Taken**
Unit - 1 (08)	1. Types of transmission lines	1	1	17.07.2017	
	2. General transmission line equation	1	2	19.07.2017	
	3.Line constant, equivalent circuits	1	3	20.07.2017	
	4.Infinite line, and reflection on a line	1	4	24.07.2017	
	5. SWR of line with different type of terminations	1	5	26.07.2017	
	6. Distortion less and dissipation less lines, Losses in transmission line	2	7	02.08.2017 03.08.2017	
	7. Coaxial cables, Transmission lines at audio and radio frequencies, Characteristics of quarter wave, half wave and lines of other lengths.	2	9	09.08.2017 10.08.2017	
	8. Test	1	10	17.08.2017	
Unit - 2 (08)	1. Smith chart and its application	2	12	21.08.2017 23.08.2017	**OBT**
	2. Transmission line applications and Impedance matching Network	1	13	24.08.2017	**PPT**
	3. Single & double Stub matching	1	14	24.8.2017	**Video Lecture**
	4. Measurement of parameters of transmission line	1	15	04.09.2017	
	5. Measurement of attenuation, insertion loss, reflection coefficient and standing wave ratio	2	17	06.09.2017	

Unit - 3 (07)	1. Elements of telephone transmission networks	2	19	07.09.2017 08.09.2017	
	2. Symmetrical and Asymmetrical two port networks	2	21	08.09.2017 11.09.2017	
	3. Different Attenuators, π section & T-section attenuators	2	23	11.09.2017 13.09.2017	
	4. Transmission equalizers	1	24	14.09.2017	
	5. Filters, constant K section, Ladder type	2	27	21.09.2017 25.09.2017	
	6. π section filter, T-section filter	2	29	27.09.2017 04.10.2017	
	7. m-derived filter sections and Lattice filter section	1	30	05.10.2017 09.10.2017	
Unit - 4 (07)	1. Voice transmission and Two wire/ Four wire transmission	1	31	11.10.2017	**PPT**
	2. Multi-channel systems: Frequency division & time division multiplexing	1	32	12.10.2017	
	3. Echo suppressors & cancellers and cross talk and Telephone set, Touch tone dial types	1	33	12.10.2017	
	4. Numbering Concept for Telephony, . Telephone Traffic Measurements and Subscriber loop Design	1	34	23.10.2017	
Unit - 5 (08)	1. Introduction to switching Concepts, De-generation, Availability Grading	1	35	23.10.2017	
	2. Principle: Electronic Exchange, EPABX and SPC telephone Exchange	1	36	26.10.2017	
	3. Principle: Electronic Exchange, EPABX and SPC telephone Exchange	1	37	26.10.2017	
	4. Multistage switches, Time Switch, Space Switch., STS and TST Switches, Concept of Supervisory and AC signalling	1	38	30.10.2017	**OBT on 31.10.2017**
Content Beyond Syllabus			**(1.) Landline Telephony**		
			(2.) Introduction to Mobile Communication		
Recommended Books			**1. Telecommunication, W. Fraser, PHI**		
			2. Transmission Lines and Networks, Umesh Sinha, Satya Prakashan		
			3. Telecommunications Switching, Traffic and Networks, J.E. Flood, Pearson		

3. Use of Various instructional methods and pedagogical initiatives: Following are the methodologies used in department to adhere to the best delivery of course with best practices for the attainment of various POs:

- **Use of various Modes of Teaching** e.g. Content beyond syllabus, External Speakers, PPTs, Video Lectures/Webinars, Tutorials/Assignments, Industrial visits, etc.

- **Online Tools for Advanced Content** from various web-based approaches e.g. NPTEL pdf and video lectures, SWAYAM portal lectures, etc.
- **Classified ways to examine students** e.g. Class Tests, Open Book Tests, Technical Quizzes, etc.
- **Mentoring the Students** to monitor the issues and grievances about their performance and to rectify them through proper counseling
- **Various Technical Activities** to enrich students with beyond curricula and application specific strengths
- **Conferences/Workshops** conduction for hands on analytical/practical exposure

Every faculty has to maintain the record of delivery against every unit topic-wise in the prescribed sample format as shown below:

Modes of Teaching (CAY 2017-18)												
S. No.	**Course Name**	**Course Code**	**Unit Wise Module Name**	**No. of Lectures required**	**Topic of Content beyond syllabus**	**Lecture from External Speaker**	**Power Point Presentation**	**Video Lectures**	**Assignments**	**Open Book Test**	**Practical/ Laboratory**	**POs Acquired**
1	**Electronic Devices & Circuits**	3EC1A	Semiconductor physics	7	Photodiodes – Basic principles	--	--	--	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	--	EDC Lab	PO1, PO2, PO3, PO5,
			Junction Diodes	8	Regulated power supply	--	Clippers	Rectifiers		Diode Applications		
			Transistors	10	--	Thermal Stabilization	--	transistor	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
			JFETS & MOSFET	7	--	--	FET	--		--		
			Small-Signal amplifiers at low frequency	8	--	h-parameter	--	--		Hybrid Model Analysis		
2	**Data Structures & Algorithms**	3EC2A	Definition & characteristics of algorithms	4	--	--	--	--	MTT1 (A1 for CO1 and A3 For CO3)	--	CP Lab-I	--
			Arrays as storage elements & evaluation of expression	8	Hashing	--	Hashing	--	--	--		
			Linear linked lists & searching	6	--	--	--	--	--	--		
			Non-linear structures	6	--	--	--	--	--	--		
			Graphs & sorting	6	Bucket and radix sort	--	--	Bucket and radix sort	--	--		
3	**Digital Electronics**	3EC3A	Number systems, basic logic gates & boolean ALGEBRA	8	--	--	Boolean Algebra	--	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	--	DE Lab	PO1, PO2, PO3, PO4
			Digital logic gate	6	--	--	Logic Gates	--		--		

			characteristics									
			Minimization techniques	10	Five-Variable K-Map	--	--	--	MTT2 (A1 for CO1, A2 for CO2, A3 for CO3 and A4 for CO4)	Minimization techniques		
			Combinational systems	8	--	--	--	Combinational Circuits		--		
			Sequential systems	8	SRAM, DRAM; (PLDs); Moore and Mealy	--	--	--		SRAM, DRAM; (PLDs); Moore and Mealy		
4	**Circuit Analysis & Synthesis**	3EC4A	Network theorems & elements	8	Grounding & Earthing	--	Elements	Network theorems	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	Norton's theorem	Workshop lab	PO1, PO2, PO4, PO7, PO9, PO12
			Transient analysis	7	Skin effect	--	AC parameters	Transient parameters		--		
			Network functions	9	--	--	--	--	MTT2 (A1 for CO1, A2 for CO2, A3 for CO3 and A4 for CO4)	--		
			Two port networks	6	--	--	--	--		--		
			Network synthesis	10	Application of network extraction	--	--	Interconnection of tpn		--		
5	**Electromagnetic Properties Of Materials**	3EC5A	Dielectric materials	7	Piezoelectricity & its application	Piezoelectricity & its Application by Ms. Geetika Mathur (EE)	Piezoelectricity & its Application	Piezoelectric sensor materials	MTT1 (A1,A2 FOR CO1)	--	--	--
			Magnetic materials	8	--	--	--	--		Soft and hard Magnetic materials, Weiss field and magnetic domains		
			Semiconductor materials	9	--	Overview of Semiconductor Devices	Overview of Semiconductor Devices &	--	MTT2 (A3 FOR CO2)	--		

						& its application by Ms. Ritambara (Phy)	its application					
			Conductive & superconductive materials	8	--	--	--	--	--	Electrical properties of conductive and resistive materials		
			Nanomaterials	8	Introduction of Nanotechnology, MEMS	--	--	Introduction of MEMS & Microsystems	--	--		
6	**Advanced Engineering Mathematics-I**	3EC6A	Laplace transform	8	Rouche's theorem and its applications	--	PPT on Rouche's Theorem	--	--	--		Po1,PO 2, PO 3, PO12
			Fourier Series & Z-Transform	8	--	--	--	--	--	--		
			Fourier Transform	8	--	--	--	--	--	--		
			Complex variable	8	--	--	--	--	--	--		
			Complex variable	8	--	--	--	--	--	--		
7	**Analog Electronics**	4EC1A	Feedback amplifier	8	--	--	Feedback topology	Classification of amplifiers	MTT1 (A1 for CO1,CO2) MTT2(A2 for CO3)	Nyquist criterion	Analog electronics lab	PO1, PO2, PO4, PO12
			Oscillator	9	Modulation techniques	--	Multivibrator	--		--		
			High frequency amplifier	7	--	--	--	Hybrid -pi model	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
			Tuned amplifier	8	Basics of antenna	--	--	Double tuned amplifier		--		
			Power amplifier	8	Types of transducer	--	Types of power amplifier	Classification of power amplifier		Class b push pull amplifier		

8	**Random Variables & Stochastic Processes**	4EC2A	Probability Theory	7	--	--	--	--	--	Bayes Theorem Problems		PO1,PO2,PO3,PO4,PO5,PO6,PO10,PO11,PO12
			Random Variables and Distributions	8	Apply Probability Distribution on Practical Problems	--	--	--	--	Properties of Probability Distributions		
			Multiple Random Variables	9	--	--	--	--	--	Properties of Multiple Random Variables		
			Stochastic Process	7	--	--	--	--	--	Gaussian Process		
			Stochastic Process in Frequency Domain	9	Application of Stochastic Process in Engineering	--	--	--	--	LTI System Problems		
9	**Electronic Measurement & Instrumentation**	4EC3A	Theory of errors	8	--	--	--	--	MTT-1 A1 for CO-1	Wattmeter errors		PO1, PO2, PO3, PO4, PO12
			Electronic instruments	8	--	--	--	--	--	Measurement of Earth resistance		
			Oscilloscopes	9	--	--	--	--	MTT-2 A2 for CO-2 A3 for CO-3	Scanning Oscilloscope		
			Signal generation and signal analysis	8	Different types of AC bridges	--	AC bridges	Classification of AC bridges	--	Distortion meter		
			Transducers	7	--	--	--	--	--	resistance wire strain gauges		
10	**Electromagnetic Field Theory**	4EC4A	Introduction	6	Introduction to basic physics, Knowledge of calculus	--	Introductory Concepts, Vector Fields and Coordinate	--	MTT-1 A1-FOR C01 A2-FOR CO2	Coordinate system	NA	PO1, PO2, PO3, PO6, PO7, PO12

							Systems					
			Electrostatics	9	Basic concept of electric field	--	fundamentals of Electrostatics	Gauss law and its applicatio n		--		
			Magnetostatics	9	Basic concept of and magnetic field	--	--	Faraday law it applicatio n	MTT-2 A2 FOR CO2 A3 FOR CO3 A4 FOR C04	Magnetost atics		
			Time varying fields	9	--	--	--	uniform plane waves		--		
			Radiation, EMI and EMC	7	--	--	--			--		
11	**Optimization Techniques**	4EC5A	Introduction & classification of Optimization	7	Game Theory and its applications	--	PPT on Game theory	Transport ation	--	--		PO1,PO2,PO 3,PO9,PO12
			Linear Programming	9	Dual simplex Method	--	PPT on Dual Simplex	Assignme nt	--	--		
			Application of LPP	8	--	--	--	--	--	--		
			Non Linear Programming	9	--	--	--	--	--	--		
			Dynamic Programming	7	--	--	--	--	--	--		
12	**Advanced Engineering Mathematics-II**	4EC6A	Numerical Analysis	6	Application of Numerical Analysis in Engineering	--	--	Stirling's Formula	MTT-I A1-For CO1	Backward interpolati on		PO1,PO2,PO 3,PO9,PO12
			Numerical Analysis	8	--	--	Numerical Differentiatio n and integration			Runge-Kutta Method		
			Special Functions	9	--	--	--	Bessel Functions	MTT - 2 A3-For CO2			
			Statistics & Probability	9	--	--	--	--	MTT-I A2-For CO3	Rank correlatio		

										n		
			Calculus of Variations	8	--	--	--	--	MTT - 2 A4- For CO4	Isoperimetric Problems		
13	**Signals & Systems**	5EC1A	Introduction	8	singularity function	--	--	--	MTT1(A1 for co1,co2)	--	Signal processing lab	PO1, PO2, PO3, PO5,PO6,PO 7,po10,po12
			Fourier series representation of signals	8	--	--	--	--	MTT2(A2 for co3,)	--		
			Fourier transform	9	application of CTFT & DTFT	--	--	--	MTT2(A3 co3,co4,)	--		
			Z-transform & Laplace transform	9	unilateral Laplace & Z-transform	--	--	--	--	--		
			Sampling	6	Decimation & interpolation	--	--	--	--	--		
14	**Linear Integrated Circuits**	5EC2A	Operational amplifier	8	Pole-Zero compensation	--	Comparator	OP-AMP 741	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	--	EED lab	PO1,PO2,PO 3,PO4,PO6,P O7,PO9,PO1 1,PO12
			Op-amp application	8	--	--	R-C phase shift oscillator			--		
			Active filters	8	Frequency response of op-amp	--	Filter	Low pass filter		--		
			Linear IC	8	--	--	--	A/d and d/a converter	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
			Non-linear applications of op-amp.	8	Step response of op-amp	--	--	--	--	--		
15	**Telecommunication Engg.**	5EC3A	Transmission Line Parameters	10		--	--	--	1 for CO1, 1 for CO2, 1 for CO3	--	Microwave Lab, Antenna Lab	PO1, PO2, PO3, PO6, PO7, PO12
			Transmission line Applications	8	--	--	Smith Chart Fundamentals	Single and Double Stub Matching		Smith Chart Applications		
			Attenuators and Filters	8	--	Filters	--	--		--		
			Telephony	7	1. Landline Telephony 2. Introduction to Mobile	--	Two Wire and Four Wire Transmission	--		--		

					Communications							
			Switching and Signalling	7	--	--	--	--		Switching		
16	**Analog Communication**	5EC4A	Noise effect in communication system	8	--	--	--	Noise in communication system	A1 for CO1 and CO2 ,A2 for CO3,CO4,CO5	--	Analog communication lab	PO1,PO2,PO3,PO4,PO5,PO7,PO12
			Amplitude modulation	9	--	--	VSB modulation			application of modulation		
			Frequency modulation	8	--	--	--	--		--		
			Noise in AM and FM	8	--	--	--	--		--		
			Pulse analog modulation	7	TDM and FDM	--	--	--		--		
17	**Microwave Engg. -I**	5EC5A	Microwave transmission lines	10	--	--	--	Microstrip line	--	--	Microwave Lab	PO1,PO2,PO6,PO7,PO12
			Microwave network analysis	8	--	--	--	--	--	--		
			Microwave passive components	9	Microwave mixer	--	--	--	--	--		
			Microwave measurements	6	--	--	Microwave impedance measuring devices		--	Power measurement techniques		
			Microwave IC technology	7	MMIC uses in VLSI	--	--	IC fabrication steps	--	--		
18	**Biomedical Instrumentation**	5EC6.1A	Human body subsystem, transducer and electrodes	7	--	--	Respiratory system	--	--	--	NA	PO1, PO2, PO6, PO10, PO11, PO12
			Bio-potentials, cardiovascular system measurements	7	Stethoscope	--	--	EEG	MTT1 (A1 for CO1, A2 for CO2 and A3	ECG		

			Instrumentation for clinical laboratory, medical imaging techniques	9	--	--	--	--	for CO3)	--		
			Patient care, biotelemetry and safety measures, therapeutic and prosthetic devices	10	Laparoscope	--	--	--	MTT2 (A1 for CO2, A2 for CO3)	--		
			Applications of bio-potentials, computer applications	7	--	--	Pacemakers	--		--		
19	**Microwave Engg.-II**	6EC1A	Impedance transformation and matching	8	--	--	--	--	--	--	RF and simulation lab	PO1, PO2, PO4, PO5, PO10, PO11, PO12
			Microwave diodes and diode circuits	9	--	--	GUNN Diode	Varactor diode	--	--		
			Microwave transistors and circuits	8	Microwave vacuum tube devices	--	--	Solid state devices used at mw freq.	MTT-2 A2 FOR CO2 A3 FOR CO3 A4 FOR C04	--		
			Klystron and magnetron	8	Microwave radar	--	--	--		--		
			Travelling wave tube	7	--	--	Klystron	--		Magnetron		
20	**Microprocessors**	6EC2A	8085 Microprocessor	10	Advance Microprocessor 8086.	--	timer IC 8253	basics of 8085	MTT1 (A1 for CO1) MTT2(A2 for CO2)	--	Micro processor lab	PO1, PO2, PO3, PO4, PO5, PO6'PO9
			Assembly Language programming	10	traffic light controller	--	--	--		--		
			Basic interrupts. s/w and h/w.	8	--	--	--	--	--	--		
			Peripheral ICs.	6	--	--	IC 8255	--	--	--		
			8051 M/C.	6	project based on 8051	--	--	--	--	--		
21	**Industrial Electronics**	6EC3A	Semiconductor power devices	10	--	--	--	--	--	--	IE Lab	PO1,PO3,PO 12
			Rectifiers & inverters	11	Power factor	--	SCR, DiAC,	Choppers	MTT1 (A1 for	Power		

					improvement		TriAC		CO1) MTT2(A2 for CO2)	supply		
			Power supplies	6	Harmonic reduction	--	--	--		--		
			Motor control	8		--	--	--	--	--		
			Stepper motors	5	--	--	--	--		--		
22	**Digital Communication**	6EC4A	Digital Transmission Of Analog Signals	8	--	--	--	--	MTT1 (A1 for CO1, A2 for CO2)	--	Communication Lab-II	PO1,PO2,PO3,PO4,PO7,PO11,PO12
			Base Band Transmission	7	Satellite Communication	Satellite Communication	Satellite Communication	Satellite Communication		Matched Filter		
			Digital Modulation Techniques	9	CDMA,GSM	CDMA,GSM	CDMA,GSM	Satellite Communication	MTT2 (A1 for CO2, A2 for CO3)	--		
			Information Theory	7	Radio Communication	--	--	--		--		
			Source & Error Control Coding	8		--	--	--		--		
23	**Control Systems**	6EC5A	Control System and their representation	7	Sampled Data control systems	Society and Control System	Time Response Analysis	--	--	--		PO1, PO2,PO3,PO5,PO10,PO12
			Time Response, Stability	7	Error Analysis using MATLAB	--	Bode-plot	State Space Model	--	--		
			Root-locus, Nyquist Plots	8	--	--	Root-locus	Nyquist plot.	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	Bode Plot		
			Bode Plots, Controller	10	--	--	--	Routh–Hurwitz stability criterion		Root Locus		
			State variable analysis, Compensation Design	8	Stability analysis of digital control system – An Introduction	--	--	--	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
24	**Optical Fiber Communication**	6EC6.3 A	Optical Fiber overview: Transmission Characteristics of optical fiber	9	--	--	Ray theory	optical fiber types		--	Optical & VLSI Lab in 8th Sem.	PO1,PO2,PO6,PO7,PO12
			Optical Fiber sources	7	Introduction to photonics	--	Laser & LED structure and	--	--	Power Launching		

							characteristics			scheme		
			Optical detectors and connectors	8	Fiber Bragg Grating	--	--	P-N and P-I-N photodiode	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
			Optical Fiber Measurements and (OTDR)	8	--	Optical modulation – Mach Zehnder	--	--		--		
			Optical Fiber Systems and Optical Fiber Applications	8	Wavelength routing and switching networks	interferometer – MZ optical modulator – operating requirements	WDM and DWDM	--	--	Digital Transmission system		
25	**Antenna & Wave Propagation**	7EC1A	Antenna fundamentals	8	--	--	--	--	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	--	Wireless Communication Lab, RF Fabrication Lab	PO1,PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12,
			Antenna Arrays	7	Reconfigurable Antennas	--	Antenna Array	Types of Propagation		--		
			Different types of antennas	10	Slots in antennas	Microstrip patch antenna	Microstrip Patch Antenna	Different types of Antenna	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	Types of antennas		
			Ground wave propagation	7	Wearable Antenna	--	Horn Antenna	Basic Fundamental of Antenna		--		
			Ionospheric Propagation	8	--	--	--	--	--	--		
26	**Digital Signal Processing**	7EC2A	Sampling	7	Multirate Sampling	--	DFT, FFT, Keiser Window	LTI	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	Filter Design	Signal and Image Processing	PO1, PO2, PO3, PO4, PO5, PO6
			Transform analysis of LTI systems	7	Adaptive Signal Processing	--	--	--		--		
			Structures for discrete-time systems	7	Auto Co relation	Cross Co relation	--	--	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		
			Filter design techniques	10	--	--	--	--		--		
			DFT, FFT	10	--	--	--	--	--	--		

27	**Digital Image Processing**	7EC3A	Digital image fundamentals	7	Properties of Walsh transform	Atul Sharma (Global Inst. Technology)	Compressive sensing	Walsh Transform :-NPTEL by Prof. Debarati sen	A1,A2,A3,A4 for weak students in respective CO	Image compression : Text & Reference Books	Signal and Image Processing	PO1, PO2,PO3, PO5, PO9,PO10,PO11,PO12
			Basic image operations	8	Compressive sensing	--	Discrete cosine transform	--	--	--		
			Image restoration	8	Discrete cosine Transform	--	walsh transform	--	--	--		
			Morphological image processing	8	--	--	--	--	--	--		
			Image segmentation and compression	8	--	--	--	--	--	--		
28	**Wireless Communication**	7EC4A	Spread Spectrum Modulation Techniques	7	--	--	Spread spectrum system (PPT in 2nd Lecture)	Introduction (NPTEL)	MTT1 (A1 for CO1, A2 for CO2 and A3 for CO3)	--	Wireless Communication Lab	PO1, PO2,PO3, PO4. PO5, PO10,PO11
			Wireless Microwave Communication	8	Capacity of Fading Channels	Capacity of Fading Channels (by Dr. Ramesh Bharti, Jagannath Univ.)	Fresnel zone clearance (PPT in 3rd Lecture)	--		--		
			Multiple Access Techniques and Networks	8	--	--	Multiple access techniques (PPT in 6th Lecture)	GSM and CDMA (NPTEL)	MTT2 (A1 for CO1, A2 for CO2 and A3 for CO3)	--		

			Cellular Wireless Networks	9	Wireless Ad hoc networks	Wireless Ad hoc networks (by Dr. Ramesh Bharti, Jagannath Univ.)	--	Wireless Networks (NPTEL)		--		
			Satellite Communication	8	--	--	--	--		...		
29	**VLSI Design**	7EC5A		--	--	--	--	BJT fabricatio n	Given	--	VHDL LAB	PO1,PO2,PO 3,PO4,PO9,P O10,PO11,P O5
			Introduction to MOSFET	10	I. Stick Diagram and its Application	I. Stick Diagram and its Application(Dr. Sandeep Vyas)	--	CMOS ICS	A1 FOR CO1 and CO2	VLSI design styles		
			CMOS logic circuits	8	I. S-Edit Design of Tanner Tool	I. S-Edit Design of Tanner Tool(Dr. K. M. Singh)	--	--	A1 for CO1 and CO2	Combinati onal logic		
			Basic physical design of simple Gates and Layout issues	8	I. L-Edit Design of Tanner Tool	I. L-Edit Design of Tanner Tool(Dr. K. M. Singh)	--	--	Assignment A2 for CO3 and CO4	Design rules		
			Dynamic CMOS circuits	8	I. LVS check of Tanner Tool	I. LVS check of Tanner Tool(Dr. K. M. Singh)	--	--	Assignment A2 for CO3 and CO4	VHDL code for flip flop		
30	**VHDL**	7EC6.3 A	Physical Design	6	--	--	--	--	Assignment A2 for CO3 and CO4	Design rules checking	Optical & VLSI Lab	PO1, PO2, PO3, PO5,
			Language Fundamentals	7	Introduction to Verilog Language	Mr. Ravi Soni	Introduction to VHDL	VHDL coding of	--	--		

						(Introduction to FPGA)		FSM by Prof Kuruvilla Vergese				
			Combinational and Sequential Circuits building blocks	9	--	--	Combinational Circuits Designing	Introduction to VHDL by Prof. A.N. Chandorkar	Assignment for CO1, CO2	FSM Design		
			Synchronous /Asynchronous Sequential Circuits	9	Handling Hazards in circuits	Dr. Manish Goswami (Mapping design to Hardware)	Sequential Circuits	--	--	--		
			Digital System Design	9	Tool Introduction Xilinx	Mr. Vikas Mathur (Analog Designing)	--	--	--	--		
31	**IC Technology**	8EC1A	Introduction to VLSI technology	7	Crystal structure	crystal structure	crystals defect	Fabrication steps	MTT1 (A1 for CO1, A2 for CO3)		NA	PO1,PO2,PO3,PO6,PO7,PO12
			Diffusion & Oxidation	9	--	oxidation tech	--	--		Ficks diffusion		
			Film deposition and Epitaxy process	8	--	--	--	--	MTT2 (A1 for CO1, A2 for CO2)	--		
			Ion implantation, lithography and Etching	8	--	--	--	--		--		
			Application of IC technology	8	novel device	--	CMOS IC Tech	--		--		
32	**Radar & TV Engineering**	8EC2A	RADAR	10	--	--	--	--	MTT-1 A1- for C01 A2- for CO2	RADAR, T.V. systems	Wireless Communication Lab	PO1, PO2, PO3, PO6, PO7, PO12
			T.V. systems.	8	--	--	--	--		--		
			Processing and transmission of TV signals	8	--	--	--	--	MTT-1 A1- FOR C01 A2- FOR CO2 A3 for CO3	--		
			Basic circuits of TV RECEIVER	8		--	--	--				
			Modern TV system	6	HDTV, Optical	--	--	--				

					LED, Remote Sensing							
33	**MEMS and Nanotechnology**	8EC3A	Introduction of Nano electronics	8	Nanotechnology in Polymers	--	--	--	MTT-1 A1- FOR C01 A2- FOR CO2 A3 for CO3	--	Nil	PO1, PO2, PO6, PO7, PO9
			Nano fabrication & Patterning technique	10	Medical application of Nanotechnology	--	CVD	--		CVD, PVD		
			General characterization technique	8	Supramolecular Machines	--	--	Dynamic light scattering	MTT-2 A3 for CO3 A4 for CO4	--		
			electrical, magnetic, mechanical and optical properties	8	Nano magnets for sensors	--	Nano biology	--		nano magnets for sensors		
			MEMS and Microsystems	9	--	--	--	--		--		
34	**Microcontrollers and Embedded Systems**	8EC4.3 A	The 8051 Microcontroller	7	--	--	8051 microcontroller		MTT1(A1 for CO1, A2 for CO2, A3 for CO3 and A4 for CO4)	--	--	(PO1, PO2, PO3, PO5, PO9, PO10, PO11 AND PO12)
			8051 Assembly Language Programming	9	--	--	--	--	--	Real time control		
			Real Time Control	7	--	--	--	ARM PROCESSOR	MTT 2(A1 for CO1, A2 for CO2, A3 for CO3 and A4 for CO4)	--		
			System Design	8	--	--	--	--	--	--		
			Introduction to Embedded System	9	PIC & ARM Processor	--	ARM processor	--	--	--		

Table 2.2.1.b Delivery Details through various Modes of Teaching

4. Quality Improvement by the Faculty in Teaching and Learning

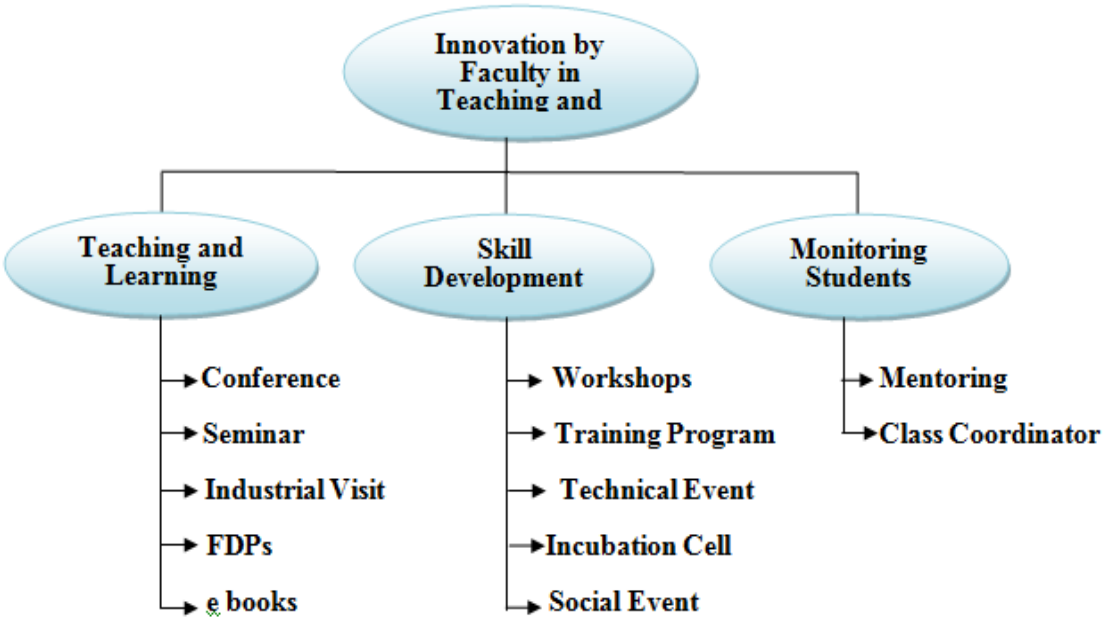


Figure 2.2.1.b Quality improvements by faculty through various modes

S. No.	Name of Faculty	Event Category	Name of Event	No. of Students Participated
1.	Dr. Lokesh Kr. Bansal	**International Conference/ Journal**	International Journal of Computer Science & Communication	NA
			RTDEEE -2018(1 paper)	2
		National Conference	RAST 2018	4
		FDP	Advanced Optimization Techniques	NA
			Managing Yourself	NA
		Social	Engineers Day	39
			Induction Day	43
			JECRC MUN	5
			Smart India Hackathon	18
		Workshop	Aptron	75
			Society and Control System	45
2.	Ms. Shruti Kalra	**Social**	Zarurat	28
3.	Mr. Rajesh Bathija	**International Conference**	RTDEEE -2018 (4 papers)	10
		National Conference	RAST 2018	4
		FDP	Effective mentoring skills	NA
			ICT Training On Embedded System	5
		Social	Aashayein	25
			Athlon	27

			Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
		Technical	Technophilia	25
		Workshop	Aptron	75
4.	Mr. S. S Manakatala	**International Conference**	RTDEEE -2018	6
		National Conference	RAST 2018	8
		FDP	Effective mentoring skills	NA
			ICT Training On Embedded System	NA
		Social	Induction Day	43
			Engineers day	39
		Technical	Technophilia	25
5.	Mr. Anil Jain	**National Conference**	RAST 2018	4
		Industrial Visit	Tesca Technologies	27
6.	Dr. Vinita Mathur	**International Conference**	RTDEEE 2018	2
		National Conference	RAST-2018	6
		FDP	ICT Training On Embedded System	NA
		Social	Engineers day	39
			Induction Day	43
			Suhasini	13
			Smart India Hackathon	18
		Technical	Line Follower	23
7.	Ms. Parul Tyagi	**International Conference/ journal**	RTDEEE- 2018	8
		National Conference	RAST 2018	4
		FDP	ICT Training On Embedded System	NA
		Social	Engineers day	39
			Suhasini	13
			Smart India Hackathon	18
		Technical	Line Follower	23
8.	Ms. Ritu Vyas	**International Conference**	RTDEEE- 2018	8
		FDP	Outcome Based Education	4
		Social	Aashayein	4
			Engineers day	39
			Induction day	43
			Suhasini	13
			Smart India Hackathon	18
		Technical	Quizolic ,Techinobuzz	24
9.	Mr. Vikas	**International Conference**	RTDEEE- 2018	4

	Sharma	**FDP**	Outcome Based Education	4
			Effective Mentoring Skills	NA
		Social	Athlon	12
			Engineers day	39
			Induction Day	43
		Technical	Aashayein	4
			Smart India Hackathon	18
			Robowar	23
		Workshop	Society and Control System	45
		International Conference	RTDEEE- 2018	3
10.	Mr. Ashish Kulshrestha	**National Conference**		
		FDP		
		Social	Athlon	12
		Technical	Engineers day	39
			Induction day	43
			Zarurat	21
			Smart India Hackathon	18
			Phoenix	21
		International Conference	RTDEEE- 2018	6
11.	Mr. Pravin Kumar Sharma	**FDP**		
		Social	Athlon	12
		International Conference	Engineers day	39
			Induction day	43
			Smart India Hackathon	18
			OWT 2018	NA
12.	Mr. Ashutosh Sharma	**National Conference**	RTDEEE- 2018	4
		Social	Athlon	12
		Industrial Visit	Engineers Day	39
			Induction Day	43
			Genus Power Infrastructure Ltd.	50
		International Conference/Journal	RTDEEE- 2018	3
13.	Ms. Neha Singh	**National Conference**	RAST 2018	3
		FDP	Effective Mentoring Skills	NA
		Social	ICT Training On Embedded System	NA
			Engineers Day	39
		Technical	Induction Day	43
			Suhasini	13
			Smart India Hackathon	18
			Formula Zero	16
		International Conference	RTDEEE- 2018	4
14.	Mr. Raj	**National Conference**		

	Kumar Jain	**FDP**	ICT Training On Embedded System	NA
		Social	Aashayein	5
		Technical	Athlon	12
			Engineers Day	39
			Induction Day	43
			Phoenix	21
		International Conference/Journal	International Journal Of Creative Research Thoughts	NA
15.	Mr. Vikas Mishra	**National Conference**	RTDEEE- 2018	6
		FDP		
		Social	Engineers Day	39
		Technical	Induction Day	43
			Athlon	12
			Robo Soccer	21
		International Conference	RTDEEE-2018	6
16.	Mr. Veni Madhav	**National Conference**	RAST 2018	4
		Social	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Renovator	16
		Industrial Visit	Tesca Technologies	27
		International Conference	RTDEEE-2018	4
17.	Mr. Mangi Lal	**National Conference**		
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Start-up	4
18.	Mr. Sidharth Chaturvedy	**Technical**	Induction Day	43
			Smart India Hackathon	18
			JECRC MUN	5
			Game of Drone	12
		Social	Engineers Day	39
19.	Mr. Honey Agarwal	**International Conference**	Induction Day	43
			Athlon	12
			RTDEEE 2018	6
20.	Mr. Jitendra Sharma	**Social**	Athlon	12
		FDP	Aashayein	4
			Engineers Day	39
			Induction Day	43
			Mathematical Modelling and Optimization of	NA

			Industrial Problems	
21.	Mr. Sandeep Dotya	**National Conference**	RAST 2018	4
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Athlon	12
22.	Mr. Rakesh Kardam	**National Conference**	RAST-2018	2
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Smart India Hackathon	18
			RTDEEE 2018	4
23.	Mr. Devendra Sharma	**National Conference**	RAST-2018	6
		Social	Athlon	12
		Technical	Aashayein	4
			Engineers Day	39
			Induction Day	43
			Game of Drone	12
24.	Mr. Naresh Kumar	**International Conference**	RTDEEE 2018	6
25.	Mr. Katru Anand	**Social**	Engineers Day	39
			Induction Day	43
			Aashayein	4
26.	Mr. Ashok Kumar	**International Conference**	RTDEEE 2018	6
27.	Mr. Ankur Gangwar	**National Conference**	RAST-2018	2
		FDP	Mathematical Modelling and Optimization of Industrial Problems	NA
		Social	Aashayein	6
		Technical	Athlon	12
			Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Formula Zero	16
		Workshop	CCNA networking	58
		Social	Athlon	12
28.	Mr. Lokesh Kumar	**Technical**	Engineers Day	39
			Induction Day	43

	Sharma	**International Conference**	8th International Conference on Computing, Communication and Networking Technologies	NA
29.	Ms. Shivam Upadhyay	**Social**	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Quizolic ,Techinobuzz	16
		Industrial Visit	Philips Lightning	51
		International Conference	Talent Pull	51
			RTDEEE 2018	4
30.	Ms. Deepmala Kulshrestha	**Social**	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Tech-Tambola, Rob soccer	12
31.	Mr. Bhoopesh Kumawat	**FDP**	Research Challenges in Wireless Technologies for 5G	NA
		Social	Athlon	12
		Technical	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
		Industrial Visit	Philips Lightning	51
			Talent Pull	51
		International Conference	RTDEEE 2018	6
			RISE 2017	NA
32.	Mr. Devesh Gupta	**National Conference**	RAST 2018	4
		FDP	Effective Mentoring Skills	NA
		Social	ICT Training On Embedded System	NA
			Athlon	12
		Technical	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Robowar	14
		Training Program	Sakrobotix	66
		International Conference	RTDEEE 2018	6
33.	Ms. Teena Sharma	**National Conference**	OWT-2018	NA
		FDP	Recent Advances in communication technologies	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			RTDEEE 2018	6
34.	Mr. Ashish	**National Conference**	RAST2018	4

	Sharma	**FDP**	Advanced Optimization Techniques	NA
		Social	Athlon	12
		Technical	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Tech-Tambola, Game of Drone	18
		Industrial Visit	Genus Power Infrastructure Ltd.	50
		International Conference	Philips lightning	51
			Talent Pull	51
			RTDEEE 2018	6
35.	Ms. Preeti Barot	**Social**	Engineers Day	39
		Industrial Visit	Induction Day	43
			Smart India Hackathon	18
			Philips lightning	51
		International Conference	Talent Pull	51
			RTDEEE 2018	6
36.	Mr. Deepak Shankla	**National Conference**	RAST 2018	4
		Social	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
		Training Program	Embedded System and Robotics	56
37.	Mr. Mohit Rajput	**International Conference**	RTDEEE 2018	4
		FDP		
		Social	Engineers Day	39
			Induction Day	43
			Aashayein	3
			Athlon	12
38.	Ms. Shweta Sharda	**International Conference**	RTDEEE 2018	6
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Smart India Hackathon	18
			RTDEEE 2018	6
39.	Ms. Kriti Manish Sharda	**Social**	Engineers Day	39
40.	Ms. Yogita	**Technical**	Induction Day	43
		Social	Quizholic	12
			Smart India Hackathon	18
		International Conference	RTDEEE 2018	4
41.	Ms. Aapurva Kaul	**Social**	Engineers Day	39
			Induction Day	43

		Industrial Visit	Smart India Hackathon	18
			Philips Lightning	51
			Talent Pull	51

Table 2.2.1.c Details of Participation of Faculties for Improvement in Teaching-Learning

5. Activities Conducted through External Entities for Improvement in Teaching and Learning

Activity Type	Name of Event	No. of Participants
Conference	RTDEEE-2018	120
	RAST-2018	70
Seminar	Aptron India	75
	Huawei Authorized Network Academy(MOU)	550
	Rajasthan Technical University	45
Industrial Visit	Regional Telecom Training Centre, BSNL Jaipur	55
	Genus Power Infrastructures Ltd.	50
	Tesca Technologies Pvt. Ltd	27
	Philips Lighting	51
	Talentpull	51
FDP	Embedded Systems (ICT51)	20

Table 2.2.1.d Activities conducted through External Entities

Skill Development Initiatives	***Name of Event***	***Organised By***	***Total no. of Participants***
Workshops	CCNA Networking	Mr. Neeraj Kanwar, IIHT	58
	Open Source Innovations – Technological Convergence	Mr. Alok Srivastava, RED HAT ACADEMY	215
	SPYBOT- Spy Robotic	Mr. Saurabh, TechiNest Pvt. Ltd.	220
Training Programs	Embedded Systems & Robotics	TechiNest Pvt. Ltd	56
	Embedded & Robotics (MOU)	SaKRobotix	66
Technical Events	Game of Drones	Faculty & Students	25
	Renovator	Faculty & Students	30

	Tech Tambola	Faculty & students	45
	Robowar	Faculty & Students	35
	Line Follower	Faculty & Students	28
	Formula Zero	Faculty & Students	40
Social Activities	ZARURAT	Faculty & Students	25

Table 2.2.1.e Skill Development Initiatives for Faculty/Students

6. Student Performance and Learning Outcomes

(i) To emphasize on concept building and exposure of latest technological trends as well as ethics impartment, following measures are taken

- **Practical Exposure** through presentations, case studies, group discussion, class tests and tutorials
- **Communication Skill Improvement** through group discussions, presentation on course based and general topics are regularly carried out in the class
- **Social responsibilities** for ethical measures

(ii) CO-PO Mapping is done for theory courses as well as laboratories to continuous monitor the performance scale for various learning outcomes

(iii) MTT Evaluation on CO basis ensures the result of the achievement of outcomes which is set as 60% minimum

(iv) Assignments for non-performing students (60% below in particular CO is the basis)

(v) Encouragement to students having excellent academic record

- To achieve university ranks
- To take up competitive examinations like GATE, GRE etc.
- To do research work

2.2.2 Quality of Internal Semester Question Papers, Assignments and Evaluation (20)

(Mention the initiatives, implementation details and analysis of learning levels related to quality of semester question papers, assignments and evaluation)

A. Process for Internal Semester Question Paper setting and evaluation and effective process implementation

The department ensure that all the students are aware of the evaluation processes through

- Syllabus and Scheme of Examination
- Time table of examination
- Paper Pattern and Question Paper Finalization through Scrutinizing committee
- Debarred Criteria
- Distribution of Marks as COs and display
- Display of marks with week student list
- Improvement paper based on COs
- Updating the Marks after Improvement-paper Performance (For Weak Students)

1. Student-Awareness for Examination-activities and the evaluation process

- Academic Calendar
- Syllabus and scheme of examination
- Time table of examination
- Ordinances and notices
- Test copies after evaluation are shown to students
- Students can see his/her copy after semester examination through re-opening on payment basis.

2. Examination reforms initiated by the department

The department has provision of showing answer sheets of internal tests to the students. They can compare their answer with other students. They can discuss with teachers. Few faculties use assignments, seminars, quiz etc. This has added value to the system.

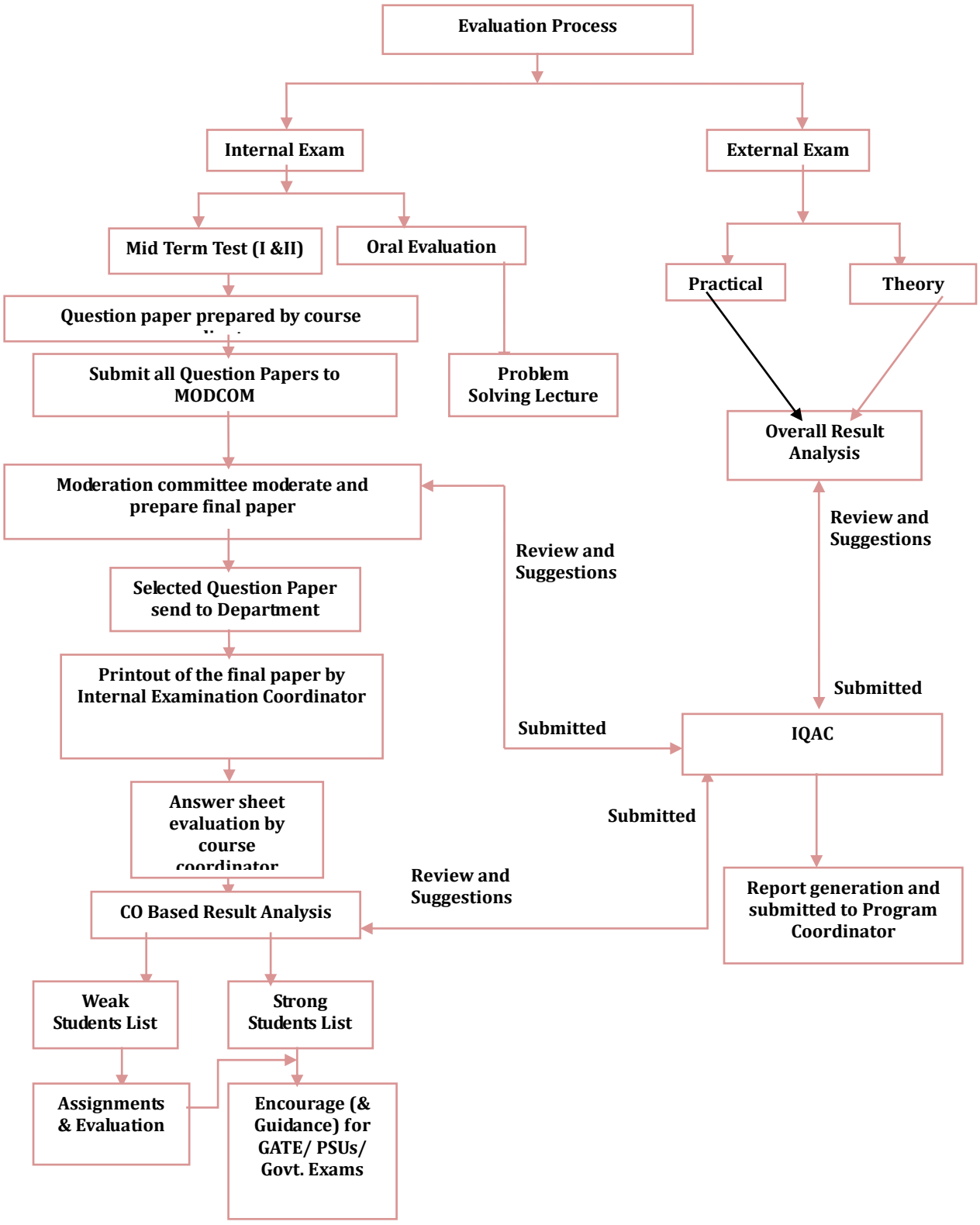


Figure 2.2.2.a Flow-chart of Examination Process

3. Quality Check and Redressal of Grievances

The department has a Moderation Committee for internal and external practical examination which is responsible to ensure the quality of internal examinations and to resolve the related issues.

9/2/2018 JECRC Mail - moderation committee

JECRC Mail

HoD ECE <hod.ece@jecrc.ac.in>

moderation committee

HoD ECE <hod.ece@jecrc.ac.in> Wed, Jul 27, 2016 at 4:16 PM
To: Principal JECRC <principal@jecrcmail.com>
Cc: Principal JECRC <principal@jecrc.ac.in>

Respected Sir,

The Moderation Committee of ECE department for Quality Improvement in MTT Examination has been formed as under.

S. NO	FACULTY NAME	QUALIFICATION	DESIGNATION	ROLE
1	Dr. Lokesh Kr. Bansal	Ph.D	Professor	Convener
2	Ms. Vinita Mathur	M.Tech	Asst. Prof.	Member
3	Ms. Shruti Kalra	M.Tech	Asst. Prof.	Member
4	Mr. Anil Jain	M.Tech	Asst. Prof.	Member
5	Mr. Sidharth Chaturvedy	M.Tech	Asst. Prof.	Member
6	Mr. Rajesh Bhatija	M.Tech	Asso. Prof.	Member

[Quoted text hidden]

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With Regards

Dr. Lokesh Kr. Bansal
Professor & Head
Department of Electronics & Communication Engg.
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
(An Institution of the JECRC Foundation)
Add: Shri Ram ki Nangal, via Sitapura RIICO, Tonk Road, Jaipur, Rajasthan 302022
Mobile No. 9412163606, 9251039858

Moderation Committee				
S. No.	**FACULTY NAME**	**QUALIFICATION**	**DESIGNATION**	**ROLE**
1	**Dr. Lokesh Bansal**	**Ph. D**	**Professor**	**Convener**
2	**Dr. Vinita Mathur**	**Ph. D**	**Asst. Professor**	**Member**
3	**Ms. Shruti Kalra**	**M. Tech**	**Asst. Professor**	**Member**
4	**Mr. Anil Jain**	**M. Tech**	**Asst. Professor**	**Member**
5	**Mr. Sidharth Chaturvedy**	**M. Tech**	**Asst. Professor**	**Member**
6	**Mr. Rajesh Bhatija**	**M. Tech.**	**Asso. Professor**	**Member**

EXAMINATION NOTICE

All faculty members who are handling B. Tech (ECE) 3rd semester are requested to send the soft copy of the question paper and solution in proper format for MTT-2 on or before 14th November 2017 to corresponding class coordinators. Syllabus for MTT-2 is remaining 2.5 Units.

All Class coordinators of 3rd semester are requested to send soft copy of question papers and solutions of your respective class to the moderation committee last by 15th November 2017 at rajesh.ece@jecrc.ac.in positively. Subject of Email should be in this format, i.e. semester_section_cc name.

The Moderation committee is requested to submit hard copies of question papers to the internal exam coordinators on or before 16th November 2017.

The pattern of question paper is

1. The Question Paper will be of 1 hour & 30 Minutes duration.
2. Question Paper should contain GATE & RTU questions.
3. Course-outcome marks should be balanced.
4. The Question paper format is given below

Section	Type of Questions	Marks
A	MCQ	10
B	Subjective	15
C	Subjective	15
Total		40

MTT Paper

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Electronics & Communication Engineering

COURSE: B. Tech **SEMESTER: VI** **SECTION: A, B, C, D**
SUBJECT: Industrial Electronics (IE) **CODE: 6EC3A**
TIME: 1Hour 30 Minutes **MTT-II** **MM: 40**

COURSE OUTCOMES
CO3: Basics of choppers, SMPS, fly back converter, UPS, buck-boost converter
CO4: Speed control of DC motor, PMHS, induction heating control

Instructions: Attempt all sections

SECTION A

Attempt all questions (objective/fill in the blanks) **(10 x 1)**

Q1/co3: Express the Load voltage of D.C. Chopper in terms of its duty cycle and V_{dc}.

Q2/co3: In a Flyback converter, energy is stored in the transformer primary, during the time when _____.

Q3/co3: Draw the block diagram of UPS.

Q4/co3: What type of speed control is achieved through Armature Voltage control method for d.c. motors?

Q5/co3: Variable-voltage variable-frequency scheme is employed generally to control the speed of a _____ motor.

Q6/co4: Write the full form of VRSM and PMSM.

Q7/co4: Name the methods used for High frequency heating.

Q8/co4: In Induction heating, the depth of penetration (d) is proportional to the _____ of frequency.

Q9/co4: Give the reason for uniform heating effect in Dielectric heating.

Q10/co4: List the advantages of Dielectric heating.

SECTION B

Attempt any one part **(2 x 7.5)**

Q1/co3 (a): An RLE load is operating in a Chopper circuit from a *500* Volt dc source. For the load having$L=0.06\ H$, $R=0$ and constant E, and for a duty cycle of *0.2*, Find the Chopping frequency to limit the amplitude of load current excursion to *10A*.

Q1/co3 (b): Draw the circuit and explain the operation of class-C chopper in each quadrant with associated waveforms.

OR

Q2/co3 (a): A Buck-Boost converter has an input voltage $V_{in}=12V$. The duty cycle is $\alpha=0.25$ and switching frequency is *25KHz*. The inductance is $L=150\mu H$, filter capacitance is $C=220\mu F$ and the load current I_0 is *1.25A*. Calculate

(i) Average Output Voltage, V_{out}

(ii) Peak-to-peak output voltage ripple, ΔV_c;and

(iii) Peak-to-peak ripple current of Inductor, ΔI

Q2/co3 (b): Explain the operation of Buck-Boost converter with its circuit and associated waveforms.

SECTION C

Attempt any one part **(2 x 7.5)**

Q3/co4 (a): Explain the construction and working of Hybrid Stepper motor.

Q3/co4 (b): Explain the speed-control of a *3-*ϕ Induction motor using frequency control methods.

OR

Q4/co4 (a): Explain the basic principle of HF Dielectric heating and derive the expression for heating power per unit volume.

Q4/co4 (b): Explain Torque versus Stepping/Pulse Rate characteristics of a stepper motor. Also, differentiate between Stepper Motor and Induction Motor.

~: Best of Luck :~

Assignment and Class Test Methodology

- **To assess students' knowledge** of engineering practices, framework, and problem solving abilities various tests are taken
- **Class Tests** are taken after every unit completion
- **Assignment based on COs** is given to the students after completion of each unit for each subject
- **Assignments questions are chosen from previous years university papers**
- **Performance based Assignments** are provided to low scoring students **(<60%)** after MTT to improve the take the performance level to minimum required one

Evaluation

- **Answer Sheets are scrutinized** on random basis to ensure the quality of evaluation of internal semester examinations answer sheets, also to check whether there is any issue in the evaluation or not
- **Transparency in Evaluation** is ensured by making provision of showing answer sheets to students who if wish then can compare their answers with other students as well as with text books

Result Analysis and Corrective Measures

MTT-1 Result Analysis (Section A)													
NAME OF FACULTY: Bhoopesh Kumawat									SUBJECT & CODE: Industrial Electronics (6EC3A)				
Class Roll No.	RTU Roll No	Name of Candidate	Obtained CO1	Total CO1	%age	Assignment-CO1 (Y/N)	Obtained CO2	Total CO2	%age	Assignment-CO2 (Y/N)	Obt. 40	Tot. 40	10
1	14EJCEC001	AAKASH MANGAL	5	20	25.00%	Y	4.5	20	22.50%	Y	9.5	40	3
2	14EJCEC002	AANCHAL JAIN	9	20	45.00%	Y	14	20	70.00%	N	23	40	6
3	14EJCEC003	AARUSHI SINGH	18	20	90.00%	N	15.5	20	77.50%	N	33.5	40	9
4	14EJCEC004	ABHINANDAN KUMAR	12	20	60.00%	N	7	20	35.00%	Y	19	40	5
5	14EJCEC005	ABHISHEK KUMAR	1	20	5.00%	Y	1	20	5.00%	Y	2	40	1
6	14EJCEC006	ADITYA GAUTAM	9.5	20	47.50%	Y	9	20	45.00%	Y	18.5	40	5
7	14EJCEC007	ADITYA SHARMA	11	20	55.00%	Y	9.5	20	47.50%	Y	20.5	40	6
8	14EJCEC008	AISHWARYA SHARMA	13.5	20	67.50%	N	10	20	50.00%	Y	23.5	40	6
9	14EJCEC009	AJAY GUPTA		20	0.00%	Y		20	0.00%	Y	0	40	0
10	14EJCEC010	AJAY SINGH NATHAWAT	10.5	20	52.50%	Y	5	20	25.00%	Y	15.5	40	4
11	14EJCEC011	AKANKSHA GUPTA	16.5	20	82.50%	N	10	20	50.00%	Y	26.5	40	7
12	14EJCEC012	AKANKSHA SINGHAL	18	20	90.00%	N	17.5	20	87.50%	N	35.5	40	9
13	14EJCEC015	AKSHAY LAROIYA	4	20	20.00%	Y	4.5	20	22.50%	Y	8.5	40	3
14	14EJCEC016	ALOK KUMAR		20	0.00%	Y		20	0.00%	Y	0	40	0
15	14EJCEC017	AMIT KUMAR	12	20	60.00%	N	7	20	35.00%	Y	19	40	5
16	14EJCEC018	AMIT KUMAR	16.5	20	82.50%	N	10	20	50.00%	Y	26.5	40	7
17	14EJCEC019	AMIT KUMAR SHARMA	13	20	65.00%	N	11.5	20	57.50%	Y	24.5	40	7
18	14EJCEC020	ANADI VATSA	0	20	0.00%	Y	6.5	20	32.50%	Y	6.5	40	2
19	14EJCEC021	ANJALI YADAV	18.5	20	92.50%	N	13.5	20	67.50%	N	32	40	8
20	14EJCEC022	ANKIT GARG	10.5	20	52.50%	Y	15.5	20	77.50%	N	26	40	7

Table 2.2.2.a MTT Credit Scheme

List of Weak Students Based on CO-Performance in MTT1

Based on CO1 Performance			Based on CO2 Performance		
S. No.	**RTU Roll No**	**Name of Candidate**	**S. No.**	**RTU Roll No**	**Name of Candidate**
1	14EJCEC001	AAKASH MANGAL	1	14EJCEC001	AAKASH MANGAL
2	14EJCEC002	AANCHAL JAIN	2	14EJCEC004	ABHINANDAN KUMAR
3	14EJCEC005	ABHISHEK KUMAR	3	14EJCEC005	ABHISHEK KUMAR
4	14EJCEC006	ADITYA GAUTAM	4	14EJCEC006	ADITYA GAUTAM
5	14EJCEC007	ADITYA SHARMA	5	14EJCEC007	ADITYA SHARMA
6	14EJCEC010	AJAY SINGH NATHAWAT	6	14EJCEC008	AISHWARYA SHARMA
7	14EJCEC015	AKSHAY LAROIYA	7	14EJCEC009	AJAY GUPTA
8	14EJCEC020	ANADI VATSA	8	14EJCEC010	AJAY SINGH NATHAWAT
9	14EJCEC022	ANKIT GARG	9	14EJCEC011	AKANKSHA GUPTA
			10	14EJCEC015	AKSHAY LAROIYA
			11	14EJCEC017	AMIT KUMAR
			12	14EJCEC018	AMIT KUMAR
			13	14EJCEC019	AMIT KUMAR SHARMA
			14	14EJCEC020	ANADI VATSA

Corrective Measures to improve the Performance of Weak students

Mentors are appointed to boost-up the performance of weak students who:

- Provides regular counselling and moral support to them
- Encourage them towards study through peer tutoring
- Encourage them for regular attendance
- Guide them through remedial support to clear their backlogs (if any)
- Constantly monitor their performance in Internal Tests
- Arrange Extra classes for backlog subjects if needed

Assignment for Weak Students

Assignment 1 (for CO1 Weak Students)

1. Describe and explain the Reverse Recovery characteristics of Power Diode.

2. Explain the Turn-On process of TRIAC with appropriate conduction diagrams in its cross-sectional view.

3. Explain two-transistor model of Thyristor and derive the expression for anode current I_A.

Assignment 1 (for CO2 Weak Students)

1. Explain the 3-ø 120˚ mode VSI with the help of circuit diagram and all relevant waveforms.

2. A half-wave controlled rectifier connected to a 150 V, 60 Hz source is supplying a resistive load of 10 Ω. If the delay angle α is 60˚, Find:

(i) Maximum Load Current (ii) Average Load Voltage (iii) Average Load Current

(iv) RMS Load Current (v) Power supplied to the load (vi) Conduction Angle.

3. Explain the working of 3-ø full-wave half-controlled bridge rectifier with the help of its circuit and relevant waveforms.

Re-Test Papers

For Weak students on CO1 Basis

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
Department of Electronics & Communication Engineering

COURSE : B. Tech SEMESTER: V SECTION : A, B, C & D
SUBJECT : Telecommunication Engineering CODE : 5EC3A

TIME: 1 Hour **Re-Test for CO1** MM: 20

COURSE OUTCOME

CO1: Understanding various elements and parameters of transmission lines and their applications

Each question carries 5 marks

Q. 1 Derive the expression for Input impedance in terms of reflection coefficient.

Q. 2 Calculate the characteristic impedance, propagation coefficient and velocity of wave propagation at a frequency of 400 KHz of a uniform transmission line which has the following constants L = 0.5 mH/mile, C = 0.08 µF/mile. Resistance and leakage negligible

Q. 3 Prove, that an infinite line is equivalent to a finite line terminated in its characteristic impedance.

Q. 4 A 50 ohm lossless transmission line is connected to a load (50 + j50) ohm. Calculate the magnitude of Reflection and value of VSWR

For Weak students on CO2 Basis

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
Department of Electronics & Communication Engineering

COURSE : B. Tech SEMESTER: V SECTION : A, B, C & D
SUBJECT : Telecommunication Engineering CODE : 5EC3A

TIME: 1 Hour **Re-Test for CO2** MM: 20

COURSE OUTCOME

CO2: Understanding Smith chart parameters and its applications in stub matching

Each question carries 5 marks

Q. 1 Explain Single stub matching and derive the expressions for location and length of stub.
Q. 2 Write down a brief note on Smith Chart and its properties.
Q. 3 An open wire R.F. transmission line (loss free) has a Z0=600Ω is connected to resistive load of 100Ω. Find the position and length of short circuited stub, if frequency is 150 MHz.
Q. 4 Use the smith chart to find the following quantities for a 50 Ohm transmission line having terminating impedance as Z_L=60+j50 located at L=0.4λ:
(i) SWR of the line (ii) Reflection coefficient at load (iii) Load admittance (iv) Input impedance of the line and (v) Distance from the load to 1st voltage minima.

2.2.3 Quality of Student Projects (25)

(Quality of the project is measured in terms of consideration to factors including, but not limited to, environment, safety, ethics, cost, type (application, product, research, review etc.) and standards. Processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working prototypes and enhancing the relevance of projects. Mention Implementation details including details of POs and PSOs addressed through the projects with justification)

Initiatives

- The student's projects are selected in line with department Vision, Mission and Program outcomes.
- Students are provided with brief idea of various fields for selecting the project ideas.
- The list of previous year projects is displayed at notice board which ensures no repetition of project work and also encourages students to enhance the previous works.
- The faculties are encouraging the students to carry out in house projects. And support will be provided with all necessary software and hardware.
- Encouraged students to participate in project exhibitions/Expo. Conducted national level and International Level. The project exhibition was aimed to provide common platform to exhibit their innovations and their work towards excellence in latest technology.

Implementation

To ensure the quality of projects, department has IQAC which is responsible for planning, scheduling and execution of all the activities related to the student project work.

Internal Quality Assurance Committee				
S. No.	**FACULTY NAME**	**QUALIFICATION**	**DESIGNATION**	**ROLE**
1	**Dr. Lokesh Bansal**	**Ph. D**	**Professor & HOD**	**Convener**
2	**Dr. S. K. Singh**	**Ph. D.**	**Professor**	**Member**
3	**Dr. Sandeep Vyas**	**Ph. D.**	**Asso. Professor**	**Member**
4	**Mr. Rajesh Bhatija**	**M. Tech.**	**Asso. Professor**	**Member**
5	**Dr. Vinita Mathur**	**Ph. D**	**Asst. Professor**	**Member**

Project COs

8EC8.1	CO1: Understand and review the available literature on the chosen problem
8EC8.2	CO2: Apply the methodology to solve the identified problem
8EC8.3	CO3: Analyze the principles and tools for the problem.
8EC8.4	CO4: Create the technique to solve the problem.
8EC8.5	CO5: Prepare and present project report

Mapping of COs with POs for Project Stage-I (7ECPR) and Project Stage-II (8ECPR)

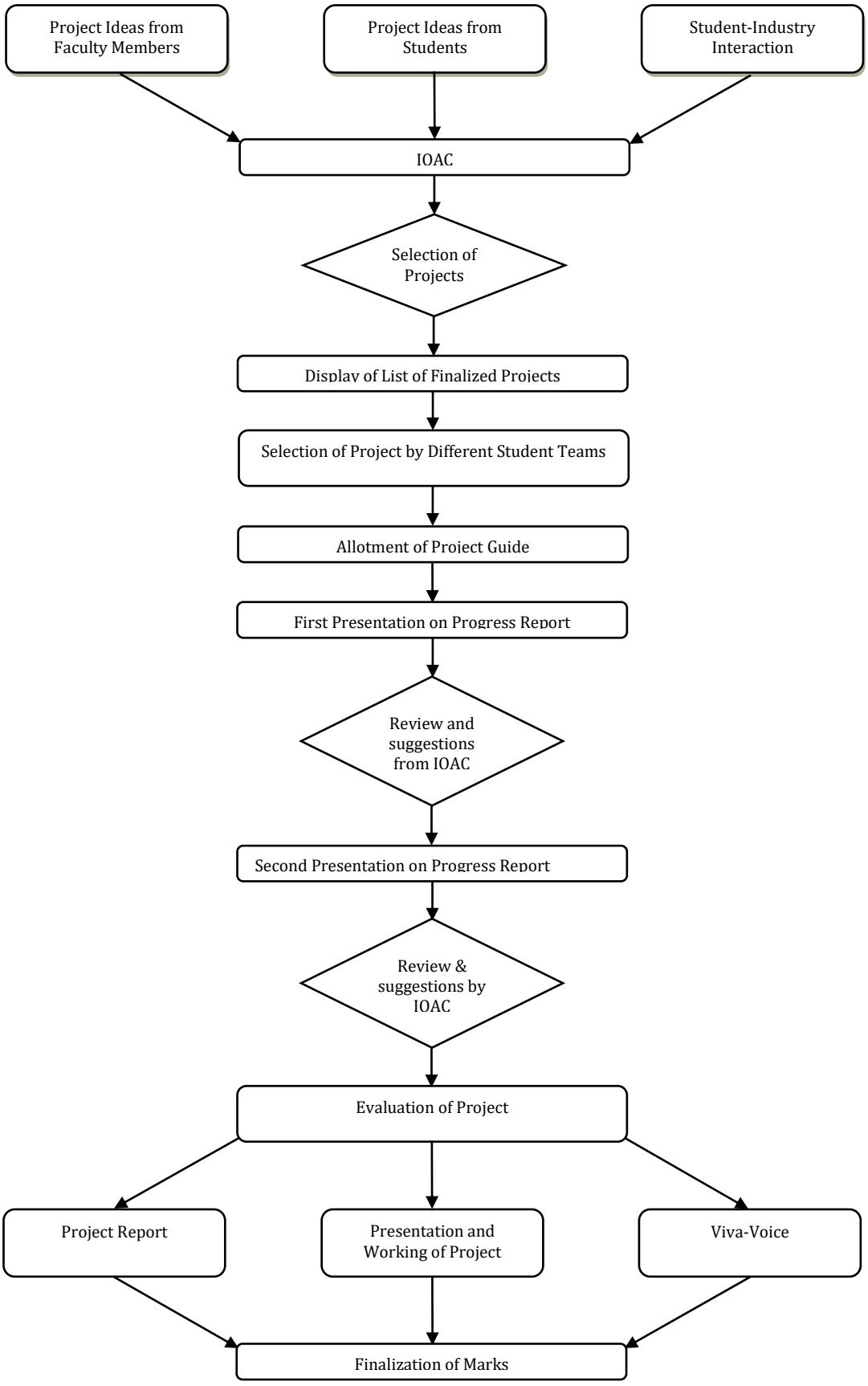
	Project											
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**
CO1	**H**	**H**	**H**	**H**	**L**	**-**	**-**	**-**	**H**	**L**	**-**	**M**
CO2	**H**	**H**	**H**	**M**	**H**	**M**	**M**	**-**	**H**	**L**	**M**	**H**
CO3	**H**	**H**	**H**	**M**	**H**	**M**	**M**	**-**	**H**	**M**	**M**	**H**
CO4	**H**	**H**	**H**	**M**	**M**	**M**	**M**	**-**	**H**	**M**	**L**	**H**
CO5	**M**	**M**	**M**	**M**	**L**	**-**	**-**	**H**	**H**	**H**	**M**	**H**

Project laboratory: ***Facilities & Utilization***

- Two hardware (workshop lab, embedded system lab) and one computer lab (CP-12) are used for project work
- Technical support for the students is available throughout the day
- All the labs are open for the students to carry out research regarding their projects, throughout the day

Facilities created in ECE department for projects

S. No.	**Name of the Laboratory**	**Facilities available to conduct Project works and Research work**	**Usage of facilities**
1.	Workshop Lab	CRO, Function Generator, Drilling Machine, Etc.	Used for student project work & Faculty research work
2.	Embedded System Lab	Different embedded system boards MSP 430, are available	Used for student project work & Faculty research work
3.	Computer Lab (CP-12)	Internet with high speed is provided for students for the project research work	Used for student project work & Faculty research work
4.	Signal Processing Lab	DSK starter kits	Used for student project work & Faculty research work


Project Ideas from Faculty Members
Project Ideas from Students
Student-Industry Interaction
IOAC
Selection of Projects
Display of List of Finalized Projects
Selection of Project by Different Student Teams
Allotment of Project Guide
First Presentation on Progress Report
Review and suggestions from IOAC
Second Presentation on Progress Report
Review & suggestions by IOAC
Evaluation of Project
Project Report
Presentation and Working of Project
Viva-Voice
Finalization of Marks

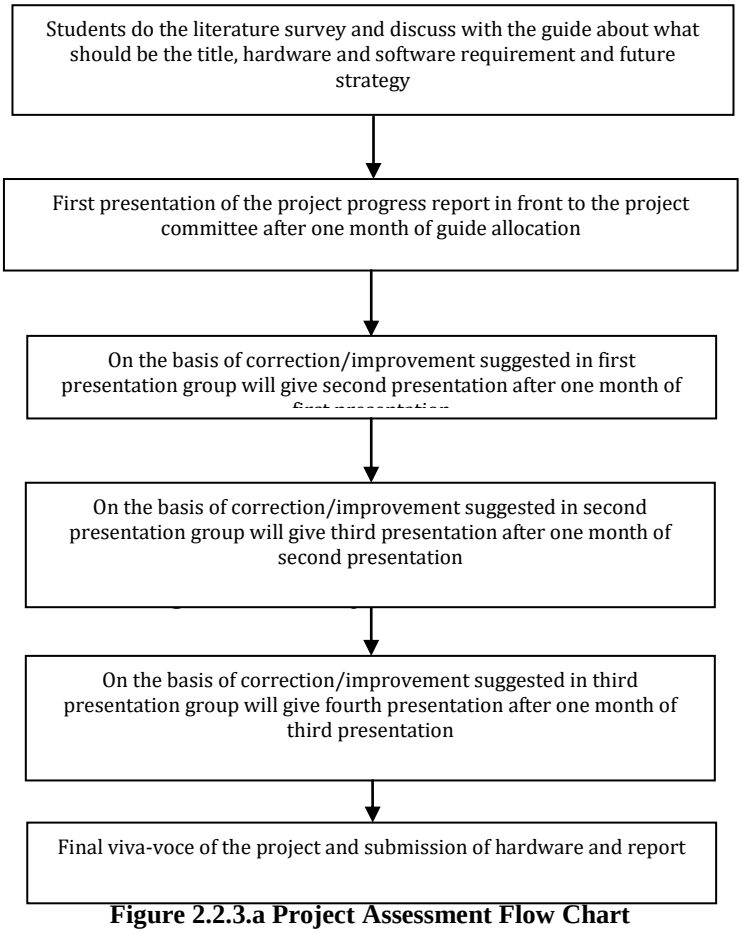


Figure 2.2.3.a Project Assessment Flow Chart

SAMPLE OF PROJECT-DATES NOTICE

Jaipur Engineering College and Research Centre, JAIPUR
Department of Electronics and Communication Engineering

Schedule of Major Project Presentation of B. Tech. ECE VIII Sem.

19-Jan-18

Presentation	dates
1st Project Presentation of VIII sem. Section-A	1/23/2018
1st Project Presentation of VIII sem. Section-B	1/24/2018
1st Project Presentation of VIII sem. Section-C	1/25/2018
1st Project Presentation of VIII sem. Section-D	1/27/2018
2nd Project Presentation of VIII sem. Section-A	2/16/2018
2nd Project Presentation of VIII sem. Section-B	2/17/2018
2nd Project Presentation of VIII sem. Section-C	2/23/2018
2nd Project Presentation of VIII sem. Section-D	2/24/2018
3rd Project Presentation of VIII sem. Section-A	3/9/2018
3rd Project Presentation of VIII sem. Section-B	3/10/2018
3rd Project Presentation of VIII sem. Section-C	3/16/2018
3rd Project Presentation of VIII sem. Section-D	3/17/2018

4th Project Presentation of VIII sem. All Sections	3/24/2018

VANUE: CAD LAB

RAJESH KUMAR BATHIJA
PROJECT INCHARGE

SAMPLE OF FRONT PAGE OF PROJECT REPORT

A
PROJECT REPORT
ON

"Floating Point 32-bit single Precision Adder/Subtractor Design using VHDL"

Submitted in partial fulfillment for the award of Degree of

Bachelor of Technology

In

Electronics And Communication Engineering

Rajasthan Technical University,Kota

Submitted To:	Submitted By:
Mr. Rajesh Bhatija	Aishwarya Sharma(14EJCEC008)
Guided By:	Akanksha Gupta(14EJCEC011)
Ms.Shruti Kalra	Anmol Bhatnagar(14EJCEC024)
Ms.Geetika Bhati Mathur	Dushyant Marothia(14EJCEC061)

JECRC Foundation

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE
(May, 2018)

Marks distribution of minor project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
PROJECT-I MARKS OF VII SEM ECE 2017-18

S.NO.	University Roll No.	Name	ASSESSMENT1 (20)	ASSESSMENT2 (30)	TOTAL (50)
1	14EJCEC001	AAKASH MANGAL	16	24	40
2	14EJCEC002	AANCHAL JAIN	16	25	41
3	14EJCEC003	AARUSHI SINGH	18	27	45
4	14EJCEC004	ABHINANDAN	15	23	38

		KUMAR			
5	15EJCEC200	ABHINAV SINGH CHAUDHA	17	25	42
6	14EJCEC005	ABHISHEK KUMAR	15	23	38
7	14EJCEC006	ADITYA GAUTAM	19	28	47
8	14EJCEC007	ADITYA SHARMA	18	28	46
9	14EJCEC008	AISHWARYA SHARMA	19	28	47
10	14EJCEC009	AJAY GUPTA	16	25	41

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
PROJECT-I ASSESSMENT-1 MARKS OF VII SEM ECE 2017-18

S. No.	University Roll No.	Name	Dress up (2)	Title and content relevant (4)	Presentation skills (6)	Content (4)	Query handling (4)	Total (20)
1	14EJCEC001	AAKASH MANGAL	2	3	5	3	3	16
2	14EJCEC002	AANCHAL JAIN	2	3	5	3	3	16
3	14EJCEC003	AARUSHI SINGH	2	4	4	4	4	18
4	14EJCEC004	ABHINANDAN KUMAR	2	3	4	3	3	15
5	15EJCEC200	ABHINAV SINGH CHAUDHA	2	3	5	4	3	17
6	14EJCEC005	ABHISHEK KUMAR	2	3	4	3	3	15
7	14EJCEC006	ADITYA GAUTAM	2	4	5	4	4	19
8	14EJCEC007	ADITYA SHARMA	2	4	4	4	4	18
9	14EJCEC008	AISHWARYA SHARMA	2	4	5	4	4	19
10	14EJCEC009	AJAY GUPTA	2	3	5	3	3	16

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
PROJECT-I ASSESSMENT-2 MARKS OF VII SEM ECE 2017-18

S. No.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total (30)
1	14EJCEC001	AAKASH MANGAL	2	5	7	5	5	24
2	14EJCEC002	AANCHAL JAIN	3	5	7	5	5	25

3	14EJCEC003	AARUSHI SINGH	3	5	9	5	5	27
4	14EJCEC004	ABHINANDAN KUMAR	2	5	6	5	5	23
5	15EJCEC200	ABHINAV SINGH CHAUDHA	3	5	7	5	5	25
6	14EJCEC005	ABHISHEK KUMAR	2	5	6	5	5	23
7	14EJCEC006	ADITYA GAUTAM	3	6	7	6	6	28
8	14EJCEC007	ADITYA SHARMA	3	6	7	6	6	28
9	14EJCEC008	AISHWARYA SHARMA	3	6	7	6	6	28
10	14EJCEC009	AJAY GUPTA	3	5	7	5	5	25

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
LIST OF STUDENTS OF VII SEM ECE WITH MAJOR PROJECT MARKS CRITERIA

S.NO.	University Roll No.	Name	INTERNAL (120)	EXTERNAL (80)	TOTAL (200)
1	14EJCEC001	AAKASH MANGAL	109	62	171
2	14EJCEC002	AANCHAL JAIN	112	72	184
3	14EJCEC003	AARUSHI SINGH	109	73	182
4	14EJCEC004	ABHINANDAN KUMAR	108	71	179
5	14EJCEC005	ABHISHEK KUMAR	107	69	176
6	14EJCEC006	ADITYA GAUTAM	112	74	186
7	14EJCEC007	ADITYA SHARMA	116	72	188
8	14EJCEC008	AISHWARYA SHARMA	118	76	194
9	14EJCEC009	AJAY GUPTA	108	71	179
10	14EJCEC010	AJAY SINGH NATHAWAT	114	73	187

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
EXTERNAL ASSEMENT OF MAJOR PROJECT OF VIII SEM ECE 2017-18

S. No.	University Roll No.	Name	VIVA-VOCE (20)	RUNNING CONDITION OF PROJECT (30)	REPORT (30)	Total (80)
1	14EJCEC001	AAKASH MANGAL	16	23	23	62
2	14EJCEC002	AANCHAL JAIN	18	27	27	72
3	14EJCEC003	AARUSHI SINGH	18	28	27	73
4	14EJCEC004	ABHINANDAN KUMAR	18	26	27	71
5	14EJCEC005	ABHISHEK KUMAR	17	26	26	69
6	14EJCEC006	ADITYA GAUTAM	19	27	28	74

7	14EJCEC007	ADITYA SHARMA	18	27	27	72
8	14EJCEC008	AISHWARYA SHARMA	19	28	29	76
9	14EJCEC009	AJAY GUPTA	18	26	27	71
10	14EJCEC010	AJAY SINGH NATHAWAT	18	28	27	73

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
MARKS OF PRESENTATION 1 OF MAJOR PROJECT 2017-18

S. No.	University Roll No.	Name	Dress up (2)	Title and content relevant (4)	Presentation skills (6)	Content (4)	Query handling (4)	Total (20)
1.	14EJCEC001	AAKASH MANGAL	1	3	5	4	4	17
2.	14EJCEC002	AANCHAL JAIN	2	3	5	4	4	18
3.	14EJCEC003	AARUSHI SINGH	2	4	5	4	4	19
4.	14EJCEC004	ABHINANDAN KUMAR	1	3	5	4	4	17
5.	14EJCEC005	ABHISHEK KUMAR	1	3	5	4	3	16
6.	14EJCEC006	ADITYA GAUTAM	2	4	5	4	4	19
7.	14EJCEC007	ADITYA SHARMA	2	4	5	4	4	19
8.	14EJCEC008	AISHWARYA SHARMA	2	4	5	4	4	19
9.	14EJCEC009	AJAY GUPTA	1	3	5	4	4	17
10.	14EJCEC010	AJAY SINGH NATHAWAT	1	3	5	4	4	17

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
MARKS OF PRESENTATION 2 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total (30)
1.	14EJCEC001	AAKASH MANGAL	3	5	8	6	5	27
2.	14EJCEC002	AANCHAL JAIN	3	6	9	6	5	29
3.	14EJCEC003	AARUSHI SINGH	2	4	8	6	5	25
4.	14EJCEC004	ABHINANDAN KUMAR	3	5	8	6	4	26
5.	14EJCEC005	ABHISHEK KUMAR	3	5	8	6	4	26
6.	14EJCEC006	ADITYA GAUTAM	2	5	8	6	5	26
7.	14EJCEC007	ADITYA SHARMA	3	5	8	6	4	26
8.	14EJCEC008	AISHWARYA SHARMA	3	5	9	6	5	28
9.	14EJCEC009	AJAY GUPTA	2	5	8	6	5	26
10.	14EJCEC010	AJAY SINGH NATHAWAT	3	5	8	6	4	26

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
MARKS OF PRESENTATION 2 OF MAJOR PROJECT 2017-18

S. No.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total (30)
1.	14EJCEC001	AAKASH MANGAL	3	5	8	6	5	27
2.	14EJCEC002	AANCHAL JAIN	3	6	9	6	5	29
3.	14EJCEC003	AARUSHI SINGH	2	4	8	6	5	25
4.	14EJCEC004	ABHINANDAN KUMAR	3	5	8	6	4	26
5.	14EJCEC005	ABHISHEK KUMAR	3	5	8	6	4	26
6.	14EJCEC006	ADITYA GAUTAM	2	5	8	6	5	26
7.	14EJCEC007	ADITYA SHARMA	3	5	8	6	4	26
8.	14EJCEC008	AISHWARYA SHARMA	3	5	9	6	5	28
9.	14EJCEC009	AJAY GUPTA	2	5	8	6	5	26
10.	14EJCEC010	AJAY SINGH NATHAWAT	3	5	8	6	4	26

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
MARKS OF PRESENTATION 3 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total (30)
1.	14EJCEC001	AAKASH MANGAL	3	5	8	6	5	27
2.	14EJCEC002	AANCHAL JAIN	3	5	8	6	5	27
3.	14EJCEC003	AARUSHI SINGH	3	5	8	6	5	27
4.	14EJCEC004	ABHINANDAN KUMAR	3	5	8	6	5	27
5.	14EJCEC005	ABHISHEK KUMAR	3	5	8	6	5	27
6.	14EJCEC006	ADITYA GAUTAM	3	5	8	6	5	27
7.	14EJCEC007	ADITYA SHARMA	3	5	9	6	5	28
8.	14EJCEC008	AISHWARYA SHARMA	3	5	8	6	5	27
9.	14EJCEC009	AJAY GUPTA	3	5	8	6	5	27
10.	14EJCEC010	AJAY SINGH NATHAWAT	3	6	8	6	5	28

Department of Electronics & Communication Engineering
Best Projects - CAY (2017-18)

S. No.	Project Name	Name of Students	RTU Roll No.	Guide Name(s)	Tool/ Software Used	Publication / Achievement	PO/PSO Mapped
1	FLOATING POINT 32-BIT SINGLE PRECISION ADDER/SUBTRACTOR DESIGN USING VHDL	Aishwarya Sharma	14EJCEC008	Ms. Shruti Kalra, Ms. Geetika Bhati Mathur	FPGA, ModelSim	Report	PO1, PO2, PO3, PO5, PO8, PO9, PO10, PO11, PO12**, PSO2**
		Akanksha Gupta	14EJCEC011				
		Anmol Bhatnagar	14EJCEC024				
		Dushyant Marothia	14EJCEC061				
2	THEFT INTIMATION OF THE VEHICLE OVER SMS TO OWNER WHO CAN STOP THE ENGINE REMOTELY	Anjali Yadav	14EJCEC021	Ms. Shruti Kalra, Ms. Geetika Bhati Mathur	Proteus, Keil Compiler, Embedded-C	Report	PO1, PO2, PO3, PO5, PO8, PO9, PO10, PO11, PO12**, PSO1**
		Arpit Ghiya	14EJCEC034				
		Arpit Gupta	14EJCEC035				
		Ajay Gupta	14EJCEC009				
3	AUTOMATIC RAILWAY GATE CONTROL SYSTEM	Aditya Sharma	14EJCEC007	Ms. Ritu Vyas, Ms. Kriti Manish Sharda	Proteus, Keil Compiler, Embedded-C	Report	PO1, PO2, PO3, PO5, PO8, PO9, PO10, PO11, PO12**, PSO1**
		Akshay Laroiya	14EJCEC015				
		Bharat Kodwani	14EJCEC047				
		Bhuvnesh Nagar	14EJCEC052				
4	HOSPITAL MANAGEMENT SYSTEM	Hardik Mittal	14EJCEC067	Mr. Ashutosh Sharma, Mr. Lokesh Sharma	Java, JSP, Microsoft Access Database	Report	PO1, PO2, PO3, PO5, PO8, PO9, PO10, PO11, PO12
		Harshit Sharma	14EJCEC072				
		Harshwardhan Singh Gaur	14EJCEC074				
		Kripal Patidar	14EJCEC095				
5	4S CLOUD	Hemant Thawani	14EJCEC075	Mr. S. S. Manaktala, Mrs. Yazusha Sharma	LINUX (Redhat 7.2), Python 2 & 3, HTML 5, Ansible, Docker	Report	PO1, PO2, PO3, PO5, PO8, PO9, PO10, PO11, PO12
		Himanshu Bakoliya	14EJCEC076				
		Kashish Jindal	14EJCEC092				
		Md. Nadeem Afzal	14EJCEC112				

2.2.4 Initiatives related to Industry Interaction (15)

(Give details of the industry involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts etc. Mention the initiatives, implementation details and impact analysis)

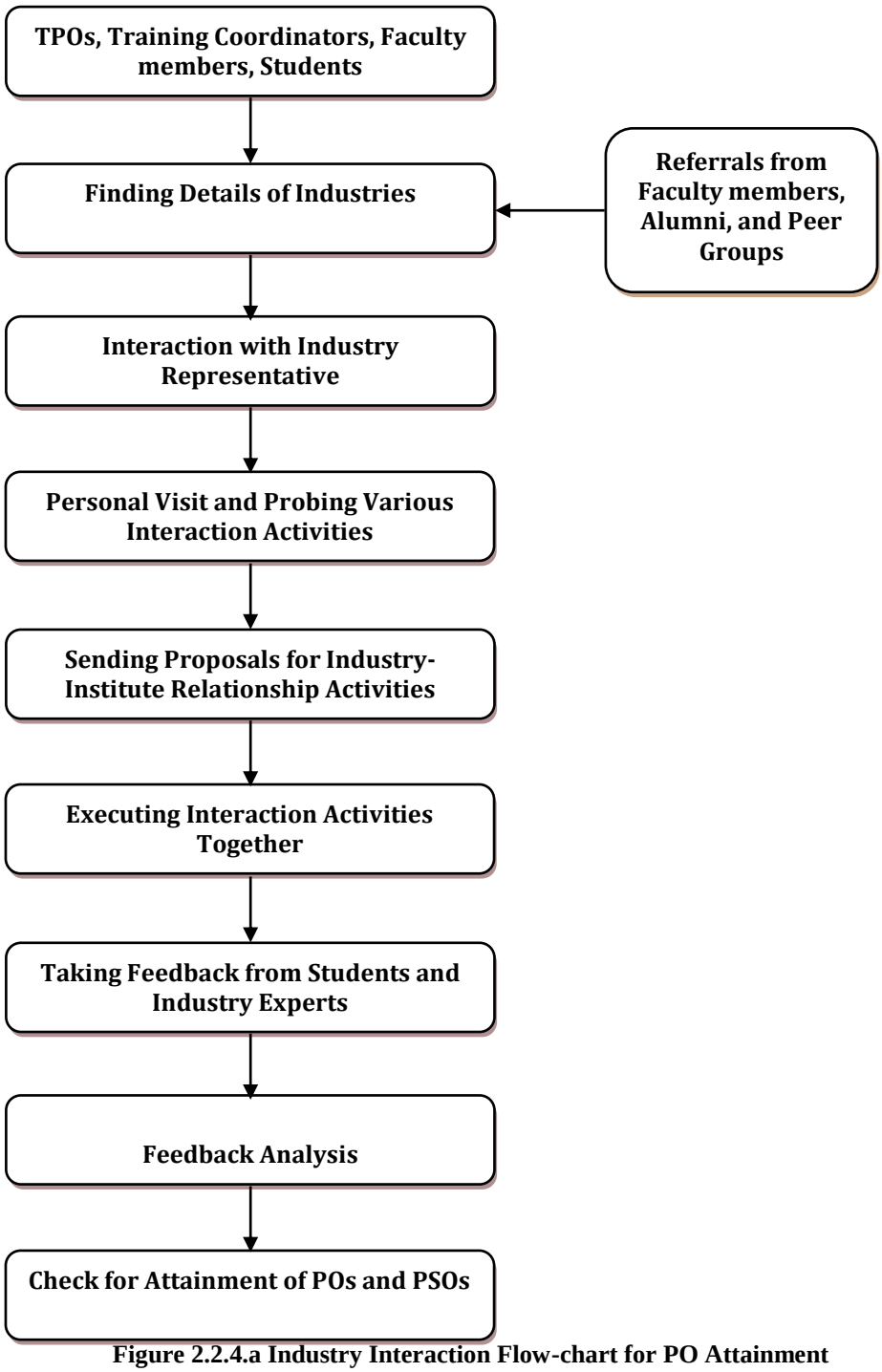


Figure 2.2.4.a Industry Interaction Flow-chart for PO Attainment

To ensure course objectives apart from traditional teaching techniques, some industry oriented following exercises are also utilized by the department:

- Industry trainings and visits

- Industry Expert lectures
- Value added programs and seminars organized and participated by students

List of Courses/Expert talks by Industry Personnel					
S. No.	**Course/ Topic Name**	**Industry**	**Resource Person with Designation**	**% of Students**	**Relevance to POs, PSOs**
1	Open Source Innovations – Technological Convergence	Red Hat Academy	Mr. Alok Srivastava	90%	PO1, PO5
2	Mobile Controlled Robotics	TechieNest	Mr. Sidharth	25%	PO1, PO2, PO3, PO5
3	Internet of Things and Big Data	TCS	Mr. Rajit Sikka	90%	PO1, PO5
4	Project Making	EFY Tech Center	Mr Sandeep Prakash & Mr. Raghav Raj Bansal	90%	PO1, PO2, PO3, PO5

Gap Fulfillment through Industrial Involvement						
S. No.	**Gap**	**Action Taken**	**Date-Month Year**	**Resource Person with Designation**	**% of Students**	**Relevance to POs, PSOs**
1	Aptitude, Reasoning, Quantitative Analysis Skills for Placement	FACE Classes	July 20-August 14, 2016	Experts from FACE	90%	PO1, PO12
2	Project Development Skills	Embedded Workshops	February 16-17, 2016	Sourabh Bhardwaj	28%	PO3, PO5, PO9, PO11
3	Industry Applications	Industrial Visits	February 18, 2017	BSNL	29%	PO1, Po5, PO12
4	Soft and Personality Development Skills	Expert Talks	July 20-August 14, 2016	Prof. P. K. Tiwari	90%	PO8, PO10, PO12
5	Research Aptitude	Conference	August 12-13, 2016	Research Scholars	80%	PO4, PO5, PO9, PO10
6	Coding Skills	Expert Lecture	February9, 2017	Mr. Chetan Prakash	32%	PO1, PO3, PO5
7	GATE/PSU Preparation	Seminar	September 30, 2016	Mr. Rahul Singh	23%	PO1, PO12

Table 2.2.4.a Gap Fulfilment through Industry-Interaction for PO Attainment

INDUSTRY VISIT DETAILS

CAY 2017-18																
Jan 2018-June 2018 (Even Sem)					IMPACT ANALYSIS											
S. No.	**Name Of Company**	**Dates of Visit**	**Profile of Company**	**No. of Students**	**Outcome**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
1	Tesca Technologies Pvt. Ltd.	17th January 2018	Electronics measurements	27 (3rd year)	1) Single sourcing partner for all Educational solutions. 2) Student Interaction with real application of Electronics Engineering.	H	M			M						M	M
2	Genus Power Infrastructures Ltd.,	15th February 2018	Electronics	50	1) Student interacted with real application of Engineering especially in Smart Energy meters. 2) Student learned about various Techniques of Power Generation and Distribution.	M				M				M			M
3	Phillips Lightings	24th March 2018	Electronics	45	1) Students understood the mechanism behind the manufacturing of lighting systems.	M								M	M		M
4	Talent Pool	24th March 2018	Telecom, IT	45	1) Students were imparted basic knowledge of telecom strategies.	M				M				L			

CAYm1 2016-17

July 2016-Dec 2016 (Odd Sem)					IMPACT ANALYSIS											
S. No.	**Name Of Company**	**Date of Visit**	**Profile of Company**	**No. of Students**	**Outcome**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
1	Department of Telecommunication (DoT), Govt. of India.	17th December 2016	Telecom (Electromagnetic Emission and Telecom Towers)	5	1) To let citizens be aware about plan of action of the government and TRAI. 2) To let citizens be aware about permissible energy level of signals in India.	H					L					L	L

Jan 2017-June 2017 (Even Sem)					IMPACT ANALYSIS											
S. No.	**Name Of Company**	**Date of Visit**	**Profile of Company**	**No. of Students**	**Outcome**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**
1	Regional Telecom Training Centre	18th February 2017	Telecom	55 (3rd Year)	1) Student interacted with real application of Engineering especially in TELECOM Engineering. 2) Students learned about various generation of mobile communication.	M			L	L						L	

CAYm2 2015-16

July 2015-Dec 2015 (Odd Sem)					IMPACT ANALYSIS											
S. No.	**Name Of Company**	**Date of Visit**	**Profile of Company**	**No. of Students**	**Outcome**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**

1	Jaybee Industries	27/10/15 to 30/10/2015	Transformers & Stabilizers	95	1) Basic knowledge of manufacturing of transformers and their usage.	M				M				L	L		L

INDUSTRY INTERACTION DETAILS

CAY 2017-18

July 2017-Dec 2017 (Odd Sem)

S. No.	Name Of Company	Concerned Person Name	Person's Designation	Outcome	Profile of Company	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
1	Pulse communication	Mr. Deepak Madan	Marketing Manager	1) Requirement of Interns having basic knowledge of communication	Telecom	M	-	-	-	M	-	-	-	M	M	M	M
2	Sahasra electronics	Mr. Maneesh Tiwari	Manager Finance	1) Interested in training and internships.	Electronics	M	M	-	-	M	-	-	-				M
3	Barco electronics	Ms. Nirja mehta	HR	1) Requirement of students who have good academic records	Electronics	M	-	-	L	-	-	-	-				M
4	Maharshi Solar Tech. Pvt. Ltd.	Mr. Arun Mishra (VP); Mr. Surjeet Singh (Manager)	Vice President - Maharshi Group	1) Interested in training people in use of sustainable energy	Solar Energy	-	L	-	-	M	-	M	-		M	M	M

Jan 2018-June 2018 (Even Sem)

S. No.	Name Of Company	Concerned Person Name	Person's Designation	Outcome	Profile of Company	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
1	Compunnel	Mr. Ankit	HR	1) Ready for technical recruitment 2)Looking for young graduates with good	Software Company	L				M				M	M		M

				skills													
2	Radiate	Mr. Snehal Kaushik	HR	1) Requirement of students with good communication skills.	E-commerce Company	L				M					M		
3	Samsung Electronics India Pvt. Ltd.	Mr. Kaushal Sharma	Deputy General Manager	1) Regular syllabus followed by the universities is essential.	Electronics & Software	M				M					M	L	
4	Ziox Mobiles	Mr. Deepak kabu	CEO	1) Interested in recruiting ECE for telecom sector. 2) Student should be practically strong.	Telecom	M	L			M					M	L	M
5	Impiger Technologies	Mr. Chetan Kabu	Technical Consultant	1) Requires students with logical skills. 2) Interested to come for guest lecture.	Software Company	L				L					M		
6	SaasForce	Mr. Arjun Shrestha	Senior Executive Admin	1) Was interested in students having good software knowledge.	Software Company	L				L					M		

Other Industrial Interaction through Visits by Faculties/Students

S. No.	Name of Team Members	Company Name	Concerned Person Name	Person's Designation	Location	Profile of Company
1	Anil Jain & Pravin Kumar Sharma	Algosec	Mr. Pawan Singh	Cyber security, AI Engineer	Gurgaon	Security in IT & Networking
		TFT	Mr. Arvind		Gurgaon	IT & Networking
		Qtech Technology	Ms. Parul Nirwan	Software Developer	Gurgaon	Software & App Development

		British Telecom	Mr. Manish Goel	Team Leader/Manager (Networking)	Gurgaon	Networking, Telecom and service provider
		BA Continuum	Ms. Luci (HR executive), Ms. Swastika Chatterjee (HR Manager)	HR executive	Gurgaon	Bank of America Company
		Candour Soft			Gurugram	Software development and maintenance
		Compucom	Mr. Jitendra Kumar	Network Engineer	Gurugram	IT & Networking
		Samsung Electronics India Pvt. Ltd.	Mr. Kaushal Sharma	Deputy General Manager	Noida	Electronics & Software
		Concentrix	Mr. Praveen	HR Manager	Noida	Service assistance to other companies
		Smart Energy Water	Ms. Taniya Marwaha	HR Manager	Noida	Software company
		Lumata Digital			Noida	Software
		Dixon		Vice President - HRD	Noida	Electronics manufacturing and maintenance
		Maharshi Solar Tech. Pvt. Ltd.	Mr. Arun Mishra (VP); Mr. Surjeet Singh (Manager)	Vice President - Maharshi Group	Noida	Electronic and Electrical Manufacturing
		Samsung Heavy Industries			Noida	Electronic manufacturing
		Radcom	Mr. Karan Malhotra	Team Leader	New Delhi	Software and Networking Assistance
2	Shweta Sharda & Aapurva Kaul	Compunnel	Mr. Ankit	HR	Noida	Software Company
		Radiate	Mr. Snehal Kaushik	HR	Noida	E-commerce Company

		Appinventiv	Ms. Niketa Saxena	HR Manager	Noida	Software Company
		Ziox Mobiles	Mr. Deepak kabu	CEO	New Delhi	Mobile Company
		Impiger Technologies	Mr. Chetan Kabu	Technical Consultant	Gurugram	Software Company
		SaasForce	Mr. Arjun Shrestha	Senior Executive Admin	Noida	Software Company
3	Ashish Sharma & Anmol Bhatnagar	Pulse Communication	Mr. Deepak Madan	Marketing Manager	New Delhi	Deals in Core embedded System & communication Devices
		Bellurbis Technology	Ms Sonal Sondhi	HR	Gurugram	Software company
		Cyient	Mr. Mudit Sharma	Sr. Team Leader(Technical)	Noida	Software company
		Sterlite Technologies	Ms. Heena	officer	New Delhi	Core wireless company,deals in Optical Fiber mancufacturing & installation
		Scatechnologies	Vidhi Mathur	HR	Gurugram	
4	Monika Gwalani, Hardik Mittal & Harsvardhan	Sahasra Electronics	Mr. Maneesh Tiwari	Manager Finance	Noida	Electronics
		Barco Electronics	Ms. Nirja mehta	HR	Noida	Electronics
		Hi Tech			Gurugram	Robotic
		M V Infotech			Gurugram	IT management
		EXL			Noida	business management consultant
		Synopsis India Pvt. Ltd			Noida	software
5	Prateek Maheshwari & Vinuj Arora	Delta Electronics	Mr. Mohit Sharma	HR	Gurugram	Power Electronics, automation, infrastructure
		Mitsubishi Electric	Miss Swati	Trainee	Gurugram	Visual imaging, power semicon, solar solutions

2.2.5 Initiatives related to Industry Internship/ Summer Training (15)

(Mention the initiatives, implementation details and impact analysis)

The student has to execute a project work preferably at industry/R&D institution. The industrial training is assessed by external and internal examiners through presentation and viva- voce.

Summer Internships Process Flow

- ***Issuance of internship letter*** to every student
- ***Acknowledgement by Company*** will be given through a letter of summer training to college(department)
- ***Tracking of Company Profile*** is done by department after Approval by company and if found satisfactory, then only the students are allowed to pursue their training from that company
- ***Issue of Approval Letter*** to the student for summer training
- ***Internship*** starts after VI semester exams are over
- ***Issue of Certificate/Evaluation Letter*** by the company for successful completion to trainee student
- ***Collection of Training Certificate's Photocopy*** is done by the department
- ***Feedback from Company representative*** is collected through mail
- ***Thanks Letter to company and*** invite ***to conduct placement drive***
- ***Presentation in next semester*** is scheduled for the students by the department along with Report Submission
- ***Final evaluation*** is done after power point presentation and training report submission

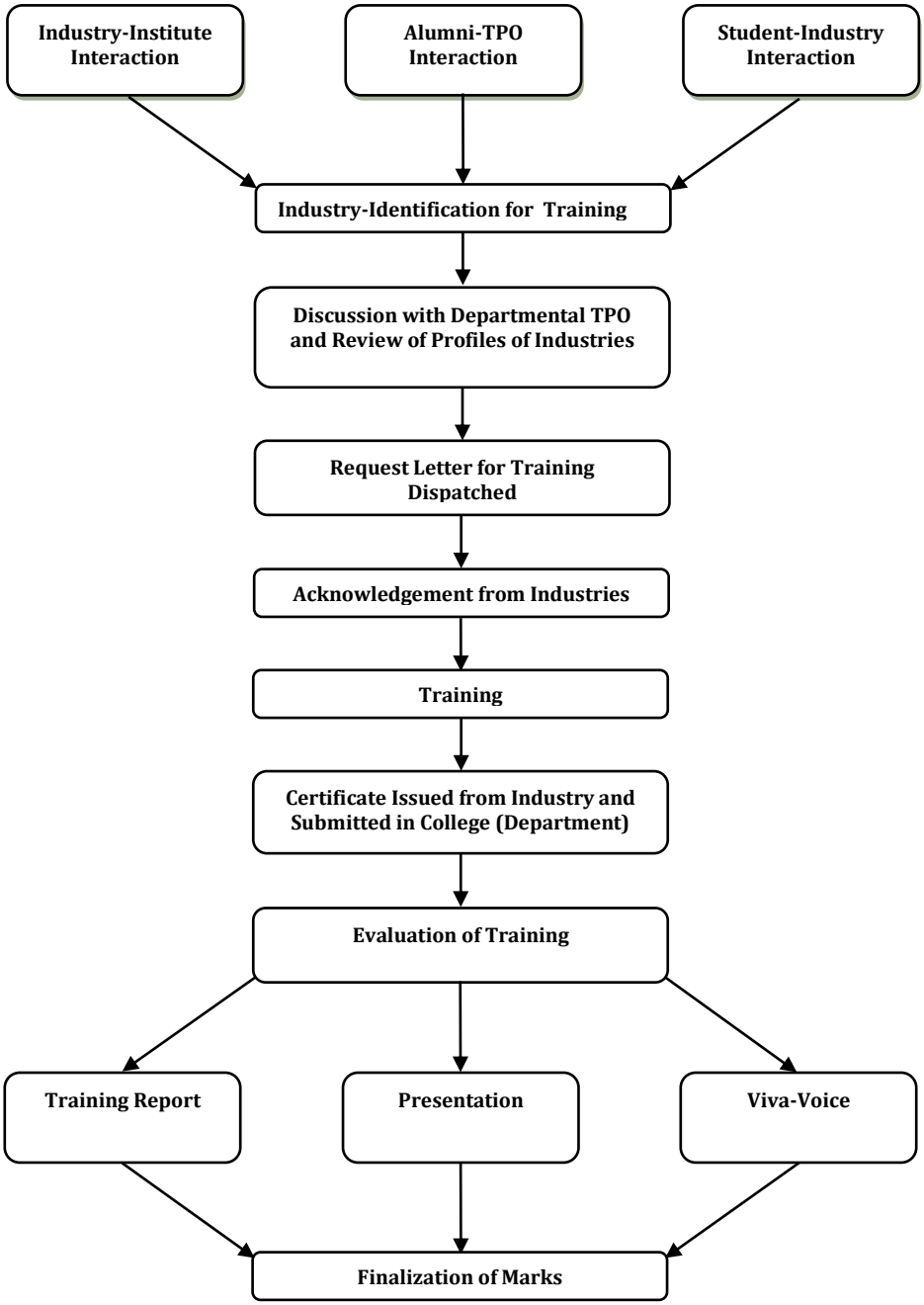
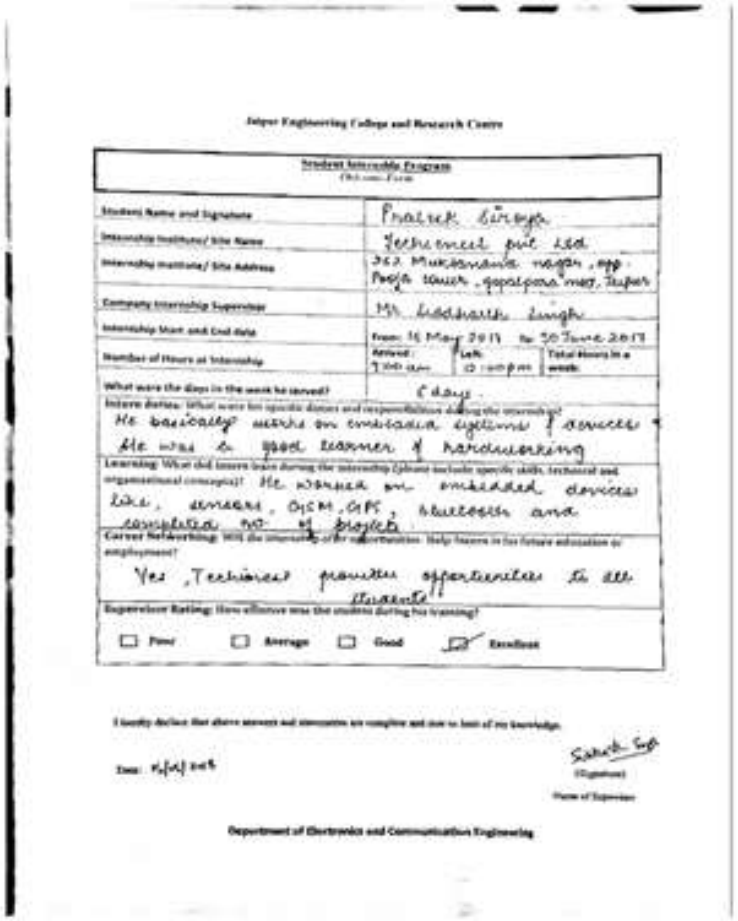


Figure 2.2.5.a Process of Evaluation of Training/Internship



Jaipur Engineering College and Research Centre

Student Internship Program

Student Name and Signature	Prateek Singh
Internship Institute/ Site Name	Technocrat pvt Ltd.
Internship Institute/ Site Address	362 Mukundwara nagar, opp. Pooja tower, gopalpura mor, Jaipur
Company Internship Supervisor	Mr. Siddharth Singh
Internship Start and End date	From: 15 May 2017 to 30 June 2017
Number of Hours at Internship	Arrived: 7:00 am; Left: 02:00 pm; Total Hours in a week:
What were the days in the week he served?	6 days.
Intern duties: What were his specific duties and responsibilities during the internship?	He basically works on embedded systems & devices. He was a good learner & hardworking
Learning: What did intern learn during the internship (please include specific skills, technical and organizational concepts)?	He worked on embedded devices like, sensors, GSM, GPS, bluetooth and completed his mini project.
Career Networking: Will the internship offer opportunities to help interns in his future education or employment?	Yes, Technocrat provides opportunities to all students
Supervisor Rating: How effective was the student during his training?	☐ Poor ☐ Average ☐ Good ☑ Excellent

I hereby declare that above answers and statements are complete and true to best of my knowledge.

Date: 4/6/2017 (Signature)

Name of Supervisor

Department of Electronics and Communication Engineering

Outcome Forms

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

(A Government of Rajasthan Undertaking)

Corporate Identity Number (CIN):- U28102RJ2000SGC016485

Regd. Office & H.O.: Vidyut Bhawan, Janpath, Jyoti Nagar, Jaipur-302005

OFFICE OF THE SUPERINTENDING ENGINEER (TRAINING)

KOTA SUPER THERMAL POWER STATION

E-mail id: training2015ktps@gmail.com

No. RVUN/ KSTPS/SE (TRAINING)/ D. 642 Date: 05-06-2018

Training & Placement Officer,
Jaipur Engineering College And Research Centre,
Jaipur (Raj.)

Sub: Practical training to Engineering Students at KSTPS Training Centre, Kota, during summer vacation.

Dear Sir,

Your request for imparting Practical training to the following students of your college /institution has been accepted , you are therefore advised to convey to the concern students for joining their training programme on scheduled date and time as mentioned against their names:-

S. No.	Name of student (Mr./Ms.)	Branch	Year	Period
813/01	Deepak Agarwal	E&C	3rd Year	08.05.18 to 06.07.18
813/02	Prakash Bhardwaj	ME	3rd year	08.05.18 to 06.07.18
813/03	Chirag Sompura	ECE	3rd year	08.05.18 to 06.07.18
813/04	Ayush Agarwal	EE	3rd year	08.05.18 to 06.07.18
813/05	Bhanu Prakash Gupta	ME	3rd year	08.05.18 to 06.07.18
813/06	Chandra Prakash Pulwani	ME	3rd year	08.05.18 to 06.07.18
813/07	Deepak Mittal	ME	3rd year	08.05.18 to 06.07.18
813/08	Nishi Dhakad	ME	3rd year	08.05.18 to 06.07.18
813/09	Divyank Rathi	ME	3rd year	08.05.18 to 06.07.18
813/10	Bhanu Khandelwal	ME	3rd year	08.05.18 to 06.07.18
813/11	Prakhar Joshi	EE	3rd year	08.05.18 to 06.07.18
813/12	Sakshi Sharma	EE	3rd year	08.05.18 to 06.07.18
813/13	Arpit Kumar Jain	EE	3rd year	08.05.18 to 06.07.18
813/14	Pranjal Birla	E&C	3rd Year	08.05.18 to 06.07.18
813/15	Kuldeep Jain	EE	3rd Year	08.05.18 to 06.07.18
813/16	Harsh Pratap Singh Chu	EE	3rd Year	08.05.18 to 06.07.18
813/17	Astha Misra	ECE	3rd year	08.05.18 to 06.07.18
813/18	Ayush Gupta	ECE	3rd year	08.05.18 to 06.07.18
813/19	Bhupesh Singhal	ECE	3rd year	08.05.18 to 06.07.18
813/20	Vipul Jain	EE	3rd year	08.05.18 to 06.07.18
813/21	Tarun Garg	EE	3rd year	08.05.18 to 06.07.18
813/22	Ritika Nagar	EE	3rd year	08.05.18 to 06.07.18
813/23	Chiranshi Chandna	EE	3rd year	08.05.18 to 06.07.18

The training programme will commence at KSTPS from 08.05.18 to 06.07.18 (10.00AM to 5.00PM).The candidate will report for training to the Executive Engineer (Training), **Shed No.8**, KSTPS, RVUN, Kota, alongwith two Nos. latest passport size photographs. The students will keep their college identity card with them during the period of training and abide by the rules of KSTPS & CISF Unit of Plant. KSTPS will not be responsible for any mishap, if occurred during the period of training.

(B.K. Jha)
Executive Engineer (Training)
KSTPS, RVUN, KOTA

Letter of summer Internship

Self Assessment Report

Sample of Summer Training Record - CAY (2017-18)

S. No.	University Roll No.	Name	Summer Training Organization	Place	Duration	PO	PSO
1	14EJCEC001	AAKASH MANGAL	Technoglobe Institute	Suratgarh	45 Days	1,2,3,4,5,6,7,9,10	1
2	14EJCEC002	AANCHAL JAIN	Airport Authority Of India	jaipur	60 days	1,5,6,7,8,9,10	
3	14EJCEC003	AARUSHI SINGH	Genx Soft Technologies (p) Ltd.	jaipur	60 days	1,5,6,7,8,9,10	2
4	14EJCEC004	ABHINANDAN KUMAR	North Western INDIAN Railway	Jaipur	45 Days	1,5,6,7,8,9,10	
5	14EJCEC005	ABHISHEK KUMAR	Cognus technology, jaipur	jaipur	45days	1,5,6,7,8,9,10	2
6	14EJCEC006	ADITYA GAUTAM	Econnect Solutions Pvt. Ltd.	Jaipur	60 days	1,5,6,7,8,9,10	2
7	14EJCEC007	ADITYA SHARMA	North Western INDIAN Railway	Jaipur	45 Days	1,5,6,7,8,9,10	
8	14EJCEC008	AISHWARYA SHARMA	CSIR CEERI, Pilani	Jaipur	45 Days	1,5,6,7,8,9,10	
9	14EJCEC009	AJAY GUPTA	IL&FS Technologies Ltd., Jaipur	Jaipur	45 days	1,5,6,7,8,9,10	2
10	14EJCEC010	AJAY SINGH NATHAWAT	Rajcomp	jaipur	45 days	1,5,6,7,8,9,10	
11	14EJCEC011	AKANKSHA GUPTA	Technoglobe Institute	Jaipur	45 Days	1,2,3,4,5,6,7,9,10	1
12	14EJCEC012	AKANKSHA SINGHAL	North Western INDIAN Railway	Jaipur	45 Days	1,5,6,7,8,9,10	
13	14EJCEC015	AKSHAY LAROIYA	Suratgarh super thermal power station	jaipur	45 days	1,5,6,7,8,9,10	1
14	14EJCEC016	ALOK KUMAR	C-DAC ATC NETCOM	Jaipur	45 days	1,2,3,4,5,6,7,9,10	
15	14EJCEC017	AMIT KUMAR	North Western INDIAN Railway	Jaipur	45 Days	1,5,6,7,8,9,10	
16	14EJCEC018	AMIT KUMAR	voltaic power system pvt. Ltd.	Jaipur	45 Days	1,5,6,7,8,9,10	
17	14EJCEC019	AMIT KUMAR SHARMA	North Western INDIAN Railway	jaipur	60 days	1,5,6,7,8,9,10	
18	14EJCEC020	ANADI VATSA	Aptron Solution Private Ltd	Gurugram	45 days	1,5,6,7,8,9,10	

Table 2.2.5.a Sample of Summer Training taken by Students

CRITERION 3	Course Outcomes and Program Outcomes	120

3. COURSE OUTCOMES AND PROGRAM OUTCOMES (120)

3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

(Program Outcomes as mentioned in Annexure I and Program Specific Outcomes as defined by the Program)

PROGRAM OUTCOMES:

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and Electronics & Communication Engineering specialization to the solution of complex Electronics & Communication Engineering problems.

PO2. Problem analysis: Identify, formulate, research literature, and analyze complex Electronics & Communication Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. Design/development of solutions: Design solutions for complex Electronics & Communication Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of Electronics & Communication Engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modeling to complex Electronics & Communication Engineering activities with an understanding of the limitations.

PO6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Electronics & Communication Engineering practice.

PO7. Environment and sustainability: Understand the impact of the professional Electronics & Communication Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Electronics & Communication Engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex Electronics & Communication Engineering activities with the engineering community and with society at large, such as,

being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the Electronics & Communication Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of Electronics & Communication Engineering changes.

(Program Outcomes as mentioned in Annexure I and Program Specific Outcomes as defined by the Program)

PSO1	Ability to apply the concepts of Embedded Systems and its applications.
PSO2	Ability to apply Field Programmable Gate Array based applications.

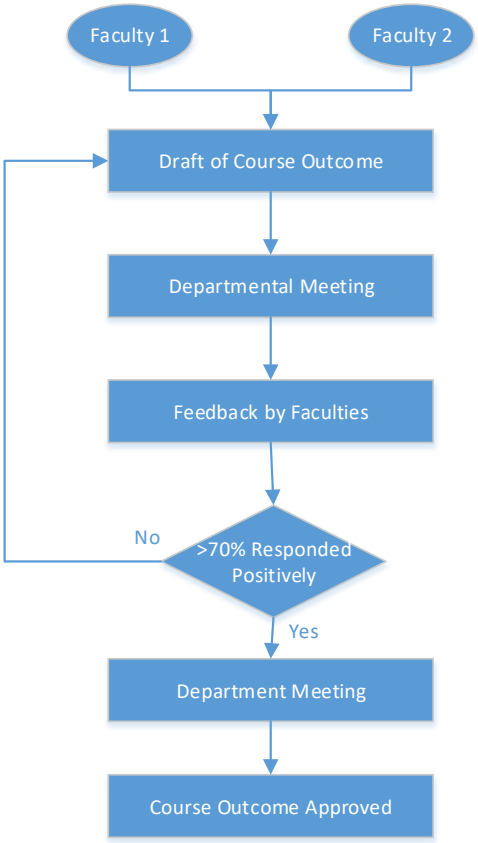


Figure 3.1 Process of making course outcomes

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and make available as evidence, if asked) (05)

1. The instructor is expected to go through the preface of the reference book and the text book that describes the authors' point of view of the outcome of the text material as prescribed.
2. As the course outcome need not vary from instructor to instructor thus a presentation and discussion of the course outcomes is necessary among the faculty members of the department before finalization of the course outcomes and the mapping of the same with the Program outcomes.

Course Name: Ciii Year of Study: YYYY-YY; for ex. C202 Year of study 2013-14

Course Name: Digital System Design	3EC4-04	**Course Year:**	2018-2019

CO1	Develop the understanding of number system and its application in digital electronics.
CO2	Development and analysis of K-map to solve the Boolean function to the simplest form for the implementation of compact digital circuits.
CO3	Design various combinational and sequential circuits using various metrics: switching speed, throughput/latency, gate count and area, energy dissipation and power.
CO4	Understanding Interfacing between digital circuits and analog component using Analog to Digital Converter (ADC), Digital to Analog Converter (DAC) etc.
CO5	Design and implement semiconductor memories, programmable logic devices (PLDs) and field programmable gate arrays (FPGA) in digital electronics

Course Name: Analog Electronics	4EC1A	**Course Year:**	2017-2018

4EC4.1	CO1: Understanding concept of feedback and its application in oscillators and amplifiers.
4EC4.2	CO2: Analyzing circuits using equivalent models.
4EC4.3	CO3: Understanding the concepts of Schmitt trigger and 555 timer.
4EC4.4	CO4: Understanding the concepts of tuned amplifiers.
4EC4.5	CO5: Understanding power amplifiers and its classification.

Course Name: Telecommunication Engg.	5EC3A	**Course Year:**	2017-2018

5EC3.1	CO1: Understanding various elements of transmission lines
5EC3.2	CO2: Analyzing transmission line parameters and its applications

5EC3.3	CO3: Understanding the design of Attenuators and Filters for Transmission lines and Analyzing their effects
5EC3.4	CO4: Analyzing various switching and signalling techniques used in Telephony
5EC3.5	CO5: Applying the concepts of telecommunications in mobile communications

Course Name: Microwave Engg.-II	6EC1A	**Course Year:**	2017-2018

6EC1.1	CO1: Analyzing the operation and characteristics of microwave diodes.
6EC1.2	CO2: Analyzing klystrons, magnetrons etc. for microwave generation and amplification
6EC1.3	CO3: Analyzing geometry and characterstics of microwave transistors.
6EC1.4	CO4: Analyzing travelling wave tube amplifier.
6EC1.5	CO5: Understanding applications of smart antenna.

Course Name: Antenna and Wave Propagation	7EC1A	**Course Year:**	2017-2018

7EC1.1	CO1: Understanding the basic skills required for designing a wide variety of practical antennas and antenna arrays.
7EC1.2	CO2: Understanding various types of antennas.
7EC1.3	CO3: Analyzing the propagation of the wave in different atmospheric medium, ionosphere, troposphere propagation
7EC1.4	CO4: Creating and analyzing the defects introduced in the structures.

Course Name: Radar and TV Technology	8EC2A	**Course Year:**	2017-2018

8EC2.1	CO1: Understanding the characteristics and applications of radar.
8EC2.2	CO2: Analyzing the architecture and features of television.
8EC2.3	CO3: Analyzing processing and transmission of TV signals.
8EC2.4	CO4: Analyzing different types of TV.
8EC2.5	CO5: Understanding the real life applications of RADAR systems.

3.1.2. CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from 3rd to 8th semester) (05)

Note : Enter correlation level s1, 2 or 3 as defined below : 1 : Slight(Low) 2 : Moderate(Medium) 3 : Substantial(High) If there is no correlation, put 1

Digital System Design (3EC4-04)												
Pos / **Cos**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**

1	3	2	2	1	-	1	-	-	-	-	-	-
2	3	2	3	2	-	-	-	-	-	-	-	-
3	2	2	3	1	1	-	-	-	-	-	-	-
4	3	2	1	1	1	-	-	-	-	-	-	-
5	2	1	3	1	1	-	-	-	-	-	-	-

Analog Electronics (4EC1A)												
POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	2	2	-	1	-	-	-	-	-	-	-	-
2	1	2	-	2	-	-	-	-	-	-	-	1
3	2	-	-	-	-	-	-	-	-	-	-	-
4	2	2	-	-	-	-	-	-	-	-	-	-
5	2	2	-	-	-	-	-	-	-	-	-	-

Telecommunication Engineering (5EC3A)												
POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	3	1	1	1	-	1	1	-	-	-	-	2
2	3	1	1	1	-	1	1	-	-	-	-	2
3	3	1	1	1	-	1	1	-	-	-	-	2
4	3	1	1	1	-	1	1	-	-	-	-	2
5	3	2	1	1	-	2	1	-	1	1	1	3

Microwave Engg. II (6EC1A)												
POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	3	2	-	-	-	-	-	-	-	-	-	-
2	3	2	-	1	-	-	-	-	-	-	-	-
3	2	3	3	-	3	1	-	-	-	-	-	-
4	2	3	3	1	-	-	-	-	-	-	-	-
5	2	3	3	-	-	-	-	-	-	-	-	-

Antenna & Wave Propagation (7EC1A)												
POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	3	2	2	2	3	2	2	-	2	2	2	2
2	3	-	2	-	-	3	3	-	-	-	-	2
3	3	2	2	2	3	2	2	-	2	2	2	2
4	3	2	2	2	3	2	2	-	2	2	2	2
5	3	2	2	2	3	2	2	-	2	2	2	2

Radar & TV Engineering (8EC2A)												
POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	2	1	1	1	-	2	1	-	-	-	-	2
2	2	1	1	1	-	2	1	-	-	-	-	2
3	2	1	1	1	-	2	1	-	-	-	-	2
4	2	1	1	1	-	2	1	-	-	-	-	2
5	2	1	1	1	-	2	1	-	-	-	-	2

CO- PSO Mapping

Digital System Design (3EC4-04)		
CO	PSO1	PSO2
1	1	-
2	2	2
3	-	3
4	-	3
5	-	3
Analog Electronics (4EC1A)		
CO	PSO1	PSO2
1	2	-
2	1	-
3	1	-
4	1	-
Linear Integrated Circuits (5EC2A)		
CO	PSO1	PSO2
1	2	-
2	2	-
3	2	-
4	1	-
5	-	-
Microprocessors (6EC2A)		
CO	PSO1	PSO2
1	2	-

2	**2**	-
3	**2**	-
4	**2**	-
VHDL (7EC6.3)		
CO	**PSO1**	**PSO2**
1	-	-
2	-	**2**
3	-	**2**
4	-	-
Microcontroller and Embedded Systems (8EC4.3A)		
CO	**PSO1**	**PSO2**
1	**2**	-
2	**2**	-
3	**2**	-
4	**2**	-

3.1.3 A Program level Course PO matrix of all courses INCLUDING first year courses (10) Before proceeding please click on Edit to fetch the data. Note : Enter correlation levels 1, 2 or 3 as defined below : 1 : Slight(Low) 2 : Moderate(Medium) 3 : Substantial(High) If there is no correlation, put-

POs COURSE	1	2	3	4	5	6	7	8	9	10	11	12
MA-101	3	3	-	-	-	-	-	-	-	1	-	1
HU-101	-	1	2	-	-	1	-	-	3	3	-	1
PY-101	2	1	1	-	-	0.33	-	-	1	1	-	1
CY-101	2	1	0.5	0.5	-	0.25	0.5	-	-	0.25	-	-
CS-101	2.75	1.75	1.5	1.75	1.5	1.25	1	-	-	1.25	-	2.5
CE-101	2	0.75	1	0.5	-	1.75	1.75	1.25	1.5	0.5	-	1
MA-102	3	3	-	-	-	-	-	-	-	1	-	1
HU-101	-	1	2	-	-	1	-	-	3	3	-	1
HU-103	-	-	2	-	-	3	2	3	2	1	-	1
CY-101	2	1	0.5	0.5	-	0.25	0.5	-	-	0.25	-	-
CS-103	2.25	1.75	1.5	2.25	2	1.75	2	-	-	2	-	1.75
CE-103	1.5	1	0.5	-	-	0.25	0.5	0.25	0.75	0.25	0.5	0.25
3EC2-01	2.67	2	1	-	1	-	-	-	-	-	-	-
3EC1-02	1.67	2	-	1.33	2	-	-	-	-	-	-	-
3EC4-04	2.6	1.8	2.4	1.2	1	1	-	-	-	-	-	-
3EC4-05	3	2	2	2.6	1.75	-	-	1.33	-	-	-	1.75
3EC4-06	2.6	2.6	2	2.25	2	-	-	-	-	-	-	1

3EC4-07	2.8	1.2	1	1.66	1	1.33	2	-	-	-	-	2
4EC1A	2	2	-	1.5	-	-	-	-	-	-	-	1
4EC2A	3	2.67	2.33	2	3	1	-	-	-	1.67	2	3
4EC3A	2	2	1	1.33	-	-	-	-	-	-	-	1
4EC4A	2.25	2	1	1.5	1	1.33	1.5	-	1	1	1	2
4EC5A	2	1.67	1	1	-	-	-	-	1	-	-	1
4EC6A	2	1.33	1	1	-	-	-	-	-	-	-	1
5EC1A	3	2.2	1.6	2	1.33	-	-	-	-	-	-	1.4
5EC2A	3	1.8	1.8	1.4	-	1	1	-	1	-	1	1
5EC3A	3	2	2	-	-	1.2	1	-	1	1	1	2.2
5EC4A	3	2	1.6	1.33	1	1.8	1.4	-	0.8	-	0.8	1
5EC5A	3	1.6	2.5	2	2	2	2	-	-	-	-	-
5EC6.3A	1.67	1	1	-	-	1	-	-	-	-	1	2
6EC1A	2.67	2.33	1	0.33	1	0.33	-	-	-	-	-	-
6EC2A	2.5	2	2.5	2.5	2	0.5	-	-	-	-	1.5	1.5
6EC3A	2	0.67	1.33	-	-	-	-	-	-	-	0.33	1.67
6EC4A	2.33	2	0.33	1.33	-	-	0.33	-	-	-	0.33	0.33
6EC5A	2.67	2.33	0.33	-	0.33	-	-	-	-	0.33	-	0.33
6EC6.3A	2	0.67	0.33	-	0.33	0.67	0.67	-	-	-	-	1
7EC1A	3	2.25	2	2	3	2.6	2.6	-	1.67	1.67	1.67	1.6
7EC2A	2.4	2.2	2.2	1.8	1.25	1	-	-	1	1	1.67	2
7EC3A	2.67	1.33	1.33	1	1.5	2	-	-	1	1	1	2
7EC4A	2	1	1.5	1	1	1.25	1	-	1	1	1	1.75
7EC5A	3	2	2.2	2.2	2.75	-	2	-	-	-	-	2
7EC6.3A	3	2	-	2	3	-	-	-	1	-	2	2
8EC1A	3	2.33	1.67	-	-	3	1.67	-	-	-	-	2.33
8EC2A	2	1	1	1	-	2	1	-	-	-	-	2
8EC3A	3	2.5	2	2.33	-	2	2	-	2	2	2	2.33
8EC4.3A	2.67	1.67	1.33	1	1.67	2	1	-	1	1.33	2	1.33

	PSO1	PSO2
3EC2-01	-	-
3EC1-03	-	-
3EC4-04	1.5	2.75
3EC4-05	-	-
3EC4-06	1.5	-
3EC4-07	2.75	2
4EC1A	1.25	-
4EC2A	-	-
4EC3A	-	-
4EC4A	-	-
4EC5A	-	-
4EC6A	-	-
5EC1A	-	-
5EC2A	1	-
5EC3A	-	-
5EC4A	-	-

5EC5A	-	-
5EC6.1A	-	-
6EC1A	-	-
6EC2A	3	-
6EC3A	1	-
6EC4A	1	-
6EC5A	-	-
6EC6.3A	-	-
7EC1A	-	-
7EC2A	-	-
7EC3A	-	-
7EC4A	-	-
7EC5A	-	1.67
7EC6.3A	-	2
8EC1A	-	-
8EC2A	-	-
8EC3A	3	-
8EC4.3A	2	-

3.2 Attainment of Course Outcomes (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

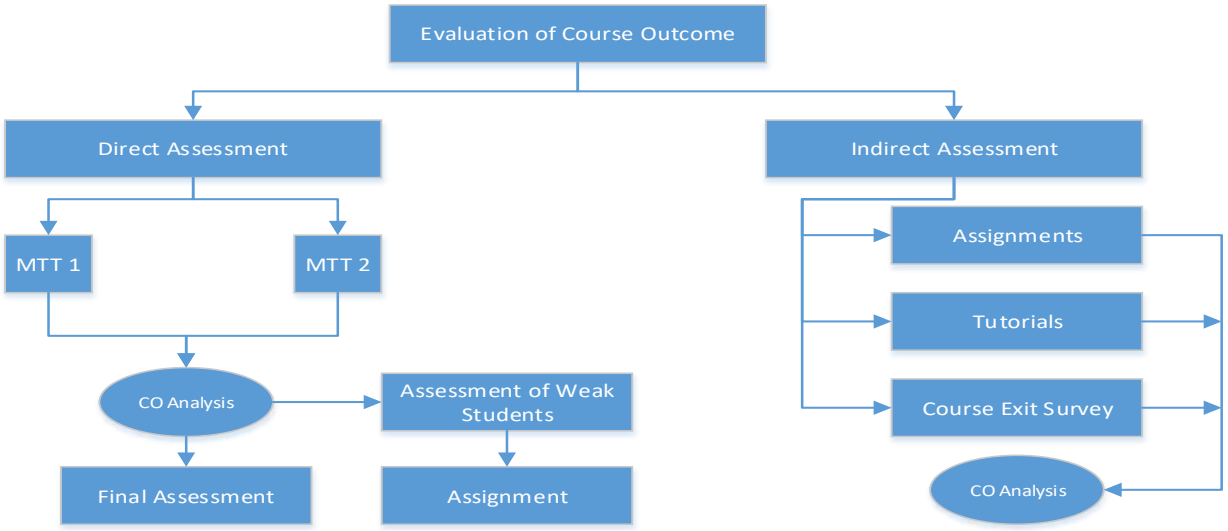


Figure 3.2 Process required for assessment

3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

The table mentioned below shows the percentage of students attained the target of 60% marks

Sample Course Outcome Analysis (2015-2016)						
3EC1A	EDC	67.89%	46.33%	62.84%	63.30%	NA

3EC2A	DSA	51.38%	35.78%	56.88%	44.95%	NA
3EC3A	DE	52.29%	43.12%	63.30%	49.54%	NA
3EC4A	CAS	33.49%	23.85%	75.69%	74.77%	NA
3EC5A	EPM	41.74%	44.04%	51.83%	43.12%	NA
3EC6A	AEM 1	47.25%	41.74%	63.30%	58.72%	NA
4EC1A	AE	59.09%	58.64%	58.64%	53.64%	NA
4EC2A	RVSP	59.55%	45.91%	45.00%	30.91%	NA
4EC3A	EMI	63.18%	47.73%	66.82%	49.09%	17.27%
4EC4A	EMFT	45.37%	21.15%	37.89%	27.31%	60.35%
4EC5A	OT	70.91%	57.27%	49.55%	45.45%	NA
4EC6A	AEM 2	40.83%	25.23%	50.92%	33.94%	NA
5EC1A	SS	69.13%	47.39%	45.22%	61.30%	NA
5EC2A	LIC	19.57%	60.43%	61.74%	66.96%	NA
5EC3A	TE	54.78%	39.57%	67.39%	69.57%	NA
5EC4A	AC	28.70%	30.43%	38.70%	46.09%	NA
5EC5A	MW 1	43.04%	28.26%	56.96%	54.35%	NA
5EC6.1A	BMI	54.78%	37.39%	53.91%	51.74%	72.40%
6EC1A	MW-2	66.09%	70.87%	65.65%	70.87%	24.35%
6EC2A	MP	67.39%	74.35%	70.87%	80.43%	NA
6EC3A	IE	70.00%	50.43%	55.22%	56.52%	NA
6EC4A	DC	63.48%	52.61%	72.17%	60.43%	12.61%
6EC5A	CS	70.43%	55.65%	64.35%	49.57%	NA
6EC6.3A	OFC	82.17%	69.13%	76.96%	68.70%	NA
7EC1A	AWP	56.83%	63.47%	63.84%	66.05%	NA
7EC2A	DSP	64.64%	78.57%	70.71%	67.50%	NA
7EC3A	DIP	77.50%	49.64%	46.07%	54.64%	NA
7EC4A	WC	70.36%	71.07%	77.50%	67.50%	NA
7EC5A	VLSI	38.01%	30.63%	61.25%	60.89%	NA
7EC6.3A	VHDL	71.96%	73.43%	59.41%	61.99%	NA
8EC1A	ICT	33.95%	33.58%	73.43%	73.43%	61.25%
8EC2A	RTV	72.69%	56.83%	67.53%	64.58%	NA
8EC3A	MEMS	63.84%	53.51%	50.55%	60.15%	61.25%
8EC4.3A	MES	70.48%	62.73%	88.19%	82.66%	64.58%

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1 Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used together the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

PO's	Skill to be demonstrated	Assessment tools
PO1	Engineering knowledge	➢ MTT result, RTU result, Project ➢ Mentoring, Core, Soft skill, Higher studies ➢ Technical Event, Conference/Workshop, Social Activity ➢ Course exit, Student exit
PO2	Problem analysis	➢ Project, Lab/Experiment ➢ Core, Soft skill, Higher studies ➢ Technical Event, Conference/Workshop, E-Resources, Industrial Visit ➢ Student exit, Alumni, Faculty
PO3	Design/development of solutions	➢ Project, Lab/Experiment, Industrial training ➢ Core, Soft skill, Higher studies ➢ Technical Event, Conference/Workshop, Social Activity, Industrial Visit ➢ Student exit, Alumni, Employer/Parents
PO4	Conduct investigations of complex problems	➢ Project, Lab/Experiment, Industrial training ➢ Core, Soft skill, Higher studies, PSU/GATE ➢ Technical Event, Social Activity, E-Resources, Industrial Visit ➢ Student exit, Alumni, Faculty
PO5	Modern tool usage	➢ RTU result, Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill, Higher studies, PSU/GATE ➢ Technical Event, Conference/Workshop, E-Resources, Social Activity ➢ Course exit, Student exit, Employer/Parents
PO6	The engineer and society	➢ Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, PSU/GATE ➢ Technical Event, Conference/Workshop, E-Resources, Social Activity, Industrial Visit ➢ Course exit, Alumni, Employer/Parents
PO7	Environment and sustainability	➢ RTU result, Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill, Higher studies ➢ Technical Event, Conference/Workshop, Social Activity, Industrial Visit ➢ Course exit, Alumni
PO8	Ethics	➢ Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill ➢ Technical Event, Conference/Workshop, E-Resources, Social Activity, Industrial Visit ➢ Course exit, Alumni, Faculty, Employer/Parents
PO9	Individual and team work	➢ Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Higher studies, PSU/GATE ➢ Technical Event, Conference/Workshop, Social Activity, Industrial Visit ➢ Course exit, Alumni
PO10	Communication	➢ Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill, Higher studies, PSU/GATE ➢ Technical Event, Conference/Workshop, Social Activity,

		Industrial Visit ➢ Alumni,Faculty, Employer/Parents
PO11	Project management and finance	➢ Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill, Higher studies, PSU/GATE ➢ Technical Event, Conference/Workshop, Social Activity ➢ Course exit, Alumni, Faculty, Employer/Parents
PO12	Life-long learning	➢ RTU result, Project, Lab/Experiment, Industrial training ➢ Core, Mentoring, Soft skill, Higher studies, PSU/GATE ➢ Technical Event, Conference/Workshop, Social Activity, Industrial Visit ➢ Course exit, Student exit, Alumni, Faculty

3.3.2 Provide results of evaluation of PO&PSO (40)

Program shall set Program Outcome attainment levels for all Pos.

(The attainment levels by direct (student performance) and indirect(surveys) are to be presented through Program level Course – PO & PSO matrix as indicated).

Instructions 1. Please Enter PO and PSO between 0 to 3. Fractional values are acceptable.

2. You can leave the fields (PO and PSO) blank.

3. Blank and 0 will not be participated in the calculation

Tools for PO Attainment

Department of Electronics & Communication Engineering
Program Outcomes Target Description (2015-16)
PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and electronics & communication engineering specialization to the solution of complex Electronics & Communication Engineering problems.

Tool	Tools	Mapping	Marks	Rubric	Marks Obtained
Academic Assessment	MTT Result	H	3	70% students >65% marks=>100% marks	3
				70% students >60% marks=>80%	
				60% students >65% marks=>60%	
				60% students >60% marks=>50%	
				Else =>20% marks	
	Final RTU Result	L	1	70% students >65% marks=>100% marks	0.2
				70% students >60% marks=>80%	
				60% students >65% marks=>60%	
				60% students >60% marks=>50%	
				Else=> 20% marks	
	Project	M	2	Distribution as per rule =>20% marks	2
				Continuous assessment -1 =>20%	
				Continuous assessment -2 =>20%	

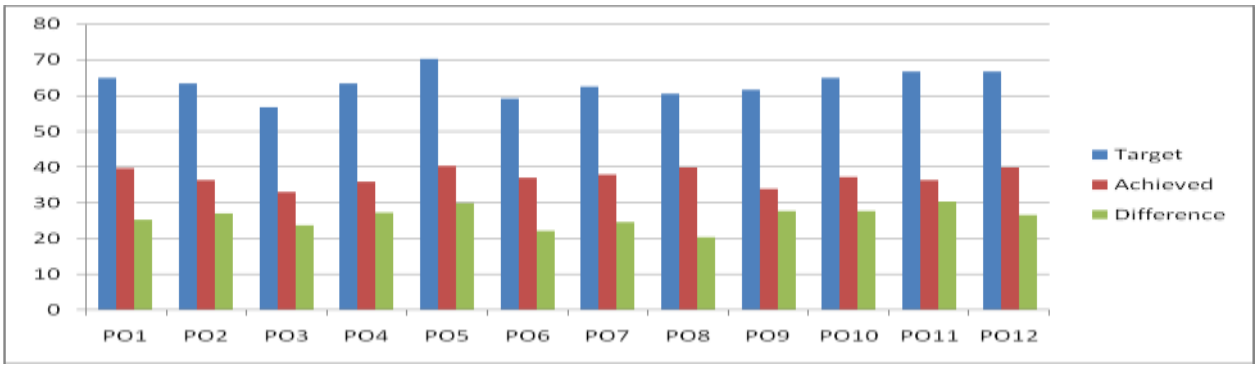
				Internal assessment -1 =>20%	
				External assessment -1 =>20%	
				Else 0 marks	
	Lab/Experiments	M	2	70% students >65% marks=>100% marks	2
				70% students >60% marks=>80%	
				60% students >65% marks=>60%	
				60% students >60% marks=>50%	
				Else=> 20% marks	
	Industrial training	L	1	>=80% students visited =>100% marks	1
				>=70% students visited=>80%	
				>=60% students visited =>60%	
				>=50% students visited =>50%	
				Else=> 20% marks	
Placement	Final Placed Strength	H	3	>=80% students placed=>100% marks	0.6
				>=70% students placed=>80%	
				>=60% students placed=>60%	
				Else=>20%	
	Mentoring	H	3	>=80% students Mentored=>100% marks	3
				>=70% students Mentored=>80%	
				>=60% students Mentored=>60%	
				Else=>20%	
	Softskill	M	2	>=80% students Participated=>100% marks	2
				>=70% students Participated=>80%	
				>=60% students Participated=>60%	
				Else=>20%	
	Higher Studies	L	1	>=50% students Enrolled=>100% marks	0.2
				>=40% students Enrolled=>80%	
				>=30% students Enrolled=>60%	
				Else=>20%	
	PSU/GATE	L	1	>=50% students Qualified =>100% marks	0.2
				>=40% students Qualified=>80%	
				>=30% students Qualified=>60%	
				Else=>20%	
Beyond Curriculum	Technical Events	H	3	>=80% students participated=>100% marks	1.8
				>=70% students participated=>80%	
				>=60% students participated=>60%	
				Else=>20%	
	Conference/Workshops	H	3	>=50% students participated=>100% marks	1.8

				>=40% students participated=>80%	
				>=30% students participated=>60%	
				Else=>20%	
	Social Events/Extra Activity	H	3	>=80% students Participated=>100% marks	0.6
				>=70% students participated=>80%	
				>=60% students participated=>60%	
				Else=>20%	
	E-Resources	M	2	>=50% students participated=>100% marks	0.4
				>=40% students participated=>80%	
				>=30% students participated=>60%	
				Else=>20%	
	Industrial visit	L	1	>=50% students participated=>100% marks	0.2
				>=40% students participated=>80%	
				>=30% students participated=>60%	
				Else=>20%	
Feedback	Course Exit	L	1	>=50% Students responded High=>100% marks	1
				>=40% Students responded High=>80%	
				>=30% students responded High=>60%	
				Else=>20%	
	Program Exit	H	3	>=50% Students responded High=>100% marks	2.4
				>=40% Students responded High=>80%	
				>=30% students responded High=>60%	
				Else=>20%	
	Alumni	L	1	>=50% Alumni responded High=>100% marks	0.2
				>=40% Alumni responded High=>80%	
				>=30% Alumni responded High=>60%	
				Else=>20%	
	Faculty	M	2	>=50% Faculty responded High=>100% marks	2
				>=40% Faculty responded High=>80%	
				>=30% Faculty responded High=>60%	
				Else=>20%	
	Parents/Professional Bodies/ Industry Person/ Management person	L	1	>=50% responded High=>100% marks	0.2
				>=40% responded High=>80%	
				>=30% responded Hiigh=>60%	
				Else=>20%	
		60	39	65.00%	24.8

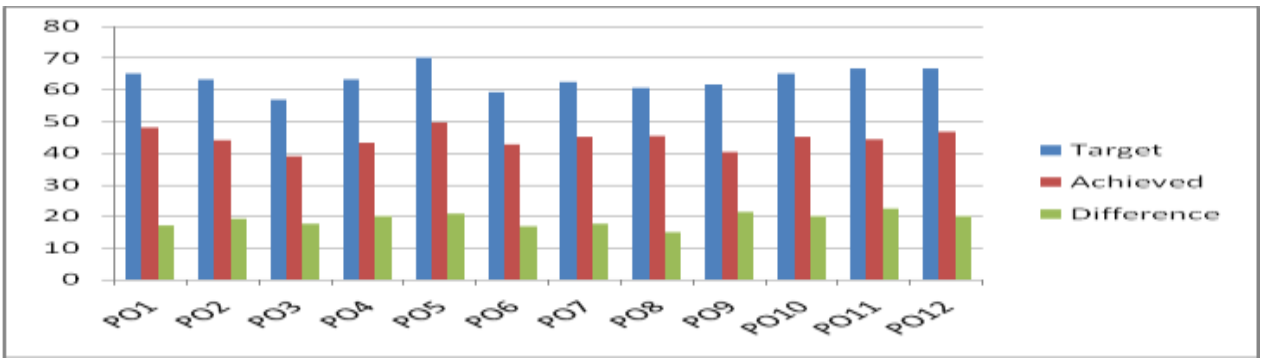
Target = 65.00%

Achieved = 41.33%

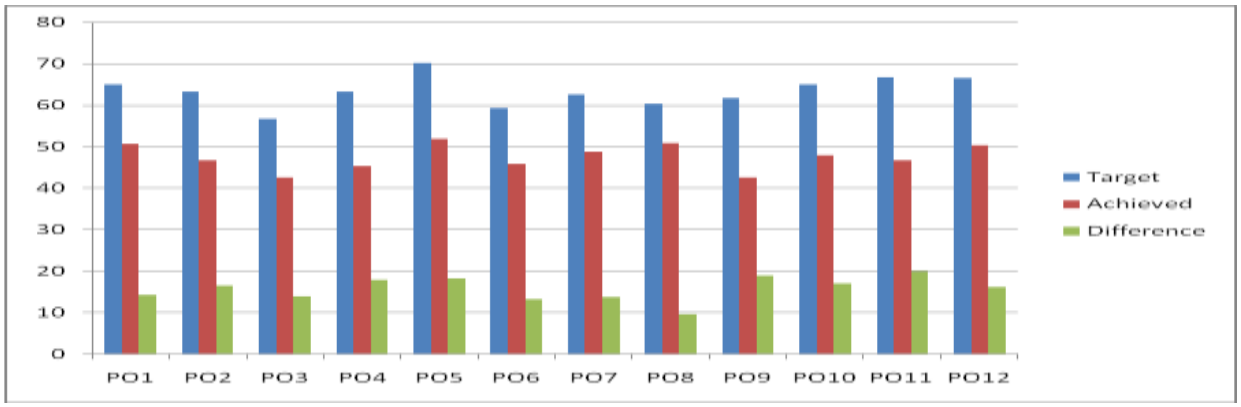
Note: Sample rubric for assessment of PO1 is defined above and similarly the rubric for assessment of other PO's is considered with different weightage.



Attainment of Program Outcomes 2015-16



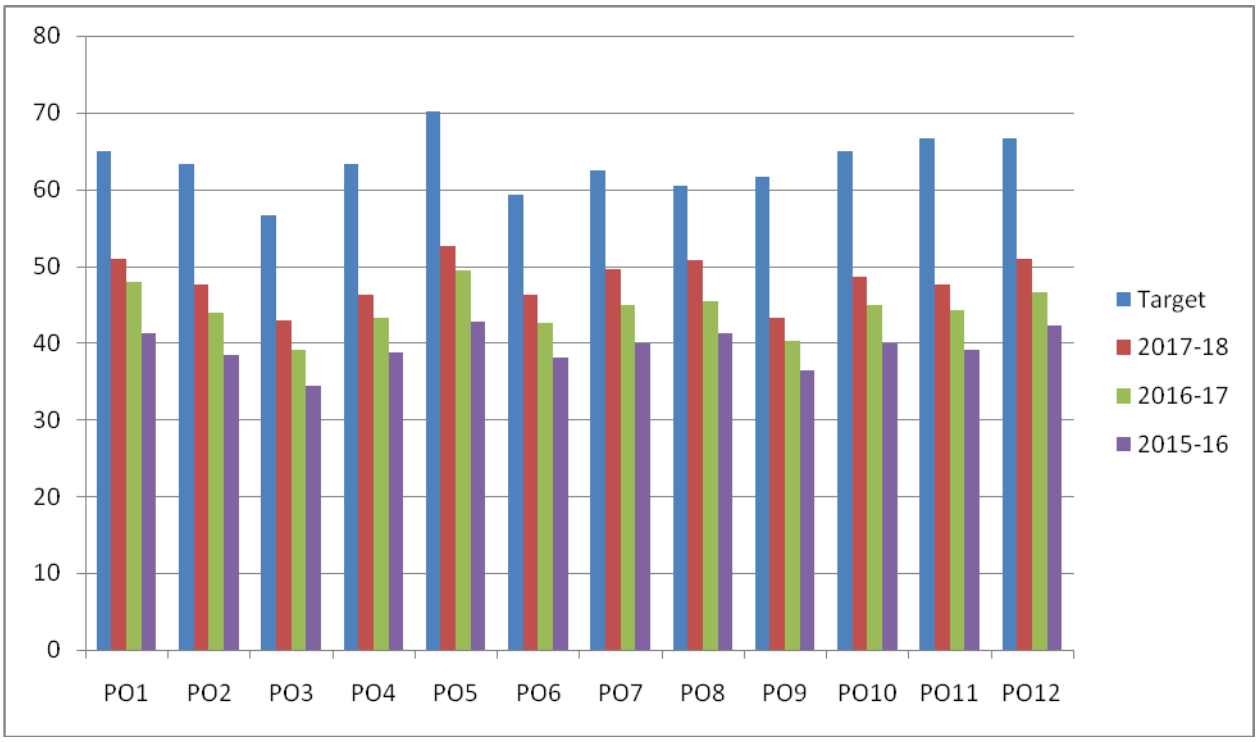
Attainment of Program Outcome 2016-17



Attainment of Program Outcomes 2017-18

Comparative Analysis of PO attainment				
PO's	Target	2017-18	2016-17	2015-16
PO1	65	51	48	41.33

PO2	63.3	47.67	44	38.33
PO3	56.67	43	39	34.33
PO4	63.33	46.33	43.33	38.67
PO5	70.18	52.63	49.47	42.81
PO6	59.26	46.3	42.59	38.15
PO7	62.5	49.58	45	40
PO8	60.42	50.83	45.42	41.25
PO9	61.67	43.33	40.33	36.33
PO10	65	48.67	45	40
PO11	66.67	47.67	44.33	39
PO12	66.6	51	46.67	42.33



Comparative Analysis of PO attainment

Attainment of PSO's

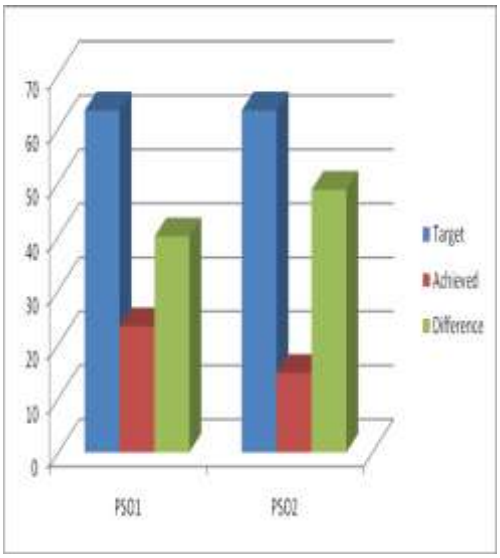
Department of Electronics & Communication Engineering
Program Specific Outcome Target Description (2015-16)
PSO 1: Ability to apply the concepts of Embedded Systems and its applications.

Tools	Mapping	Marks	Rubric	Marks Obtained
In House Training	H	3	>=50% students Participated=>100% marks	0.6
			>=40% students Participated=>80%	
			>=30% students Participated=>60%	
			Else=>20%	
Project	H	2	>=50% students Participated=>100% marks	1.2
			>=40% students Participated=>80%	
			>=30% students Participated=>60%	
			Else=>20%	
Hand on Practice	L	1	>=50% students Participated=>100% marks	0.2
			>=40% students Participated=>80%	
			>=30% students Participated=>60%	
			Else=>20%	
Industrial training	H	3	>=50% students visited =>100% marks	2.4
			>=40% students visited=>80%	
			>=30% students visited =>60%	
			Else=> 20% marks	
Final Placed Strength	M	2	>=80% students placed=>100% marks	0.4
			>=70% students placed=>80%	
			>=60% students placed=>60%	
			Else=>20%	
Mentoring	L	1	>=80% students Mentored=>100% marks	1
			>=70% students Mentored=>80%	
			>=60% students Mentored=>60%	
			Else=>20%	
Technical Events	H	3	>=80% students participated=>100% marks	1.8
			>=70% students participated=>80%	
			>=60% students participated=>60%	
			Else=>20%	
Conference/Workshops	L	1	>=50% students participated=>100% marks	0.2
			>=40% students participated=>80%	
			>=30% students participated=>60%	
			Else=>20%	
E-Resources	L	1	>=50% students participated=>100% marks	0.2
			>=40% students participated=>80%	
			>=30% students participated=>60%	
			Else=>20%	

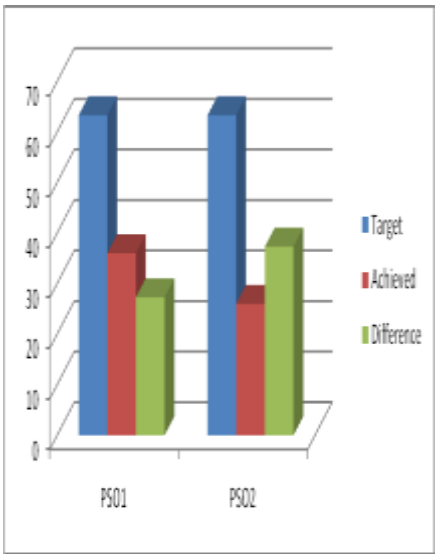
Industrial visit	M	2	>=50% students participated=>100% marks	0.4
			>=40% students participated=>80%	
			>=30% students participated=>60%	
			Else=>20%	
	30	19	63.33%	8.4

Target = 63.33%
Achieved = 28.00%

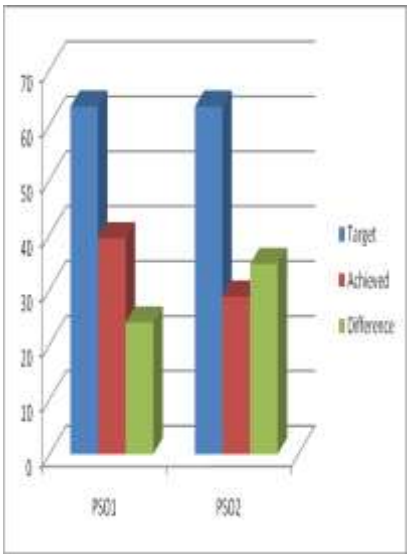
Note: Sample rubric for assessment of PSO1 is defined above and similarly the rubric for assessment of other PSO's is considered with different weightage.



Attainment of PSO's 2015-16

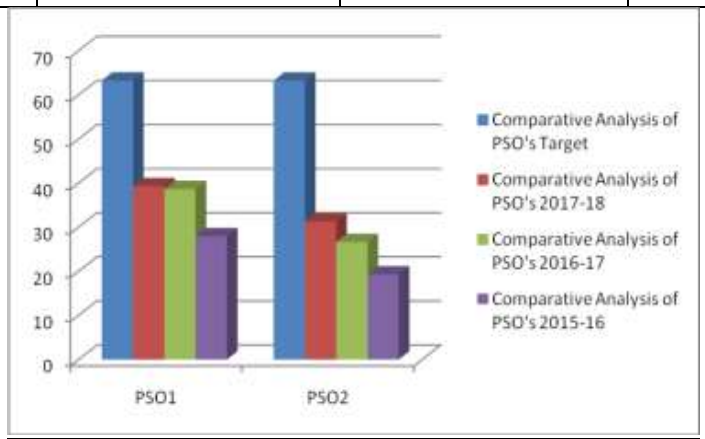


Attainment of PSO's 2016-17



Attainment of PSO's 2017-18

Comparative Analysis of PSO's				
PSO's	Target	2017-18	2016-17	2015-16
PSO1	63.3	39.33	38.67	28
PSO2	63.3	31.33	26.67	19.33



Comparative Analysis of PSO attainment

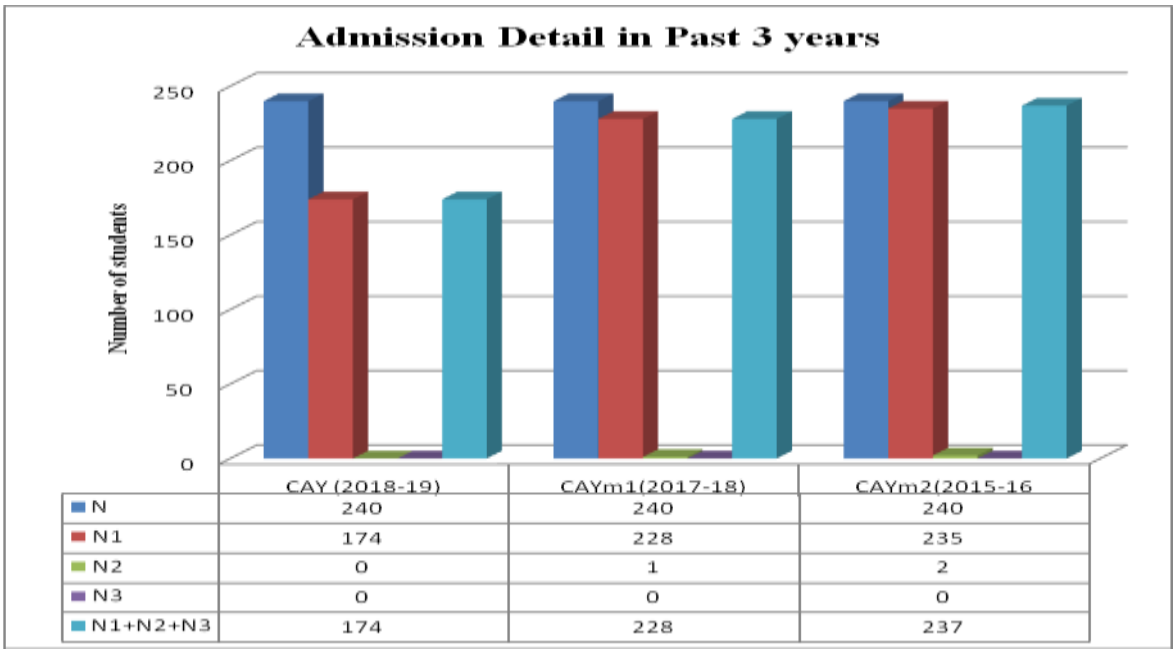
CRITERION 4	Students' Performance	150

4. STUDENTS' PERFORMANCE (150)

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable	CAY (2018-19)	CAY*m*1 (2017-18)	CAY*m*2 (2015-16)
Sanctioned intake of the program (*N*)	240	240	240
Total number of students admitted in first year *minus* number of students migrated to other programs/institutions plus no. of students migrated to this program (*N*1)	174	228	235
Number of students admitted in 2nd year in the same batch via lateral entry (*N*2)	0	1	2
Separate division students, if applicable (*N3*)	nil	nil	nil
Total number of students admitted in the Program (*N*1 + *N*2 + N3)	174	228	237

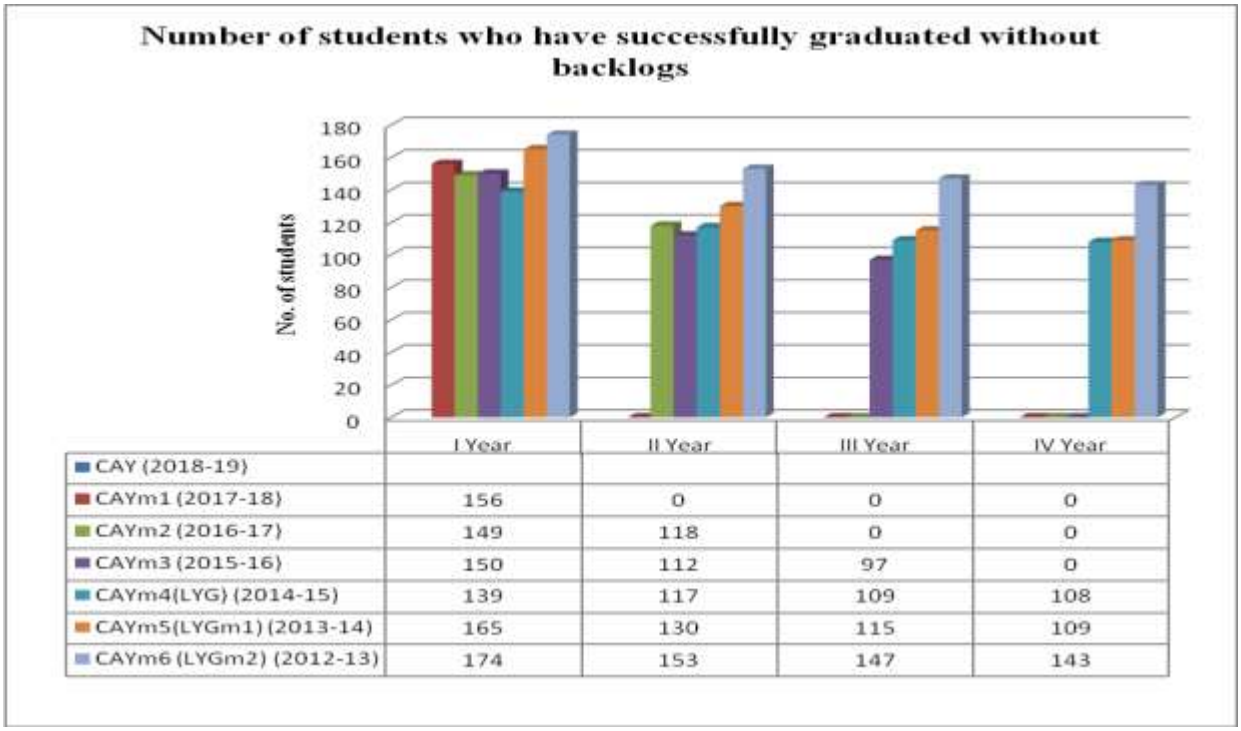
Table B.4a

CAY – Current Academic Year
CAYm1- Current Academic Year minus1= Current Assessment Year
CAYm2 - Current Academic Year minus2=Current Assessment Year minus 1
LYG – Last Year Graduate minus 1
LYGm1 – Last Year Graduate minus 1
LYGm2 – Last Year Graduate minus 2



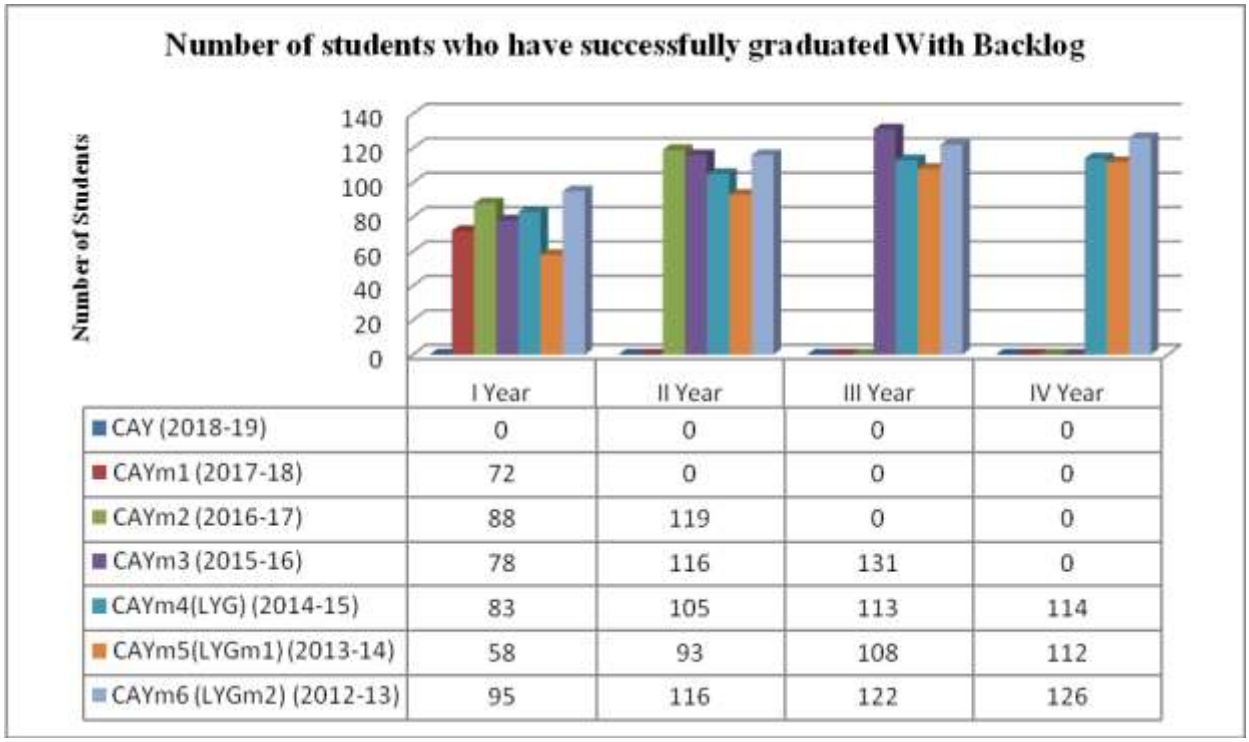
Year of entry	*N*1 + *N*2 + N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study			
		I Year	II Year	III Year	IV Year
CAY (2018-19)	174(174+0+0)	-	-	-	-
CAYm1 (2017-18)	228(228+0+0)	156	-	-	-
CAYm2 (2016-17)	237(235+2+0)	149	118	-	-
CAYm3 (2015-16)	228(225+3+0)	150	112	97	-
CAYm4(LYG) (2014-15)	222(219+3+0)	139	117	109	108
CAYm5(LYGm1) (2013-14)	223(212+11+0)	165	130	115	109
CAYm6 (LYGm2) (2012-13)	269(248+21+0)	174	153	147	143

Table B.4b



Year of entry	*N*1 + *N*2 + N3 (As defined above)	Number of students who have successfully graduated (Students with backlog in stipulated period of study)			
		I Year	II Year	III Year	IV Year
CAY (2018-19)	174(174+0+0)	-	-	-	-
CAYm1 (2017-18)	228(228+0+0)	72	-	-	-
CAYm2 (2016-17)	237(235+2+0)	88	119	-	-
CAYm3 (2015-16)	228(225+3+0)	78	116	131	-
CAYm4(LYG) (2014-15)	222(219+3+0)	83	105	113	114
CAYm5(LYGm1) (2013-14)	223(212+11+0)	58	93	108	112
CAYm6 (LYGm2) (2012-13)	269(248+21+0)	95	116	122	126

Table B.4c



	I Year	II Year	III Year	IV Year
CAY (2018-19)	0	0	0	0
CAYm1 (2017-18)	72	0	0	0
CAYm2 (2016-17)	88	119	0	0
CAYm3 (2015-16)	78	116	131	0
CAYm4(LYG) (2014-15)	83	105	113	114
CAYm5(LYGm1) (2013-14)	58	93	108	112
CAYm6 (LYGm2) (2012-13)	95	116	122	126

4.1. Enrolment Ratio (20) Enrolment Ratio= N1/N

Item (Students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year)	**Marks**
>=90% students enrolled	20
>=80% students enrolled	18
>=70% students enrolled	16
>=60% students enrolled	14
>=50% students enrolled	12
Otherwise	0

Table B.4.1

Year	N1	N	Enrolment Ratio= N1/N	Parentage	Avarage percentage	Marks
CAY	174	240	0.725	72.5%	88.46%	18
CAYm1	228	240	0.95	95.0%		
CAYm2	235	240	0.979	97.90%		
Marks						**18**

4.2. Success Rate in the stipulated period of the program (40)

4.2.1. Success rate without backlogs in any semester/year of study (25)

SI= (Number of students who have graduated from the program without backlog)/ (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable

Average SI = Mean of Success Index (SI) for past three batches

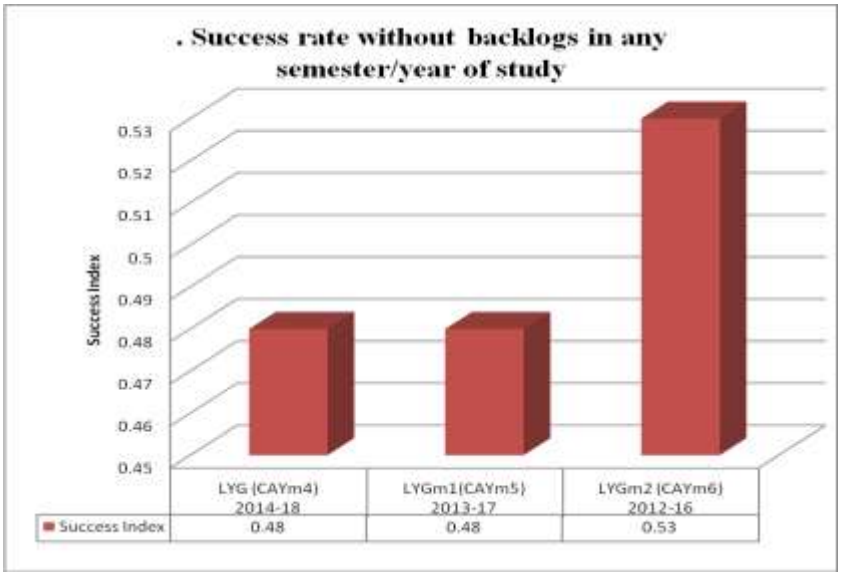
Success rate without backlogs in any year of study = 25 × Average SI

Item	Last year of graduation LYG (CAYm4) 2014-18	Last Year of Graduate minus 1, LYGm1 (CAYm5) 2013-14	Last Year of Graduate minus 2, LYGm2 (CAYm6) 2012-13
Number of students admitted in the corresponding first year + admitted in second year via Lateral entry and separate division if applicable	222	223	269
Number of students who have graduated without backlogs in the stipulated period	108	109	143

Success Index (SI)	0.48	0.48	0.53
Average SI	0.49		

Table B.4.2.1

Success rate: 0.49 × 25 = 12.42



4.2.2. Success rate with backlog in stipulated period of study (15)

SI= (Number of students who graduated from the program in the stipulated period of course duration)/ (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable)Average SI = mean of Success Index (SI) for past three batchesSuccess rate = 15 × Average SI

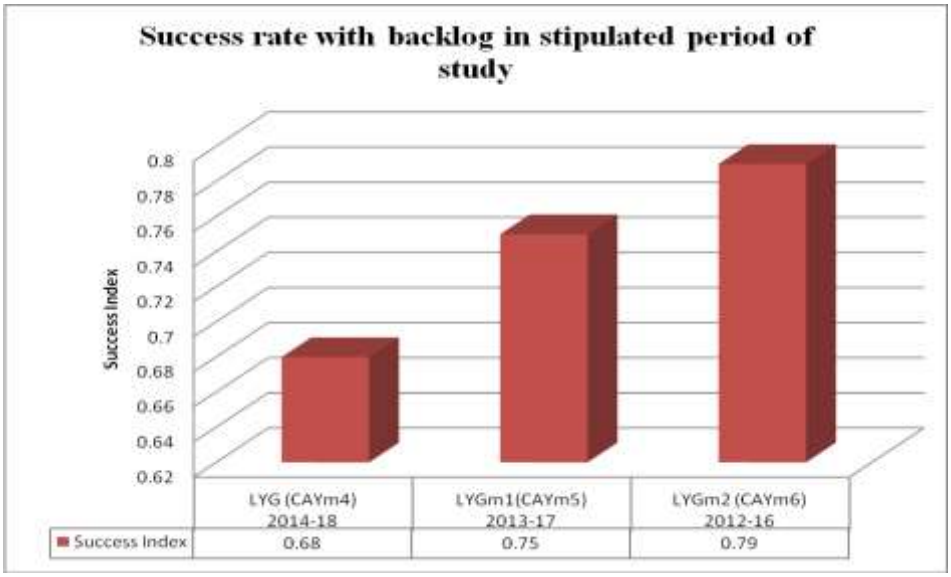
Item	Last year of graduation LYG (CAYm4) 2014-18	Last Year of Graduate minus 1, LYGm1 (CAYm5) 2013-14	Last Year of Graduate minus 2, LYGm2 (CAYm6) 2012-13
Number of students admitted in the corresponding first year + admitted in second year via Lateral entry and separate division if applicable	222	223	269

Number of students who have graduated with backlogs in the stipulated period	151	168	214
Success Index (SI)	0.68	0.75	0.79
Average SI	0.74		

Table B.4.2.2

Success rate= 15 x 0.74 = 11.1

Note: If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.



4.3. Academic Performance in Third Year (15)

Academic Performance = 1.5 * Average API (Academic Performance Index)

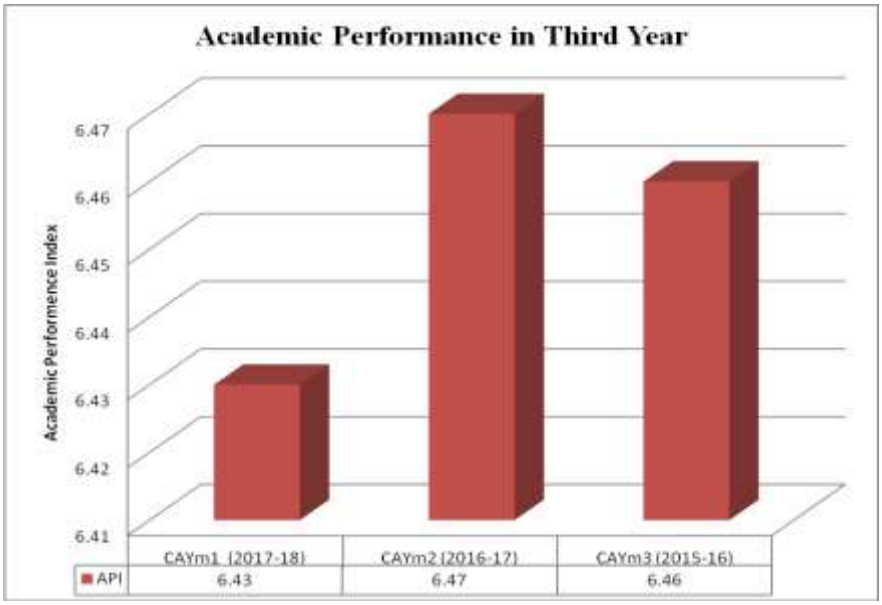
API = ((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/10)) x (number of successful students/number of students appeared in the examination) Successful students are those who are permitted to proceed to the final year.

Academic performance	**CAYm1 (2017-18)**	**CAYm2 (2016-17)**	**CAYm3 (2015-16)**
Mean of CGPA or Mean Percentage of all successful students (X)	64.30	64.80	63.40
Total no. of successful students (Y)	224	218	223

Total no. of students appeared in the examination (Z)	224	218	223
API = x* (Y/Z)	6.43	6.47	6.46
Average API = (AP1 + AP2 + AP3)/3	6.45		

Table B.4.3

Academic Performance = 1.5 x 6.45 = 9.68



4.4. Academic Performance in Second Year (15)

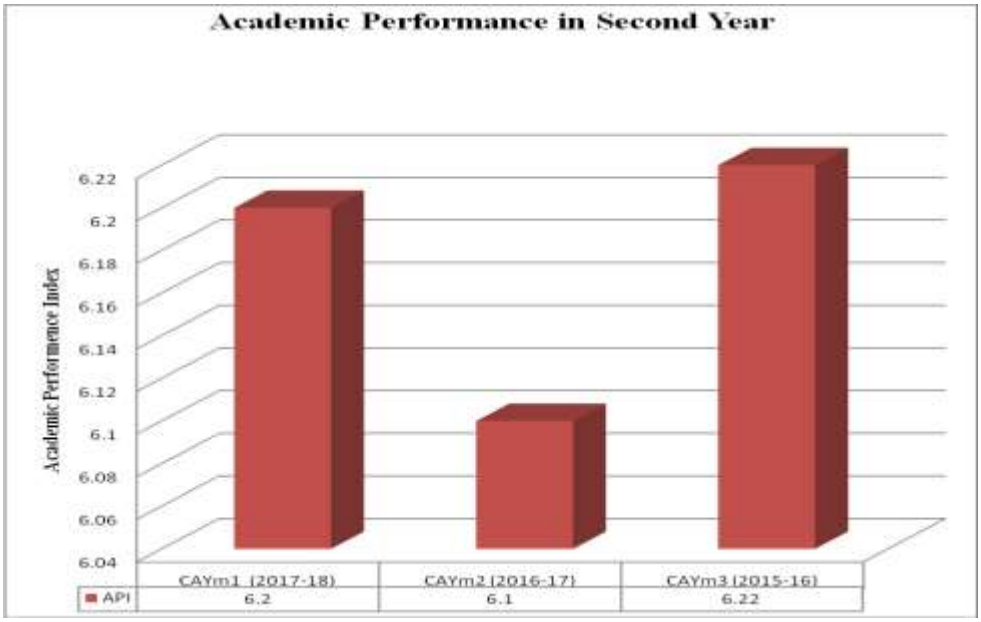
Academic Performance Level = 1.5 * Average API (Academic Performance Index)
API = ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/10)) x (number of successful students/number of students appeared in the examination)Successful students are those who are permitted to proceed to the Third year.

Academic performance	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Mean Percentage of all successful students (X)	62.0	63.2	63.0
Total no. of successful students (Y)	234	228	222

Total no. of students appeared in the examination (Z)	234	228	222
API = x* (Y/Z)	6.20	6.10	6.22
Average API = (AP1 + AP2 + AP3)/3	6.17		

Table B.4.4

Academic Performance Level= 1.5 × 6.17 = 9.26



4.5 Placement, Higher studies and entrepreneurship (40)

Assessment point= 40* average placement

Item	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Total No. of Final Year Students (N)	218	223	268
No. of students placed in companies or Government Sector (x)	96	114	169
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	1	4	1
No. of students turned entrepreneur in engineering/technology (z)	1	0	10

x + y + z =	98	118	180
Placement Index : (x + y + z)/N	0.44	0.53	0.67
Average placement= (P1 + P2 + P3)/3	0.55		

Table B.4.5

Assessment point= 40* 0.55 = 22

Sample Placement Data of CAYm1(2016-17)

S.No	University Roll No.	Name	Company Placed	Ref No. with date
1	13EJCEC001	AANCHAL KABRA	Accenture	
2	13EJCEC002	AASTHA JAIN	Accenture	
3	13EJCEC006	ABHINAV KHANDELWAL	ericsson	
4	13EJCEC007	ABHISHEK KUMAR SINGH	Bulls eye/ Ericsson	
5	13EJCEC008	ABHISHEK KUMAR SINGH	Mind it (offset)	
6	13EJCEC009	ABHISHEK RATHI	MindTree	
7	13EJCEC012	ADHISH DUSAD	Appeal Group (Offset)	
8	13EJCEC013	ADITI SHARMA	Accenture	
9	13EJCEC014	ADITYA AGARWAL	Accenture	
10	13EJCEC022	AKSHAY SHARMA	Face/Bullseye	
11	13EJCEC024	AMAN CHOUDHARY	Accenture	
12	13EJCEC026	ANAND MOTT	MindIT	
13	13EJCEC028	ANISHA MATHUR	Accenture	
14	13EJCEC030	ANSHUL PATNI	Mindit	
15	13EJCEC031	ANUBHA AGARWAL	Accenture	
16	13EJCEC032	ANUSHA NANDWANA	Accenture	
17	13EJCEC033	APOORVA SINGHAL	Technist	
18	13EJCEC035	ARCHI JAIN	Accenture	
19	13EJCEC036	ARPIT MISHRA	Justdial	
20	13EJCEC037	ARPITA MANTRI	Ericsson	
21	13EJCEC038	ARVIND KUMAR JHAJHARIA	Mindit	
22	13EJCEC041	ASHISH RATHI	Ericsson	
23	13EJCEC045	AYUSHI HALDIA	Ericsson	
24	13EJCEC046	AYUSHI JAIN	Accenture	
25	13EJCEC047	AYUSHI KANKARIA	Techfleeters	

26	13EJCEC048	AYUSHI KUMAWAT	Accenture	
27	13EJCEC049	AYUSHI NAMA	Ericsson	
28	13EJCEC052	BHAVANA MATHUR	Accenture	
29	13EJCEC053	BHAWNA SONI	Accenture	
30	13EJCEC059	DEEPAK KUMAR SHARMA	justdial	
31	13EJCEC060	DEEPALI GOYAL	Accenture	
32	13EJCEC067	DIVYANSHU SINGHI	L&T Technologies Services mysore	
33	13EJCEC068	DIXITA JAIN	DXC (offcampus)/FACE	
34	13EJCEC069	EKANSH AGARWAL	mindit	
35	13EJCEC073	GAURAV KUMAR	Mindit	
36	13EJCEC079	HIMANSHU MATHUR	Ericsson	
37	13EJCEC083	ISHITA JAIN	Accenture	
38	13EJCEC084	JAGDISH SEERVI	Ericsson	
39	13EJCEC085	JAGRITI ARORA	Accenture	
40	13EJCEC088	JITESH KUMAR	Anora	
41	13EJCEC089	JYOTIKA JAIN	Accenture	
42	13EJCEC092	KAPIL GUPTA	Technist	
43	13EJCEC094	KARTIK SHARMA	Ericsson	
44	13EJCEC097	KIRTIVARDHAN SINGH GOGAWAT	Accenture	
45	13EJCEC098	KISHAN S RATHORE	Mindtree	
46	13EJCEC099	KRISHAN KUMAR SHARMA	Mindit	
47	13EJCEC100	KRISHNA VIJAYVARGIYA	Accenture	
48	13EJCEC102	KUSHAGRA AGRAWAL	Technist	
49	13EJCEC103	LAKSHYA DAULANI	Accenture	
50	13EJCEC109	MALLIKA DHAMIJA	Accenture	
51	13EJCEC111	MANISH KUMAR SHARMA	Mindit	
52	13EJCEC112	MANISH PUSHKAR	MindTree	
53	13EJCEC113	MAYANK ARORA	technist	
54	13EJCEC118	MEGHA KUMARI	Accenture	
55	13EJCEC120	MOHD SHAHID	Mind it (offset)	
56	13EJCEC123	MOHIT JAIN	SLK	
57	13EJCEC126	NEELABH GOYAL	Accenture	
58	13EJCEC139	PARSHANT MAHENDRA	just Dial	
59	13EJCEC143	PRACHI JAIN	Accenture	
60	13EJCEC147	PRAMUGDHA KHANDELWAL	Accenture	
61	13EJCEC150	PRATEEK JAIN	Metacube	
62	13EJCEC154	PULKIT KHANDELWAL	Mindit	
63	13EJCEC162	RAJAT GARG	technist/Ericsson	

64	13EJCEC168	RAMAKANT SHARMA	Mindit	
66	13EJCEC173	RASHI GAUR	Accenture	
67	13EJCEC178	RITIK JAIN	technist	
68	13EJCEC179	RITU DARYANI	Accenture	
69	13EJCEC180	ROHAN KUMAR VERMA	Accenture	
70	13EJCEC181	ROMMEL SHARMA	Appiccimo	
71	13EJCEC182	RUCHIKA RATHORE	Accenture	
72	13EJCEC184	RUNAKSHI PURI	Accenture	
73	13EJCEC187	SAKSHI MAHESHWARI	Accenture	
74	13EJCEC189	SAKSHI SHIVHARE	Accenture	
75	13EJCEC193	SAURABH BARTHWAL	MindTree/ericsson	
76	13EJCEC194	SHALINI AGRAWAL	Accenture	
77	13EJCEC195	SHAMIKA MITTAL	Accenture	
78	13EJCEC196	SHARAD GUPTA	HexaView	
79	13EJCEC198	SHIKHA KOUL	Accenture	
80	13EJCEC199	SHILPI PANDEY	Accenture	
81	13EJCEC200	SHIVANGI KHANDELWAL	First American	
84	13EJCEC211	SHUBHAM SINGH	Mindit	
85	13EJCEC214	SHUBHI JAIN	Ericsson	
86	13EJCEC215	SHUCHITA SHARMA	Accenture	
87	13EJCEC218	SUMAN DUDHWAL	Accenture	
88	13EJCEC220	SWATI SINGHI	Hexaview	
89	13EJCEC221	TAMANNA JAIN	Accenture	
90	13EJCEC222	TANUJ KOTHARI	Accenture	
91	13EJCEC223	TAPAN SONI	Nodd	
92	13EJCEC224	TARANG UPADHYAY	DLB	
93	13EJCEC225	TRIPTI KHURANA	Accenture	
94	13EJCEC228	UMANG MATHUR	Ericsson	
95	13EJCEC230	VAIBHAV GARG	Accenture	
96	13EJCEC232	VAISHALI BHARDWAJ	Accenture	
97	13EJCEC233	VARTIKA MAHESHWARI	Lantern	
98	13EJCEC234	VEERANGANA	Bullseye/Ericsson	
99	13EJCEC235	VIDHIKA MATHUR	Ericsson	
100	13EJCEC238	VINOD KUMAR GILL	Ericsson	
101	13EJCEC240	VIPUL TIWARI	Ericsson	
102	13EJCEC241	VISHAL RANJAN PRASAD	MindTree	
103	13EJCEC243	VISHNU PATIDAR	Reliance Jio (network Engineer) at New delhi	
104	13EJCEC247	YATIN KALIA	MindTree	
105	13EJCEC405	AJEET SONI	Ericsson	
106	13EJCEC402	CHARCHIT GUPTA	justdial	
108	14EJCEC200	ABHILASHA SHARMA	Mind it (offset)	

109	14EJCEC203	RAJEEV SHARMA	Mindit	
111	14EJCEC206	RUCHI SHARMA	Mindit	
112	14EJCEC208	SIMRANJEET KAUR	Mindit	
113	14EJCEC209	SRISHTI SINGH	Accenture	
114	14EJCEC551	SM. SANA	JECRC	

4.6. Professional Activities (20)

4.6.1 Professional societies/chapters and organizing engineering events (5)

(The Department shall provide relevant details)

Following events have been conducted under the societies Electronica , Xananoids and Abhudaya

Table No.4.6.1 events conducted under the societies Electronica xananoids and Abhudaya in CAY(+1) 2018-19)

\	Organized event under society	Organized period	Level of event	Event outcome
1	Project exhibition	15.09.2018	National	An exihibition shown all made projects based on robotics and embedded system and digital image processing
2	Expert talk on block chain technology	15.09.2018	National	How the system came to be and the various benefits and drawbacks of using blockchain. He further provided information about how the technology is being used in the crypto currency bitcoin and how more and more industries have started using the technology to reach greater heights.
3	Smart city expo visit @ jecc, sitapura	26/09/2018 and 27/09/2018 (two days)	Industrial visit	The objective of smart city expo india event is to showcase the innovation in the space of smart cities globally.
4	Industrial visit at tesca technologies	05/07/2018 and 06/07/2018 (two days)	Industrial visit	Overview of electronic components and educational training kits of engineering test and measurement of instruments.give information about ac/dc power supplies
5	Invited talk by mr. Ashok kumar (section officer-ministry of external affairs)	06/07/2018	College level	The ministry of external affairs has asked all its officers on leave to travel to their hometowns and particularly their alma mater.
6	Celebration of 150th birthday of mahatma gandhi	02-10-2018	College level	So long as you do not take the broom and the bucket in your hands, you cannot make your towns and cities clean."
7	International expert talk	15-09-2018	International	In traditional workflow automation tools, a software developer produces a list of actions to automate a task and interface to the back-end system using internal application programming interfaces (apis) or dedicated scripting language.

8	Seminar on app development	05/07/2018 to 06/07/2018	National	*Describe the basics of graphics and multimedia support in android.Demonstrate basic skills of using an integrated development environment (android studio) and android software development kit (sdk) for implementing android applications.*
9	Seminar on iot and python	2days (18/07/2018 to 19/07/2018)	National	Python is an interpreted high-level programming language for general-purpose programming. Python features a dynamic type system and automatic memory management.
10	Workshop on embedded systems	4days (10/07/2018 to 13/07/2018)	College level	An embedded system is some combination of computer hardware and software, either fixed in capability or programmable,
11	Workshop on vlsi technology	4days (10/07/2018 to 13/07/2018)	College level	The first semiconductor chips held two transistors each. Subsequent advances added more transistors, and as a consequence, more individual functions or systems were integrated over time.

4.6.2. Publication of technical magazines, newsletters, etc. (5)

(The Department shall list the publications mentioned earlier along with the names of the editors, publishers, etc.)

Table 4.6.2.1: List of Publication of Newsletters

S. No.	Academic Year	Name of The Newsletter	Month and Year of Publication	Name of editors	Name of Publishers
1	2016-17	Ujjwalam vol. 1, issue 1	March-2017	Chief Editor: Dr. Lokesh Kumar Bansal HoD, ECE Ms. Shivam Upadhyaya Asst. Professor, ECE Student Editors: Aditya Vardhan, Charu Upadhyaya,Ayush Jain	ECE Department
2	2017-18	Ujjwalam vol. 1, issue 2	October 2017	Chief Editor: Dr. Lokesh Kumar Bansal HoD, ECE Ms. Shivam Upadhyaya, Asst. Professor, ECE Student Editors: Charu Upadhyaya, Keya vyas	ECE Department
3	2017-18	Ujjwalam vol. 2, issue 1	April-2018	Chief Editor: Dr. Lokesh Kumar Bansal HoD, ECE Ms. Shivam Upadhyaya, Asst. Professor, ECE Student Editors: Charu Upadhyaya, Keya vyas	ECE Department

4	2018-19	Ujjwalam July edition	July 2018	Chief editor: Dr. Lokesh Bansal HOD, ECE Ms. Shivam upadhyay Asst. Professor Studemt editors: Jacob Mahto, Yuvraj singh Rathore,Nikhil Jain, Sumit Mittal, Yogesh Pareek, Shivangi Porwal	ECE Department
5	2018-19	Ujjwalam August edition	August 2018	Chief editor: Dr. Lokesh Bansal HOD, ECE Ms. Shivam upadhyay Asst. Professor Studemt editors: Jacob Mahto, Yuvraj singh Rathore,Nikhil Jain, Sumit Mittal, Yogesh Pareek, Shivangi Porwal	ECE Department
6	2018-19	Ujjwalam September edition	September 2018	Chief editor: Dr. Lokesh Bansal HOD, ECE Ms. Shivam upadhyay Asst. Professor Studemt editors: Jacob Mahto, Yuvraj singh Rathore,Nikhil Jain, Sumit Mittal, Yogesh Pareek, Shivangi Porwal	ECE Department

4.6.3 Participation in inter-institute events by students of the program of study (10)

(The Department shall provide a table indicating those publications, which received awards in the events/conferences organized by other institutes.)

***T*able 4.6.3.1: Participation in Inter-Institute Events by Students in CAY(+1) (2018-19)**

S.No.	Name of students	Event	Date	Organized by	Event outcomes
1	Rishabh Jain	SPHINX 2018	27-29 Sep. 18	MNIT, Jaipur	Certificates
2	Rishabh Jain	JIGYASA 2018	15-17 Oct. 2018	GIT, Jaipur	Certificates
3.	Gaurav Goyal	JIGYASA 2018	15-17 Oct. 2018	GIT, Jaipur	Certificates
4	Hardik Rathi	JIGYASA 2018	15-17 Oct. 2018	GIT, Jaipur	Certificates

***T*able 4.6.3.2: Participation in Inter-Institute Events by Students in CAYm1 (2017-18)**

S.No.	Name of students	Event	Date	Organized by	Event outcomes
1	Harshil Jian	National Start-up Fest	13-16 Oct 2017	AICTE	Certificates
2	Manav Sharma	National StartUp Fest	13-16 Oct 2017	AICTE	Certificates
3	Kushagra Singh	National StartUp Fest	13-16 Oct 2017	AICTE	Certificates
4	Chirag Maheshwari	Robo War	10-11 Jan 2018	Manipal University	IInd Prize
5	Gourav Goyal	Robo War	10-11 Jan 2018	Manipal University	IInd Prize
6	Hardik Rathi	Robo War	10-11 Jan 2018	Manipal University	IInd Prize

7	Juhi Garg	Robo War	10-11 Jan 2018	Manipal University	IInd Prize
8	Chirag Maheshwari	Robo Rumble	23-24 March	NIT, Delhi	Ist Prize
9	Sumit Mittal	Exhibition	8 Feb 2018	Indian Railway	Certification
10	Rohit Raj	Google india Challenge scholarship	7 Feb 2018	Udacity	Certification
11	Kanishka Kukreja	Accenture women Achiever award	10 Feb 2018	JECRC-Accenture	Certification
12	Rashi Bansal	PARIDHAN	15 March 2018	JK Lakshmipat University, Jaipur	Certification
13	Rashi Bansal	"PANACHE"	22 March 2018	Creative Arts and Cultural Society, MNIT, Jaipur	Certification

Table 4.6.3.3: Participation in Inter-Institute Sports Events by Students in CAYm1 (2017-18)

S.No.	Name of students	Event	Sport	Organized by	Position
1	Lakshita Sharma	Rajasthan Sr. State football Tournament	Football		Selected in Top 11 players in Raj
2	Lakshita Sharma	Vanquish	Football	GIT Jaipur	Winner
3	Lakshita Sharma	RTU Sports Tournament	Football	RTU Kota	winner

Table 4.6.3.4 : Publication in Inter-Institute conferences and Events by Students in CAYm1(2017-18)

S.No.	Name of students	Event	*Title*
1	Cheshta Agrawal	RTDEEE 2018	Review of MIMO wireless communication systems
2	Anadi Vatsya	RTDEEE 2018	
3	Anushree Rawat	RTDEEE 2018	Review of long term evolution technology for broadband wireless access
4	, Megha Nawaria	RTDEEE 2018	Review of fiber tapping mechanism in WDM
5	Adityavardhan,	RTDEEE 2018	Food wasting information and solution
6	Aneesh anari	RTDEEE 2018	
7	Tushar Jain,	RTDEEE 2018	Temperature behaviour of dry type transformer
8	Shubham Agrawal,	RTDEEE 2018	
9	Vipul Jain,	RTDEEE 2018	
10	Nikhil Rajpurohit	RTDEEE 2018	
11	VidushiGaur	RTDEEE 2018	

			Emotion tracker
12	Tapendra Singh	RTDEEE 2018	
13	Maithili Thakur,	RTDEEE 2018	Renewable Energy Source Set-up for Two-wheelers
14	Shruti Saini,	RTDEEE 2018	
15	Yashika Sanghi	RTDEEE 2018	Designing techniques of the Hshape Uslotted microstrip patch antenna
16	Hardik Mittal,	RTDEEE 2018	Industrial Interior Environment Monitoring System
17	Harshwardhan Singh Gaur	RTDEEE 2018	
18	Krishna Kumar Rajpurohit	RTDEEE 2018	Analysis of Complete House Management System
29	Naman Sharma	RTDEEE 2018	
30	Rayman Singh	RTDEEE 2018	Review of Security Aspects in Vehicular Ad hoc Networks
31	Nousheen Khan	RTDEEE 2018	A Study: Classification and Application of Photonic Crystal
32	Radhika Sharma,	RTDEEE 2018	A Survey on Routing Protocol and Wireless Sensor Network
33	Prakashika Mishra	RTDEEE 2018	
34	Sakshi Gupta	RAST 2108	Quantum Dots: An emerging technology
35	Swapnil Sharma,	RAST 2108	Study Of Wireless Traffic Positioning System
36	Vishwas Sharma,	RAST 2108	
37	Shahrukh Khan	RAST 2108	
38	Yash Bhatt,	RAST 2108	Intrusion detection scheme for wireless ad-hoc Networks: A study
39	Virendra Singh	RAST 2108	
40	Abhishek Kumar	RAST 2108	On Capturing Exceptions in Workflow Models for flexible processes
41	Harish Pradhan	RAST 2108	
42	Nousheen Khan	RAST 2108	A Survey of Free Space Optical Communication Network Channel over Optical Fiber Cable Communication
43	Pooja Premjani,	RAST 2108	
44	Ayush Chelawat	RAST 2108	Centric Model Assessment for Collaborative Data Mining
45	Bhrigu Shandilya	RAST 2108	
46	Nainji Hora,	RAST 2108	A Video Indexing System
47	Ashpreet Singh	RAST 2108	

48	Utkarsh Vashistha	RAST 2108	A Review On Microelectronic Pill
49	Vidushi Agarwal	RAST 2108	A Review on Biometrics Based Authentication Systems
50	Nousheen Khan	RAST 2108	A brief Study of Heliodisplay
51	Yatendra Gaur,	RAST 2108	A review on Blue Brain Technology
52	Abhinav	RAST 2108	
53	Krishna Kumar Rajpurohit,	RAST 2108	Wild Animal Surveillance Using Wireless Technology
54	Aachal Agarwal,	RAST 2108	GSM Based Automatic Irrigation Control System
55	Anand Nenawa	RAST 2108	

Table 4.6.3.5: Participation in Inter-Institute Events by Students in CAY m2(2016-17)

S.No.	Name of students	Event	Date	Organized by	Event outcomes
1	Sourabh Bhartwal	IEEE Conference	23.12.2016	IEEE	Certificate
2	Sourabh Bhartwal	IEEE Conference	16.02.2017	ASME-IEEE Coimbtore	Certificate
3	Jatin kumar	5th national level project exhibition	15 Sep 2016	VIT Jaipur	First Prize
4	Arvind	5th national level project exhibition	15 Sep 2016	VIT Jaipur	Certificate

Table 4.6.3.6: Participation in Inter-Institute Events by Students in CAY m2(2016-17)

S.No.	Name of students	Event	*Title of paper*
1	Mahak Pandita	RTDEEE 2016	*Digital Watermarking*
2	Kritika Singh	RTDEEE 2016	
3	Kushagra singh	RTDEEE 2016	
4	Anushree Rawat	RTDEEE 2016	*Review of telecommunication networks*
5	Shikha Sharma	RTDEEE 2016	*High speed low power nikhilam multiplier*
6	Shipra sharma	RTDEEE 2016	*Brain Port vision technology*
7	Prakhar joshi	RTDEEE 2016	
8	Sakshi sharma	RTDEEE 2016	
9	Shivani dashottar	RTDEEE 2016	*Analysis of 5G telecommunication and wireless systems*
10	Sufal Gupta	RTDEEE 2016	
11	Tapemdra singh	RTDEEE 2016	
12	Arpit singhal	RTDEEE 2016	*Solar water heating System*
13	Ayush Jain	RTDEEE 2016	
14	Sidarth Singh	RTDEEE 2016	
15	Shubham Singhal	RTDEEE 2016	

16	Suchita Sharma	RTDEEE 2016	*Microelectronic pill*
17	Shalini Agarwal	RTDEEE 2016	
18	Neelabh Goyal	RTDEEE 2016	*Wireless communication using visible light*
19	Nikita Beniwal	RTDEEE 2016	*Issue of multi hop propagation in wireless mobile Ad Hoc n/w*
20	Monika	RTDEEE 2016	*Review oftelecommunication systems*
21	Sanidhya mohovia	RTDEEE 2016	*Tyre pressure monitoring system*
22	Rohan Agarwal	RTDEEE 2016	
23	Parag mangal	RTDEEE 2016	
24	Neha goyal	RTDEEE 2016	*Li-Fi the future of wireless*
25	Varsha parihar	RTDEEE 2016	
26	Simran Bhatia	RTDEEE 2016	*Compact left opened pie shaped patch antenna with band notch charecterstics*
27	Jitendra kumar	RTDEEE 2016	*Wireless sensor technology with underwater enviroment*
28	Avinash sain	RTDEEE 2016	
29	Sachin Chauhan	RTDEEE 2016	*Comparison of Borosilacte crown glassphotonic crystal fibers*
30	Anadi vatsa	RTDEEE 2016	Green Energy
31	Yogendra Sharma	RTDEEE 2016	*Analysis and design of multiple watermarking in a video for authentication and copyright protection*
32	Aditya Gautam	RTDEEE 2016	*Design and comparison of the rectangular microstrip patch antenna*
33	Gaurav kumar	RTDEEE 2016	*Requirement for wireless communication techniques for effiecent underwater communication*
34	Kirti dassani	RTDEEE 2016	*FCM based EM channel estimation and data detection for OSTBC in MIMO system*
35	Anshul Shortriya	RTDEEE 2016	
36	Nikita Beniwal	RTDEEE 2016	*Power estimation for the 64 bit RISC based processor- As performance measue*
37	Shubhi Jain	RTDEEE 2016	*Intigrating microelectronic technologies for the development in bionic limbs*
38	Jagriti Arora	RTDEEE 2016	
39	Veerangana	RTDEEE 2016	
40	Bhattaru Tejaswini	RTDEEE 2016	*Li-Fi tech. Review analysis*
41	Sorabh Agarwal	RTDEEE 2016	
42	Neelabh Goyal	RTDEEE 2016	*A review on black hole attack in MANET*
43	Rashi Gaur	RTDEEE 2016	
44	Astha Jaiswal	RTDEEE 2016	*Advanced digital wireless liquid level indicator*

CRITERION 5	Faculty Information and Contributions	200

Table 5.1: Faculty Information (2018-19)

S. No	Name	PAN No.	Qualification	Areas of Specialization	Designation	Date of Joining	Date on which Designated as Professor/ Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/Contract/Adjunct)	Date of Leaving (In case Currently Associated is "No")
1	Dr. Lokesh Kumar Bansal	AFWPB9091B	Ph.D.	Wireless Comm.	Professor	13/1/2016		Y	Regular	
2	Dr. S. K. Singh	BOUPS5721K	Ph.D	Wireless Comm.	Professor	02/01/2017		Y	Regular	
3	Dr. A. Williamson	AALPW2253Q	Ph.D	Telecommunication	Professor	28/06/2018		Y	Regular	
4	Dr. Sandeep Vyas	AFXPV5199R	Ph.D	Optics	Asso. Professor	19/07/2017		Y	Regular	
5	Shruti Kalra	ANQPK5955P	M.Tech	VLSI	Associate professor	19/8/2003		Y	Regular	
6	Rajesh Kumar Bathija	AHDPB0243J	M.Tech	VLSI	Associate professor	18/7/2016		Y	Regular	
7	Dr. Vinita Mathur	AKHPM3052H	Ph.D.	Microwave	Asso. professor	02-08-2005		Y	Regular	
8	Mr. Ashok Kherodia	AOSPK7460A	M.Tech	Communication	Asso. Professor	16/08/2018		Y	Regular	
9	Vikas Mishra	AYMPM1504B	M.Tech	Electronics	Asst professor	07-01-2013		Y	Regular	
10	Naresh Kumar	ALGPN	M.TE	Wireless	Asst	22/7/2013		Y	Regular	

		5796H	CH		professor					
11	Rakesh Kumar Kardam	AMDPK4998A	M.Tech	Electronics	Asst professor	03-01-2014		Y	Regular	
12	Ankur Gangwar	BFDPG0660P	M.Tech	Communication	Asst professor	24/7/2014		Y	Regular	
13	Katru Anand	CSGPK6132H	M.Tech	VLSI	Asst professor	14/7/2014		Y	Regular	
14	Ashutosh Sharma	BHVPS3926E	M.Tech	VLSI	Asst professor	24/7/2014		Y	Regular	
15	Lokesh Kumar Sharma	AXHPS2584H	M.Tech	Telecom	Asst professor	07-04-2015		Y	Regular	
16	Bhoopesh Kumar Kumawat	BAXPK5296E	M.Tech	Wireless	Asst professor	07-01-2015		Y	Regular	
17	Sidharth Chaturvedy	AGDPC9408K	M.Tech	Embedded	Asst professor	07-01-2015		Y	Regular	
18	Shivam Upadhayay	ADAPU4929K	M.Tech	Optoelectronics	Asst professor	13/7/2015		Y	Regular	
19	Deepmala Kulshreshth	AXJPD8149H	B.Tech	Electronics	Asst professor	14/7/2015		Y	Regular	
20	Alpana Gupta	AJLPG4988R	MBA	Electronics	Asst professor	15/7/2015		Y	Regular	
21	Deepak Shankhala	BXYPS2998K	M.Tech	Electronics	Asst professor	22/8/2016		Y	Regular	
22	Devesh Gupta	AOKPG6567J	M.Tech	Communication	Asst professor	15/7/2016		Y	Regular	
23	Preeti Barot	BDJPB8982K	M.Tech	Electronics	Asst professor	20/7/2016		Y	Regular	
24	Teena Sharma	EQSPS9988B	M.TECH	Microwave	Asst professor	15/7/2016		N	Regular	31-08-2018
25	Aashish	DOBPS	M.Tec	Optimizatio	Asst	18/7/2016		Y	Regular	

	Sharma	4622L	h	n	professor					
26	Shweta Sharda	BAWPS 0763H	M.Tech	Electronics	Asst professor	17/7/2017		Y	Regular	
27	Geetika Bhati Mathur	AGQPB 0802P	M.TECH	Antenna	Asst professor	17/7/2017		N	Regular	20-08-2018
28	Mohit Kumar	DFBPK 4609N	M.Tech	Electronics	Asst professor	18/7/2017		Y	Regular	
29	Aapurva Kaul	BLRPK 0793B	M.TECH	Electronics	Asst professor	24/7/2017		Y	Regular	
30	Yogita	ALUPY 2403L	M.TECH	VLSI	Asst professor	24/7/2017		Y	Regular	
31	Kriti Manish Sharda	AZOPS 1172N	M.Tech	Electronics	Asst professor	21/7/2017		Y	Regular	
32	Yazusha Sharma	BRDPS 2349B	M.Tech	Electronics	Asst professor	17/7/2017		Y	Regular	
33	Ritambhara K	BTCPR 2037J	M.Tech	Electronics	Asst professor	08-02-2017		Y	Regular	
34	Vikas Sharma	CQFPS 8859A	M.Tech	Embedded	Asst professor	20/2/2010		Y	Regular	
35	Anil Jain	AIYPJ3 152A	M.Tech	Antenna	Asst professor	19/7/2007		Y	Regular	
36	Shyam Sundar Manaktala	AGYP M8906 B	M.Tech	VLSI Design	Asst professor	25/11/2004		Y	Regular	
37	Parul Tyagi	AEVPT 9930N	M.Tech	Communication	Asst professor	14/2/2009		Y	Regular	
38	Neha Singh	CNTPS 3234E	M.Tech	Antenna	Asst professor	11-08-2010		Y	Regular	
39	Mangilal Meghwal	BKZPM 4835M	M.Tech	Electronics	Asst professor	08-02-2010		Y	Regular	

40	Ritu Vyas	AEKPV4859C	M.Tech	Electronics	Asst professor	16/8/2010		Y	Regular	
41	Honey Agrawal	AKEPA0586H	M.Tech	Electronics	Asst professor	21/7/2011		Y	Regular	
42	Sandeep Kumar Dotya	BOQPS0885A	M.Tech	Electronics	Asst professor	21/7/2011		Y	Regular	
43	Jitendra Sharma	CWXPS7101P	M.Tech	Electronics	Asst professor	25/4/2012		Y	Regular	
44	Ashish Kulshrestha	BMFPK1793Q	M.Tech	Electronics	Asst professor	25/4/2012		Y	Regular	
45	Pravin Kumar Sharma	EBKPS3831J	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
46	Raj Kumar Jain	ANSPJ5809M	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
47	Devendra Sharma	FMXPS26958	M.Tech	Electronics	Asst professor	25-04-2012		Y	Regular	
48	Veni Madhav Sharma	CQUPS7715L	M.Tech	Electronics	Asst professor	04-05-2012		Y	Regular	

Table 5.2: Faculty Information (2017-18)

S. No	Name	PAN No.	Qualification	Areas of Specialization	Designation	Date of Joining	Date on which Designated as Professor/ Associate Professor	Currently Associate d (Y/N)	Nature of Association (Regular/Contract/Adjunct)	Date of Leaving (In case Currently Associated is "No")
1	Dr. Lokesh Kumar Bansal	AFWPB9091B	Ph.D.	Wireless Comm.	Professor	13/1/2016		Y	Regular	
2	Dr. S. K. Singh	BOUPS5721K	Ph.D	Wireless Comm.	Professor	02/01/2017		Y	Regular	
3	Dr. A. Williamson	AALPW2253Q	Ph.D	Telecommunication	Professor	28/06/2018		Y	Regular	
4	Dr. Sandeep Vyas	AFXPV5199R	Ph.D	Optics	Associate professor	19/07/2017		Y	Regular	
5	Shruti Kalra	ANQPK5955P	M.TECH	VLSI	Associate professor	19/8/2003		Y	Regular	
6	Rajesh Kumar Bathija	AHDPB0243J	M.TECH	VLSI	Associate professor	18/7/2016		Y	Regular	
7	Vinita Mathur	AKHPM3052H	M.TECH.	VLSI	Asst professor	02-08-2005		Y	Regular	
8	Vikas Mishra	AYMPM1504B	M.TECH.	Electronics	Asst professor	07-01-2013		Y	Regular	
9	Naresh Kumar	ALGPN5796H	M.TECH	Wireless	Asst professor	22/7/2013		Y	Regular	
10	Rakesh Kumar Kardam	AMDPK4998A	M.TECH	Electronics	Asst professor	03-01-2014		Y	Regular	

11	ASHOK KUMAR	BBVPA1183P	M.TECH	Comm.	Asst professor	24/7/2014		N	Regular	24-02-2018
12	Ankur Gangwar	BFDPG0660P	YES	Communication	Asst professor	24/7/2014		Y	Regular	
13	Katru Anand	CSGPK6132H	M.TECH	VLSI	Asst professor	14/7/2014		Y	Regular	
14	Ashutosh Sharma	BHVPS3926E	M.TECH	VLSI	Asst professor	24/7/2014		Y	Regular	
15	Lokesh Kumar Sharma	AXHPS2584H	M.TECH.	Telecom	Asst professor	07-04-2015		Y	Regular	
16	Bhoopesh Kumar Kumawat	BAXPK5296E	M.TECH	Wireless	Asst professor	07-01-2015		Y	Regular	
17	Sidharth Chaturvedy	AGDPC9408K	M.TECH	Embedded	Asst professor	07-01-2015		Y	Regular	
18	Shivam Upadhayay	ADAPU4929K	M.TECH.	Optoelectronics	Asst professor	13/7/2015		Y	Regular	
19	Deepmala Kulshreshth	AXJPD8149H	B.Tech	Electronics	Asst professor	14/7/2015		Y	Regular	
20	NIDHI JAIN	AQQPJ1015I	M.TECH	Electronics	Asst professor	20-07-2016		N	Regular	14-10-2017
21	Alpana Gupta	AJLPG4988R	MBA	Electronics	Asst professor	15/7/2015		Y	Regular	
22	Vinod Kumar	BGNPK5526R	B.Tech	Electronics	Asst professor	02-09-2016		N	Regular	01-07-2018
23	Deepak Shankhala	BXYPS2998K	M.TECH	Electronics	Asst professor	22/8/2016		Y	Regular	
24	Devesh Gupta	AOKPG6567J	M.TECH	Communication	Asst professor	15/7/2016		Y	Regular	
25	Preeti Barot	BDJPB8982K	M.TECH	Electronics	Asst professor	20/7/2016		Y	Regular	

26	Teena Sharma	EQSPS9988B	M.TECH	Microwave	Asst professor	15/7/2016		Y	Regular	
27	Aashish Sharma	DOBPS4622L	M.TECH	Optimization	Asst professor	18/7/2016		Y	Regular	
28	Shweta Sharda	BAWPS0763H	M.TECH	Electronics	Asst professor	17/7/2017		Y	Regular	
29	Geetika Bhati Mathur	AGQPB0802P	M.TECH	Antenna	Asst professor	17/7/2017		Y	Regular	
30	Mohit Kumar	DFBPK4609N	M.TECH	Electronics	Asst professor	18/7/2017		Y	Regular	
31	Aapurva Kaul	BLRPK0793B	M.TECH	Electronics	Asst professor	24/7/2017		Y	Regular	
32	Yogita	ALUPY2403L	M.TECH	VLSI	Asst professor	24/7/2017		Y	Regular	
33	Kriti Manish Sharda	AZOPS1172N	M.TECH	Electronics	Asst professor	21/7/2017		Y	Regular	
34	Yazusha Sharma	BRDPS2349B	M.TECH	Electronics	Asst professor	17/7/2017		Y	Regular	
35	Ritambhara K	BTCPR2037J	M.TECH	Electronics	Asst professor	08-02-2017		Y	Regular	
36	Vikas Sharma	CQFPS8859A	M.TECH.	Embedded	Asst professor	20/2/2010		Y	Regular	
37	Anil Jain	AIYPJ3152A	M.TECH.	Antenna	Asst professor	19/7/2007		Y	Regular	
38	Shankar Singh Shekhawat	AAAPS8334H	M.TECH., M.S. (UK)	TELECOME	Professor	08-02-2007		N	Regular	26-03-2018
39	Shyam Sundar Manaktala	AGYPM8906B	M.TECH	VLSI Design	Asst professor	25/11/2004		Y	Regular	
40	Parul Tyagi	AEVPT9930N	M.TECH.	Communication	Asst professor	14/2/2009		Y	Regular	
41	Neha Singh	CNTPS32	M.TECH	Antenna	Asst	11-08-2010		Y	Regular	

		34E			professor					
42	SHIKHA GAUR	ARGPG6482P	B.TECH	Electronics	Asst professor	04-08-2010		N	Regular	31-01-2018
43	Mangilal Meghwal	BKZPM4835M	M.TECH	Electronics	Asst professor	08-02-2010		Y	Regular	
44	Ritu Vyas	AEKPV4859C	M.TECH	Electronics	Asst professor	16/8/2010		Y	Regular	
45	Honey Agrawal	AKEPA0586H	M.TECH	Electronics	Asst professor	21/7/2011		Y	Regular	
46	Sandeep Kumar Dotya	BOQPS0885A	M.TECH.	Electronics	Asst professor	21/7/2011		Y	Regular	
47	Jitendra Sharma	CWXPS7101P	M.TECH	Electronics	Asst professor	25/4/2012		Y	Regular	
48	Ashish Kulshrestha	BMFPK1793Q	M.TECH	Electronics	Asst professor	25/4/2012		Y	Regular	
49	Pravin Kumar Sharma	EBKPS3831J	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
50	Raj Kumar Jain	ANSPJ5809M	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
51	Devendra Sharma	FMXPS26958	M.Tech	Electronics	Asst professor	25-04-2012		Y	Regular	
52	Veni Madhav Sharma	CQUPS7715L	M.Tech	Electronics	Asst professor	04-05-2012		Y	Regular	
53	Dr. Ram Rattan	ADJTR4585T	Ph.D	Communication Systems	Professor	01-09-2015		N	Contract	02-08-2018
54	Dr. K. M. Singh	CFGPS2294	Ph.D	Opto Electronics	Professor	09-01-2013		N	Contract	25-07-2018
55	Dr. Manoj Gupta	AIQPG8714K	Ph.D	Signal & Image Processing	Asso. Prof.	08-03-2013		N	Contract	13-08-2018

Table 5.3: Faculty Information (2016-17)

S. No	Name	PAN No.	Qualification	Areas of Specialization	Designation	Date of Joining	Date on which Designated as Professor/ Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/Contract/Adjunct)	Date of Leaving (In case Currently Associated is "No")
1	Dr. Lokesh Kumar Bansal	AFWPB9091B	Ph.D.	Wireless Comm.	Professor	13/1/2016		Y	Regular	
2	Dr. S. K. Singh	BOUPS5721K	Ph.D	Wireless Comm.	Professor	02/01/2017		Y	Regular	
3	Rajesh Kumar Bathija	AHDPB0243J	M.TECH	VLSI	Associate professor	18/7/2016		Y	Regular	
4	Vinita Mathur	AKHPM3052H	M.TECH.	VLSI	Asst professor	02-08-2005		Y	Regular	
5	Vikas Mishra	AYMPM1504B	M.TECH.	Electronics	Asst professor	07-01-2013		Y	Regular	
6	Naresh Kumar	ALGPN5796H	M.TECH	Wireless	Asst professor	22/7/2013		Y	Regular	
7	Rakesh Kumar Kardam	AMDPK4998A	M.TECH	Electronics	Asst professor	03-01-2014		Y	Regular	
8	SANJAY KUMAR SINGHAL	AUUPS4046G	M.TECH	Electronics	Asst professor	16-07-2014		N	Regular	31-05-2016
9	ASHOK KUMAR	BBVPA1183P	M.TECH	Comm.	Asst professor	24/7/2014		Y	Regular	

10	Ankur Gangwar	BFDPG0660P	YES	Communication	Asst professor	24/7/2014		Y	Regular	
11	ARUNA YADAV	ACPPY7272D	M.TECH	VLSI	Asst professor	24-07-2014		N	Regular	31-03-2017
12	ANSUL KUMAR GUPTA	BERPG0254C	M.TECH	VLSI	Asst professor	05/07/2014		N	Regular	22-07-2017
13	Katru Anand	CSGPK6132H	M.TECH	VLSI	Asst professor	14/7/2014		Y	Regular	
14	Ashutosh Sharma	BHVPS3926E	M.TECH	VLSI	Asst professor	24/7/2014		Y	Regular	
15	Lokesh Kumar Sharma	AXHPS2584H	M.TECH.	Telecom	Asst professor	07-04-2015		Y	Regular	
16	Bhoopesh Kumar Kumawat	BAXPK5296E	M.TECH	Wireless	Asst professor	07-01-2015		Y	Regular	
17	Sidharth Chaturvedy	AGDPC9408K	M.TECH	Embedded	Asst professor	07-01-2015		Y	Regular	
18	Shivam Upadhayay	ADAPU4929K	M.TECH.	Optoelectronics	Asst professor	13/7/2015		Y	Regular	
19	Deepmala Kulshreshth	AXJPD8149H	B.Tech	Electronics	Asst professor	14/7/2015		Y	Regular	
20	NIDHI JAIN	AQQPJ1015I	M.TECH	Electronics	Asst professor	20-07-2016		Y	Regular	
21	Alpana Gupta	AJLPG4988R	MBA	Electronics	Asst professor	15/7/2015		Y	Regular	
22	Vinod Kumar	BGNPK5526R	B.Tech	Electronics	Asst professor	02-09-2016		Y	Regular	
23	Deepak Shankhala	BXYPS2998K	M.TECH	Electronics	Asst professor	22/8/2016		Y	Regular	
24	Devesh Gupta	AOKPG6	M.TECH	Communication	Asst	15/7/2016		Y	Regular	

		567J			professor					
25	Preeti Barot	BDJPB8982K	M.TECH	Electronics	Asst professor	20/7/2016		Y	Regular	
26	Teena Sharma	EQSPS9988B	M.TECH	Microwave	Asst professor	15/7/2016		Y	Regular	
27	Aashish Sharma	DOBPS4622L	M.TECH	Optimization	Asst professor	18/7/2016		Y	Regular	
28	Vikas Sharma	CQFPS8859A	M.TECH.	Embedded	Asst professor	20/2/2010		Y	Regular	
29	Anil Jain	AIYPJ3152A	M.TECH.	Antenna	Asst professor	19/7/2007		Y	Regular	
30	Shankar Singh Shekhawat	AAAPS8334H	M.TECH., M.S. (UK)	TELECOM	Professor	08-02-2007		Y	Regular	
31	Shyam Sundar Manaktala	AGYPM8906B	M.TECH	VLSI Design	Asst professor	25/11/2004		Y	Regular	
32	Parul Tyagi	AEVPT9930N	M.TECH.	Communication	Asst professor	14/2/2009		Y	Regular	
33	Neha Singh	CNTPS3234E	M.TECH	Antenna	Asst professor	11-08-2010		Y	Regular	
34	SHRUTI KALRA	ANQPK5955P	M.TECH	VLSI	ASST PROFESSOR	19/8/2003		Y	Regular	
35	SHIKHA GAUR	ARGPG6482P	B.TECH	Electronics	Asst professor	04-08-2010		Y	Regular	
36	Mangilal Meghwal	BKZPM4835M	M.TECH	Electronics	Asst professor	08-02-2010		Y	Regular	
37	Ritu Vyas	AEKPV4859C	M.TECH	Electronics	Asst professor	16/8/2010		Y	Regular	
38	Honey Agrawal	AKEPA0586H	M.TECH	Electronics	Asst professor	21/7/2011		Y	Regular	
39	Sandeep Kumar	BOQPS0	M.TECH.	Electronics	Asst	21/7/2011		Y	Regular	

	Dotya	885A			professor					
40	Jitendra Sharma	CWXPS7101P	M.TECH	Electronics	Asst professor	25/4/2012		Y	Regular	
41	Ashish Kulshrestha	BMFPK1793Q	M.TECH	Electronics	Asst professor	25/4/2012		Y	Regular	
42	Pravin Kumar Sharma	EBKPS3831J	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
43	Raj Kumar Jain	ANSPJ5809M	M.Tech	Electronics	Asst professor	30/7/2012		Y	Regular	
44	Devendra Sharma	FMXPS26958	M.Tech	Electronics	Asst professor	25-04-2012		Y	Regular	
45	Veni Madhav Sharma	CQUPS7715L	M.Tech	Electronics	Asst professor	04-05-2012		Y	Regular	
46	SWATI GAUR	AYFPG7433C	M.TECH	Electronics	Asst professor	13-07-2015		N	Regular	28-02-2017
47	Dr. Ram Rattan	ADJTR4585T	Ph.D	Communication Systems	Professor	01-09-2015		Y	Contract	
48	Dr. K. M. Singh	CFGPS2294	Ph.D	Opto Electronics	Professor	09-01-2013		Y	Contract	
49	Dr. Manoj Gupta	AIQPG8714K	Ph.D	Signal & Image Processing	Asso. Prof.	08-03-2013		Y	Contract	

5.1 Student-Faculty Ratio (SFR) 10/ (20)

Student Faculty Ratio (No of Faculty as per the sanctioned intake):-

(To be calculated at Department Level)

No. of UG Programs in the Department (n): 01

No. of Students in UG 2nd Year= **u1**

No. of Students in UG 3rd Year= **u2**

No. of Students in UG 4th Year= **u3**

No. of Students in PG 1st Year= **p1**

No. of Students in PG 2nd Year= **p2**

No. of Students = Sanctioned Intake + Actual Admitted lateral entry students

(The above data to be provided considering all the UG and PG programs of the department)

S=Number of Students in the Department = UG1 + UG2 +.. +UGn + PG1 + …PGm

F = Total Number of Faculty Members in the Department (excluding first year faculty)

Table: 5.1 Student-Faculty Ratio (SFR)

Year	CAY+1 (2018-19)	CAY (2017-18)	CAYm1 (2016-17)
u1	240+1=241	240+2=242	240+3=243
u2	240+2=242	240+3=243	240+3=243
u3	240+3=243	240+3=243	240+11+5= 256
Total No. of Students in the Department (S)	**726**	**728**	**742**
No. of Faculty in the Department (F)	**F=46**	**F=53**	**F=49**
Student Faculty Ration (SFR)	**SFR1=S1/F1= 15.7**	**SFR1=S1/F1= 13.7**	**SFR1=S2/F1 = 15.1**
Average SFR	**SFR=(SFR1+SFR2+SFR3)/3 = 14.8**		

Student Teacher Ratio (STR) = S / F=14.8

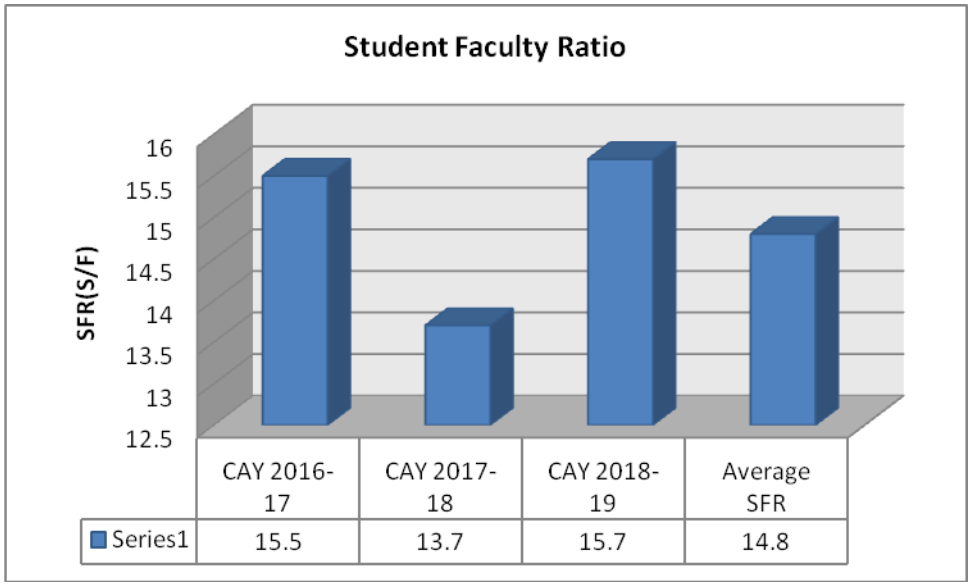


Figure 5.1: Student Faculty Ratio

5.1.1 Provide the information about the regular and contractual faculty as per the format mentioned below:

Table 5.1.1 Faculty Information

	Total number of regular faculty in the department	Total number of contractual faculty in the department
(2018-19)	46	NIL
(2017-18)	50	3
(2016-17)	46	3

5.2 Faculty Cadre Proportion (25)

The reference Faculty cadre proportion is 1 (F1):2(F2):6(F3)

F1: Number of Professors required=1/9 x Number of faculty required to comply with 15:1 student faculty ratio based on no. of students (N) as per 5.1

F2: Number of Associate Professors required=2/9 x Number of faculty required to comply with 15:1 student faculty ratio based on no. of students (N) as per 5.1

F3: Number of Assistant Professors required=6/9 x Number of faculty required to comply with 15:1 student faculty ratio based on no. of students (N) as per 5.1

Table 5.2 Faculty Cadre Proportion

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
2018-19	5	3	10	5	32	38
2017-18	4	5	8	4	25	44
2016-17	4	5	8	1	25	43
Average Numbers	RF1=4.3	AF1=4.33	RF2=8.66	AF2=3.3	RF3=27.33	AF3=41.6

$$\text{Cadre Ratio Marks} = \left[\left[\frac{AF1}{RF1} \right] + \left[\frac{AF2 \times 0.6}{RF2} \right] + \left[\frac{AF3 \times 0.4}{RF3} \right] \right] \times 12.5$$

Average = 22.96

- **If AF1=AF2=0 then zero marks**
- **Maximum marks to be limited if it exceeds 25**

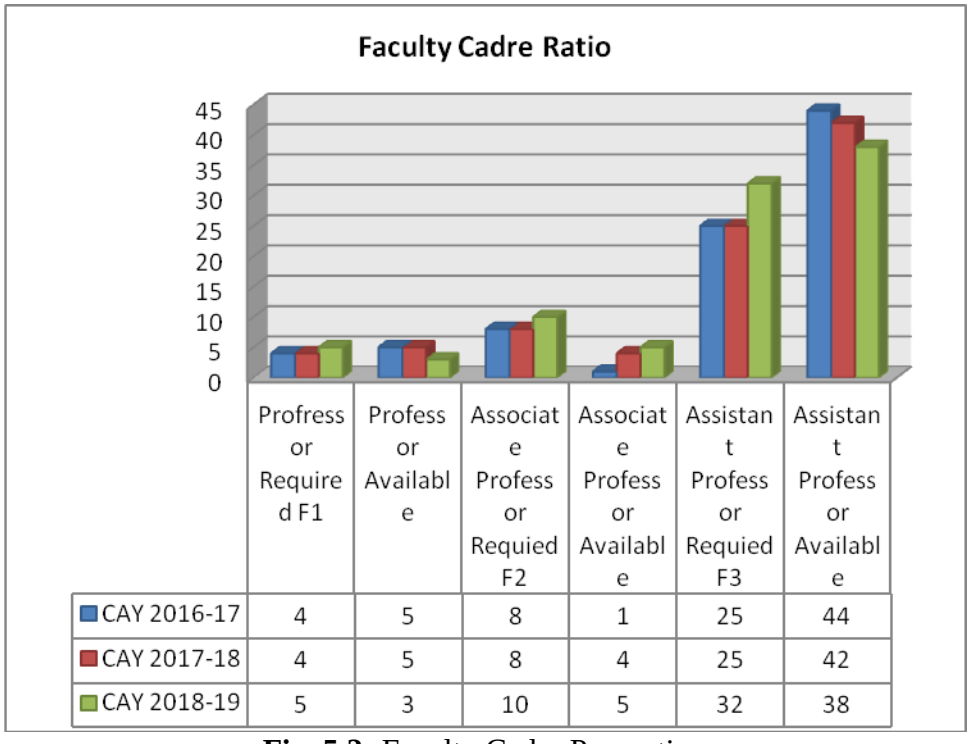


Fig. 5.2: Faculty Cadre Proportion

5.3 Faculty Qualification 12/ (25)

FQ=2.5 x [(10X+6Y)/F] where X is no. of regular faculty with Ph.D., Y is no. of regular faculty with M.Tech. , F is no of regular faculty required to comply 1:20 Faculty student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Table: 5.3 Faculty Qualifications

Year	X	Y	F	FQ=2.5 x [(10 X+ 6Y)/F]
2018-19	5	39	37	19.18
2017-18	4	43	37	20.13
2016-17	3	39	38	17.36
Average SFR for these assessment years				18.89

5.4 Faculty Retention (25)

Item	Marks
>=90% of required Faculty members retained during the period of assessment keeping CAY*m3* as base year	25
>=75% of required Faculty members retained during the period of assessment keeping CAY*m3* as base year	20
>=60% of required Faculty members retained during the period of assessment keeping CAY*m3* as base year	15
>=50% of required Faculty members retained during the period of assessment keeping CAY*m3* as base year	10
<50% of required Faculty members retained during the period of assessment keeping CAY*m3* as base year	5

Table: 5.4 Faculty Retention

Description	2018-19	2017-18	2016-17
No. of regular faculty members	46	50	49

Total No. of Faculty in 2016-17 = 49
No of Faculty Retained since 2018-19 = 39
% of retained Faculty = 79.59
Assessment Marks: 20

5.5 Innovations by the Faculty in Teaching and Learning (20)

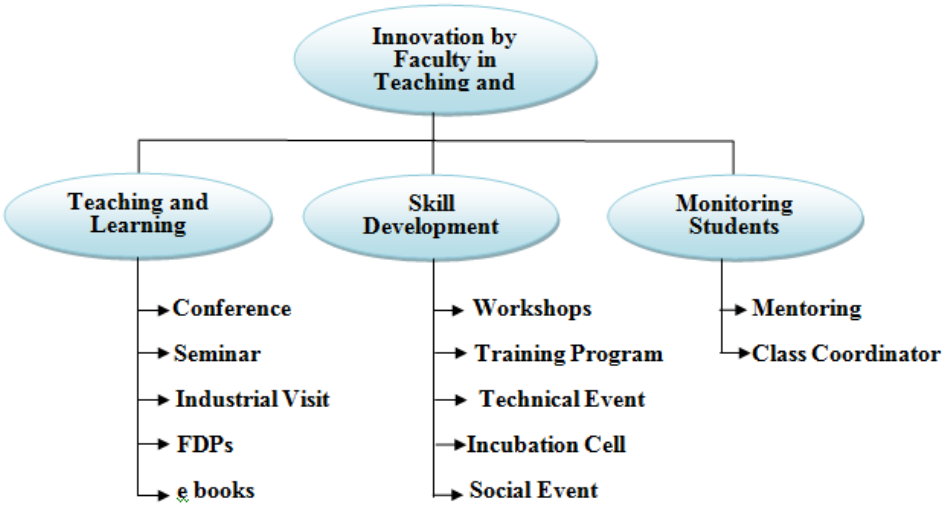


Figure 5.5. Flow chart of Innovations by the Faculty in Teaching and Learning

Table: 5.5 Innovations by the Faculty in Teaching and Learning

S. No	Name of Faculty	Event	Name of Event	No. of Student Participated
1.	Dr. Lokesh Kr. Bansal	**International Conference/ Journal**	International Journal of Computer Science & Communication	NA
			RTDEEE -2018(1 paper)	2
		National Conference	RAST 2018	4
		FDP	Advanced Optimization Techniques	NA
			Managing Yourself	NA
		Social	Engineers Day	39
			Induction Day	43
			JECRC MUN	5
			Smart India Hackathon	18
		Workshop	Aptron	75
			Society and Control System	45
2.	Ms. Shruti Kalra	**Social**	Zarurat	28
		International Conference	RTDEEE -2018 (4 papers)	10

3.	Mr. Rajesh Bathija	**National Conference**	RAST 2018	4
		FDP	Effective mentoring skills	NA
			ICT Training On Embedded System	5
		Social	Aashayein	25
			Athlon	27
			Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
		Technical	Technophilia	25
		Workshop	Aptron	75
4.	Mr. S. S Manakatala	**International Conference**	RTDEEE -2018	6
		National Conference	RAST 2018	8
		FDP	Effective mentoring skills	NA
			ICT Training On Embedded System	NA
		Social	Induction Day	43
			Engineers day	39
		Technical	Technophilia	25
5.	Mr. Anil Jain	**National Conference**	RAST 2018	4
		Industrial Visit	Tesca Technologies	27
6.	Dr. Vinita Mathur	**International Conference**	RTDEEE 2018	2
		National Conference	RAST-2018	6
		FDP	ICT Training On Embedded System	NA
		Social	Engineers day	39
			Induction Day	43
			Suhasini	13
			Smart India Hackathon	18
		Technical	Line Follower	23
7.	Ms. Parul Tyagi	**International Conference/ journal**	RTDEEE- 2018	8
		National Conference	RAST 2018	4
		FDP	ICT Training On Embedded System	NA
		Social	Engineers day	39
			Suhasini	13
			Smart India Hackathon	18
		Technical	Line Follower	23
	Ms. Ritu Vyas	**International Conference**	RTDEEE- 2018	8
		FDP	Outcome Based Education	4
		Social	Aashayein	4
			Engineers day	39

8.			Induction day	43
			Suhasini	13
			Smart India Hackathon	18
		Technical	Quizolic ,Techinobuzz	24
9.	Mr. Vikas Sharma	**International Conference**	RTDEEE- 2018	4
		FDP	Outcome Based Education	4
			Effective Mentoring Skills	NA
		Social	Athlon	12
			Engineers day	39
			Induction Day	43
		Technical	Aashayein	4
			Smart India Hackathon	18
			Robowar	23
		Workshop	Society and Control System	45
		International Conference	RTDEEE- 2018	3
10.	Mr. Ashish Kulshrestha	**National Conference**		
		FDP		
		Social	Athlon	12
		Technical	Engineers day	39
			Induction day	43
			Zarurat	21
			Smart India Hackathon	18
			Phoenix	21
		International Conference	RTDEEE- 2018	6
11.	Mr. Pravin Kumar Sharma	**FDP**		
		Social	Athlon	12
		International Conference	Engineers day	39
			Induction day	43
			Smart India Hackathon	18
			OWT 2018	NA
12.	Mr. Ashutosh Sharma	**National Conference**	RTDEEE- 2018	4
		Social	Athlon	12
		Industrial Visit	Engineers Day	39
			Induction Day	43
			Genus Power Infrastructure Ltd.	50
		International Conference/Journal	RTDEEE- 2018	3
13.	Ms. Neha Singh	**National Conference**	RAST 2018	3
		FDP	Effective Mentoring Skills	NA
		Social	ICT Training On Embedded System	NA
			Engineers Day	39
		Technical	Induction Day	43
			Suhasini	13
			Smart India Hackathon	18
			Formula Zero	16
		International Conference	RTDEEE- 2018	4

14.	Mr. Raj Kumar Jain	**National Conference**		
		FDP	ICT Training On Embedded System	NA
		Social	Aashayein	5
		Technical	Athlon	12
			Engineers Day	39
			Induction Day	43
			Phoenix	21
		International Conference/Journal	International Journal Of Creative Research Thouths	NA
15.	Mr. Vikas Mishra	**National Conference**	RTDEEE- 2018	6
		FDP		
		Social	Engineers Day	39
		Technical	Induction Day	43
			Athlon	12
			Robo Soccer	21
		International Conference	RTDEEE-2018	6
16.	Mr. Veni Madhav	**National Conference**	RAST 2018	4
		Social	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Renovator	16
		Industrial Visit	Tesca Technologies	27
		International Conference	RTDEEE-2018	4
17.	Mr. Mangi Lal	**National Conference**		
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Start-up	4
18.	Mr. Sidharth Chaturvedy	**Technical**	Induction Day	43
			Smart India Hackathon	18
			JECRC MUN	5
			Game of Drone	12
		Social	Engineers Day	39
19.	Mr. Honey Agarwal	**International Conference**	Induction Day	43
			Athlon	12
			RTDEEE 2018	6
		Social	Athlon	12

20.	Mr. Jitendra Sharma	**FDP**	Aashayein	4
			Engineers Day	39
			Induction Day	43
			Mathematical Modelling and Optimization of Industrial Problems	NA
21.	Mr. Sandeep Dotya	**National Conference**	RAST 2018	4
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Athlon	12
22.	Mr. Rakesh Kardam	**National Conference**	RAST-2018	2
		FDP	ICT Training On Embedded System	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Smart India Hackathon	18
			RTDEEE 2018	4
23.	Mr. Devendra Sharma	**National Conference**	RAST-2018	6
		Social	Athlon	12
		Technical	Aashayein	4
			Engineers Day	39
			Induction Day	43
			Game of Drone	12
24.	Mr. Naresh Kumar	**International Conference**	RTDEEE 2018	6
25.	Mr. Katru Anand	**Social**	Engineers Day	39
			Induction Day	43
			Aashayein	4
26.	Mr. Ashok Kumar	**International Conference**	RTDEEE 2018	6
27.	Mr. Ankur Gangwar	**National Conference**	RAST-2018	2
		FDP	Mathematical Modelling and Optimization of Industrial Problems	NA
		Social	Aashayein	6
		Technical	Athlon	12
			Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Formula Zero	16

		Workshop	CCNA networking	58
		Social	Athlon	12
28.	Mr. Lokesh Kumar Sharma	**International Conference**	Engineers Day	39
			Induction Day	43
			8th International Conference on Computing, Communication and Networking Technologies	NA
29.	Ms. Shivam Upadhyay	**Social**	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Quizolic ,Techinobuzz	16
		Industrial Visit	Philips Lightning	51
		International Conference	Talent Pull	51
			RTDEEE 2018	4
30.	Ms. Deepmala Kulshrestha	**Social**	Engineers Day	39
		Technical	Induction Day	43
			Smart India Hackathon	18
			Tech-Tambola ,Rob soccer	12
		International Conference	RISE 2017	NA
31.	Mr. Bhoopesh Kumawat	**FDP**	Research Challenges in Wireless Technologies for 5G	NA
		Social	Athlon	12
		Industrial Visit	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Philips Lightning	51
		International Conference	Talent Pull	51
			RTDEEE 2018	6
32.	Mr. Devesh Gupta	**National Conference**	RAST 2018	4
		FDP	Effective Mentoring Skills	NA
		Social	ICT Training On Embedded System	NA
			Athlon	12
		Technical	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Robowar	14
		Training Program	Sakrobotix	66
		International Conference	RTDEEE 2018	6
33.	Ms. Teena Sharma	**National Conference**	OWT-2018	NA
		FDP	Recent Advances in communication technologies	NA
		Social	Engineers Day	39
		International Conference	Induction Day	43
			RTDEEE 2018	6
		National Conference	RAST2018	4
		FDP	Advanced Optimization	NA

			Techniques	
34.	Mr. Ashish Sharma	**Social**	Athlon	12
		Technical	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
			Tech-Tambola, Game of Drone	18
		Industrial Visit	Genus Power Infrastructure Ltd.	50
		International Conference	Philips lightning	51
			Talent Pull	51
			RTDEEE 2018	6
35.	Ms. Preeti Barot	**Social**	Engineers Day	39
		Industrial Visit	Induction Day	43
			Smart India Hackathon	18
			Philips lightning	51
		International Conference	Talent Pull	51
			RTDEEE 2018	6
36.	Mr. Deepak Shankla	**National Conference**	RAST 2018	4
		Social	Engineers Day	39
			Induction Day	43
			Smart India Hackathon	18
		Training Program	Embedded System and Robotics	56
37.	Mr. Mohit Rajput	**International Conference**	RTDEEE 2018	4
		FDP		
		Social	Engineers Day	39
			Induction Day	43
			Aashayein	3
			Athlon	12
38.	Ms. Shweta Sharda	**International Conference**	RTDEEE 2018	6
		Social	Engineers Day	39
		International Conference	Induction Day	43
			Smart India Hackathon	18
			RTDEEE 2018	6
39.	Ms. Kriti Manish Sharda	**Social**	Engineers Day	39
40	Ms. Yogita	**Technical**	Induction Day	43
		Social	Quizolic	12
			Smart India Hackathon	18
		International Conference	RTDEEE 2018	4
41.	Ms. Aapurva Kaul	**Social**	Engineers Day	39
			Induction Day	43
		Industrial Visit	Smart India Hackathon	18
			Philips Lightning	51
			Talent Pull	51

5.6 Faculty as participants in Faculty development/training activities/STTPs (15)

- A Faculty scores maximum five points for participation
- Participation in 2 to 5 days Faculty development program: 3 Points
- Participation>5 days Faculty development program: 5 points

Table5.6. Faculty as participants in Faculty development Program

S.No.	Name of Faculty	Max 5 Per Faculty		
		2017-18	2016-17	2015-16
1.	Dr. Lokesh Kr. Bansal	3	3	NA
2.	Mr. Rajesh Kumar Bathija	3	3	NA
3	Mr. S. S Manakatala	3	3	0
4	Ms. Shruti Kalra			3
5	Mr. Anil Jain	3		3
6	Ms. Vinita Mathur	3		3
7	Ms. Parul Tyagi	3		3
8	Ms. Ritu Vyas			3
9	Mr. Ashutosh	0	0	3
10	Mr. Sidharth Chaturvedy			3
11	Mr. Bhoopesh Kumawat	3	3	3
12	Mr. Deepak Shankla	0	0	0
13	Mr. Devesh Gupta	3	3	3
14	Mr. Anshul			3
15	Mr. Lokesh Kumar Sharma	3	0	3
16	Mr. Vikas Sharma			
17	Mr. Ashish Kulshrestha	0	0	3

18	Mr.Pravin Kumar Sharma			3
19	Ms. Shikha Gaur			3
20	Mr. Raj Kumar Jain	3	0	3
21	Mr. Vikas Mishra	0	3	3
22	Mr. Veni Madhav			3
23	Ms. Aruna Yadav			3
24	Ms. Teena Sharma	3	3	0
25	Mr. Mangi Lal	3		3
26	Mr. Honey Agarwal			3
27	Mr. Jitendra Sharma			3
28	Mr. Sandeep Dotya	3		3
29	Mr. Rakesh Kardam	3		3
30	Mr. Devendra Sharma			3
31	Mr. Naresh Kumar		3	3
32	Mr. Katru Anand			3
33	Mr. Ashok Kumar			3
34	Mr. Ankur Gangwar			3
35	Ms.Neha Singh	3	3	3
36	Ms. Shivam Upadhyay	3		3
37	Ms. Deepmala Kulshrestha	0	0	3
38	Mr. Ashish Sharma	3	3	3

39	Ms. Preeti Barot		3	3
40	Ms. Nidhi Jain			3
41	Swati			3
42	Ragini Khandelwal			3
43	Ms. Alpana Gupta			3
44	Aapurva kaul	0	0	3
45	Mohit	0	0	3
46	Kirti Manish Sharda	0	0	3
47	Deepak Sankla	0	0	0
48	Shweta shardha	0	0	3
	Total	51	33	127

Name of the Faculty	**Max. 5 per Faculty**		
	CAY	**CAYm1**	**CAYm2**
Sum*	**51**	**33**	**127**
***RF*= Number of Faculty required to comply with 15:1 Student-Faculty ratio as per 5.1**	44	44	44
Assessment = 3 x (Sum/0.5RF) (Marks limited to 15)	6.95	4.5	17.3
Average assessment over three years (Marks limited to 15) = 9.5			

Institute marks: 9.5

5.7. Research and Development (30)

5.7.1 Academic Research (10)

Details of Ph.D

Table 5.7.1.1Details of Faculty who got Ph.D. degree during the assessment year 2017-18:

Name of Faculty	Guide Name	Year of Passing	Thesis Entitled	University

Dr. Vinita Mathur	Dr. Manisha Gupta	2017	Design and Development of Ultra-Wide Band Fractal Antennas for Communication System".	JECRC

Table 5.7.1.2 Details of Faculty who are pursuing Ph.D.

Name of the Faculty	Ph.D Pursuing University	Year of Registration	Details of Guide	Area of Research work	Status of Work & No. of publications
Ms. Parul Tyagi	JECRC University, Jaipur	2014	Prof. Deepak Dembla	VANET	Completed Within 1 year,6 publication
Mr. Ashutosh	RTU, Kota university	2015	Prof. Lokesh Tharani	MANET	Completed Within 1.5 year,3 publication
Mr. Rajesh Bathija	RTU ,Kota	2011	Dr. R.S. Meena	VLSI Technology	About to complete
Ms. Teena	MNIT, Jaipur	2013	Dr.Ravi Kumar Madilla	Optical Communication	Completed Within 1 year,3 publication
Mr. Bhoopesh	MNIT, Jaipur	2016	Prof. R.P. Yadav	Cognitive Radio	2.5YEAR,1 Publication
Mr.S.S.Manaktala	JECRC, University	2015	Dr.K.M.Singh	Nanotechnology	2 year Completed,2Publication
Ms. Neha singh	C.P. University	2014	Dr. K.C.Roy	Optical fiber	Complete with in 1 year,4 Publication

Faculty Publications: Following table indicates the list of ECE department faculty publications during the three assessment years.

Table 5.7.1.3 Details of Publications

S.No.	Name of Faculty	Publications
1.	Dr. Lokesh Bansal	2 SCI, 1 referred , 3 International
2.	Dr.Vinita Mathur	3 SCI-E,1 SCI, 6 Scopus, 1 Referred 5 international
3.	Parul Tyagi	1 SCI-E, 3 Scopus, 2 Referred, 4international
4.	Anil Jain	4international

4.	Shivam Upadhyay	11international
5.	Ashutosh Sharma	3international
6.	Shikha Gaur	1 international
7.	Preeti	3international
8.	Neha Singh	1 Referred, 3 international
9.	Ms. Ritu Vyas	5international
10.	Mr. Vikas Sharma	5international
11.	Sandeep Dotya	3international
12.	Katru Anand	2 international
12.	Rajkumar Jain	3 international
13.	Mr. Ashish Kulshrestha	3international
14	Mr.Pravin Kumar Sharma	2international
15.	Mr. Vikas Mishra	4international
16.	Mr. Veni Madhav	1international
17.	Mr. Mangi Lal	3international
18.	Mr. Rakesh Kardam	2international
19.	Mr. Naresh Kumar	5 international
20.	Mr. Katru Anand	2 international
21.	Mr. Ankur Gangwar	2 international
22.	Ms. Deepmala Kulshrestha	3 international

23.	Ms. Teena Sharma	1 international
24.	Mr. Ashish Sharma	3 international
25.	Mr. Deepak Shankla	3 international
26.	Mr. Mohit Rajput	1 international
27.	Ms. Shweta Sharda	1 international
28.	Ms. Kriti Manish	1international
29	Mr.Mohit	2international
30.	Ms. Aapurva Kaul	1international

5.7.2. Sponsored Research (5)

Name of Sponsored Research Lab	Sponsored by	Approx. Estimation
Xananoid (Robotics Lab)	Sak-robotics	1.5 lac
Embedded Lab	TechieNest	2.57 lac

Institute marks: 5

5.7.3. Development activities (10)

1. Product Development

Name of Students	Start-Up	Faculty Co-ordinator
Harshil Jain, Manav Sharma And Kushagra Singh	DIVYA AANG	Mr. Siddharth Chaturvedi
Kushagra Singh	PRATIKRIYA	Mr. Siddharth Chaturvedi

S.NO.	ROLL NO.	STUDENT ALLOTED TO GUIDE	TITLE	ALLOTED GUIDES

1	14EJCEC022	ANKIT GARG	ELECTRONIC DETECTOR FOR THE DETECTION OF EARTHQUAKES AND TSUNAMI	Dr. Lokesh Kr. Bansal , Ms. Preeti Barot
2	14EJCEC023	ANKIT KUMAR		
3	14EJCEC028	ANUSHKA AGRAWAL		
4	14EJCEC104	MANISH AGARWAL		
7	14EJCEC008	AISHWARYA SHARMA	IEEE 754 FLOATING POINT ALU USING VHDL	Ms. Shruti Kalra, Ms. Geetika Bhati Mathur
8	14EJCEC011	AKANKSHA GUPTA		
9	14EJCEC024	ANMOL BHATNAGAR		
10	14EJCEC061	DUSHYANT MAROTHIA		
11	14EJCEC009	AJAY GUPTA	CLOUD COMPUTING INFRASTRUCTURE	Mr. S. S Manakatala, Ms. Yazusha Sharma
12	14EJCEC021	ANJALI YADAV		
13	14EJCEC034	ARPIT GHIYA		
14	14EJCEC035	ARPIT GUPTA		
15	14EJCEC092	KASHISH JINDAL		
16	14EJCEC112	MD NADEEM AFZAL	TEXT EDITOR FOR CODE	Mr. S. S Manakatala, Ms. Yazusha Sharma
17	14EJCEC075	HEMANT THAWANI		
18	14EJCEC076	HIMANSHU BAKOLIYA		
19	14EJCEC063	GAURAV SHARMA		
20	14EJCEC070	HARSH JHA	MODIFIED PEB FORMULATION FOR HARDWARE EFFICIENT FIXED WITH BOOTH MULTIPLIER	Mr. Rajesh Bathija, Ms. Aapurva Kaul
21	14EJCEC091	KARUNA KOUL		
26	14EJCEC016	ALOK KUMAR		
27	14EJCEC049	BHATTARU TEJASWINI	VACCINATION CARD	Mr. Anil Jain , Mr. Ashok Kumar
28	14EJCEC053	CHHAYA GAUTAM		
29	14EJCEC058	DIMPLE GARG		
30	14EJCEC106	MANSI SHARMA		
31	14EJCEC873	TANISHA AGRAWAL	HAND GESTURE CONTROLLED ROBOT	Mr. Anil Jain , Mr. Ashok Kumar
32	14EJCEC881	VAISHALI SUMAN		
33	14EJCEC088	KANISHKA KUKREJA		
34	14EJCEC026	ANUBHAV SAXENA		
35	14EJCEC045	AYUSHI RAWAT	SMART CITY	Ms. Vinita Mathur, Ms. Parul Tyagi
36	14EJCEC059	DIPANSHU SHARMA		
37	14EJCEC060	DIVYANSH BHARGAVA		
38	14EJCEC177	RONAK KHANDELWAL		
39	14EJCEC890	VIPUL GARG	DRIVE PROTECTION USING SMART HELMET	Ms. Vinita Mathur, Ms. Parul Tyagi
40	14EJCEC897	YASH KUMAR JEPH		
41	14EJCEC854	SHUBHAM GARG		
42	14EJCEC850	SHUBHAM AGARWAL		
43	14EJCEC189	SAURABH JAIN	LIBRARY MANAGEMENT SYSTEM	Ms. Vinita Mathur, Ms. Parul Tyagi
44	14EJCEC856	SHUBHAM JAIN		
45	14EJCEC896	YASH DOSI		
46	14EJCEC128	NIDHI AGIWAL		
47	14EJCEC186	SANYA KHATRI	ENTERPRISE NETWORK MANAGEMENT SYSTEM	Mr. Rajesh Bathija, Ms. Aapurva
48	14EJCEC142	PARUL SIPPY		

49	14EJCEC146	PIYUSH AGARWAL		Kaul
50	14EJCEC159	PUSHPENDRA SINGH NARUKA		
51	14EJCEC151	PRANAV BAHETI	RE BASED HOME AUTOMATION	Ms. Ritu Vyas , Ms. Kriti Manish Sharda
52	14EJCEC179	SAJID HUSSAIN		
53	14EJCEC153	PRATEEK DAD	THE ULTIMATE CHILD TRACKER	Mr. Rajesh Bathija, Ms. Aapurva Kaul
54	14EJCEC857	SHUBHAM JAIN		
55	14EJCEC893	VIVEK KUMAR CHAURASIA	ACOUSTIC DETECTION OF REAR APPROACHING VEHICLES FOR CYCLISTS	Ms. Ritu Vyas , Ms. Kriti Manish Sharda
56	14EJCEC195	SHIV RATAN		
57	14EJCEC894	YASH BHATT		
58	14EJCEC001	AAKASH MANGAL		
59	14EJCEC006	ADITYA GAUTAM	SENSOR BASED AUTOMATIC CONTROL OF RAILWAY GATE	
60	14EJCEC018	AMIT KUMAR		
61	14EJCEC020	ANADI VATSA		
62	14EJCEC007	ADITYA SHARMA		
63	14EJCEC047	BHARAT KODWANI	WRITING ROBOTS	Mr. Vikas Sharma , Ms. Yogita
64	14EJCEC052	BHUVNESH NAGAR	WEARABLE CAPTIONING DEVICE FOR HEARING IMPARIED	Mr. Ashish Kulshrestha, Ms. Shweta Sharda
65	14EJCEC015	AKSHAY LAROIYA		
66	14EJCEC071	HARSHIL JAIN		
67	14EJCEC073	HARSHITA SHARMA		
68	14EJCEC103	MANAV SHARMA	WEARABLE CAPTIONING DEVICE FOR HEARING IMPARIED RFID BASED DIGITAL IFO CARD CONSISTING RASHAN CARD, AADHAR CARD, VOTER ID CARD	
69	14EJCEC099	KUSHAGRA SINGH		
70	14EJCEC198	SHREYA AGNIHOTRI		
71	14EJCEC877	UMANGINI PANWAR		
72	14EJCEC880	VAIDEHI SHARMA	SMART LIGHT MONITORING SYSTEM	Mr.Pravin Kumar Sharma, Mr. Deepak Shankla
73	14EJCEC866	SUMAN KANWAR		
74	14EJCEC002	AANCHAL JAIN		
75	14EJCEC003	AARUSHI SINGH		
76	14EJCEC056	DEEPIKA	SMART LIGHT MONITORING SYSTEM	
77	14EJCEC062	GARVIT CHUGH		

78	14EJCEC130	NIHAR JAIN	AUTOMATIC ROOM LIGHT CONTROLLER WITH VISITOR COUNTER	
79	14EJCEC132	NIKHIL GOYAL		
80	14EJCEC133	NIKHIL SARASWAT	BUS TRACKER	Mr.Pravin Kumar Sharma, Mr. Deepak Shankla
81	14EJCEC138	NITIN GOYAL		
82	14EJCEC087	KANISHK BHARDWAJ		
83	14EJCEC069	HAREEKESH GURJAR		
84	14EJCEC081	JAY KUMAR ISHAR	DENSITY BASED TRAFFIC LIGHT CONTROL USING GSM	Mr. Ashutosh Sharma , Mr. Lokesh Kumar Sharma
85	14EJCEC110	MAYANK KUMAR	HOSPITAL MANAGEMENT SYSTEM USING JAVA	Mr. Ashutosh Sharma , Mr. Lokesh Kumar Sharma
86	14EJCEC869	SURABHI SONI		
87	14EJCEC870	SURBHI SHRIVASTAVA		
88	14EJCEC874	TANVI KOLBHANDARI		
89	14EJCEC193	SHAHRUKH KHAN	AUDIBLE WALKING STICK FOR VISUALLY IMPAIED PERSON	Ms. Shikha Gaur, Ms. Teena Sharma
90	14EJCEC872	SWAPNIL SHARMA		
91	14EJCEC891	VIRENDRA SINGH		
92	14EJCEC892	VISHWAS SHARMA	DATA ANALYSIS BASED WEB DEVELOPMENT	Ms. Shikha Gaur, Ms. Teena Sharma
92	14EJCEC067	HARDIK MITTAL		
93	14EJCEC064	GOPAL BAGRI		
94	14EJCEC090	KAPIL SINGH		
95	14EJCEC094	KETAN RAJE SINGH	SMART DUSTBIN- AN EFFICIENT GARBAGE MONITORING SYSTEM	Ms. Neha Singh , Mr. Mohit Rajput
96	14EJCEC876	TORAL JAIN		
97	14EJCEC878	UTKARSH VASHISTHA		
98	14EJCEC886	VIDUSHI AGARWAL		
99	14EJCEC010	AJAY SINGH NATHAWAT	SECURITY SYSTEM USING RFID SMART CARD TECHNOLOGY	Mr. Raj Kumar Jain , Mr. Devendra Sharma
100	14EJCEC019	AMIT KUMAR SHARMA		
112	14EJCEC025	ANSHUL SINGHAL		
113	14EJCEC043	AYUSH GANDHI	WIRELESS CHARGER	Ms. Shikha Gaur, Ms. Teena Sharma
114	14EJCEC852	SHUBHAM DUTT SHARMA		
115	14EJCEC855	SHUBHAM JAIN		
116	14EJCEC884	VEDANT SHARMA		
117	14EJCEC898	YASH SONI		

118	14EJCEC887	VIDUSHI CHAPLOT	GARBAGE MONITORING SYSTEM FOR WASTE MANAGEMENT	Mr. Raj Kumar Jain , Mr. Devendra Sharma
119	14EJCEC889	VINUJ ARORA		
120	14EJCEC895	YASH CHATURVEDI		
121	14EJCEC899	YATENDRA GAUR	SMART POSITION OF REAR VIEW MIRROR IN AUTOMOBILE	Mr. Raj Kumar Jain , Mr. Devendra Sharma
122	15EJCEC200	ABHINAV SINH CHOUDARY		
125	14EJCEC012	AKANKSHA SINGHAL		
126	14EJCEC033	ARPIT AGRAWAL	AUTOMATIC GREEN HOUSE SYSTEM	Mr. Vikas Mishra, Ms. Ritambhara
127	14EJCEC039	ASHMITA AGARWAL		
128	14EJCEC042	AVINASH KUMAR PAL	SMART PLANT MONITORING SYSTEM	Mr. Vikas Mishra, Ms. Ritambhara
129	14EJCEC150	PRAKHAR AGRAWAL		
130	14EJCEC187	SAURABH AGRAWAL		
133	14EJCEC005	ABHISHEK KUMAR		
134	14EJCEC036	ARPIT KUMAR	CASHLESS TOLL TAX SYSTEM	Mr. Veni Madhav, Mr. Ankur Gangwar
135	14EJCEC038	ASHISH JOHN		
136	14EJCEC184	SANJAY KUMAR JAIN	MULTILEVEL SAFETY AND SECURITY SYSTEM FOR VEHICLE	Mr. Veni Madhav, Mr. Ankur Gangwar
137	14EJCEC077	HIMANSHU PRAJAPATI		
138	14EJCEC108	MANVENDRA KUMAR		
139	14EJCEC109	MAYANK AGRAWAL		
140	14EJCEC122	NANDAN KUMAR RAY	SMART GARDEN	Mr. Mangi Lal, Mr. Devesh Gupta
141	14EJCEC154	PRATEEK MAHESHWARI		
142	14EJCEC155	PRATEEK SIROYA		
143	14EJCEC157	PRIYA ISRANI		
144	14EJCEC158	PRIYANKA MITTAL	SMART CANE	Mr. Mangi Lal, Mr. Devesh Gupta
145	14EJCEC093	KAUSHAL VIJAY SINGH CHAUHAN		
146	14EJCEC098	KUMAR SANU		
147	14EJCEC100	LOKENDER SINGH BHATI		
148	14EJCEC117	MOHIT CHAUHAN		

149	14EJCEC147	PIYUSH AGARWAL	HOME AUTOMATION USING DIGITAL CONTROL	Mr. Siddharth Chaturvedy, Mr. Ashish Sharma
150	14EJCEC196	SHIVAM KHANDELWAL		
151	14EJCEC858	SHUBHAM KHANDELWAL		
152	15EJCEC201	SHIVAM SUKHWAL	GESTURE CONTROLLED ROBOT	Mr. Mangi Lal, Mr. Devesh Gupta
153	14EJCEC143	PAURAV SINGH		
154	14EJCEC167	RAUNAK AGRAWAL		
155	14EJCEC174	ROHAN AGRAWAL		
156	14EJCEC183	SANIDHYA MOHOVIA	STUDENT SMART SECURITY SYSTEM	Mr. Siddharth Chaturvedy, Mr. Ashish Sharma
157	14EJCEC136	NISAR AHMAD		
158	14EJCEC137	NITESH RATHORE		
159	14EJCEC165	RAKSHAK MATHUR		
160	14EJCEC178	SAJAL SHARMA	WIRELESS DETECTION FOR RASH DRIVING AND SPEED CHECKER FOR VEHICLES	Mr. Honey Agarwal , Mr. Katru Anand
161	14EJCEC140	PARAG MANGAL		
162	14EJCEC141	PARUL SHARMA		
163	14EJCEC160	RAGHAV KABRA		
164	14EJCEC163	RAJAT KUMAR SAINI	DYNAMIC WEB APPLICATION	Mr. Jitendra Sharma, Mr. Bhoopesh Kumawat
165	14EJCEC082	KAJAL KHANDELWAL		
166	14EJCEC107	MANTHAN RAWAT		
167	14EJCEC111	MAYUR GUPTA		
168	14EJCEC125	NEHA JADOUN	ENHANCED VAULT LOCKER PRIVACY AND SECURITY USING SMART PHONE ANDROID APP WITH PASSWORD PROTECTION	Mr. Jitendra Sharma, Mr. Bhoopesh Kumawat
169	14EJCEC027	ANUKRITI SHARMA		
170	14EJCEC044	AYUSHI JAIN		
171	14EJCEC867	SUNAINA YADAV		
172	14EJCEC029	ANUSHREE RAWAT	ENHANCED VAULT LOCKER PRIVACY AND SECURITY USING SMART PHONE ANDROID APP WITH PASSWORD PROTECTION WIRELESS VOLTAGE DETECTOR	Mr. Sandeep Dotya , Mr. Naresh Kumar
173	14EJCEC032	ARCHANA VISWANATH		
174	14EJCEC040	ASTHA JAISWAL		
175	14EJCEC048	BHARAT RAMAWAT		
176	14EJCEC145	PAWAN KUMAR LAKHARA	ENHANCED VAULT LOCKER PRIVACY AND SECURITY USING SMART PHONE ANDROID APP WITH PASSWORD PROTECTION	
177	14EJCEC156	PRAVIN SHARMA		
178	14EJCEC054	DEEPAK KUMAR		

			WIRELESS VOLTAGE DETECTOR WIRELESS VOLTAGE DETECTOR ARDUINO BASED WEATHER MONITORING SYSTEM	
179	14EJCEC041	ATUL SHARMA	WIRELESS VOLTAGE DETECTOR ARDUINO BASED WEATHER MONITORING SYSTEM SMART STREET LIGHTENING SYSTEM USING PIEZOELECTRICITY	
180	14EJCEC004	ABHINANDAN KUMAR		
181	14EJCEC017	AMIT KUMAR		
182	14EJCEC164	RAJNISH KUMAR VEDANT		
183	14EJCEC173	ROBIN KUMAR JAKHAR	FULLY AUTOMATED SOLAR GRASS CUTTER	Mr. Sandeep Dotya , Mr. Naresh Kumar
184	14EJCEC134	NIKITA AGARWAL		
185	14EJCEC191	SAURABH RAHEJA		
186	14EJCEC180	SALONI SHARMA		
187	14EJCEC181	SANATH CHAUDHARY	RED SIGNAL ALERTING FOR TRAIN USING WIRELESS COMMUNICATION	Mr. Rakesh Kardam, Ms. Nidhi Jain
188	14EJCEC152	PRASHANT KUMAR JHA		
189	14EJCEC129	NIDHI NAGAR		
190	14EJCEC162	RAJAN KUMAR		
191	14EJCEC126	NEHA KUMARI	WIRELESS ELECTRONIC NOTICE BOARD	Ms. Shivam Upadhyay, Ms. Deepmala Kulshretha
192	14EJCEC194	SHASHIKANT SHARMA		
193	14EJCEC865	SUDEEP GIRI		
194	14EJCEC851	SHUBHAM BANSAL		
195	14EJCEC046	AZAHARUDDIN KHAN	WIRELESS ELECTRONIC NOTICE BOARD POST ACCIDENTAL EMERGENCY SYSTEM	Ms. Shivam Upadhyay, Ms. Deepmala Kulshretha
196	14EJCEC051	BHUPENDRA SINGH		
197	14EJCEC055	DEEPAK RANKAWAT		
198	14EJCEC057	DHEERAJ KUMAR GOYAL	POST ACCIDENTAL EMERGENCY SYSTEM	
199	14EJCEC097	KRITIKA SINGH		
200	14EJCEC101	MAHENDRA GODARA		
201	14EJCEC139	OSCEAN RAINA		
202	14EJCEC116	MEHAK PANDITA	POST ACCIDENTAL EMERGENCY SYSTEM AUTOMATIC VEHICLE ACCIDENT DETECTION AND RESCUE	
203	14EJCEC166	RAKSHITA		
204	14EJCEC168	RAVEENA SHARMA		
205	14EJCEC171	RISHABH MITTAL		
206	14EJCEC175	ROHIT VERMA	MOBILE CONTROLLED ROBOT WITHOUT MICROCONTROLLER VEHICLE TRACKING SYSTEM	
207	14EJCEC172	RISHABH RAJ		
211	14EJCEC197	SHIVANGI NANGIA		
212	14EJCEC199	SHREYA SHARMA		
213	14EJCEC859	SHUBHAM VEER SAXENA	MOBILE CONTROLLED ROBOT WITHOUT MICROCONTROLLER VEHICLE TRACKING SYSTEM	
214	14EJCEC868	SURABHI SINGH		
215	14EJCEC862	SIMRAN BHATIA		
216	14EJCEC871	SUWARNA SANT		

217	14EJCEC882	VARSHA CHATURVEDI		
218	14EJCEC864	SPARSH ABHISHEK		

2. Research laboratories

S.No	Name of Faculty	Research lab name	Faculty member/Student name
1	Mr. Ashutosh	Centre for Apps and Ideas	Developments of apps which comply with all social issues of india like agriculture, weather science, health, space science, education, employment, poverty etc.
2	Mr. Vikas Sharma	XENONIDS(Robotics Lab)	Product development in the area of Robotics, Embedded Systems and Mechatronics

3. Instructional materials

- **Course file:**
  Each & every faculty prepare course wise lecture schedules, resource material and other rel ated instruction material before commencement of semester and is added to moodle. The st udents can login and access the content though internet.
- **PowerPoint Presentation:**
  Content wise instruction material is developed including PPT presentations, for all the cours es prior to the commencement of each semester which is monitored by course coordinators.
- **Hand Outs:**
  Where ever necessary, additional material and hand outs are prepared and the same is made available to students through Moodle.
- **Laboratory manuals:**
  Laboratory manuals: are prepared and Laboratory instruction is given through Lab manuals at the beginning of each semester and demonstration classes are delivered for better underst anding of concepts behind laboratory experiment.
- Working models/charts/monograms etc.

- Relevant Charts are displayed in all Laboratories so that realization becomes easy for the stu dents.

- A project model competition titled “J-TechTrix” held every year for students to enhance their interpersonal and intrapersonal skills.

- The department has many models created by students and are been displayed in Laboratori es. This prototype models helps the students to understand the working of basics and recent t echnologies in a better manner.

5.7.4. Consultancy (from Industry) 5/(5)

Details of Consultancy by Faculty Member/Staff of Electronics & Communication Engg. Department

S. No.	Name of Faculty/Staff Member	Designation	Particulars	2015-16 (Rs.)	2016-17 (Rs.)
1	Mr. Raj Kumar Jain	Astt. Professor	Mentoring of students outside JECRC for GATE examination	30000	45000
2	Mr. Rajendra Sirowha	Lab Technician	Reparing of Computer Hardware	12000	15000
3	Babulal Sharma	Lab Technician	Home Appliances (T.V., Radio, Setup Box, etc.)	Nil	24000
4	Rakesh Kumar	Lab Technician	Home Wiring and Appliances (Press, Water Heater, etc.)	Nil	18000
Total Amount Rs.				**42000**	**102000**

5.8 Faculty Performance Appraisal and Development System 30/ (30)

Jaipur Engineering College and Research Centre, Jaipur

FACULTY APPRAISAL FORM (Session 2016-2017)

For best faculty award

Total 200 points

Name of Faculty Member: **Designation:** **Department:**

S. No.	Item Name		Maximum Points	Points obtained
1	Academic result 30 points average (90% students having more than 70% : 30 points, 80-89% students having more than 70% result: 27 points, 70-79% students having more than 70% result: 24 points, 60-69% students having more than 70% result: 21, 60-69% students having more than 60% result: 18 points, 50-59% students having more than 60% result: 15 points else ZERO)		30	
	Example:			
	Theory Subject	Points obtained		
	Sub-1	30		
	Sub-2	27		
	Sub-3	0		
	Sub-4	18		
	Average points scored	**75/4 i.e. 18.75**		
	No marks for Labs subjects			
2	Research Publication 20 points average (1 sci indexed publication: 10 points, 1 publication having ISSN number : 5 points, Else ZERO)		20	
3	Faculty development programme 10 point average (one faculty development programme minimum 5 days attended 5 points, 2 points for attending 2 days workshop, subject to maximum of 10)		10	
4	International / National conference 10 points average (5 points for attending International, 3 points for attending National of repute, 2 points for National conference)		10	
5	Research grant average 20 points for having grant of more than 5 lakh, if only project submitted to DST/other govt agency: 10 points, subject to maximum 20		20	
6	Patent 10 points		10	
7	Product development / startup 10 points		10	
8	Course material prepared for Govt job cell 15		15	
9	Innovation in teaching learning, video lecture, online MOOCs, Online notes uploading, any other 20 points		20	
10	Technical activity organized 5 points		5	
11	Participation in social responsibility 5 points / activity subject to maximum of 10		10	
12	Institute level activity organized 5 points, participation 2 points subject to maximum of 5		5	
13	Any award received, session chair in conference, guest lecture, invited talk, etc. 5 points		5	
14	HOD recommendation maximum 30 points (Departmental responsibility 2 points, NBA related activity 5)		30	
		Total	200	

Note: HOD will verify the documentary proof.

Signature of Faculty Signature of HOD

5.9 Visiting/Adjunct/Emeritus Faculty etc. 10/ (10)

1. Mr. Harish
2. Ms. Ankita
3. Mr. Siddhartha (3)

CRITERION 6	Facilities and Technical Support	80

6. FACILITIES AND TECHNICAL SUPPORT (80)

6.1. Adequate and well equipped laboratories, and technical manpower (30)

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important Equipment	Weekly Utilization Status	Technical Manpower Support		
					Name of the technical staff	Designation	Qualification
1	EDC LAB	3 (20)	P-N junction diode apparatus Zener .diode apparatus Transistor characteristics apparatus. Clipping & Clamping circuit apparatus. Half wave, Full wave bridge rectifier, Common collector transistor amplifier FET characteristics. Scientech 50Mhz digital storage, Digital function generator 2Mhz. Digital Function generator 2Mhz Two stage R-C coupled amplifier kit.	24	Mr. Sitaram Saini	Lab Technician	Diploma In Electronics
2	MEASUREMENT & INSTRUMENTATION LAB	3 (20)	Wein's Bridge (Capacity), Anderson's Bridge, Maxwell Inductance Bridge, Wein's Bridge (frequency). Ultrasonic digital distance meter. RTD Trainer kit, Single Phase Energy Meter LCR-Q Bridge . Solar Educational Kit Digital Earth Tester	24	Mr. Amit Jain	Sr. Instructor	Polytechnic Diploma
3	ELECTRONIC INSTRUMENTATION	3 (20)	Push Pull Power Amplifier Kit, Voltmeter, Voltmeter, Two Stage R-C Coupled Amplifier, Voltage Regulator, Voltage Multiplier, Opamp Designer Trainer Kit, Bootstrap Sweep Generator, BJT Trainer Kit ,	24	Ms. Vaishali Yadav	Lab Technician	Diploma In Electronics

	WORKSHOP		Attenuator &Equalizers CRO, Dual Trace With Ct CRO, Dual Trace With Ct &FG, DECADE CAPACITANCE BOX, Decade Résistance Box, Decade Inductance Box, Digital Multimeter, Emitter Follower , Function Generator Function Generator With Frequency Counter, FET Trainer Kit, Rectifier Trainer Kit, Oscillator Trainer Kit, Opamp Characteristics Trainer Kit, P-N Diode & Zener Diode Trainer Kit, Power Supply,				
4	DIGITAL ELECTRONICS LAB	3 (20)	Scientech Digital Kit(5), Digital Trainer Kit(10)	24	Mr. Ramovtar Saini	Lab Technician	Diploma In Electronics
5	ANALOG ELECTRONICS LAB	3 (20)	Series Voltage Regulator, Shunt Voltage Regulator, Wein's Bridge Oscillator, FET Common Source Amp. Push Pull Amp. Phase Shift Oscillator, Hartley Colpitt Oscillator, UJT Characteristics, UJT Relaxation, MOSFET, CMOS IC, Digital Storage CRO, Function Generator(6), CRO(6)	24	Mr. babu Lal Sharma	Lab Technician	Diploma In Electronics
6	COMMUNICATION LAB 1ST	3 (20)	Sampling & Reconstruction Trainer, Data Formatting & Carrier Modulation Transmitter, TDM Pulse Code Modulation Receiver, TDM Pulse Code Modulation Transmitter, Delta, Adaptive Modulation & Demodulation. PAM, PPM, PWM Mod. & Demodulation. Transmission Line Trainer , CRO, Digital Storage CRO 150 MHz, FM modulation & Demodulation, DSB/SSB AM Modulation .Tx, DSB/SSB AM Demodulation. Rx, Power Project Board, TDM PA Mod/Demodulator, Dual Power Supply, Data Formatting & carrier modulation / Receiver Trainer, function Generator	24	Mr. Gaurav Goyal	Lab Technician	Diploma In Electronics
7	DIGITAL	3 (20)	PCM, DPCM, CVSD modulation & demodulation	24	Mr. Gaurav	Lab	Diploma In

	COMMUNICATION LAB		trainer, MSK modulation & demodulation Trainer Delta , adaptive delta ,sigma delta Mod. & Demodulation trainer, Cyclic code experimental setup, Block code encoder , Block code decoder ASK, FSK BPSK, DBPSK experimental Setup TDM-PAM trainer kit, Sampling & Reconstruction trainer, Data Formatting and Carrier modulation, Data formatting & carrier Demodulation, 4 channel TDM-PCM transmitter Receiver, QPSK, OQPSK, DQPSK modulation & demodulation trainer		Goyal	Technician	Electronics
8	MICROPROCESSOR LAB	3 (20)	Microprocessor kit 8085(15)	24	Mr.Rajesh Yogi	Lab Technician	Diploma In Electronics
9	MICROWAVE LAB	3 (20)	klystron power supply , Gunn power supply, Microwave test bench(klystron), Microwave test bench (Gunn diode), Spectrum analyzer, VSWR meter, Solid state klystron power supply, CRO 150 MHz, Microwave test bench(klystron), Microwave test bench (Gunn diode), Microwave test bench (s band)	24	Mr.Rakesh Talwara	Lab Technician	Diploma In Electronics
10	ANTENNA AND WIRELESS COMMUNICATION LAB	3 (20)	GPS Trainer Kit, Radar Trainer Kit, CRO dual channel, function generator, CDMA direct sequence spread, spectrum (DSSS) trainer kit, antenna trainer lab ATS40, antenna trainer ATS2000, satellite communication trainer kit, antenna digital RF TX ATS200IT, satellite communication trainer up link TX, satellite communication trainer down link RX, satellite communication trainer, Satellite transponder, fiber optic trainer, Fiber optic connectors kit display board, fiber optic cable sample kit display board, laser trainer model lt2506, voice communication using DSSS	24	Mr.Harish Kumar	Lab Technician	Diploma In Electronics

SAMPLE COPY OF LAB FILE

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

ELECTRONICS AND COMMUNICATION DEPARTMENT

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

LAB FILE

EDC LAB

LAB IN CHARGE : - MANGILAL

TECHNICAL ASSISTANT: - Mr. Sitaram Saini

SAMPLE COPY OF LAB FILE (Contd..)

INDEX

Table 6.3: Sample of Index in EDC LAB File

1. Vision and Mission

Vision of Institute

To become a renowned center of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission of Institute

M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.

M3. Offer opportunities for interaction between academia and industry.

M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Vision of Department

To contribute to the society through excellence in scientific and technical education, teaching and research aptitude in Electronics & Communication Engineering to meet the needs of Global Industry.

Mission of Department

M1. To equip the students with strong foundation of basic sciences and domain knowledge of Electronics & Communication Engineering, so that they are able to creatively apply their knowledge to design solution of problems arising in their career path.

M2. To induce the habits of lifelong learning in order to continuously enhance overall performance.

M3. Students are able to communicate their ideas clearly and concisely so that they can work in team as well as an individual.

M4. To make the students responsive towards the ethical, social, environmental and economical growth of the society.

2. Program Outcomes (PO's)

PO1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and Electronics & Communication Engineering specialization to the solution of complex Electronics & Communication Engineering problems.

PO2. **Problem analysis:** Identify, formulate, research literature, and analyze complex Electronics & Communication Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. **Design/development of solutions:** Design solutions for complex Electronics & Communication Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of Electronics & Communication Engineering experiments, analysis and interpretation of

data, and synthesis of the information to provide valid conclusions.

PO5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modeling to complex Electronics & Communication Engineering activities with an understanding of the limitations.

PO6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Electronics & Communication Engineering practice.

PO7. **Environment and sustainability:** Understand the impact of the professional Electronics & Communication Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the Electronics & Communication Engineering practice

PO9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. **Communication**: Communicate effectively on complex Electronics & Communication Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. **Project management and finance**: Demonstrate knowledge and understanding of the Electronics & Communication Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of Electronics & Communication Engineering changes.

3. Program Educational Objectives (PEO's)

PEO1. To provide students with the fundamentals of engineering sciences with more emphasis in Electronics & Communication Engineering by way of analyzing and exploiting electronics & communication challenges.

PEO2. To train students with good scientific and Electronics & Communication Engineering knowledge so as to comprehend, analyze, design and create electronics & communication based novel products and solutions for the real life problems.

PEO3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate

Electronics & Communication Engineering with social issues.

PEO4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful Electronics & Communication Engineering professional career.

PEO5. To prepare students to excel in electronics & communication based industry and higher education by educating students in Electronics & Communication Engineering field along with high moral values and knowledge.

4. Program Specific Outcomes (PSO's)

PSO1. Ability to apply the concepts of Embedded Systems and its applications.

PSO2. Ability to apply Field Programmable Gate Array based applications.

5. COURSE OUTCOMES

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Course Outcome:

Course Code	Course Name	Course Outcome	Details
3EC4-21	Electronic Devices Lab	CO 1	Understand the characteristics of different Electronic Devices.
		CO 2	Verify the rectifier circuits using diodes and implement them using hardware.
		CO 3	Design various amplifiers like CE, CC, common source amplifiers and implement them using hardware and also observe their frequency responses
		CO 4	Understand the construction, operation and characteristics of JFET and MOSFET, which can be used in the design of amplifiers.
		CO 5	Understand the need and requirements to obtain frequency response from a transistor so that Design of RF amplifiers and other high frequency amplifiers is feasible

CO-PO Mapping:

Subject	Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
3EC4-21 Electronic Devices Lab	CO 1	3	2	3	2	1							1
	CO 2	2	3	1	3	3							2
	CO 3	2	1	2	3	3							
	CO 4	3	2	3	2	2							1
	CO 5	3	2	1	2	2							

3: Strongly 2: Moderate 1: Weak

6. SYLLABUS

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

3EC4-21	PCC	Electronics Devices Lab	MM:50	0L:0T:2P	1 credit

List of Experiments

Sr. No.	Name of Experiment
1.	Study the following devices: (a) Analog& digital multimeters (b) Function/ Signal generators (c) Regulated d. c. power supplies (constant voltage and constant current operations) (d) Study of analog and digital CRO, measurement of time period, amplitude, frequency & phase angle using Lissajous figures.
2.	Plot V-I characteristic of P-N junction diode & calculate cut-in voltage, reverse Saturation current and static & dynamic resistances.
3.	Plot the output waveform of half wave rectifier and effect of filters on waveform. Also calculate its ripple factor.
4.	Study bridge rectifier and measure the effect of filter network on D.C. voltage output & ripple factor.
5.	Plot and verify output waveforms of different clipper and clamper.
6.	Plot V-I characteristic of Zener diode
7.	Study of Zener diode as voltage regulator. Observe the effect of load changes and determine load limits of the voltage regulator
8.	Plot input-output characteristics of BJT in CB, CC and CE configurations. Find their h-parameters.
9.	Study of different biasing circuits of BJT amplifier and calculate its Q-point.
10.	Plot frequency response of two stage RC coupled amplifier & calculate its bandwidth .
11.	Plot input-output characteristics of field effect transistor and measure I_{dss} and V_P.
12.	Plot frequency response curve for FET amplifier and calculate its gain bandwidth product.

7. INSTRUCTIONAL METHODS

7.1. Direct Instructions:

I. Black board presentation.

II. Power point presentation.

7.2. Interactive Instruction:

I. Practical on respective equipment.

II. Practical Examples.

8. LEARNING MATERIALS

8.1 Lab Manual

8.2 Reference Books

9. ASSESSMENT OF OUTCOMES

9.10 End term Practical exam

9.11 Quiz

9.12 Daily Lab interaction.

10. INSTRUCTIONS SHEET

We need your full support and cooperation for smooth functioning of the lab.

DO's

1. Please switch off the Mobile/Cell phone before entering Lab.
2. Enter the Lab with complete data.
3. Check whether all equipments are available at your desk before proceeding for experiment
4. Intimate the lab In charge whenever you are incompatible in using apparatus
5. Arrange all the equipments and seats before leaving the lab.
6. Keep the bags in the racks.
7. Enter the lab on time and leave at proper time.
8. Maintain the decorum of the lab.
9. Utilize lab hours in the corresponding experiment.
10. Get your file checked by lab In charge before using it in the lab.

DON'TS

- Don't mishandle the apparatus.
- Don't bring any external material in the lab.
- Don't make noise in the lab.

- Don’t bring the mobile in the lab. If extremely necessary then keep ringers off.
- Don’t enter in the lab without permission of lab Incharge.
- Don’t litter in the lab.

BEFORE ENTERING IN THE LAB

1. All the students are supposed to prepare the theory regarding the next experiment
2. Students are supposed to bring the practical file and the lab copy.
3. Previous practical should be written in the practical file.
4. Any student not following these instructions will be denied entry in the lab.

WHILE WORKING IN THE LAB

1. Adhere to experimental schedule as instructed by the lab incharge.
2. Get the previously executed program signed by the instructor.
3. Get the output of the current program checked by the instructor in the lab copy.
4. Each student should work on his/her assigned computer at each turn of the lab.
5. Take responsibility of valuable accessories.
6. Concentrate on the assigned practical and do not play games.
7. If anyone caught red handed carrying any equipment of the lab, then he will have to face serious consequences.

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EDC LAB (3EC4-21)

SESSION (2017-18)

Table 6.6: Sample of Continuous Evaluation Sheet

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Communication Lab-1 (5EC9A)

SESSION (2018-19)

Experiment Conduction Sheet – 5th C2.

Sub-group No. / Exp. No.	A		B		C		D		E	
	P	S	P	S	P	S	P	S	P	S
Exp. No. 1	9/7	16/7	13/8	20/8	30/7	13/8	23/7	30/7	16/7	23/7
Exp. No. 2	16/7	23/7	9/7	16/7	13/8	20/8	30/7	13/8	23/7	30/7
Exp. No. 3	23/7	30/7	16/7	23/7	9/7	16/7	13/8	20/8	30/7	13/8
Exp. No. 4	30/7	13/8	23/7	30/7	16/7	23/7	9/7	16/7	13/8	20/8
Exp. No. 5	13/8	20/8	30/7	13/8	23/7	30/7	16/7	23/7	9/7	16/7
Exp. No. 6	20/8	27/8	1/10	8/10	24/9	1/10	24/9	1/10	27/8	17/9
Exp. No. 7	27/8	17/9	20/8	27/8	1/10	8/10	1/10	8/10	17/9	24/9
Exp. No. 8	17/9	24/9	27/8	17/9	20/8	27/8	20/8	27/8	24/9	1/10
Exp. No. 9	24/9	1/10	17/9	24/9	27/8	17/9	27/8	17/9	1/10	8/10
Exp. No. 10	1/10	8/10	24/9	1/10	17/9	24/9	17/9	24/9	20/8	27/8

P- Date of performing experiments

S- Date of submitting experiments

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Production Practice Lab

SESSION 2017-18

Table 6.7: Sample of Continuous Evaluation Sheet

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Communication Lab-1 (5EC9A)
SESSION (2018-19)
Continuous Evaluation Sheet- V-C2

Sr. No.	Roll No.	Name of Student	Experiment in Lab File [15]										Performance MM: 10	Viva-1 MM: 5	Viva-2 MM: 5	Attendance MM: 10	Total (Sessional) MM: 45
			1	2	3	4	5	6	7	8	9	10					
1	16EJCEC154	PRIYANSHI AJMERA	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	9	4	4	10	41
2	16EJCEC155	PULKIT MUNJRAL	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	8	4	4	9	38
3	16EJCEC156	PUSHPENDRA SARAN	1	1	1	1	1	1	1.5	1	1.5	1.5	7	3	3	8	32.5
4	16EJCEC157	RACHITA JAIN	1	1	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	8	4	4	8	37.5
5	16EJCEC158	RAGHAV LADHA	1	1	1	1	1	1.5	1.5	1.5	1	1.5	7	3	4	9	35
6	16EJCEC159	RAHUL AGARWAL	1	1	1	1	1	1	1	1.25	1.25	1.25	6	2	2	8	28.75
7	16EJCEC160	RAHUL KAYAMKHANI	1	1	1	1	1	1.25	1.25	1.5	1.5	1.5	7	2	3	8	32
8	16EJCEC161	RAHUL KULHARI	1	1	1	1.25	1.25	1.25	1.25	1.5	1.25	1.5	8	3	3	8	34.25
9	16EJCEC162	RAHUL MODI	1	1	1	1	1.5	1.25	1.5	1.5	1.5	1.5	8	3	3	10	36.75
10	16EJCEC163	RAHUL SHARMA	1	1	1	1	1	1	1.25	1.25	1.5	1.5	7	2	2	9	31.5
11	16EJCEC164	RAHUL SUTHAR	1	1	1	1	1	1	1.25	1.5	1.5	1.5	7	3	4	7	32.75
12	16EJCEC165	RAHUL VIKRAM CHAUHAN	1	1	1	1.25	1.25	1.25	1.5	1.5	1.5	1.5	8	4	3	8	35.75
13	16EJCEC166	RAJAT KATARIA	1	1	1	1	1	1.25	1.25	1.5	1.5	1.5	7	3	3	8	33
14	16EJCEC167	RAMAKANT	1	1.25	1.25	1.25	1.25	1.5	1.5	1.25	1.25	1.25	8	3	4	9	35.75
15	16EJCEC168	RANDHIR KUMAR GUPTA	1	1	1	1.25	1.25	1	1.25	1.25	1.25	1.25	7	3	3	9	33.5
16	16EJCEC169	RASHI PARIKH	1	1	1	1.25	1.25	1.25	1.25	1.25	1.5	1.5	8	3	3	9	35.25
17	16EJCEC170	RAUNAK KESHRI	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	10	4	5	10	43.5
18	16EJCEC172	RISHIKESH KUMAR JHA	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	10	4	5	10	43.5
19	16EJCEC173	RITESH RANJAN	1	1	1	1.25	1.25	1.25	1	1.25	1.25	1.25	8	3	3	8	33.5
20	16EJCEC175	RIYA AGARWAL	1.25	1.25	1.25	1.25	1.5	1.5	1.5	1.5	1.5	1.5	10	4	5	9	42

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

DETAIL OF EQUIPMENT
EDC & AE LAB

S. NO.	STOCK REG NO.	DATE	BILL NO.	PARTICULARS	MAKE	QTY.	AMOUNT
1.	01	1/07/2014	176	ANALOG LAB TRAINER KIT	MARS	01	10900
2.	02	1/07/2014	176	CLIPPING & CLAMPING EXP. KIT	MARS	01	3250
3.	03	1/07/2014	176	DIGITAL FUNCTION GENERATOR (2MHZ)	MARS	01	7500
4.	004	1/07/2014	176	HALF WAVE FULL WAVE BRIDGE RECTIFIER KIT	MARS	01	4150
5.	005	1/07/2014	176	DIGIT DIGITAL MULTIMETER (MECO 3.5)	MARS	05	7000
6.	008	1/07/2014	176	DUAL TRACE OSCILLOSCOPE (30 MHz)	SCIENTECH	07	132300
7.	009	1/07/2014	176	DIGITAL STORAGE OSCILLOSCOPE (50 MHz)	SCIENTECH	01	27200
8.	011	1/07/2014	176	ZENER DIODE EXP. KIT	MARS	01	3450
9.	006	1/07/2014	176	P-N JUNCTION DIODE EXP. KIT	MARS	01	3450
10.	010	1/07/2014	176	TRANSISTOR CHARACTERISTICS EXP. KIT	MARS	01	5600
11.	007	1/07/2014	176	SINGLE OUTPUT 30VDC OUTPUT POWER SUPPLY	MARS	01	6200
12.	012	28/07/2014	176	FET COMMON SOURCE AMPLIFIER EXP. KIT	MARS	01	2730
13.	013	28/07/2014	176	CMOS CHARACTERISTICS EXP.KIT	MARS	01	3840
14.	014	28/07/2014	176	ACTIVE FILTERS EXP. KIT	MARS	01	4100
15.	015	28/07/2014	176	SHUNT VOLTAGE REGULATOR EXP. KIT	MARS	01	6500
16.	016	28/07/2014	176	COMMON COLLECTOR TRANSISTOR AMPLIFIER KIT	MARS	01	2730
17.	017	28/07/2014	176	WEIN BRIDGE OSCILLATOR EXP. KIT	MARS	01	2370
18.	018	28/07/2014	176	TWO STAGE R-C COUPLED AMPLIFIER EXP. KIT	MARS	01	2730
19.	019	28/07/2014	176	UJT CHARACTERISTICS EXP. KIT	MARS	01	5400
20.	020	28/07/2014	176	MOSFET CHARACTERISTICS KIT	MARS	01	5050
21.	021	28/07/2014	176	FET CHARACTERISTICS EXP. KIT	MARS	01	5050
22.	022	28/07/2014	176	UJT RELAXATION OSCILLATOR KIT	MARS	01	2370
23.	023	28/07/2014	176	PHASE SHIFT OSCILLATOR KIT	MARS	01	2370
24.	024	28/07/2014	176	PUSH PULL AMPLIFIER KIT	MARS	01	3090
25.	025	28/07/2014	176	SERIES VOLTAGE REGULATOR KIT	MARS	01	6500
26.	026	28/07/2014	176	COMMON EMITTER AMPLIFIER KIT	MARS	01	2730

27.	027	28/07/2014	176	FUNCTION GENERATORS (2 MHz)	MARS	04	30000
28.	028	28/07/2014	176	HARTLEY AND COLPITTS OSCILLATOR	NVIS	01	4840
TOTAL AMOUNT							**303400**

SAMPLE COPY OF LAB FILE (Contd..)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

ODD SEMSETER

S.No.	BRANCH	LIST OF RUNNING LABS IN ODD SEM
1	3ECE	EDC LAB

EVEN SEMSETER

S.No.	BRANCH	LIST OF RUNNING LABS IN EVEN SEM
1	4ECE	AE LAB

SAMPLE COPY OF LAB FILE (Contd..)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

LIST OF EXPERIMENT OF ODD SEM

EDC LAB (3ECE)

S.No.	LIST OF PRACTICALS
1	Study the following devices: (a) Analog & digital multi meters(b) Function/ Signal generators (c) Regulated d. c. power supplies (constant voltage and constant current operations) (d) Study of analog CRO, measurement oftime period, amplitude, frequency & phase angle using Lissajous figures.
2	Plot V-I characteristic of P-N junction diode & calculate cut-in voltage, reverse Saturation current and static & dynamic resistances
3	Plot V-I characteristic of zener diode and study of zener diode as voltage regulator. Observe the effect of load changes and determine load limits of the voltage regulator.
4	Plot frequency response curve for single stage amplifier and to determine gain bandwidth product
5	Plot drain current - drain voltage and drain current – gate bias characteristics of field effect transistor and measure of Idss &Vp
6	Application of Diode as clipper & clamper
7	Plot gain- frequency characteristic of two stage RC coupled amplifier & calculate its bandwidth and compare it with theoretical value
8	Plot gain- frequency characteristic of emitter follower & find out its input and output
9	Plot input and output characteristics of BJT in CB, CC and CE configurations. Find their h-parameters
10	Study half wave rectifier and effect of filters on wave. Also calculate theoretical & practical ripple factor.
11	Study bridge rectifier and measure the effect of filter network on D.C. voltage output & ripple factor.

SAMPLE COPY OF LAB FILE (Contd..)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

LIST OF EXPERIMENT OF EVEN SEM

AE LAB (4ECE)

S.No.	LIST OF EXPERIMENTS
1	Plot gain-frequency characteristics of BJT amplifier with and without feedback in the emitter circuit and determine bandwidths, gain bandwidth products and gains at 1kHz with and without negative feedback.
2	Study of series and shunt voltage regulators and measurement of line regulation and ripple factor.
3	Plot and study the characteristics of small signal amplifier using FET.
4	Study of push pull amplifier. Measure variation of output power & distortion with load.
5	Study Wein bridge oscillator and observe the effect of variation in R oscillator frequency
6	Study transistor phase shift oscillator and observe the effect of variation in R & C \on oscillator frequency and compare with theoretical value.
7	Study the following oscillators and observe the effect of variation of C on oscillator frequency: (a) Hartley (b) Colpitts
8	Design Fabrication and Testing of k-derived filters (LP/HP).
9	Study of a Digital Storage CRO and store a transient on it.
10	To plot the characteristics of UJT and UJT as relaxation.
11	To plot the characteristics of MOSFET and CMOS.

Individual Lab Instructor Data Sheet

JECRC, JAIPUR

Name of the Lab Instructor : AMIT JAIN

Present Designation : LAB INSTRUCTOR

Email Id : amitjain6879@gmail.com

Contact Details : 9314088836

I. Particulars of Educational Qualification: (*only completed*)

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University
UG	B.A	ARTS	2006	PVT.	RAJASTHAN UNIVERSITY
DIPLOMA	DIPLOMA	ELECTRONICS	2000	KHAITAN POLYTECHNIC COLLEGE JAIPUR	BTER JODHPUR [RAJ]

II. Academic Experience : 16Y

III. Industrial Experience : NIL

IV. Awards/Achievements : NIL

VI. Research/Specialization : NIL

SAMPLE COPY OF TIME TABLE OF
EDC LAB FOR 2017-2018

EDC-3(Sitaram Saini) (BF-14)(24)	8:30	9:30	10:30	11:30	12:30	1:30	2:30
	1	2	3	4	5	6	7
Mon	AE Lab EDC-LabA1, DPS		AE Lab EDCC1-Lab1,C1,ML				
Tue	AE Lab EDC-LabA2, DPS		AE Lab EDCC2-Lab1, C2,ML				
Wed	AE Lab EDCA3-Lab1, DPS		AE Lab EDCC2-Lab1, C3,ML				
Thu	AE Lab EDCB1-Lab1, DPS					AE Lab EDCD2-Lab1, ML	
Fri	AE Lab EDCB2-Lab1,DPS					AE Lab EDCD3-Lab1, ML	
Sat	AE Lab EDCB3-Lab1, DPS					AE Lab EDCD1-Lab1, ML	

6.2. Additional facilities created for improving the quality of learning experience in laboratories (25)

Sr. No.	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Relevance to POs/PSOs
1.	Establish "Robotics Lab" (Xananoids Club)	Lab containing electronic, pneumatic instruments, Provide the training to students: regarding newly job oriented and beyond syllabus courses	To make students ready to industry	4 hrs per day (24 hrs. per week)	Students developed, robotics based, Robotos in: Embedded system design, Image processing, Machine learning and IoT based projects	PO1, PO3, PO4, PO5, PO9, PO11, PO12
2.	Provide training on "Embedded Systems & Robotics" By TechieNest, (An ISO 9001:2008 Certified Company)., Jaipur	During this training students would be trained in Embedded Systems & Robotics and they would be also aware about IoT technology.	It will help them in grabbing various job opportunities in MNCs.	The contents covered during 90 hours for a batch.	students would be prepared to design Voice Control Robot, SPY Robot Robo Password access.	PO1, PO3, PO4, PO5, PO9, PO11, PO12
3.	Provide training on	After completion of training students will get	It will help them in grabbing	40 Hours for a batch	Students will be trained in LINUX based operating	PO1, PO3, PO4, PO5,

	"LINUX" By Red Hat India Private Ltd	prepared for RHCSA (Red Hat Certified System Administrator) Exam and after this exam they will be RHCSA certified .	various job opportunities in MNCs.		systems	PO9, PO11, PO12
4.	Provide training on "Embedded & Robotics design" By Sakrobotix research and startup centre, Bhuvneshwar	After completion of this course students learnt about basics of embedded and robotics in electronics field.	It will help them in grabbing various job opportunities in MNCs.	28 Hours for a batch		PO1, PO3, PO4, PO5, PO9, PO11, PO12

Additional Facilities mapping with PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Establish "Robotics Lab" (xananoids)	M	M	H	H	H	M	L	-	H	M	H	H
Provide training on "Embedded Systems & Robotics" By TechieNest, (An ISO 9001:2008 Certified Company)., Jaipur	M	M	H	H	H	M	L	-	H	M	H	H
Provide training on "LINUX" By Red Hat India Private Ltd	M	M	M	H	H	M	L	-	H	M	-	H
Provide training on "Embedded & Robotics design" By Sakrobotix research and startup centre, Bhuvneshwar	M	M	M	H	H	M	L	-	H	M	M	H

REPORT ON TECHINEST TRAINING

Course Name: **Embedded Systems & Robotics**

Faculty Coordinator:

S.No.	Name	Department	Contact	Email
1	Devesh Gupta	ECE	9950005942	deveshgupta.ece@jecrc.ac.in

1. Duration of Training

Slot-1 Training Duration (90 Hours)

Date- 22th Jan.2018 to 15th March.2018

Time- 2:00 pm to 4:00 pm

Venue- Cad Lab (CP-12, B Block)

Slot-2 Training Duration (90 Hours)

Date- 12th Feb.2018 to 5th April.2018 (approximated)

Time- 2:00 pm to 4:00 pm

Venue- Basement (CP-11, B- Block)

2. No. of Students Attending Training:

Slot-1 training Total Registration: 35

S. No.	Branch	6th Sem.	4th Sem.	Total
1	ECE	6	29	35

Slot-2 training Total Registration: 21

S. No.	Branch	6th Sem.	4th Sem.	Total

1	ECE	14	7	21

3. Type of Certification:

After this training, students will be evaluated based on theory and practical examinations certified by **TechieNest, (An ISO 9001:2008 Certified Company).**

4. Skill Set:

During this training students would be trained in Embedded Systems & Robotics and they would be also aware about IoT technology. The detailed contents covered during this 90 hours program are as under.

Embedded Systems & Robotics (Regular Module)

DAYS	TOPIC	DURATION
1	***Introduction to ESR*** ***Introduction to Technologies*** ***Microprocessors & Microcontrollers***	3
2	***Embedded C Programming*** ***Light Emitting Diodes (LEDs)***	3
3	***Introduction and Working of LED Matrix***	3
4	***Seven Segment Displays (SSDs)***	3
5	***DC Motors***	3
6	***Sensors***	3
7	***Practical 12: IR sensor as a binary color sensor***	3
8	***Light Searching Robot***	3
9	***Liquid Crystal Display (LCD)***	3
10	***Displaying a String on LCD using AVR***	3
11	***Relays***	3

12	***Keys/Switches***	3
13	***Keypad Matrix***	3
14	***Analog to Digital Converters (ADC)*** ***Analog Sensors***	3
15	***QUERY SESSION WITH PRESENTATION FROM ABOVE TOPICS***	3
16	***Sensors continued…***	3
17	***Temperature Sensor based Alerting/Alarming System*** ***Ultrasonic Sensor***	3
18	***Touch Sensors/Screens***	3
19	***Accelerometers***	3
20	***Frequency Synthesizing Techniques(DTMF)***	3
21	***Communication Systems(RF communication)***	3
22	***Communication Protocols***	3
23	***Bluetooth***	3
24	***RFID***	3
25	***Global Services for Mobile (GSM)***	3
26	***IoT Based Automation***	3
27	***TV Remote***	3
28	***Layout & PCB Designing***	3
29	***Component Mounting, Testing & Verification***	3
30	**Query Solving Session**	3

5. Outcomes –

After completion of this training, students would be prepared to design Voice Control Robot, SPY Robot Gesture Control Wheel chair, GSM Based Notice Board, Multi-Layer Security System, SMART Home Automation System (Voice, Remote, Smart Phones, Internet etc) RFID based

Attendance System using Local Database, Maze Robo, Grid Control Robo, Line Follower Robo, Password access. It will help them in grabbing various job opportunities in MNCs.

Jaipur Engineering College & Research Centre
Department of Electronics & Comminication Engineering
List of Students Enrolled for training on "Embedded Systems" by Techienest in 1st Batch (Duration 22-01-2018 to 15-03-2018)

Sr. No.	Name of Students	Email ID	Mobile No.	Branch	Semester
1	Varsh Namdev	Varshanamdev.ece19@jecrc.ac.in	7727834521	ECE	VI- D
2	Anuj Goyal	anujgoyal10reso@gmail.com	9460552705	ECE	IV-A
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4	Jenisha yadav	jenisha0572@gmail.com	7073387357	ECE	IV-B
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6	Uttkarsh Goyal	uttkarsh97goyal@gmail.com	8239962966	ECE	VI- D
7	Sam Koshy Thomas	koshysamthomas@gmail.com	8058690347	ECE	IV-C
8	Bikram Bhattacharya	bikramajmer123@gmail.com	7426855589	ECE	IV
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10	Yash Tak	yasktak09@gmail.com	9166703041	ECE	IV
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12	Prabal Jain	prabal4575@gmail.com	9413424671	ECE	IV- C
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19	Raunak Keshri	raunakkeshri05@gmail.com	9785938545	ECE	IV –C
20	Nishant Jain	nishantjain141@gmail.com	8696570535	ECE	IV
21	Pulkit Munjal	pulkit.munjal@gmail.com	7791833592	ECE	IV –C
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28	Ramakant	ramakant0102@gmail.com	9789266425	ECE	IV –C

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30	Shubhangi Sharma	sshubhangi077@gmail.com	7737128651	ECE	VI –D
31	Parth Mathur	parth.mathur0@gmail.com	7597923555	ECE	IV –C
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33	Peehu Choudhary	peehuchoudhary08@gmail.com	7587168520	ECE	IV –C
34	Gaurav Vaishnav	gauravvaishnav17@gmail.com	7397869035	ECE	II –B
35	Gaurav Goyal	goyal.gaurav1999@gmail.com	7689995343	ECE	IV –B

PROFILE OF TECHINEST FACULTY

Harish Nagar

Embedded Research Engineer

He is a dynamic and highly committed technical professional and is constantly engaged in research and development. The purpose that drives him all his life is 'Don't Quit' because today's suffering can leave anyone as a champion.

He has certification in ARM, Arduino UNO by and Water Rocketry with expertise in

Embedded System design and manufacturing, Robotic Design and Implementation.

FORTE

- Arduino UNO
- AVR (Advanced Virtual RISC)
- ARM (Advanced RISC Machine)
- PCB Designing
- PCB Fabrication
- Embedded C
- IoT

Projects:

- Smart Restaurant System
- Real Time Clock
- GLCD Interfacing with Arduino and AVR.
- Nokia LCD Interfacing with Arduino and AVR.
- Biometric Project
- Security System
    - Temperature Controlled Automatic fan
    - Swarm Bot
    - Robotic Arm
    - Health monitoring system for soldiers.
    - Smart Helmet
    - Smart irrigation system
    - VLC controlled With Flex sensor
    - Electronic Voting Machine using Fingerprint Sensor.
    - Light controlled with Google assistant, Facebook, Telegram and other social site.

Training Delivery in colleges:

30-45 Days in house training given on Embedded Systems & Robotics in the following

Institutes-

- Jaipur Engineering College & Research Centre, Jaipur
- Rungta College of Engineering, Bhilai Chhattisgarh

Trained over 300+ students through training program of TechieNest SITP (Summer Industrial

Training Program, RITP (Regular Industrial Training Program) programs.

Also he has completed successful Workshops in-

- IIT Kanpur
- IIT Hyderabad
- IIT Roorkee
- IIIT Kalyani
- NIT Srinagar
- KITS Warangal
- NIFFT Ranchi
- Manipal University Jaipur
- Mody University Lakshmangarh, Rajasthan
- BIT Mesra, Jaipur
- Jabalpur Engineering College, Madhya Pradesh
- Prabhat Engineering college, Kanpur
- NIIT Neemrana, Rajasthan
- GEC Barton Hills
- JECRC, Jaipur
- Amity Noida and many more…

Jaipur Engineering College & Research Centre, Jaipur,
RAJASTHAN

Sakrobotix research and startup centre,

(Course Name- Embedded & Robotics design)

Faculty Coordinator's:

S.No.	Name	Department	Contact	Email
1	Vikas Sharma	ECE	9461060635	Vikassharma.ece@jecrc.ac.in
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3	Rahul Saini	EE	9785845882	Rahulsaini.ee@jecrc.ac.in

Duration of Training

Training Duration (28 Hours)

Date- 19th Jan.2018 to 22th Jan.2018
Time- 08.30 am to 5:30 pm
Venue: - Robotics Lab & BF-07

Branch vise Students Participated

Training Total Registration: 66

S. No.	Branch	Participations .	Sem
1	ECE	11	6th
2	Ist Year	66	--

Type of Certification

After completion of training students will get certificates from sakrobotix startup and research centre incubation with IIT guwahati in the field of robotics and embedded systems.

Syllabus of embedded and robotics training

In 28 Hours RHCSA training students will come through below mentioned syllabus.

- Micro-controller Basics
- Introduction to 8051 architecture
- Comparison of 8051 with RISC based systems and Microprocessors
- RAM, FLASH, UART and other peripherals.
- Pin configurations of different Micro-controllers
- Introduction to 8051 programming KIT
- Introduction & Assembly Language
- Branching & Looping
- I/O Programming
- Memory Modes & Arithmetic
- Introduction to C Programming for 8051
- Timers & counters, Serial Communication
- Interrupts & Handling ISR
- Software tools used for programming
- Hardware interfacing with peripherals

External Hardware Interfacing:

- Interfacing of LEDs
- Interfacing of Switches
- Interfacing of Relays
- Interfacing of LCD
- Interfacing of 7 Segment Display
- Interfacing of ADC
- Interfacing of Stepper Motors
- Interfacing of DC Motors
- Interfacing of Mobile Phone using DTMF
- Interfacing of Real Time Clock
- Interfacing of GSM
- Serial Communication
- Sensor Interfacing

Outcome of training

After completion of this course students learnt about basics of embedded and robotics in electronics field.

This learning will led students in their technical knowledge and better awareness and interest in technical activities and reflection will show in technical interviews of campus placements.

Generally students from 3rd and 4th year are well known of the robotics and latest technologies in electronics and comm. But by this students will start learning from their basic 1st semester so they can put it into gear from starting and till their final semester.

Level 2 training will start in next phase next year with updated and higher technologies syllabus like (Raspberry Pi, Arduino, ARM processor and IOT etc.). So students can enhance their basic knowledge after level 2 in the previous level.

A Report on
Training Session
"Linux by RED HAT ACADEMY"
Jaipur Engineering College and Research Centre, Jaipur

Organized By: Departments of ECE

Objective:

To aware research scholars, students and faculty members about the

- Brief Introduction of Red Hat
- Various career opportunists available in the market apart from Networking jobs
- Market significance of red Hat certification
- Career opportunities with red Hat certifications
- Training In campus is much better than training after Graduation/Masters

Target:

Faculty members, Research Scholars, Post-Graduate and Under-Graduate students of ECE, CSE, IT and EE departments.

Summary:

The ECE department of Jaipur Engineering College and Research Centre 15 day training session on "**Linux Operating system by RED HAT ACADEMY**" on 17th to 31th January 2018 at C- Block auditorium. And 19th Feb to 30 28 Feb 2018.

Institute
Network Nuts Delhi

Trainer-
Mr Alok Shrivastava
Mr Gurmeet Singh

Outcome:

- Students and research scholars were made aware about the RedHat linex operating system.
- Students knew about the benefits of such workshop so that they may get an insight into the field of linex which is an essential factor for the advancement of their career.

Scope for Improvement:

- Internationally renowned speakers may be call as resource persons.
- More no of participant can be gathered.
- Some hands on practice can be organized.

Training Session was held in two slots

Slot-1 was a successful event with Alok Sir and Gurmeet Sir, our students are get benefited with it up to a great extent and only because of both of you students are looking there career in Linux world.

Slot-2: As expected from Network Nuts team, again create a milestone. Mr. Somvir Sir, made huge impact on the students of all semester which shown there interest and instead of Holidays, students choose to learn Linux.

S. No	Roll No/ Student ID	Student Name	Mobile No	Email Id
1.	15EJCEC006	Abhishek Sandilya	9829159079	akash.mathur4444@gmail.com
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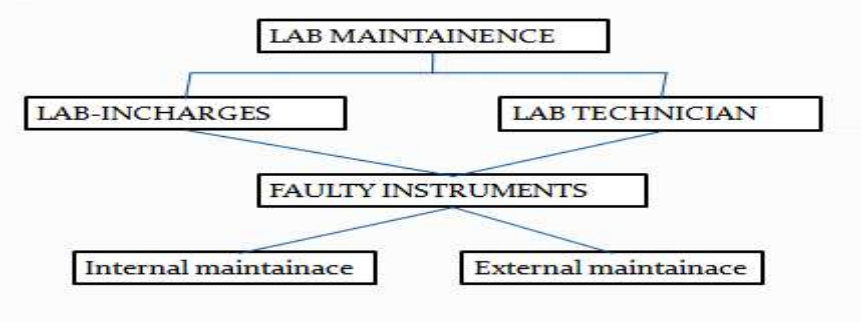
6.3. Laboratories: Maintenance and overall ambiance (10)

(Self-Explanatory)

Maintenance of Laboratory Equipments:-

- Repairing of the faulty equipments is carried out by the technical staffs along with one technical in-house expert.
- Regular maintenance of equipment is carried out during free time slots as well as in winter/summer break, at the end of every semester.
- Stock registers are maintained in the separate laboratories and verified regularly.
- Maintenance of computers is taken care by the maintenance department of the institute.

LAB MAINTANENCE BLOCK DIAGRAM



Lab maintenance Process

(1)Lab Feedback:

- Meeting arranges By Hod with the Lab In charge.
- All issue regarding Lab discuss Like maintenance ,requirement and set up of lab (Within 15 days)
- A feedback regarding lab also taken from student .
- All Data are collected.

(2)Lab Feedback corrective action :

- HOD discuses all feed back with Departmental lab In charge.
- Departmental Lab in charge collected all lab status and requirement with budget.

Repairing details of the faulty equipments are maintained in the department as under:

Status of Lab Maintenance

S. No.	Name of lab	Name of Equipment	Problem	Repairing Date	Component Required	Name of Lab Tech	BUDGET BY OUTSOURCE	BUDGET BY INHOUSE
1.	EDC	Wein Bridge Oscillator	Not Working	10.11.17	1k Pot Replace	Amit Jain	225	30
2.	Work Shop	T.V	Dead	10.11.17	Bu 2020 D	B.L. Shar ma	260	65
3.	DE	Power	Not	15.11.17	Bridge	Sitar am	225	25

	LAB	Supply	Working		Rectifier Replace	Saini		
4.	DE LAB	Power Supply	Not Working	15.11.17	Bridge Rectifier Replace	Sitaram Saini	225	25
5.	DE LAB	Power Supply	Not Working	15.11.17	Connector Loose	Sitar Am Saini	215	00
6.	DE LAB	Power Supply	Scientech	Not Working	16.11.17	IC 7905 Replace	Sitar am Saini	240
7.	DE LA B	Power Supply	Scientech	Not Working	16.11.17	IC7905 Replace	Sitar am Saini	240
8.	DE LAB	Power Supply	Scientech	Not Working	16.11.17	Connector Loose	Sitar am Saini	215
9.	EC LAB	Zener Diode Characterics	Mars	Not Reading	18.11.17	D.P.D.T/ Toggle Switch	Hem ant Shar ma	280
10.	Physics Lab	Energy Band Gap/PN Diode Ckt.	Mars	Not Work ing	30.12.17	TR1005 replace	Chandan Sing h	260
11.	EC LAB	MOSFET Ckt.	Mars/Me 548	Dead	7.12.17	100uf 25v/20/Om Replace	Hemant Vasis th	250

12.	EMI LAB	RTD Trainer	MARS/ 1053	Not Working	7.12.17	IC 741 Replace	Amit Jain	300
13.	EMI LA B	Thermo Couple Trainer Kit	MARS	Not Working	7.12.17	Fuse Replace	Amit Jain	250

S.NO.	NAME OF EQUIMENT	QTY	REPARING DATE	COMPONENT REUIRED	COST BY OUTSOURSE	COST BY INOUSE
14	MULTIMETER	25	27/7/17	BATERY	5000	600
15	DATA FORMATING AND MODULATION	3	27/7/17	CONNECTOR REPLACEMENT	1000	80
16	IC TESTER	3	27/7/17	SOCKET REPALEMENT	860	120
17	DIODE CHERECTERISTICS	10	10/7/17	TRANSISTOR, DOIDE REPLACE	3600	350
18	TRANSISTOR CHARTERISTIC	10	20/7/17	RESISTANCE REPLACE	5000	800
19	FET KIT	10	2/8/17	DRY SOLDERING	2500	500
20	ANTENNA STEPPER MOTOR	1	27/8/17	DRY SOLDERING	300	0
21	VCD PLAYER	1	27/7/17	JACK PIN REPLACEMENT	300	10
22	SOLDERING IRON	8	27/7/17	DOIDE REPLACE, MAIN WIRE	400	32

23	VOLTAGE REGULATOR	6	10/7/17	FUSE, IC 723 REPACEMNT	1240	120
24	UJT KIT	4	20/7/17	UJT, LM317, 2N2646`	1400	120
25	DE MULTIPLAYER KIT	8	2/8/17	FUSE, LEAD REPLACEMENT	1800	120
26	CMOS TO TTL KIT	4	27/8/17	ON OFF SWITCH REPLACE	1200	200
27	BCD TO BINARY CONVERTER	4	27/7/17	TOGGLE SWICH REPLACEMNT	1300	60
28	POWER SUPLLY	20	27/7/17	LM317, LM3055 RPLACEMENT	5000	200
29	CRO	10	27/7/17	TRACKING, WD40 SPRAY	5000	300
30	FUNCTION GENERATOR	12	10/7/17	TR 2219, 295 REPLACE	6000	400
31	ENERGY BAND GAP	2	22/7/17	TR1005 OA79 REPALCE	650	45
32	RTD AND THERMOCOUPLE	3	22/8/17	IC741, FUSE	960	60
33	COMMUNICATION KIT	10	21/8/17	T3902 REPLACE	5000	240
34	EC LAB	10	21/8/17	TWO WAY SWICH REPLACE	4000	500

Overall Ambience:-

- All laboratories are acoustics having sufficient natural light, proper ventilation with tubes and fan arrangement.
- Overall ambience of laboratory is good.
- Laboratory manuals are prepared and are available in hard copy in each lab.

List of items in the labs.

S.NO	NAME OF LAB	ROOM NO.	LAB INCHARGE	NAME OF THE ITEMS												
				EXPERIMENT TABLE	STOOL / STUDENTS CHAIR	FACULTY TABLE	FACULTY CHAIR	ALMIRAH	NOTICE BOARD	WHITE / BLACK BOARD	WINDOW	TUBE LIGHT	LIGHT	FAN	AC	POWER SWITCH BOARD
1	Work Shop Lab	BS-15	Mr. Vikash Mishra	**2**	**25**	**1**	**1**	**NIL**	**1**	**1**	**5**	**10**	**NIL**	**8**	**NIL**	**18**
2	Signal Processing Lab	CP-12	Mr. Honey Agarwal	**14**	**28**	**1**	**1**	**NIL**	**1**	**1**	**2**	**8**	**NIL**	**4**	**2**	**16**
3	EDC LAB	BF-	Mr. Mangi	**10**	**30**	**1**	**1**	**2**	**1**	**1**	**4**	**4**	**NIL**	**4**	**NIL**	**15**

	-I	14	Lal													
4	Digital Electronics Lab-2	BS-04	Ms. Yogita Taluja	**7**	**25**	**1**	**1**	**1**	**1**	**1**	**4**	**4**	**NIL**	**4**	**NIL**	**11**
5	EED LAB	BG-04	Mr. Rakesh Kardam	**8**	**35**	**1**	**1**	**2**	**1**	**1**	**4**	**2**	**NIL**	**4**	**NIL**	**11**
6	Microprocessor Lab	BG-15	Mr. Katru Anand	**7**	**25**	**1**	**1**	**2**	**1**	**1**	**8**	**2**	**NIL**	**4**	**NIL**	**10**
7	Communication Lab	BG-16	Mr. Devendra Sharma	**9**	**30**	**1**	**1**	**1**	**1**	**1**	**4**	**2**	**NIL**	**4**	**NIL**	**12**
8	Signal & Image Processing Lab	BS-13	Ms. Shinam upadhyay	**14**	**32**	**1**	**1**	**1**	**1**	**1**	**4**	**8**	**NIL**	**4**	**2**	**12**
9	JAVA Language Lab	BS-14	Mr. Ashish Kulshrestha	**14**	**32**	**1**	**1**	**NIL**	**1**	**1**	**4**	**8**	**NIL**	**4**	**2**	**12**
10	Wireless Comm.Lab	BG-01	Mr. Veni Madhav	**8**	**28**	**1**	**1**	**1**	**1**	**1**	**5**	**6**	**NIL**	**6**	**NIL**	**15**
11	EDC LAB -II	BG-06	Mr. Lokesh Kumar Sharma	**11**	**25**	**1**	**1**	**4**	**1**	**1**	**4**	**2**	**NIL**	**4**	**NIL**	**13**
12	Digital Electronics Lab- 1	BLG-16	Ms. Geetika Mathur Bhati	**11**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**4**	**NIL**	**4**	**NIL**	**17**
13	EDC LAB	DS-	Mr. Sandeep	**15**	**33**	**1**	**2**	**2**	**NI**	**NI**	**2**	**NI**	**9**	**4**	**NIL**	**4**

	-III	09	Dotya						L	L		L				
14	Microwave Engg. Lab	DS-08	Ms. Teena Sharma	**16**	**48**	**1**	**2**	**2**	**NIL**	**1**	**2**	**NIL**	**23**	**6**	**NIL**	**8**

LAB PICS FOR AMBIENCE

6.4. Project laboratory (5)

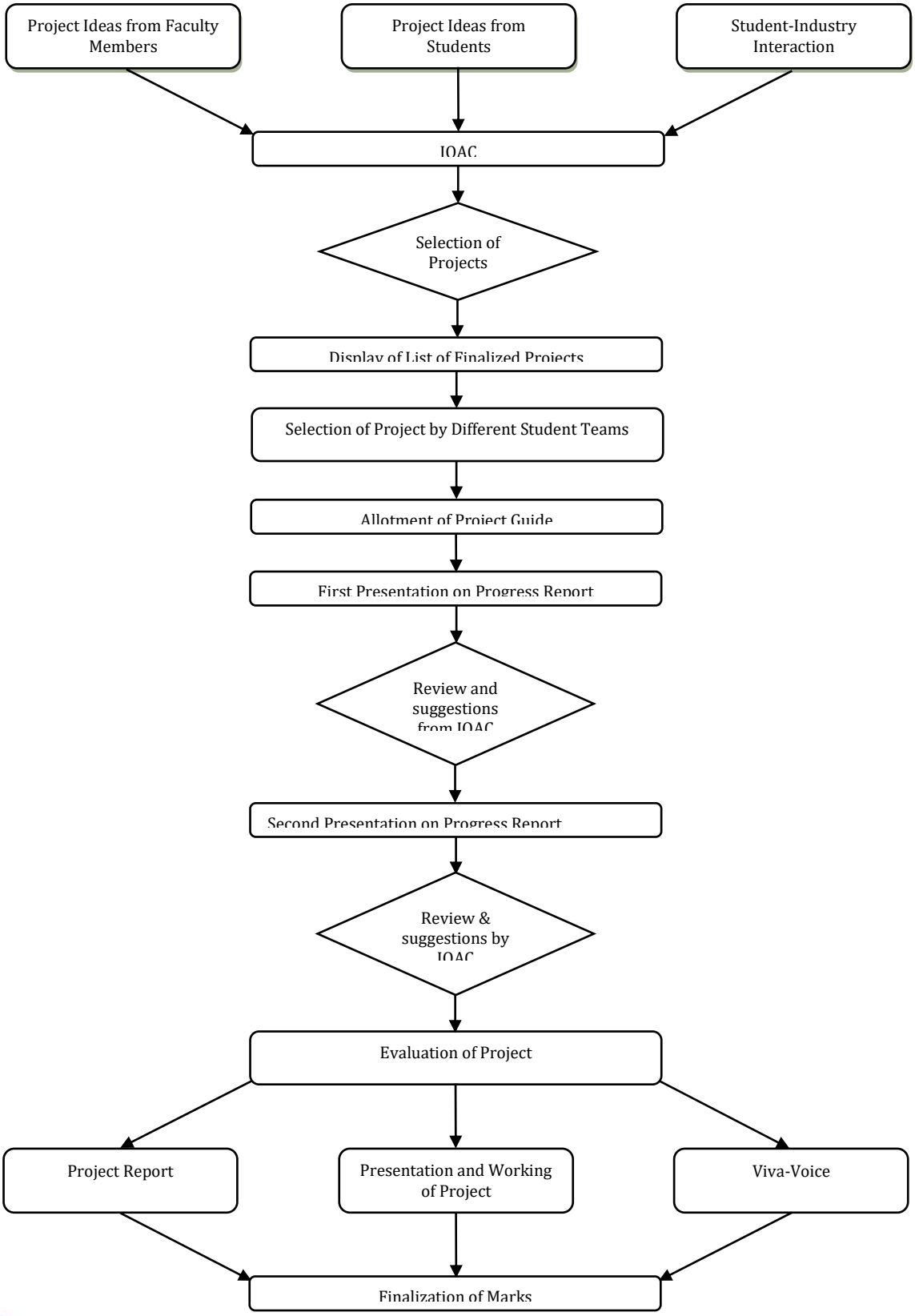
(Mention facilities & Utilization)

- Two hardware (workshop lab, embedded system lab) and one computer lab (CP-12) are used for project work.
- Technical support for the students is available throughout the day.
- All other labs are open for the students to carry out research regarding their projects, throughout the day.

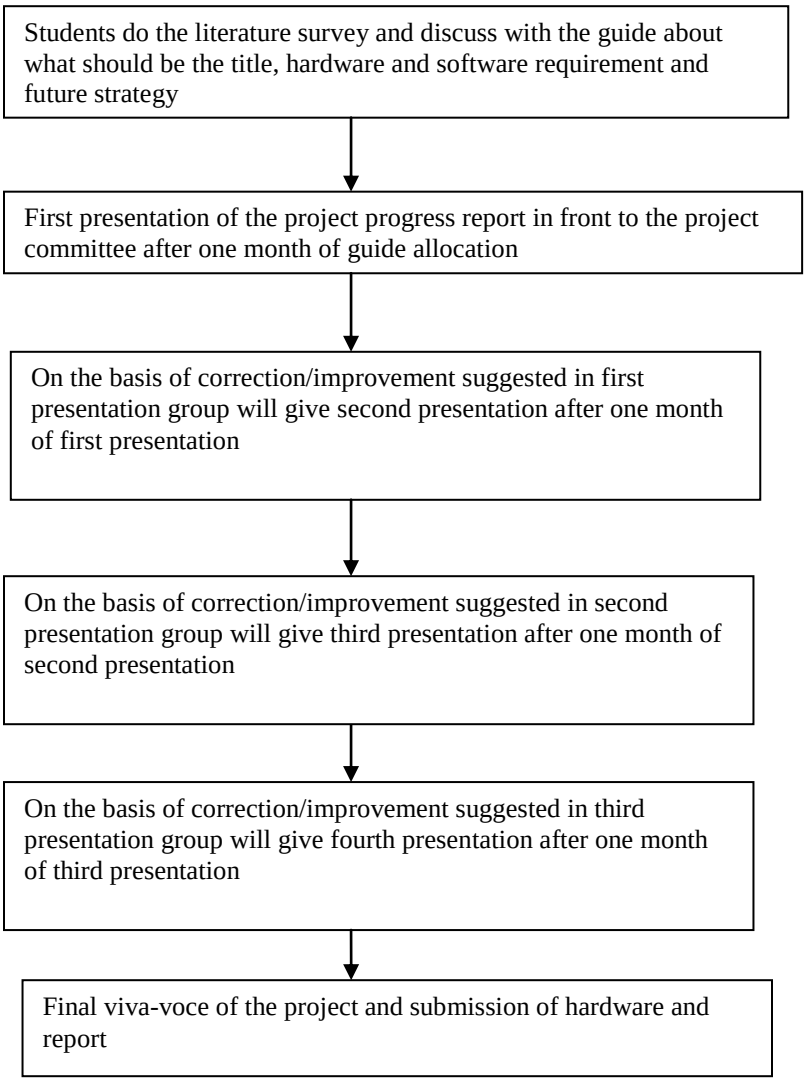
Table 6.4 Facilities created in ECE department for projects:

S. No.	Name of the Laboratory	Facilities available to conduct Project works and Research work
1.	Workshop Lab	CRO, Function Generator, Drilling Machine, Etc.
2.	Embedded System Lab	Different embedded system boards MSP 430, are available
3.	Computer Lab (CP-12)	Internet with high speed is provided for students for the project research work
4.	Signal Processing Lab	DSK starter kits

Project flow



PROJECT ASSESMENT FLOW



PROJECT COs AND CO-PO MAPPING

8EC8.1	**CO1: Understand and review the available literature on the chosen problem**
8EC8.2	**CO2: Apply the methodology to solve the identified problem**
8EC8.3	**CO3: Analyze the principles and tools for the problem.**
8EC8.4	**CO4: Create the technique to solve the problem.**
8EC8.5	**CO5: Prepare and present project report**

POs COs	1	2	3	4	5	6	7	8	9	10	11	12
1	H	H	H	H	L	-	-	-	H	L	-	M
2	H	H	H	M	H	M	M	-	H	L	M	H
3	H	H	H	M	H	M	M	-	H	M	M	H
4	H	H	H	M	M	M	M	-	H	M	L	H
5	M	M	M	M	L	-	-	H	H	H	M	H

SAMPLE OF NOTICES

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
NOTICE

August, 8, 2017

It is informed to all final year of academic session 2017-18 of ECE Deptt, that their guide allotment will be held on August 10, 2017. The guidelines are as under

- Students cannot form a group.
- Students will appear in front of the project committee in the order of their merit which is given below.
- A faculty list is given with their area of specialization/interest. Max of 2 projects will be allotted to the faculty.
- A group of students will be of 4 in max and 3 in min.
- Group of students will be taken from each section.
- Students came in specified order and will select a guide.
- When two groups formed of the particular faculty, then his name is crossed in the list.
- Section has to come in following time in cad lab.

Section	time
A	9:00 AM TO 10:30AM
B	10:30AM TO 12:00 NOON
C	12:30PM TO 2:00PM
D	2:00PM TO 3:30PM

RAJESH KUMAR BATHIJA

(PROJECT IN-CHARGE)

Jaipur Engineering College and Research Centre, JAIPUR

Department of Electronics and Communication Engineering
Schedule of Major Project Prestation of B.Tech. ECE VIII Sem

19-Jan-18

Presentation	dates
1st Project Presentation of VIII sem. Section-A	1/23/2018
1st Project Presentation of VIII sem. Section-B	1/24/2018
1st Project Presentation of VIII sem. Section-C	1/25/2018
1st Project Presentation of VIII sem. Section-D	1/27/2018
2nd Project Presentation of VIII sem. Section-A	2/16/2018
2nd Project Presentation of VIII sem. Section-B	2/17/2018
2nd Project Presentation of VIII sem. Section-C	2/23/2018
2nd Project Presentation of VIII sem. Section-D	2/24/2018
3rd Project Presentation of VIII sem. Section-A	3/9/2018
3rd Project Presentation of VIII sem. Section-B	3/10/2018
3rd Project Presentation of VIII sem. Section-C	3/16/2018
3rd Project Presentation of VIII sem. Section-D	3/17/2018
4th Project Presentation of VIII sem. All Sections	3/24/2018

VANUE: CAD LAB

RAJESH KUMAR BATHIJA
PROJECT INCHARGE

SAMPLE OF FRONT PAGE OF PROJECT REPORT

A

PROJECT REPORT

ON

"THEFT INTIMATION OF THE VEHICLE OVER SMS TO OWNER WHO CAN STOP THE ENGINE REMOTELY"

Submitted in partial fulfilment for the award of degree of

Bachelor of Technology

In

Electronics and Communication Engineering (RTU, Kota)

Project Guide:
1. Ms. Shruti Kalra
2. Mrs. Geetika Bhati Mathur

Submitted By:
ANJALI YADAV (14EJCEC021)
ARPIT GHIYA (14EJCEC034)
ARPIT GUPTA (14EJCEC035)
AJAY GUPTA (14EJCEC009)

Submitted to:
Mr. Rajesh Bathija
(Associate Professor, ECE)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE
(May, 2018)

i

Marks distribution of minor project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING

PROJECT-I MARKS OF VII SEM ECE 2017-18

S.NO.	University Roll No.	Name	ASSESSMENT1 (20)	ASSESSMENT2 (30)	TOTAL (50)
1.	14EJCEC001	AAKASH MANGAL	16	24	40
2.	14EJCEC002	AANCHAL JAIN	16	25	41
3.	14EJCEC003	AARUSHI SINGH	18	27	45
4.	14EJCEC004	ABHINANDAN KUMAR	15	23	38
5.	15EJCEC200	ABHINAV SINGH CHAUDHA	17	25	42
6.	14EJCEC005	ABHISHEK KUMAR	15	23	38
7.	14EJCEC006	ADITYA GAUTAM	19	28	47
8.	14EJCEC007	ADITYA SHARMA	18	28	46
9.	14EJCEC008	AISHWARYA SHARMA	19	28	47
10.	14EJCEC009	AJAY GUPTA	16	25	41

Marks distribution of minor project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR
DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
PROJECT-I ASSESSMENT-1 MARKS OF VII SEM ECE 2017-18

S.NO.	University Roll No.	Name	Dress up (2)	Title and content relevant (4)	Presentation skills (6)	Content (4)	Query handling (4)	total (20)
1.	14EJCEC001	AAKASH MANGAL	2	3	5	3	3	16
2.	14EJCEC002	AANCHAL JAIN	2	3	5	3	3	16
3.	14EJCEC003	AARUSHI SINGH	2	4	4	4	4	18
4.	14EJCEC004	ABHINANDAN KUMAR	2	3	4	3	3	15
5.	15EJCEC200	ABHINAV SINGH CHAUDHA	2	3	5	4	3	17
6.	14EJCEC005	ABHISHEK KUMAR	2	3	4	3	3	15
7.	14EJCEC006	ADITYA GAUTAM	2	4	5	4	4	19
8.	14EJCEC007	ADITYA SHARMA	2	4	4	4	4	18
9.	14EJCEC008	AISHWARYA SHARMA	2	4	5	4	4	19
10.	14EJCEC009	AJAY GUPTA	2	3	5	3	3	16

Marks distribution of minor project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR

DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING

PROJECT-I ASSESSMENT-2 MARKS OF VII SEM ECE 2017-18

S.NO.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total (30)
1	14EJCEC001	AAKASH MANGAL	2	5	7	5	5	24
2	14EJCEC002	AANCHAL JAIN	3	5	7	5	5	25
3	14EJCEC003	AARUSHI SINGH	3	5	9	5	5	27
4	14EJCEC004	ABHINANDAN KUMAR	2	5	6	5	5	23
5	15EJCEC200	ABHINAV SINGH CHAUDHA	3	5	7	5	5	25
6	14EJCEC005	ABHISHEK KUMAR	2	5	6	5	5	23
7	14EJCEC006	ADITYA GAUTAM	3	6	7	6	6	28
8	14EJCEC007	ADITYA SHARMA	3	6	7	6	6	28
9	14EJCEC008	AISHWARYA SHARMA	3	6	7	6	6	28
10	14EJCEC009	AJAY GUPTA	3	5	7	5	5	25

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER, JAIPUR

DEPARTMENT OF ELCTRONICS AND COMMUNICATION ENGINEERING
LIST OF STUDENTS OF VII SEM ECE WITH MAJOR PROJECT MARKS CRITERIA

S.NO.	University Roll No.	Name	INTERNAL (120)	EXTERNAL (80)	TOTAL (200)
1	14EJCEC001	AAKASH MANGAL	109	62	171
2	14EJCEC002	AANCHAL JAIN	112	72	184
3	14EJCEC003	AARUSHI SINGH	109	73	182
4	14EJCEC004	ABHINANDAN KUMAR	108	71	179
5	14EJCEC005	ABHISHEK KUMAR	107	69	176
6	14EJCEC006	ADITYA GAUTAM	112	74	186
7	14EJCEC007	ADITYA SHARMA	116	72	188
8	14EJCEC008	AISHWARYA SHARMA	118	76	194
9	14EJCEC009	AJAY GUPTA	108	71	179
10	14EJCEC010	AJAY SINGH NATHAWAT	114	73	187

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EXTERNAL ASSEMENT OF MAJOR PROJECT OF VIII SEM ECE 2017-18

S.NO.	University Roll No.	Name	VIVA-VOCE (20)	RUNNING CONDITION OF PROJECT (30)	REPORT (30)	Total (80)
1	14EJCEC001	AAKASH MANGAL	16	23	23	62
2	14EJCEC002	AANCHAL JAIN	18	27	27	72
3	14EJCEC003	AARUSHI SINGH	18	28	27	73
4	14EJCEC004	ABHINANDAN KUMAR	18	26	27	71
5	14EJCEC005	ABHISHEK KUMAR	17	26	26	69
6	14EJCEC006	ADITYA GAUTAM	19	27	28	74
7	14EJCEC007	ADITYA SHARMA	18	27	27	72
8	14EJCEC008	AISHWARYA SHARMA	19	28	29	76
9	14EJCEC009	AJAY GUPTA	18	26	27	71
10	14EJCEC010	AJAY SINGH NATHAWAT	18	28	27	73

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MARKS OF PRESENTATION 1 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (2)	Title and content relevant (4)	Presentation skills (6)	Content (4)	Query handling (4)	total (20)
1.	14EJCEC001	AAKASH MANGAL	1	3	5	4	4	17
2.	14EJCEC002	AANCHAL JAIN	2	3	5	4	4	18
3.	14EJCEC003	AARUSHI SINGH	2	4	5	4	4	19
4.	14EJCEC004	ABHINANDAN KUMAR	1	3	5	4	4	17
5.	14EJCEC005	ABHISHEK KUMAR	1	3	5	4	3	16
6.	14EJCEC006	ADITYA GAUTAM	2	4	5	4	4	19
7.	14EJCEC007	ADITYA SHARMA	2	4	5	4	4	19
8.	14EJCEC008	AISHWARYA SHARMA	2	4	5	4	4	19
9.	14EJCEC009	AJAY GUPTA	1	3	5	4	4	17
10.	14EJCEC010	AJAY SINGH NATHAWAT	1	3	5	4	4	17

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
MARKS OF PRESENTATION 2 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total 30
1.	14EJCEC001	AAKASH MANGAL	3	5	8	6	5	27
2.	14EJCEC002	AANCHAL JAIN	3	6	9	6	5	29
3.	14EJCEC003	AARUSHI SINGH	2	4	8	6	5	25
4.	14EJCEC004	ABHINANDAN KUMAR	3	5	8	6	4	26
5.	14EJCEC005	ABHISHEK KUMAR	3	5	8	6	4	26
6.	14EJCEC006	ADITYA GAUTAM	2	5	8	6	5	26
7.	14EJCEC007	ADITYA SHARMA	3	5	8	6	4	26
8.	14EJCEC008	AISHWARYA SHARMA	3	5	9	6	5	28
9.	14EJCEC009	AJAY GUPTA	2	5	8	6	5	26
10.	14EJCEC010	AJAY SINGH NATHAWAT	3	5	8	6	4	26

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MARKS OF PRESENTATION 3 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (3)	Title and content relevant (6)	Presentation skills (9)	Content (6)	Query handling (6)	Total 30
1.	14EJCEC001	AAKASH MANGAL	3	5	8	6	5	27
2.	14EJCEC002	AANCHAL JAIN	3	5	8	6	5	27
3.	14EJCEC003	AARUSHI SINGH	3	5	8	6	5	27
4.	14EJCEC004	ABHINANDAN KUMAR	3	5	8	6	5	27
5.	14EJCEC005	ABHISHEK KUMAR	3	5	8	6	5	27
6.	14EJCEC006	ADITYA GAUTAM	3	5	8	6	5	27
7.	14EJCEC007	ADITYA SHARMA	3	5	9	6	5	28
8.	14EJCEC008	AISHWARYA SHARMA	3	5	8	6	5	27
9.	14EJCEC009	AJAY GUPTA	3	5	8	6	5	27
10.	14EJCEC010	AJAY SINGH NATHAWAT	3	6	8	6	5	28

Marks distribution of major project of 2017-18 session

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MARKS OF PRESENTATION 4 OF MAJOR PROJECT 2017-18

S.NO.	University Roll No.	Name	Dress up (4)	Title and content relevant (8)	Presentation skills (12)	Content (8)	Query handling (8)	Total 40
1.	14EJCEC001	AAKASH MANGAL	4	6	10	7	6	34
2.	14EJCEC002	AANCHAL JAIN	4	6	10	7	6	34
3.	14EJCEC003	AARUSHI SINGH	4	6	10	7	6	34
4.	14EJCEC004	ABHINANDAN KUMAR	4	6	10	7	6	34
5.	14EJCEC005	ABHISHEK KUMAR	4	6	10	7	6	34
6.	14EJCEC006	ADITYA GAUTAM	4	7	11	7	6	36
7.	14EJCEC007	ADITYA SHARMA	4	8	12	8	7	39
8.	14EJCEC008	AISHWARYA SHARMA	4	8	12	8	7	39
9.	14EJCEC009	AJAY GUPTA	4	6	10	7	6	34
10.	14EJCEC010	AJAY SINGH NATHAWAT	4	8	12	8	7	39

6.5. Safety measures in laboratories (10)

Sr. No.	Subject Code	Name of the Laboratory	Safety measures
1.	3EC7A	Electronic Instrumentation Workshop	• Before switching on the power supply, get the circuit connections checked by the teacher/Instructor. • Maintain strict discipline. • First aid kit is available for the safety measure. • Do not touch or attempt to touch the mains power supply Wire with bare hands. • Do not overcrowd at the tables in the laboratory. • Carry out the experiments in such a way that nobody will be injured or hurt. • Carry out the experiments in such a way that the equipment will not be damaged or destroyed. • Sensitive electronic circuits and electronic components have to be handled with great care. • All the time ambulance facility is available, in case of any emergency.
2.	3EC8A	Computer Programming Lab-I	
3.	3EC9A	Electronic Device Lab	
4.	3EC10A	Digital Electronics Lab	
5.	3EC11A	Business Entrepreneurship	
6.	4EC7A	Computer Programming Lab-II	
7.	4EC8A	Analog Electronics Lab	
8.	4EC9A	Measurement & Instrumentation Lab	
9.	4EC10A	Humanities & Social Sciences	
10.	5EC7A	Electronic Engineering Design Lab	
11.	5EC8A	Microwave Engg. Lab	
12.	5EC9A	Communication Lab-I	
13.	5EC10A	Signal Processing Lab	
14.	5EC11A	Professional Ethics and Disaster Management	
15.	6EC7A	Communication Lab-II	
16.	6EC8A	Microprocessor Lab	
17.	6EC9A	RF Simulation Lab	
18.	6EC10A	Industrial Electronics Lab	
19.	6EC11A	Personality Development & General Aptitude	
20.	7EC7A	Signal & Image Processing Lab	
21.	7EC8A	Wireless Communication Lab	
22.	7EC9A	Practical Training & Industrial Visit	
23.	7EC10A	Project-I	
24.	8EC5A	RF Fabrication Lab	
25.	8EC6A	Industrial Economics & Management.	
26.	8EC7A	VLSI & Optical Fibre Lab	
27.	8EC8A	Project -II	
28.	8EC9A	Seminar	

CRITERION 7	Continuous Improvement	50

7.1. Actions taken based on the results of evaluation of each of the POs & PSOs (20)

- Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attainment levels for the assessment years.

POs Attainment Levels and Actions for Improvement during CAY- (2017-2018)

POs	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and electronics and communication engineering specialization to the solution of complex electronics and communication engineering problems.			
PO1	**65%**	**51.00%**	• Lack in implementing practical knowledge according to theoretical subjects. • Complex problems were not properly handled by students due to lack in basic concepts.
ACTION: • Introductory classes were made more **technical for implementing basic subjects Basic Electronics, Analog Communication and Digital Communication**. • Seminars and webinars were provided to the students for the implementing of practical knowledge. • Workshops on **CCNA Networking, Spy Robotics** were organized. • Training Program on **Embedded Systems & Robotics** was organized**.** • Industrial visits at **Genus Power, Tesca Technologies pvt. Ltd., BSNL, Philips lighting etc.** were organized for improving practical knowledge. • Seminar on **Embedded System** was conducted. • **International conference** and **National conference** were organized.			
PO2. Problem analysis: Identify, formulate, research literature, and analyze complex electronics and communication engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	**63.3%**	**47.67%**	• Need of strong analytical power in students. • Students were facing problem in applying the principles for understanding the complex problem.
ACTION: • **Industrial visits** were organized to improve the analytical skills.			

- Technical events such as **Robowar, Robosoocer, line follower, Game of Drones** were organized to understand complex problems.
- Seminar on **Embedded System** was conducted.
- **International conference** and **National conference** was organized.

PO3: Design/development of solutions: Design solutions for complex electronics and communication engineering problems and design system components or processes that meet the specified needs with appropriate considerations for the public health and safety, and the cultural, societal, and environmental considerations.

PO3	**56.67%**	**43.00%**	• Less fulfillment of industrial approach in minor and major projects for the problem solutions.

ACTION:

- Projects needed to be designed to provide solutions of problems related to industrial work.
- Seminar on **Embedded System** was conducted.
- For the technical understanding **Technical events** were organized.
- Various **Training programs, Workshops and Industrial visits** were organized.
- **International conference** and **National conference** were organized.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of electronics and communication engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO4	**63.33%**	**46.33%**	• Lack in applying research based approach.

ACTION:

- Emphasis is given to the project based learning by giving project based assignments.
- **International and National Conferences** were organized to develop interest into the students towards the research and publications.
- GATE questions which are related to **synthesis of the system** were included in Mid-Term papers.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modeling to complex electronics and communication engineering activities with an understanding of the limitations.

PO5	**70.18%**	**52.63%**	• Up gradation of tools and software to fill the gap between industry and academia are required.

ACTION:

- To upgrade students, Workshops on **CCNA Networking and Spy Robotics** were organized.
- To upgrade students, Training Program on **Embedded Systems & Robotics** was organized**.**
- Industrial visits at **Genus Power, Tesca Technologies pvt. Ltd., BSNL, Philips lighting etc.** were organized for improving practical knowledge of students.
- For the practical hands on experience technical events **Robofiesta and Hackathon** were conducted.
- For learning of modern tools, **a seminar on Embedded system** was conducted.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the

<table>
<tr><td colspan="4">professional electronics and communication engineering practice.</td></tr>
<tr><td>PO6</td><td>59.26%</td><td>46.3%</td><td>• Content beyond the syllabus includes subjects related to needs of health safety and social needs of the society.</td></tr>
<tr><td colspan="4">ACTION:
• Students were motivated to take a part in various social events such as Blood donation camp, Zarurat event, Clean India Campaign.</td></tr>
<tr><td colspan="4">PO7: Environment and sustainability: Understand the impact of the professional electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</td></tr>
<tr><td>PO7</td><td>62.5%</td><td>49.58%</td><td>• The role of students towards environment and global awareness needs to be improved.</td></tr>
<tr><td colspan="4">ACTION:
• Students were motivated to participate more in social activities and environmental awareness programs.
• Students were motivated to join the Social groups.</td></tr>
<tr><td colspan="4">PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.</td></tr>
<tr><td>PO8</td><td>60.42%</td><td>50.83%</td><td>• Along with increase in technical knowledge, ethical knowledge was also required in graduates.</td></tr>
<tr><td colspan="4">ACTION:
• Motivational lectures on Self Realization by class coordinators were given to the students.
• Students were motivated to take a part in various social events such as Blood donation camp, Zarurat event, Clean India Campaign.</td></tr>
<tr><td colspan="4">PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.</td></tr>
<tr><td>PO9</td><td>61.67%</td><td>43.33%</td><td>• Few students were not able to make themselves compatible with other members in a group.</td></tr>
<tr><td colspan="4">ACTION :
• Technical events were organized to enhance leadership qualities in individuals as well as to make them work in team.
• Students were also motivated to take a part in various social events such as Blood donation camp, Zarurat event, Clean India Campaign.
• Emphasis was also given to make student projects in group.</td></tr>
<tr><td colspan="4">PO10: Communication: Communicate effectively on complex electronics and communication engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.</td></tr>
<tr><td>PO10</td><td>65%</td><td>48.67%</td><td>• Communication skills were not up to the mark.</td></tr>
<tr><td colspan="4">ACTION:
• Interaction with industry persons through guest lectures.
• Different HR activity such as Group discursion, Personal Interview, Technical Interview were conducted.</td></tr>
</table>

<table>
<tr><td colspan="4">

For improving presentation skills International and National conferences were organized.
For improving communication skills some events such as TEDX, Techinobuzz, TechnoPhila and MUN were organized.

</td></tr>
<tr><td colspan="4">PO11: Project management and finance: Demonstrate knowledge and understanding of the electronics & communication engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.</td></tr>
<tr><td>PO11</td><td>66.67%</td><td>47.67%</td><td>• Implementation and feasibility of various projects can be done by properly analyzing and managing them according to the financial availability.</td></tr>
<tr><td colspan="4">ACTION:
• Few classes were organized to understand the basic principles of financial analysis of projects.</td></tr>
<tr><td colspan="4">PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the broadest context of electronics and communication engineering changes.</td></tr>
<tr><td>PO12</td><td>66.6%</td><td>51%</td><td>• Students of 3rd and 4th year need to have conceptual knowledge of few basic and important courses such as Embedded System, Networking which will help them in their future jobs.</td></tr>
<tr><td colspan="4">ACTION:

Video lectures along with detailed course contents were held and students were also registered in online courses launched by AICTE.
For the lifelong understanding training and workshop were conducted on Embedded System and Networking.
An Expert Talk on ‘Control System and Real life’ by Dr. Rajeev Gupta on Control System was organized.

</td></tr>
</table>

PSOs Attainment Levels and Actions for Improvement during CAY- (2017-2018)

<table>
<tr><th>PSOs</th><th>Target Level</th><th>Attainment Level</th><th>Observations</th></tr>
<tr><td colspan="4">PSO1: Ability to apply the concepts of Embedded Systems and its applications.</td></tr>
<tr><td>PSO1</td><td>63.33%</td><td>39.33%</td><td>• Students were requiring knowledge of microcontroller and embedded systems for their projects in final year of engineering which was not available in curriculum.</td></tr>
<tr><td colspan="4">ACTION:

Special workshops and seminars were held for the students to increase their understanding of embedded systems.
Student trainings were organized related to Embedded Systems.

</td></tr>
<tr><td colspan="4">PSO2: Ability to apply Field Programmable Gate Array based applications.</td></tr>
<tr><td>PSO2</td><td>63.33%</td><td>31.33%</td><td>• Due to demand of latest technologies in industry students were required to know basics of latest applications.</td></tr>
</table>

ACTION:

- Extra programs based on VERILOG were added in the laboratory manual.

POs Attainment Levels and Actions for Improvement during CAYm1- (2016-2017)

POs	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and electronics and communication engineering specialization to the solution of complex electronics and communication engineering problems.			
PO1	**65%**	**48%**	• Basic knowledge was not fulfilling the requirements of branch specific subjects such as Basic Electronics, Electronics Devices and Circuits, Digital Electronics, Communications, Wireless Networking, VLSI , Antenna etc.
ACTION: • Emphasis was given on basic subjects with practical implementation of their concepts. • For practical hands on experience, training on **Embedded system** was organized. • For the awareness of recent technologies **National conference** was organized.			
PO2: Problem analysis: Identify, formulate, research literature, and analyze complex electronics and communication engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	**63.3%**	**44%**	• Correlation between Mathematics & science with engineering subjects was required.
ACTION: • Students were advised to observe the problems related to electronics in their surroundings. • At department level various **technical events** were organized. • Training on **Embedded system** was organized.			
PO3: Design/development of solutions: Design solutions for complex electronics and communication engineering problems and design system components or processes that meet the specified needs with appropriate considerations for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	**56.67%**	**39%**	• Real time applications based projects need to be more understood by students.
ACTION: • At department level various **technical events such as Phoenix, Reverse Engineering, Robowar, Formula Zero, RoboRace, Robosoocer, LineFollwer** were organized. • Training on **Embedded system** was organized.			

<table>
<tr><td colspan="4">

- **National conference** was organized.

</td></tr>
<tr><td colspan="4">PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of electronics and communication engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.</td></tr>
<tr><td>PO4</td><td>63.33%</td><td>43.33%</td><td>

- Result oriented approach was required to solve complex problems

</td></tr>
<tr><td colspan="4">ACTION:

- To enhance interest in research fields**, National conference** was organized.
- The Technical events based on the Complex problem solving approach such as **Robowar, LineFollwer, Robosoocer** were conducted.

</td></tr>
<tr><td colspan="4">PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modeling to complex electronics and communication engineering activities with an understanding of the limitations.</td></tr>
<tr><td>PO5</td><td>70.18%</td><td>49.47%</td><td>

- Curriculum was lacking the subjects related to latest tools.

</td></tr>
<tr><td colspan="4">ACTION:

- For practical hands on experience, training on **Embedded system** was organized.

</td></tr>
<tr><td colspan="4">PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional electronics and communication engineering practice.</td></tr>
<tr><td>PO6</td><td>59.26%</td><td>42.59%</td><td>

- Requirement of subjects related to solution of social issues.

</td></tr>
<tr><td colspan="4">ACTION:

- Social groups of students were formed.
- Students were motivated to take a part in various social events such as **Blood donation camp, Zarurat event, Clean India Campaign.**

</td></tr>
<tr><td colspan="4">PO7: Environment and sustainability: Understand the impact of the professional electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</td></tr>
<tr><td>PO7</td><td>62.5%</td><td>45%</td><td>

- Knowledge of environment and global awareness needs to be improved.

</td></tr>
<tr><td colspan="4">ACTION:

- Social groups of students were formed.
- Students were motivated to take a part in various social events such as **Blood donation camp, Zarurat event, Clean India Campaign.**

</td></tr>
<tr><td colspan="4">PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.</td></tr>
<tr><td>PO8</td><td>60.42%</td><td>45.42%</td><td>

- Students are lagging in real life situations due to lack in ethical moral knowledge.

</td></tr>
</table>

ACTION: • Meditation Sessions for the students were organized by the spiritual cell. • Students were motivated to take a part in various social events such as **Blood donation camp, Zarurat event, Clean India Campaign.**			
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	**61.67%**	**40.33%**	• While working in teams output was not up to the mark.
ACTION : • Emphasis was given for making students more and more work in groups such as Projects etc. • At department level various **technical events** were organized. • Students were motivated to take a part in various social events such as **Blood donation camp, Zarurat event, Clean India Campaign.**			
PO10: Communication: Communicate effectively on complex electronics and communication engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
PO10	**65%**	**45%**	• Understanding of problem requirement analysis was lacking.
ACTION: • **National conference** was organized. • For the improvement in communication skills such technical events **Techinobuzz** was organized.			
PO11: Project management and finance: Demonstrate knowledge and understanding of the electronics and communication engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO11	**66.67%**	**44.33%**	Study of projects according to financial analysis was required.
ACTION: Awareness regarding financial implications was created among students.			
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the broadest context of electronics and communication engineering changes.			
PO12	**66.6%**	**46.67%**	Need of resources to enhance life-long learning.
ACTION: • Students were registered for video lectures on EDX and Swayam Portal.			

PSOs Attainment Levels and Actions for Improvement during CAYm1- (2016-2017)

PSOs	Target Level	Attainment Level	Observations
PSO1: Ability to apply the concepts of Embedded Systems and its applications.			
PSO1	**63.33%**	**38.67%**	• Requirement of industry according to latest technologies, was not fulfilled by the regular courses.

ACTION: • Trainings related to latest ARDUINO were provided.			
PSO2: Ability to apply Field Programmable Gate Array based applications.			
PSO2	**63.33%**	**26.67%**	• Students were lacking in Application specific subjects.
ACTION: • Extra programs based on VERILOG were added in the laboratory manual.			

POs Attainment Levels and Actions for Improvement during CAYm2- (2015-2016)

POs	**Target Level**	**Attainment Level**	**Observations**
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and electronics and communication engineering specialization to the solution of complex electronics and communication engineering problems.			
PO1	**65%**	**41.33%**	• Complex problems were not properly handled by students due to lack in basic concepts.
ACTION: • Seminars and webinars for increasing technical knowledge, were provided to students. • Training on **Micro controlled robotics and SCI-LAB** were conducted.			
PO2: Problem analysis: Identify, formulate, research literature, and analyze complex electronics and communication engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	**63.3%**	**38.33%**	• Need of strong analytical power in students. • Requirement of implementing engineering principles.
ACTION: • For developing problem solving skills various technical events were organized. • Training on **Micro controlled robotics and SCI-LAB** were conducted.			
PO3: Design/development of solutions: Design solutions for complex electronics and communication engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	**56.67%**	**34.33%**	• Students were lacking to solve complex electronics and communications problems.
ACTION: • Emphasis is given to the final year projects.			

<table>
<tr><td colspan="4">

- Technical Events were conducted.
- Training on **Micro controlled robotics and SCI-LAB** were conducted.

</td></tr>
<tr><td colspan="4">**PO4: Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of electronics and communication engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.</td></tr>
<tr><td>**PO4**</td><td>**63.33%**</td><td>**38.67%**</td><td>

- Students were required to involve research activity.

</td></tr>
<tr><td colspan="4">**ACTION:**

- More knowledge imported for conduction and analysis of experiments.
- Students were motivated to write research paper.
- Technical Events were conducted.
- Training on **Micro controlled robotics and SCI-LAB** were conducted.

</td></tr>
<tr><td colspan="4">**PO5: Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modeling to complex electronics and communication engineering activities with an understanding of the limitations.</td></tr>
<tr><td>**PO5**</td><td>**70.18%**</td><td>**42.81%**</td><td>

- Knowledge required to meet industry standards.

</td></tr>
<tr><td colspan="4">**ACTION:**

- Students were registered for video lectures related to latest upcoming tools.
- Technical Events were conducted.
- Training on **Micro controlled robotics and SCI-LAB** were conducted.

</td></tr>
<tr><td colspan="4">**PO6: The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional electronics and communication engineering practice.</td></tr>
<tr><td>**PO6**</td><td>**59.26%**</td><td>**38.15%**</td><td>

- Social issues needs to be solved with engineering aids.

</td></tr>
<tr><td colspan="4">**ACTION:**

- Awareness among students to establish link between society and engineering.
- Students were motivating to take part in social events such as **Blood donation camp, Zarurat event**.

</td></tr>
<tr><td colspan="4">**PO7: Environment and sustainability**: Understand the impact of the professional electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</td></tr>
<tr><td>**PO7**</td><td>**62.5%**</td><td>**40%**</td><td>

- Student's interest towards environment and global awareness needs to be improved.

</td></tr>
<tr><td colspan="4">**ACTION:**

- Students were involved in projects related to global and environmental issue solutions.
- Students were motivating to take part in social events such as **Blood donation camp, Zarurat event**.

</td></tr>
<tr><td colspan="4">**PO8: Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.</td></tr>
</table>

PO8	**60.42%**	**41.25%**	• Ethical knowledge was also required in graduates.
ACTION: • Students were motivated to inculcate ethical values in them. • Students were motivating to take part in social events such as **Blood donation camp, Zarurat event**.			
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	**61.67%**	**36.33%**	• Requirement of team work capacity among students
ACTION : • Emphasis was given for making students more and more work in groups. • Technical events were organized to enhance leadership qualities in individuals as well as to make them work in team. • Students were motivating to take part in social events such as **Blood donation camp, Zarurat events** etc.			
PO10: Communication: Communicate effectively on complex electronics and communication engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
PO10	**65%**	**40.00%**	• Presentation and communication skills needs to be improved.
ACTION: • Soft skills training was conducted for the students. • HR activity such as Group discursion, Personal interview, Technical interview were conducted.			
PO11: Project management and finance: Demonstrate knowledge and understanding of the electronics and communication engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO11	**66.67%**	**39%**	Courses including financial analysis and management skills were required.
ACTION: • Importance of financial feasibility and managing skills being imparted to students.			
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the broadest context of electronics and communication engineering changes.			
PO12	**66.6%**	**42.33%**	Required to have conceptual knowledge of few basic and important courses which will help them in their future jobs.
ACTION: • Knowledge of latest technologies were provided to students.			

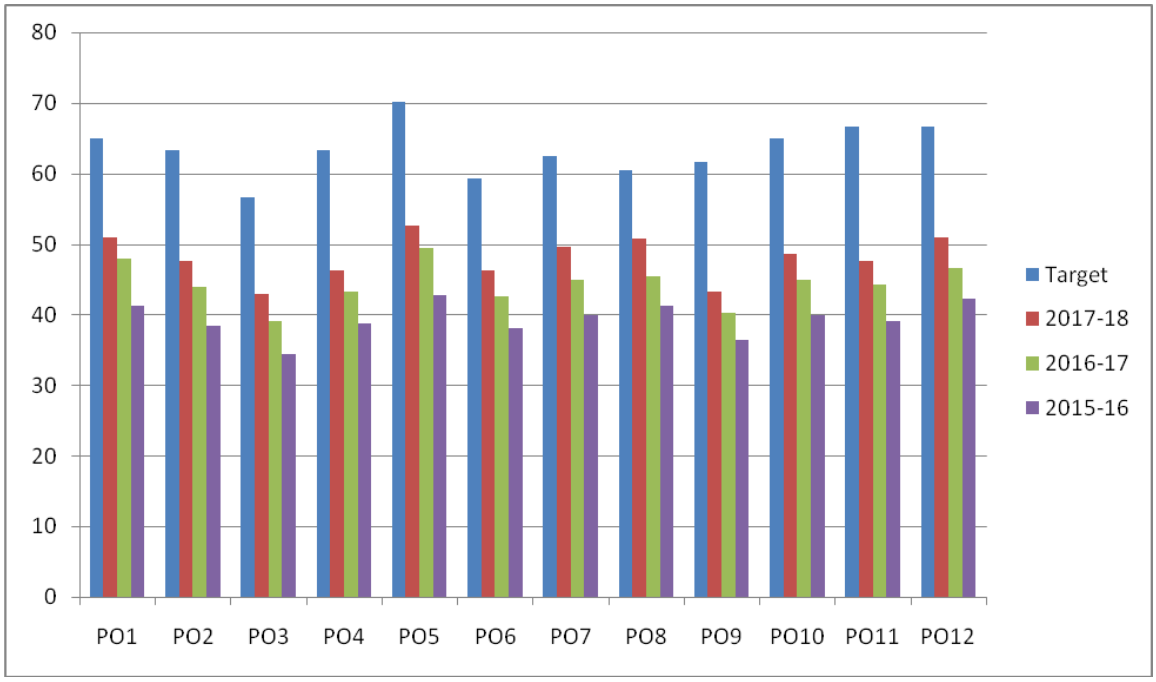
PSOs Attainment Levels and Actions for Improvement during CAYm2- (2015-2016)

PSOs	Target Level	Attainment Level	Observations

PSO1: Ability to apply the concepts of Embedded Systems and its applications.			
PSO1	**63.33%**	**28.00%**	• Emerging technologies were the requirement for major projects development.
ACTION: • Academic workshops were organized to enhance the knowledge of students.			
PSO2: Ability to apply Field Programmable Gate Array based applications.			
PSO2	**63.33%**	**19.33%**	• Requirement of latest trends and tools were required for students.
ACTION: • Expert Lectures from industry were organized on modern engineering practices.			

Table 7.1.1 Comparative Analysis of PO attainment

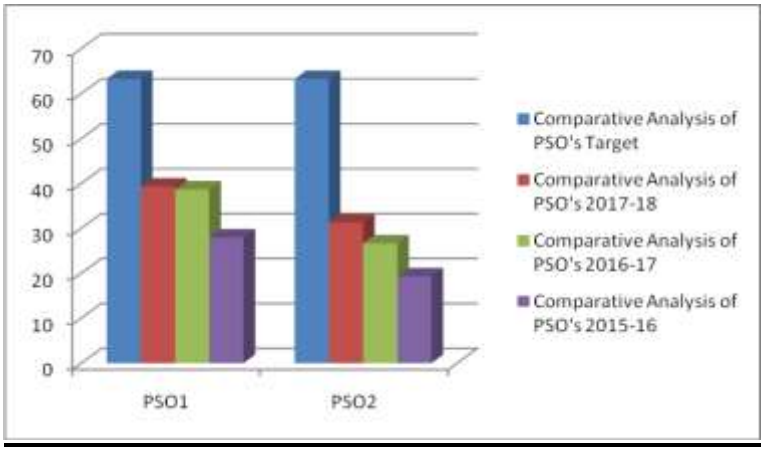
Comparative Analysis of PO attainment				
PO's	**Target**	**2017-18**	**2016-17**	**2015-16**
PO1	65	51	48	41.33
PO2	63.3	47.67	44	38.33
PO3	56.67	43	39	34.33
PO4	63.33	46.33	43.33	38.67
PO5	70.18	52.63	49.47	42.81
PO6	59.26	46.3	42.59	38.15
PO7	62.5	49.58	45	40
PO8	60.42	50.83	45.42	41.25
PO9	61.67	43.33	40.33	36.33
PO10	65	48.67	45	40
PO11	66.67	47.67	44.33	39
PO12	66.6	51	46.67	42.33



Graph 7.1. PO Attainment analysis of 2017-18(CAY), 2016-17(CAYm1), 2015-16(CAYm2)

Table 7.1.1 Comparative Analysis of PSO attainment

Comparative Analysis of PSO's				
PSO's	**Target**	**2017-18**	**2016-17**	**2015-16**
PSO1	63.3	39.33	38.67	28
PSO2	63.3	31.33	26.67	19.33



Graph 7.2. PSO Attainment analysis of 2017-18(CAY), 2016-17(CAY-m1), 2015-16(CAY-m2)

7.1.3.Tool Analysis for Gap identification with PO mapping

Tool Name	Activity for Tool Assessment	Analysis through Tool	Observation/Gap	Gap Recovery	PO /PSO Attainment
ACADEMIC ASSESSMENT TOOL	***MTT Result***	Student performance based on Theory and Practical Exams	Students' Performance below Target*	Assignments, Extra Classes, Invited Talks, Re-Tests, OBTs, etc.	PO1, PO2
	Final RTU Result				
	Labs/Experiments				
	Projects	Application/Industry based Learning	Students lag in relating theoretical aspects in Practical terms	Project Competitions, Technical trainings, Industry Interaction through visits, etc.	PO3, PO5, PO11,**PSO 1,PSO2**
	Industrial Trainings				
PLACEMENT TOOL	***Final Placed Strength***	Ability to select for job	Students lacking in communication-skills and Lack of Reasoning Aptitude	Face Classes, Expert talks	PO10, PO12
	Mentoring	Guide the students to enhance the Inter-Personal skills	Councelling sessions required for motivation and grooming up	Class Coordinators, Mentors for Placement, GD/PI Classes, Mocks	PO10, PO12
	Soft-Skills				
	Higher Studies	Proportion of students who go for higher education/Govt. Jobs	Very low percentage selection	Govt. Job Portal, Technical talks, Course Material for	PO1, PO2
	PSU/GATE				

				higher studies	
BEYOND CURRICULUM TOOL	***Technical Events***	Encouragement to implement Theoretical aspects through Participation	Participation in-house and outside college by few students only	Technical Events, Activities beyond syllabus, Technical Seminars	PO2, PO3, PO5, PO9, PO10,**PSO 1**
	Social Events/Extra Activity	To indulge students in society for Ethics inputs	Need of linkage between social and professional aspects	Blood Donation, Vande Mataram, Clean Campaign, Marathon, etc.	PO6, PO8, PO9
	Conference/Workshops	To impart Research/Industry oriented skill-set along with work-culture	Motivation towards R & D and familiarization with working environment at industries	National/International Conferences, Workshops, Seminars, Industrial visits, etc.	PO1, PO2,PO3, PO4, PO10,**PSO 1,PSO2**
	Industrial Visits				
	E-Resources	Motivation for Universal Learning approaches	Requirement to update students with latest trends and developments in engineering field	Swayam portal, EdX, NPTEL videos/lectures, e-Books, etc	PO1, PO10, PO12

**** Target was more than 75% students pass the examination***

Table 7.1.4. Sample Department Activities during CAY(2017-18)

Sr.No.	Department Activity	Level of Activity	Number of	PO Attainment

			Participant	
	Technical Events			
1	Game of Drones	National	42	PO2, PO3, PO9,**PSO1**
2	Quizolic	National	98	PO2, PO3, PO9
3	Techinobuzz	National	58	PO2, PO3, PO9
4	Renovator	National	30	PO2, PO3, PO9
5	Robowar	National	35	PO2, PO3, PO9,**PSO1**
6	Line follower	National	28	PO2, PO3, PO9,**PSO1**
7	Formula Zero	National	40	PO2, PO3, PO9,**PSO1**
8	Rob soccer	National	31	PO2, PO3, PO9,**PSO1**
9	Technical Hack	National	30	PO2, PO3, PO9
10	Tech Tambola	National	45	PO2, PO3, PO9
11	Phoenix	National	28	PO2, PO3,PO9
12	Sumowar	National	20	PO2, PO3, PO9
13	TEDX	International	13	PO2, PO3, PO9,PO10
14	MUN	National	14	PO2, PO3, PO9,PO10
15	HEAKTHON	National	105	PO2, PO3, PO9,PO5
	Industrial Trainings/Industrial Visits/Workshops			
16	Embedded Systems & Robotics organized by TechiNest Pvt.	National	56	PO1, PO2, PO3, PO5, **PSO1**
17	Embedded & Robotics organized by SaK Robotics	National	66	PO1,PO2, PO3, PO5,**PSO1**
18	Workshop on CCNA Networking	National	58	PO1,PO2, PO3, PO5
19	Workshop on SPYBOT-Spy Robotic Workshop organized by TechiNest Pvt. Ltd	National	215	PO1, PO2, PO3, PO5,**PSO1**

20	Industrial Visit Genus Power Infrastructures Ltd	National	50	PO1,PO2, PO3, PO5
21	Industrial Visit Tesca Technologies Pvt. Ltd.,	National	27	PO1,PO2, PO3, PO5
22	Industrial Visit PHILIPS LIGHTING	National	510	PO1,PO2, PO3, PO5
23	Industrial Visit at BSNL	National	55	PO1, PO2, PO3, PO5
Seminar/Expert Talk				
24	Seminar on Embedded System by Aptron	National	75	PO1,PO2, PO3, PO5,**PSO1**
25	Seminar by HUAWEI	National	550	PO2, PO3
26	Expert Talk by Dr. Rajeev Gupta	National	50	PO12
Conferences/FDP				
27	International Conference	International	92(Papers)	PO1, PO2, PO3, PO4, PO10,**PSO1**
28	National Conference	National	42(Papers)	PO1, PO3, PO4, PO10,**PSO1**
29	FDP Embedded Systems (ICT51)	National	09	PO12
Social Activity				
30	Blood Donation Camp	National	80	PO6, PO7,PO8, PO9
31	Clean India Camp	National	54	PO6,PO7, PO8, PO9
32	National Anthem	National	64	PO6,PO7, PO8, PO9

7.2. Academic Audit and actions taken thereof during the period of Assessment (10)
Academic Audit system/process and its implementation in relation to Continuous Improvement

IQAC (Internal Quality Assurance Committee) team

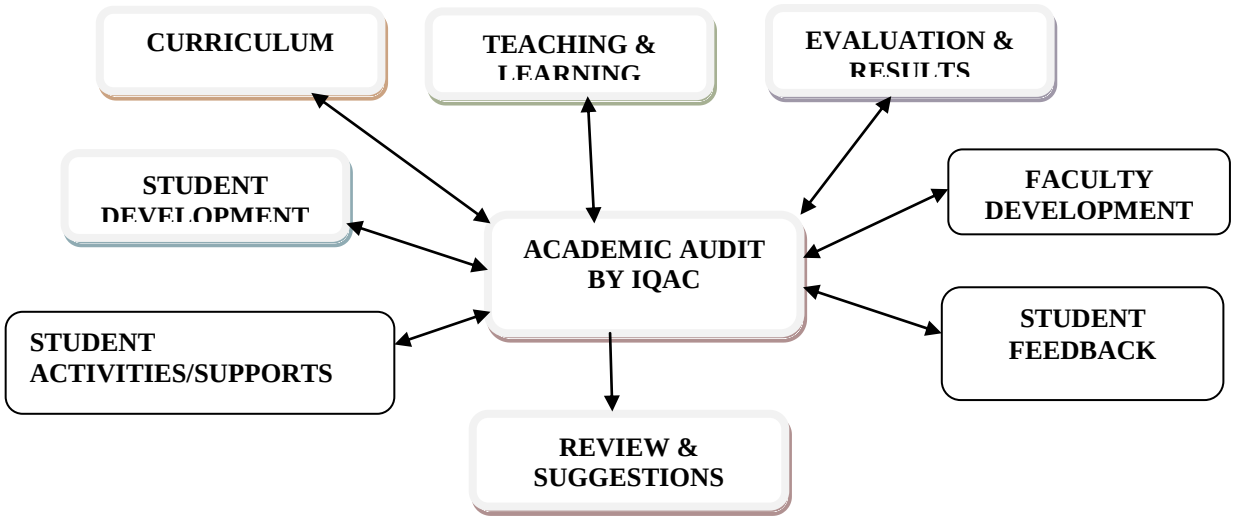
- In the department of Electronics and Communication Engineering, the INTERNAL QUALITY ASSURANCE COMMITTEE (IQAC) is formed for the Academic audit process.
- Members of this Academic audit IQAC team are consisting of program coordinator and senior faculty members of the department.
- The IQAC team of department monitors and enhances the quality of teaching & learning process and student development process, through appropriate guidelines for both faculty and students.

Goal of Audit

- The IQAC team during Academic Audit process monitor the conduct of the course, adherence to the course plan, time schedule, completion of the syllabus, standard of internal tests and evaluation process, inspection of labs, monitoring of student development programs and also addresses the difficulties faced by students and takes suitable actions.

Frequency of Audit

- The Academic audit process is conducted twice in a year. One audit in each semester.



TEACHING & LEARNING

- Academic Calendar
- Modes of Teaching
- Course File
- Course Material

EVALUATION & RESULTS

- Mid Term Question Papers
- Examination
- Assignments
- Evaluation

FACULTY DEVELOPMENT

- Improvement in Qualification
- Publications
- Seminar/FDPs/Workshops

STUDENT DEVELOPMENT

- Skills Development
- Collaborative Programs
- Industry Interactions

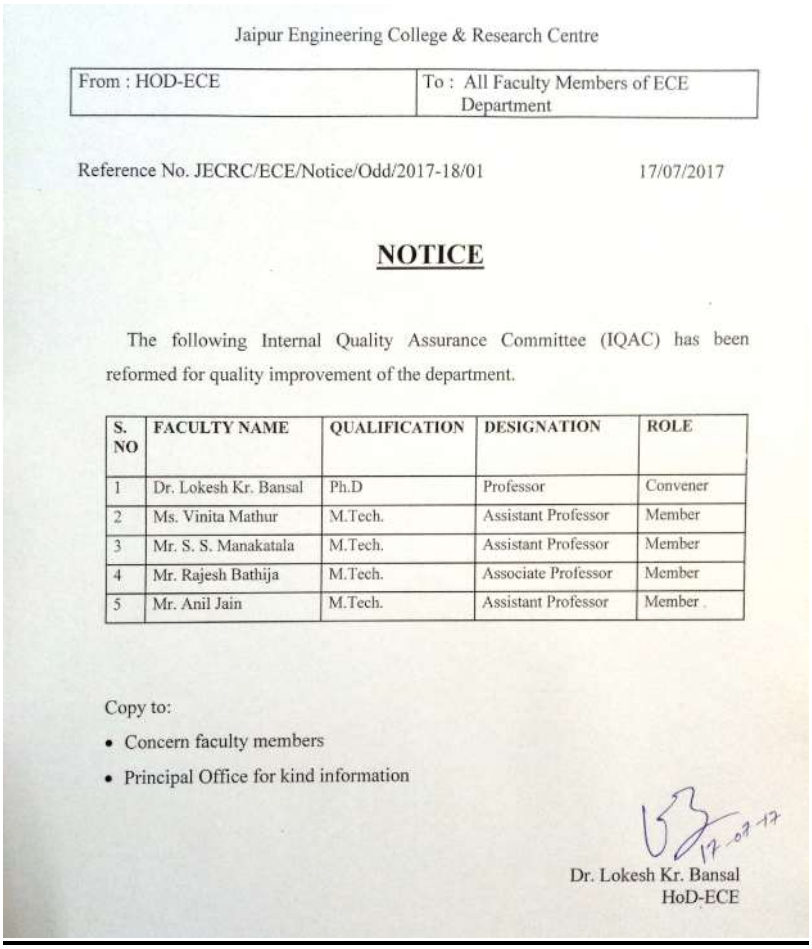
STUDENT ACTIVITIES/SUPPORTS

- Mentoring
- Career Development
- Alumni Support

Flow chart representation of Academic Audit Process by IQAC team

Followings are the team member of IQAC for CAY (2017-18)

S.NO.	Name	Designation	Responsibilities
1	Dr. Lokesh Bansal	Professor	Chair
2.	Ms. Vinita Mathur	Assistant Professor	Member
3.	Mr. S. S. Manakatala	Assistant Professor	Member
4.	Mr. Rajesh Bathija	Assistant Professor	Member
5.	Mr. Anil Jain	Assistant Professor	Member



Jaipur Engineering College & Research Centre

From : HOD-ECE	To : All Faculty Members of ECE Department

Reference No. JECRC/ECE/Notice/Odd/2017-18/01 17/07/2017

NOTICE

The following Internal Quality Assurance Committee (IQAC) has been reformed for quality improvement of the department.

S. NO	FACULTY NAME	QUALIFICATION	DESIGNATION	ROLE
1	Dr. Lokesh Kr. Bansal	Ph.D	Professor	Convener
2	Ms. Vinita Mathur	M.Tech.	Assistant Professor	Member
3	Mr. S. S. Manakatala	M.Tech.	Assistant Professor	Member
4	Mr. Rajesh Bathija	M.Tech.	Associate Professor	Member
5	Mr. Anil Jain	M.Tech.	Assistant Professor	Member

Copy to:

- Concern faculty members
- Principal Office for kind information

17.07.17

Dr. Lokesh Kr. Bansal
HoD-ECE

Following are the findings during Academic Audit Process by IQAC team in CAY (2017-18):

AUDIT: 01

- The existing university syllabus does not include Practical training of Embedded System.
- More technical activities are required to add in departmental academic calendar.
- Suggestion is given to include content beyond the syllabus in few theoretical subjects (Signals & Systems, Telecommunication Engineering, Antenna).
- More interactive methods are required for the understanding of theoretical subject (BMI).
- For the understanding of subjects, project based learning is needed.

- The quality of the question paper should be improved.
- For transparency in evaluation process, scrutinizing process is needed.
- Require to give more emphasis on skills development programs.
- For the overall development of the student, Mentoring and Career Development Counseling was needed.

AUDIT: 02

- Suggestion is given to include interactive teaching modes such as PPT and video lectures for the delivery of lectures.
- More emphasis is needed on the training, workshop and industrial visits.
- Faculty development program is needed to improve faculty member's skills.
- More encouragement is required to motivate students towards the project learning.
- Required to give more assignment to the weak students for their improvement.
- Suggestion is given to include some practical in lab manuals that are not included in curriculum.

Table 7.2.1 Action Taken and Improvement

Sr. No.	Description of Activity	Action Taken	Improvement
Curriculum			
1	**Curriculum Development**	• Various Trainings and workshops based on ***Embedded System*** are conducted**.**	• Students build project which are based on Microcontroller.
Teaching & Learning			

2	**Academic Instruction**	• In Departmental Academic calendar some technical activities are added. • ***Academic Lecturer plan and course material*** are prepared by the faculty Members and content beyond curriculum is introduced. • In Lab Manuals few practical were added which are not mention in curriculum.	• Teaching quality is improved.
3	**Modes of teaching**	• ***Interactive lecture methods*** such as Video lectures, Power point presentations, Industrial visits, are adopted by the faculty members.	
4	**Project based learning**	• Some ***previous year projects*** are given to the ***second year students*** to rebuilt them and bring best in west projects. • An event ***Reverse Engineering*** is conducted to motivate students towards the project making. • Students are motivated to execute small projects which they ***exhibit during project expos, technical contests*** etc.	• During the current assessment year 59 projects were made and among all ***"Diyang-aang"*** project is selected for the startup.
Evaluation & Results			
5	**Question Papers**	• ***Moderation and scrutinizing Committee*** ensures the quality of Internal Mid-Semester Examination paper-setting, their solutions and to scrutinize the answer sheets	• During the CAY our ***two student is secured rank in RTU merit list.***
6	**End semester examination and academic results**	• ***Two internal exams*** and ***end semester*** examinations are conducted.	
7	**Assignments & Class test Methodology**	• ***To assess students' knowledge*** of engineering practices, framework, and problem solving abilities various tests are taken • ***Class Tests*** are taken after every unit completion • ***Assignment based on COs*** is given to the students after completion of each	

		unit for each subject • Assignments questions are chosen from previous years ***university papers*** • ***Performance based*** Assignments are also given to the students	
8	**Evaluation**	• Answer Sheets are ***scrutinized*** • ***Transparency*** in Evaluation	
Faculty improvement			
9	**Improvement in Faculty qualification**	• Department is keen in improving the Qualifications of the faculty. ***Paid leave are granted*** for improving qualification .	• During the CAY ***one faculty member is awarded by PhD degree and 3faculty members have*** completed their M.Tech. • During the assessment period, ***15 number*** of faculty attended seminars/workshops/FDPs
10	**Faculty participation i n Seminars / Workshops/ FDPs**	• Faculty members are encouraged to attend Seminars/ Workshops/ FDPs conducted by various institutions.	
11	**Publications**	• Faculty members are encouraged for Publishing research papers in journals and articles in conference proceedings. • ***Financial support from management*** is extended to encourage research activities among faculty members. • For the same ***on duty leave*** is also provided.	• During the assessment year, total ***Publications are 43***.
Students Development			
13	**Skill development o f students**	• The emphasis is given for providing education based on ***the industry requirement.*** • The various ***technical events*** are conducted.	• During the assessment year department conducted ***12 technical events.*** • For overall development student interacted with the ***HR of different companies***.
14	**Collaborative Programs**	• Initiatives are contemplated to take up Some c***ollaborative programs*** in the Institution for the benefits of students.	***MoUs with*** • ForskTechnologies • Red Hat Technologies Pvt. Ltd

			• Infosys Campus Connect • CADD Centre: • WADHWANI Foundation • SAKROBOTICS LAB: • Salesforce Technologies Ltd. • Indo Vision Services Pvt. Ltd. • Cyber Security
19	**Industry Interaction**	• The institution has ***MoU*** with some industries for mutual exchange of expertise, to provide more exposure to the student regarding Industrial practices. • ***Industrial visits*** are arranged for the students regularly. • ***Experts from industry*** deliver guest lectures. • ***Industry internship*** is mandatory for all students after their 6th semester.	Institute had ***signed MoUs with industries, Organized 5 industrial visit, 4 Industrial training,/workshop*** etc.
Student activities/ support			
15	**Mentoring**	• Student mentoring system at department level focuses on ***all issues related to stay and growth of the individual student***.	• During the current assessment year ***15 faculty members were Mentor*** and ***12 faculty members*** were class coordinator.
16	**Career Development**	• The placement cell organizes seminars on ***Higher education opportunities*** and conducts aptitude training. • Government Cell is also formed. .	• In the current assessment year various ***12 industrial training, Industrial visits, Workshops, Seminars*** were conducted for the improvement. • ***Total 73 number*** of students got placed in different companies. • ***06 students qualified GATE*** Examination. • For the improvement in

			communication skills ***FACE classes were conducted.*** • Various Mocks related to ***aptitude, group discursion, personal interviews*** were taken.
17	**Alumni Support**	• ***Alumni meets***/ get together are organized once in a year. • Alumni are invited ***to interact and inspire the students***, to help in develop ing the curriculum, to give expert lectures in their field of specialization	• Industrial interaction is improved.
Student Feedback			
18	**Students Feedback**	• Feedback system is used to evaluate the ***performance of the faculty***. • It is ensured that the feedback from student is acted upon, and recommendations are applied to enhance teaching quality.	• With this faculty members ***improve their skills*** set.

Documents which are verified by the Academic audit committee

List of documents:

1. Students Batch List
2. Departmental Academic Calendar
3. Class Time Table, Faculty Time Table and Master Time Table
4. Teachers' Diary for all the courses (Theory, practical, seminar and projects etc.)
5. Course Files
6. Lab manuals for practical courses
7. Mid-Term paper
8. Final semester project reports
9. Department technical activities
10. Internships/ Industrial visits/ Summer training / Workshops/ Industrial Interaction
11. Details of student's placements, Higher education etc.
12. Students feedback reports
13. Continuous learning activities of faculty (FDP, Publications etc.)

7.3. Improvement in Placement, Higher Studies and Entrepreneurship (10)

Assessment is based on improvement in:

- Placement: number, quality placement, core industry, pay packages etc.
- Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier institutions.

Table 7.3.1.1: Placement Details: (2015 to 2017)

S.No.	Year	Total No of Students	Total No. of Students Placed	Percentage of student Placed (%)
1	2015-2016	268	169	63.0
2	2016-2017	223	114	51.1
3	2017-2018	218	96	44.0
4	2018-2019	227	109	48.01

Table 7.3.1.2: Placement Quality

S.No.	Year	Highest package	Lowest package
1	2015-2016	3.5 Lpa	1.8 Lpa
2	2016-2017	6 Lpa	1.8 Lpa
3	2017-2018	9 Lpa	1.8Lpa
4	2018-2019	7 Lpa	2 Lpa

Table 7.3.1.3: Placement data for the year 2017-18(CAY)

Sr.No	Company name	No. of students placed	Package (In lacs)

1	Accenture	11	3.5
2	TCS	06	3.6
3	Mindtree	02	3.5
4	Appeal	05	3.5
5	Artech	02	2.7
6	Capitaltrust	06	2.4
7	Carrere Point	01	4.00
8	Dev technosys	01	3.84
9	Face	02	3.00
10	GKMIT	01	3.00
11	Guru Kripa	04	6.00
12	Just dial	06	2.73
13	Marketing Mindz	05	3.4
14	Matrix	05	2.6
15	Metacube	01	3.2
16	Mind IT	01	1.8
17	PAL IT	01	1.8
18	Simply Force	01	1.8

19	Talent Pull	05	1.8
20	Interview Air	01	3.6
21	Interview Air	01	1.8
22	Marketing Mindz	04	3.4
23	Pro sports league	01	6.00
24	Byjus	01	9.00
25	Infosys	06	3.25
26	Cognizant	01	3.58
27	Metacube	01	3.14
28	JECRC	01	1.9
29	Ericsson	08	2.8
30	FEV	02	3.71
31	Appirio	01	3.2
32	Think Quant	01	3.6
33	Thrillophilia	01	2.4

Table 7.3.1.4: Placement data for the year 2016-17(CAYm1)

S.No.	Name of company	No. of selected students	Package (in Lac)
1	Accenture	45	3.5

2	Mind IT	16	1.8
3	Tech FELEETERS	01	1.8
4	TechiNest	06	1.8
5	Anora labs	01	3
6	Appeal group	01	4.5
7	Appiccimo	01	1.8
8	DLB group	02	1.8
9	Bulls Eye	02	2.8
10	First American	01	6.0
11	Hexaview Technologies	02	4.5
12	Just dial	04	3.0
13	Lanterns Info system	02	1.8
14	Mindtree	05	3.5
15	NODD	01	2.8
16	SLK technologies	01	2.8
17	Ericsson	16	2.8
18	Face	02	3
19	L&T technologies services Mysore	01	3.6
20	Metacube	01	3.5
21	JECRC	01	1.9
22	A3 Logic	01	3.3
23	DXC	01	3.5

Table 7.3.1.5: Placement data for the year 2015-16(CAYm2)

S.No.	Name of company	No. of selected students	Package (in Lac)
1	TCS	90	3.5
2	Accenture	81	3.5
3	Ericsson	03	2.8
4	Idea Cellular ltd.	02	3.0
5	Anora labs	03	3.0
6	Just dial	01	1.8
7	The Phone Support	02	1.8
8	Mind Tree	01	4.5
9	Capgemini	03	3.15
10	Config Aware	01	3.4
11	IES	01	6.5
12	UCO bank Asst. Manager	01	6.37
13	Aakash Institute	01	3.4

Table 7.3.1.6: Placement data for the year 2018-19

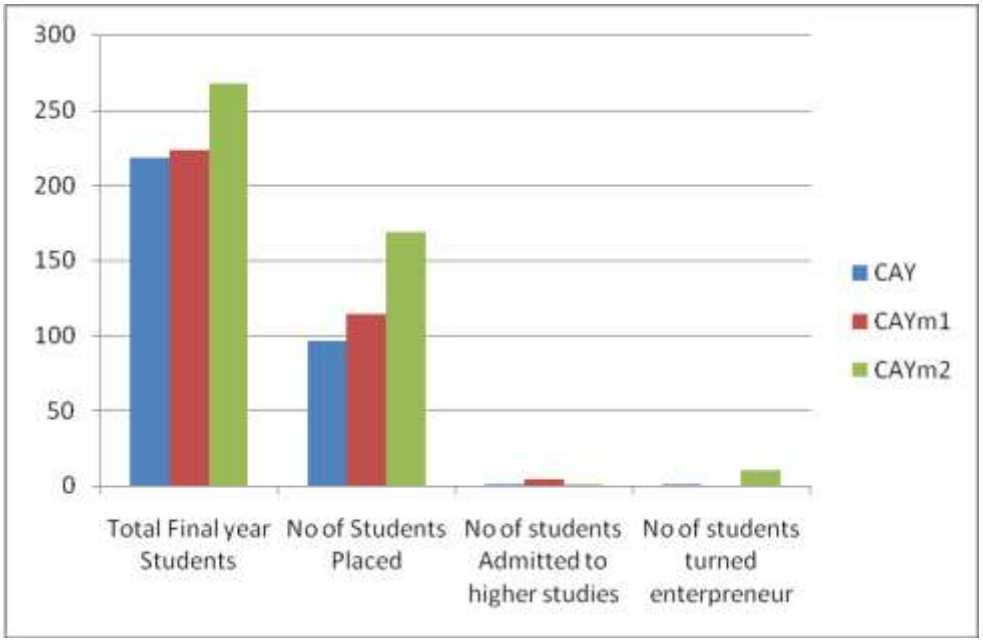
Sr.No	Company name	No. of students placed	Package (In lacs)
1	Accenture	53	3.75
2	TCS Codevita	06	3.5, 7.00
3	TCS National	05	3.75

4	Capgemini	04	3.4
5	Academia Guru	03	3.00
6	Smart circle Group	03	2-3.6
7	Aquatronic Systems	03	3.6
8	Ongraph	01	3.6
9	Just Dial	11	2.73
10	LinkRuit	02	2-2.16
11	PIN Click	04	2.4-4.8
12	Scope Telecom	06	2.4-3.00
13	Trading Bells	02	3.6
14	Thrillophilia	02	2.4
15	Appeal	03	3.0-3.6
16	ENC Technology	01	2.4

Table 7.3.2. Data related to Placement, Higher Studies and Entrepreneurship

Item	CAY+1 (2018)	CAYm1 (2017)	CAYm2 (2016)
Total no. of Final year students(N)	218	223	268
No. of students placed in companies (private or government)(X)	96	114	169
No. of Students admitted to higher studies with valid qualifying scores (GATE or Equivalent State or National Level Tests, GRE, GMAT, etc.)(Y)	01	04	01

No. of students turned up as entrepreneurs/start-ups(Z)	01	00	10
Total(X+Y+Z)	98	118	180
Placement Index (X+Y+Z)/N	0.449	0.529	0.671
Average Placement =(P1+P2+P3/3)	0.549		



Graph 7.3. Data related to Placement, Higher Studies and Entrepreneurship

7.4. Improvement in the quality of students admitted to the program (10)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Table 7.4: Data related to quality of students admitted to the program

Item		**CAY (2017-2021)**	**CAYm1 (2016-2020)**	**CAYm2 (2015-2019)**
National Level Entrance Examination(JEE)	No. of Students admitted	228	235	225
	Opening Score/Rank	138	131	400(Rank)
	Closing Score/Rank	28	43	14004(Rank)
State/University/Level	No. of Students	N/A	N/A	N/A

Entrance Examination/Others	admitted			
	Opening Score/Rank	N/A	N/A	N/A
	Closing Score/Rank	N/A	N/A	N/A
Name of the Entrance Examination for Lateral Entry or Lateral entry details	No. of Students admitted	01	3	2
	Opening Score/Rank	58.42	69.89	61.57
	Closing Score/Rank	58.42	65.51	55.95
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Maths)		229	232	236

CRITERION 8	First Year Academics	50

8. FIRST YEAR ACADEMICS (50)

8.1 First Year student faculty Ratio (5)

Data for first year courses to calculate FYSFR

Year	No. of students (Approved intake strength)	No. of faculty members (Considering fractional load)	FYSFR	Assessment = (5×20)/Average FYSFR (Limited to Max. 5)
2018-19	990	46	21.52	4.64
2017-18	997	48	20.77	4.81
2016-17	1020	51	20.00	5.00
Average	**1002**	**48.33**	**20.76**	**4.81**

Table B. 8.1 First Year student faculty Ratio

8.2 Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = (5X+3Y)/RF, X = No. of Regular Faculty with Ph.D., Y = No. of Regular Faculty with Post Graduate qualification, RF = No. of faculty members required as per SFR of 20:1, faculty definition as define in 5.1

Year	X	Y	RF	Assessment of faculty qualification (5X+3Y)/RF
2018-19	22	24	49.50	3.67
2017-18	24	24	49.85	3.85
2016-17	29	22	51.00	4.13
Average Assessment				**3.88**

Table B. 8.2a Assessment of Qualification

8.3 First Year Academic Performance (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10)) x(number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year.

First Year Academic Performance is shown in the table below:

S. No.	CAY	Academic Performance (10 Scale)
1	CAY (2018-19)	Result yet to be declared
2	CAY-1 (2017-18)	7.9
3	CAY-2 (2016-17)	7.9

Table 8.3a Academic Performance(10 Scale)

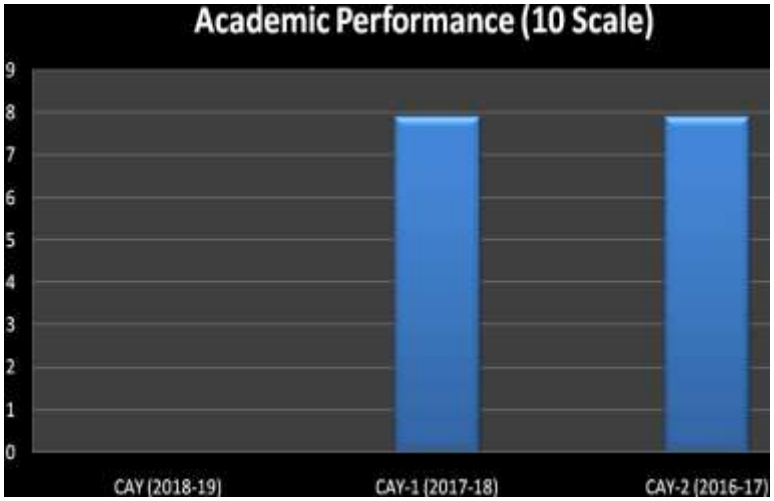


Figure 8.3a Academic Performance(10 Scale)

2017-18 (II Sem)

Table B.8.3b Academic Performance 2017-18 Sem.-II

S. No	SUBJECT	No. of Students	Passed	Mean of %	10 scale
1	Communication Skills	524	517	98.66	9.7
2	Human Values	486	476	97.94	9.6
3	Engineering Chemistry	469	398	84.86	7.2
4	Engineering Physics	500	438	87.60	7.7
5	Engineering Mathematics-II	964	874	90.66	8.2
6	Basic Civil Engineering	861	794	92.22	8.5
7	Computer Programming-II	984	826	83.94	7.0
8	Engineering Mechanics	1016	831	81.79	6.7
9	Basic Mechanical Engineering	127	91	71.65	5.1
	AVERAGE	**656**	**583**	**87.70**	**7.7**

(2017-18 Sem.-I)

S. No.	Subject	No. of Students	Passed	Mean of %	10 Scale
1	Communication Skills	490	484	98.78	9.8
2	Human Values	523	500	95.60	9.1
3	Engineering. Chemistry	511	464	90.80	8.2
4	Engineering Physics	474	379	79.96	6.4
5	Engineering Mathematics I	974	794	81.52	6.6
6	Environmental Engineering and Disaster Management	986	930	94.32	8.9
7	Computer Programming	994	892	89.74	8.1
AVERAGE		**707**	**635**	**90.10**	**8.1**

Table B.8.3c Academic Performance 2017-18 Sem.-1

(2016-17 Sem. - II)

S. No.	Subject	No. of Students	Passed	Mean of %	10 Scale
1	Communication Techniques	1001	993	99.20	9.8
2	Engineering Mathematics-II	992	791	79.74	6.4
3	Engineering Physics-II	1005	880	87.56	7.7
4	Chemistry & Evironmental Engineering	1001	936	93.51	8.7
5	Engineering Mechanics	1001	866	86.51	7.5
6	Fundamentals of Computer Programming	976	808	82.79	6.9
AVERAGE		**996**	**879**	**88.21**	**7.8**

Table B.8.3d Academic Performance 2017-18 Sem.-II

(2016-17 Sem.-I)

S. No.	Subject	No. of Students	Passed	Mean of %	10 Scale
1	Communicative English	1015	965	95.07	9.0
2	Engineering Mathematics-I	1014	822	81.07	6.6
3	Engineering Physics-I	1009	803	79.58	6.3
4	Engineering Chemistry-I	1014	959	94.58	8.9
5	Basic Electrical and Electronics Engineering	1019	875	85.87	7.4
AVERAGE		**1014**	**885**	**87.23**	**7.6**

Table B.8.3e Academic Performance 2016-17 Sem.-I

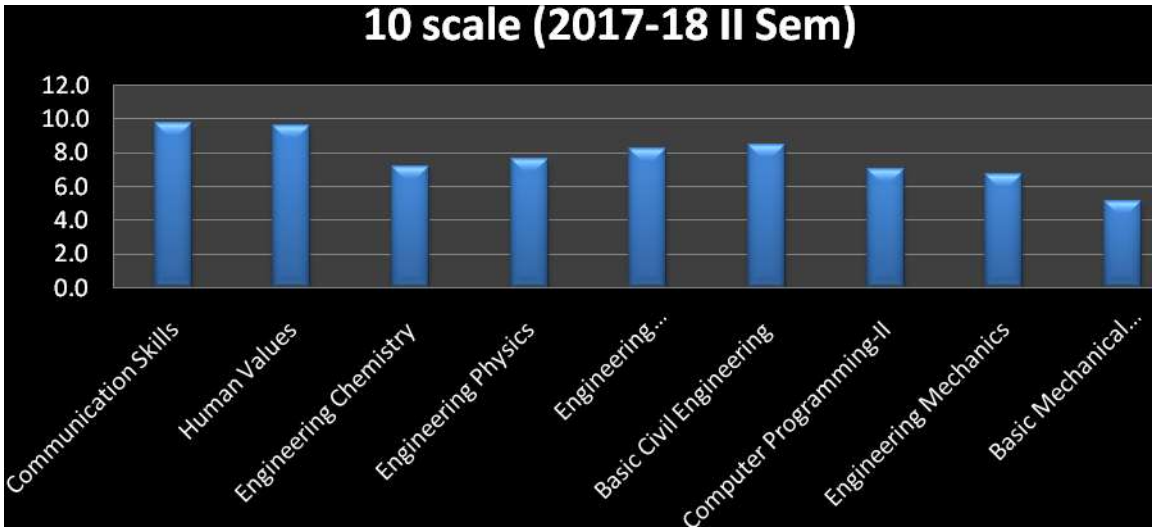


Figure 8.3b Academic Performance 2017-18 II Sem. (10 Scale)

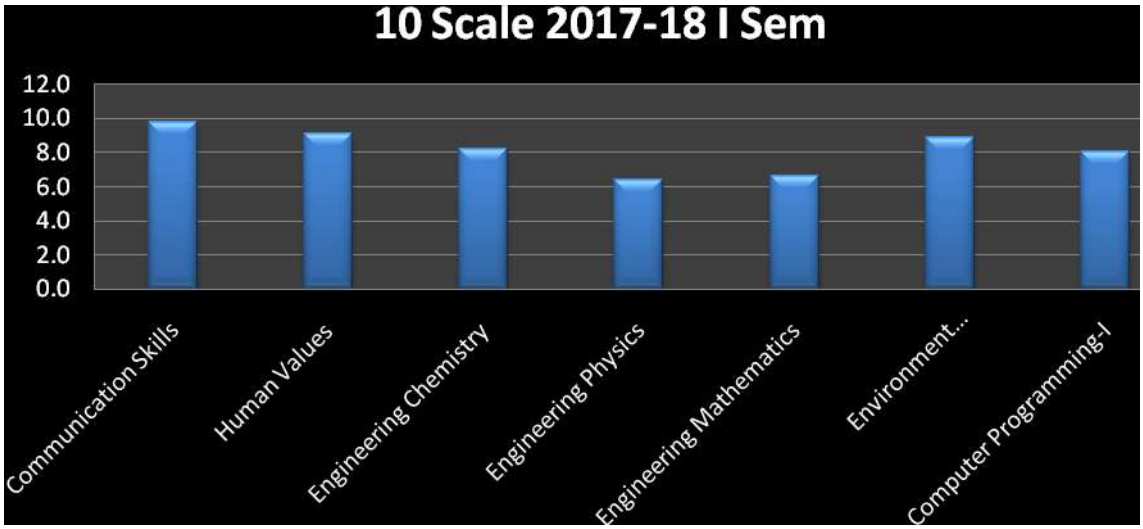


Figure 8.3c Academic Performance 2017-18 I Sem. (10 Scale)

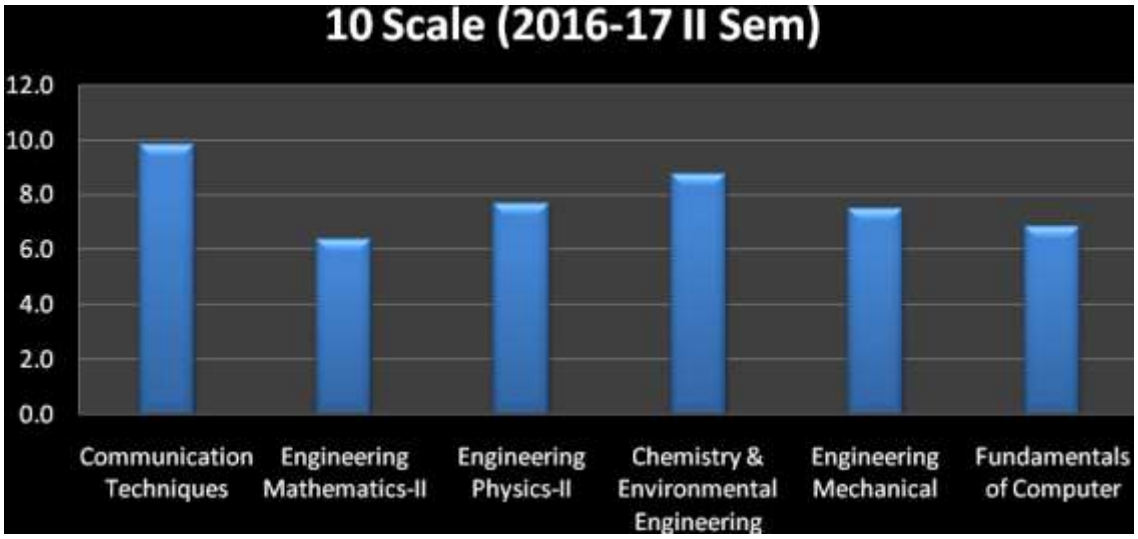


Figure 8.3d Academic Performance 2016-17 II Sem. (10 Scale)

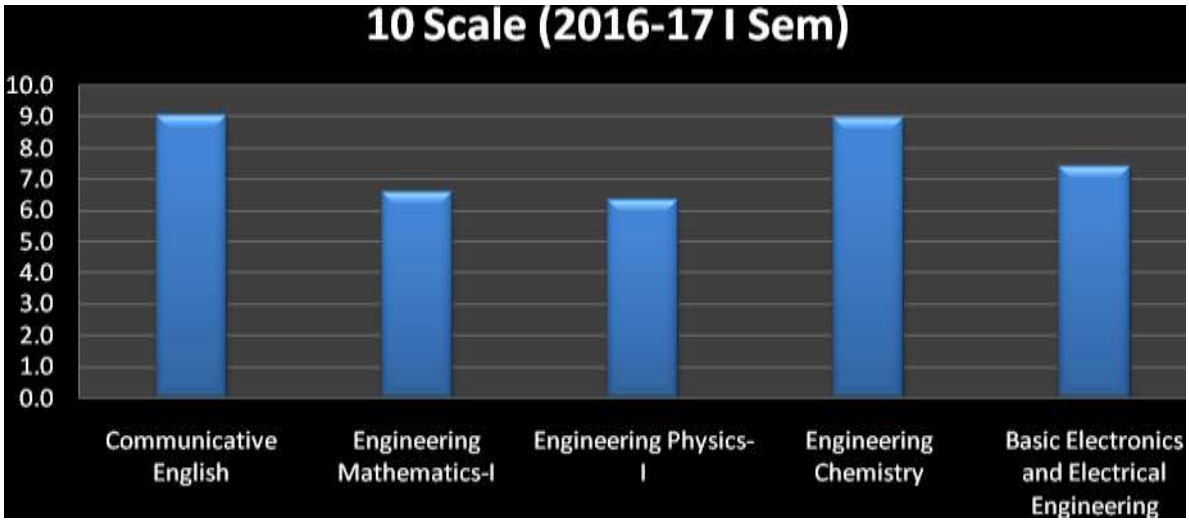


Figure 8.3e Academic Performance 2016-17 I Sem. (10 Scale)

8.4. Attainment of Course Outcomes of first year courses (10)

8.4.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

(Examples of data collection processes may include, but are not limited to, specific exam questions, laboratory tests, internally developed assessment exams, oral exams assignments, presentations, tutorial sheets etc.)

The assessment process used to gather the data upon which the evaluation of course outcomes of first year is done is as follows:

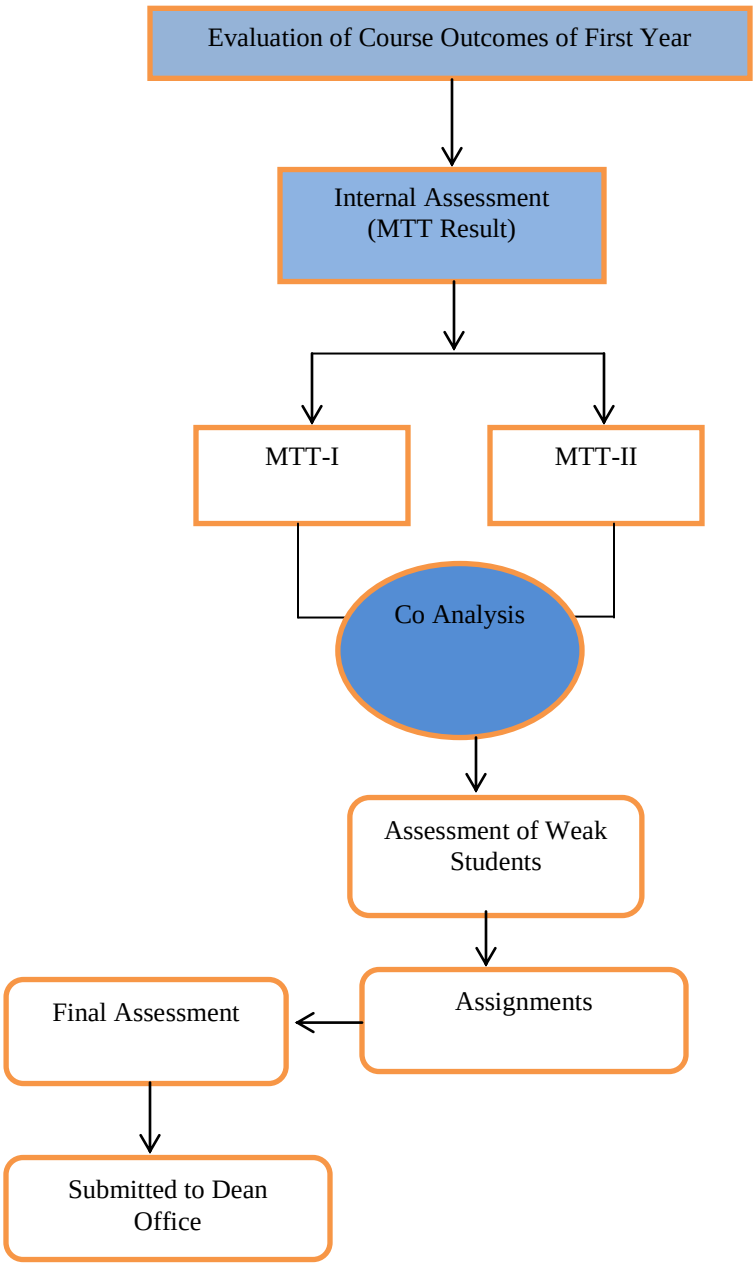


Figure 8.4a Attainment of Course Outcome of First Year Course

Assessment Process for the Year 2018-19

- Internal assessment will be done by taking two Mid Term Tests and assignment/presentations (co wise) as per the RTU guidelines.
- The performance of a student in internal assessment with respect to all the CO's will be recorded.
- End semester University exam performance of students for the maximum marks will be considered for external exam performance.
- For laboratory assessment, the over all performance of astudent in sessional will be assessed as in Final lab internal test, Final lab internal Viva voce and Class performance during the whole semester (record + attendance). Totalof these three is considered for internal lab assessment.
- Performance of a student inexternal lab exami.e.Practicalwill be assessed as inperformance and viva voce. Total of this is considered for external practical exam performance.
- The summation of these two performances is considered ascumulative assessment for a prescribed lab outcome.

Assessment Process for the Year 2016-17 & 2017-18

- Two internal tests for a maximum marks10 are conducted and total of two internals is considered for final internal assessment.
- The performance of a student in internal assessment with respect to all the CO's is recorded.
- End semester University exam performance ofstudents for the maximum marks100 is considered for external exam performance.
- For laboratory assessment, the over all per formance of a student in sessional is assessed as in Final lab internal test,Final lab internal Viva voce andClass performance during the whole semester (Record + attendance). Total of these three is considered for internal lab assessment.
- Performance of a student inexternal lab exami.e.Practical is assessedas in performance and viva voce. Total of this is considered for external practical exam performance.
- The summation of these two performance sisconsidered as cumulative assessment fora prescribed lab outcome.

8.4.2. Record the attainment of Course Outcomes of all first year courses(5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect the COs of a subject plus the performance in the University examination)

Attainment of Course Outcome

Target for Assessment Year 2017-2018= 60%

Semester I (2017-2018)

S. No.	Subject	CO1	CO2	CO3	CO4	Average Attainment
1	Communication Skills (HU-101)	79.63%	67.70%	82.10%	-	76.47%
2	Human Values (HU-103)	75.38%	66.79%	76.15%	-	72.77%
3	Engineering Mathematics-I(MA-101)	70.92	75.60	51.43	44.78	60.68%
4	Engineering Physics (PY-101)	70.75	69.55	73.53	-	71.28%
5	Engineering Chemistry (CY-101)	77.31%	66.07%	72.43%	69.42%	71.30%
6.	Computer Programming-I(CS-101)	48.2	51.1	47.3	53.5	50%%
7.	Environmental &Disaster Management(CE-101)	89.15	90.30	85.71	82.88	87.01%

Table B.8.4.2a Attainment of Course Outcome Semester I (2017-2018)

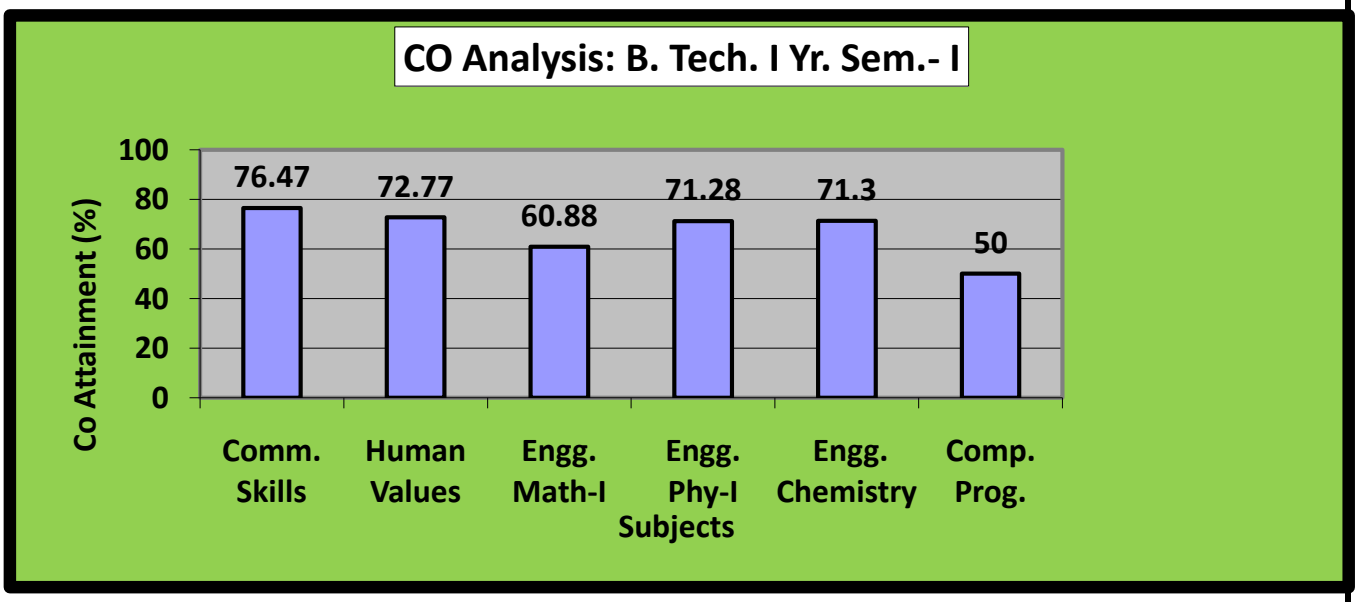


Figure 8.4.2a CO Analysis B.Tech I Yr. Sem.-I(2017-18)

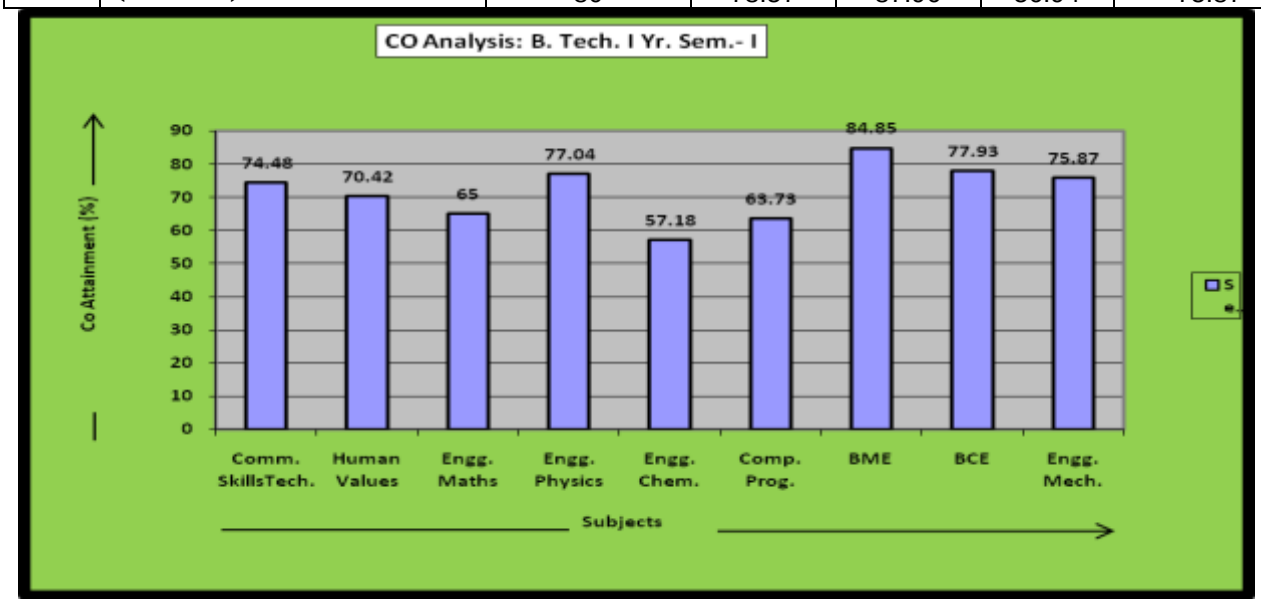
Target for Assessment Year 2017-2018= 60%

Semester II (2017-2018)

Table B.8.4.2b Attainment of Course Outcome Semester I (2017-2018)

Target for Assessment Year 2016-2017= 60%

S. No.	Subject	CO1 (in %)	CO2	CO3	CO4	Average Attainment
1	Communication Skills (HU-101)	80.34	55.91	87.21	-	74.48
2	Human Values (HU-103)	70.49	67.62	73.15	-	70.42
3	Engineering Mathematics-I(MA-101)	81%	59%	79%	39%	65%
4	Engineering Physics (PY-101)	**76.57**	**75.45**	**79.05**	--	**77.04**
	Engineering Chemistry (CY-101)	60.83	43.99	71.16	52.73	57.18
6.	Computer Programming-I(CS-101)	65.83	58.14	66.86	64.11	63.73
7.	Basic Mechanical Engineering (ME-101)	82.38	87.32	-	-	84.85
8.	Basic Civil Engineering (CE-103)	85.07	83.23	66.75	76.64	77.93
9.	Engineering Mechanics (OE-101)	80	78.57	87.96	56.94	75.87



Semester I (2016-2017)

S.No.	Subject	CO1	CO2	CO3	CO4	CO5	Average Attainment
1	Communicative English(101)	82.36	78.81	80.09	-	-	80.39
2	Engineering Mathematics-I(102)	70.73	49.99	61.93	-	-	60.88
3	Engineering Physics-I(103)	92.68	82.05	-	-	-	87.37
4	Engineering Chemistry(104)	86.53	79.66	57.54	---	---	74.57
5	Basic Electrical & Electronics Engg.(105)	54.27	44.04	42.43	47.81	52.5	48.20

Table B.8.4.2b Attainment of Course Outcome Semester I (2016-2017)

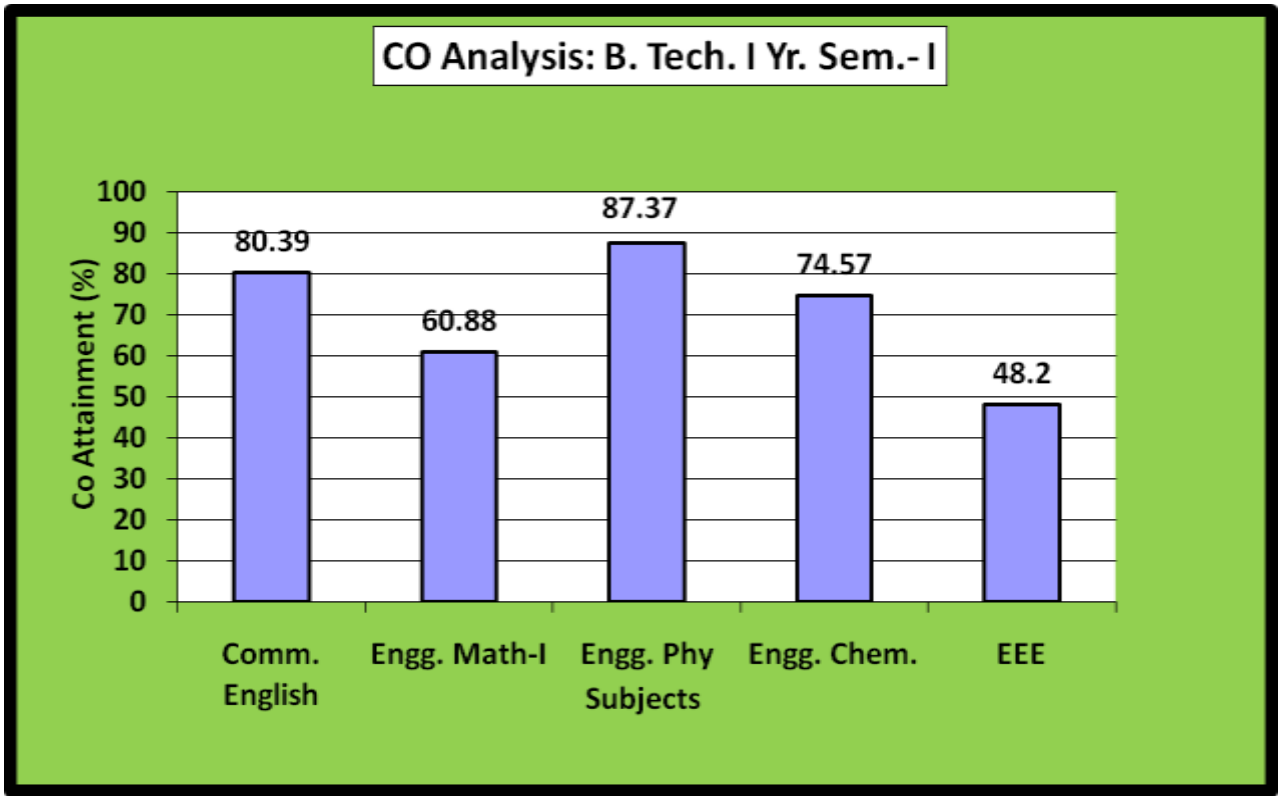


Figure 8.4.2b CO Analysis B.Tech I Yr. Sem.-I(2016-17)

Target for Assessment Year 2016-2017= 60%

Semester II (2016-2017)

S.No.	Subject	CO1	CO2	CO3	CO4	CO5	Average Attainment
1	Communication Technique(201)	76.22	84.41	74.11	-	-	78.24
2	Engineering Mathematics-II(202)	67	82	66	37	-	63
3	Engineering Physics-II(203)	77.26	80.48	-	-	-	78.87
4	Chemistry & Environmental Engg. (204)	85.74	68.96	63.76	-	-	72.8
5	Engineering Mechanics(205)	60.33	48.56	-	-	-	54.44
6	Fundamentals of Computer Programming(206)	77	60.5	79.3	53.8		67.65

Table B.8.4.2c Attainment of Course Outcome Semester II(2016-17)

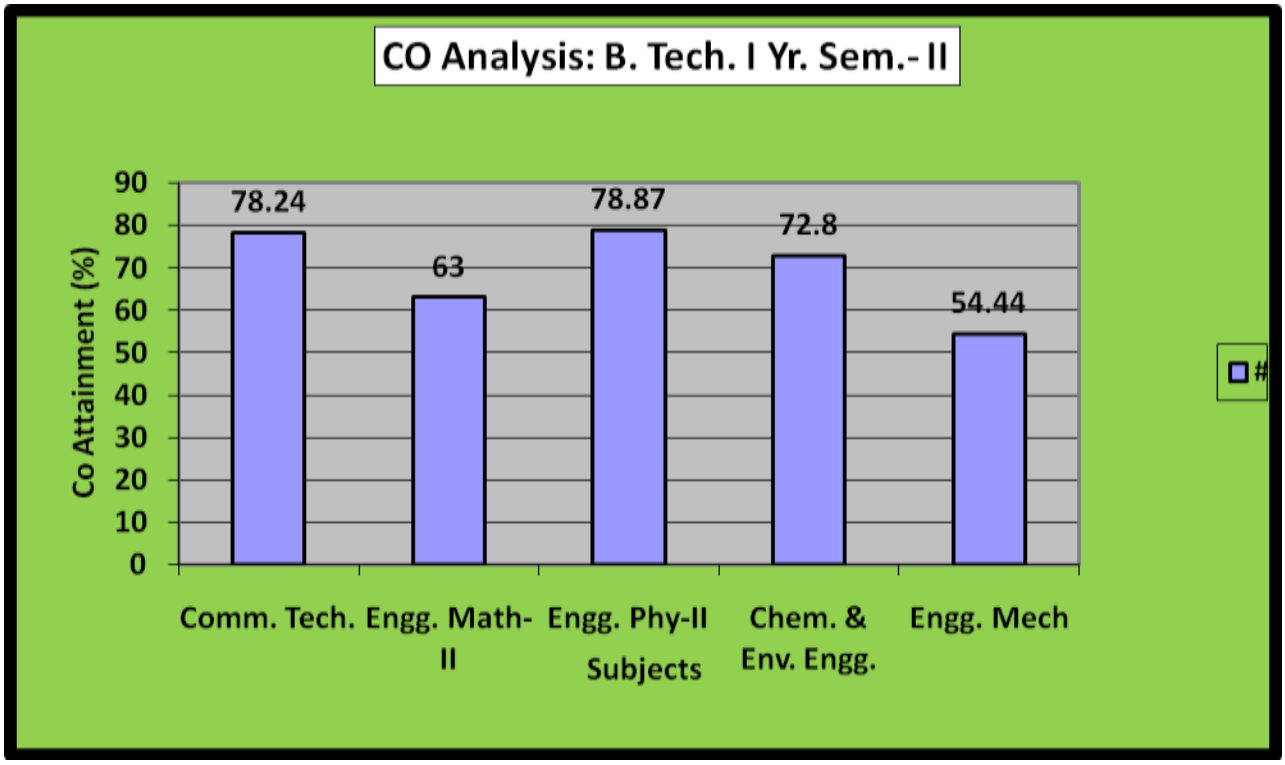


Figure 8.4.2c CO Analysis B.Tech I Yr. Sem.-II(2016-17)

8.5: Attainment of Program Outcomes from I year courses (20)

8.5.1: Indicate results of evaluation of each relevant PO and/or PSO, if applicable (15)

The relevant Program outcomes that are to be addressed at first year need to be identified by the institution.

Program outcome attainment levels shall be set for all relevant PO's and/or PSO's through First year courses.

(Describe the assessment processes that demonstrate the degree to which the Program outcomes are attained through First year courses and document the attainment levels. Also include information on assessment processes used to gather the data upon which the evaluation of each Program Outcome is based indicating the frequency with which these processes are carried out)

Assessment Process used to gather the data upon which the evaluation of each Program Outcome is based

Process to Calculate Attainment of PO's (Annualy)

Phase –I

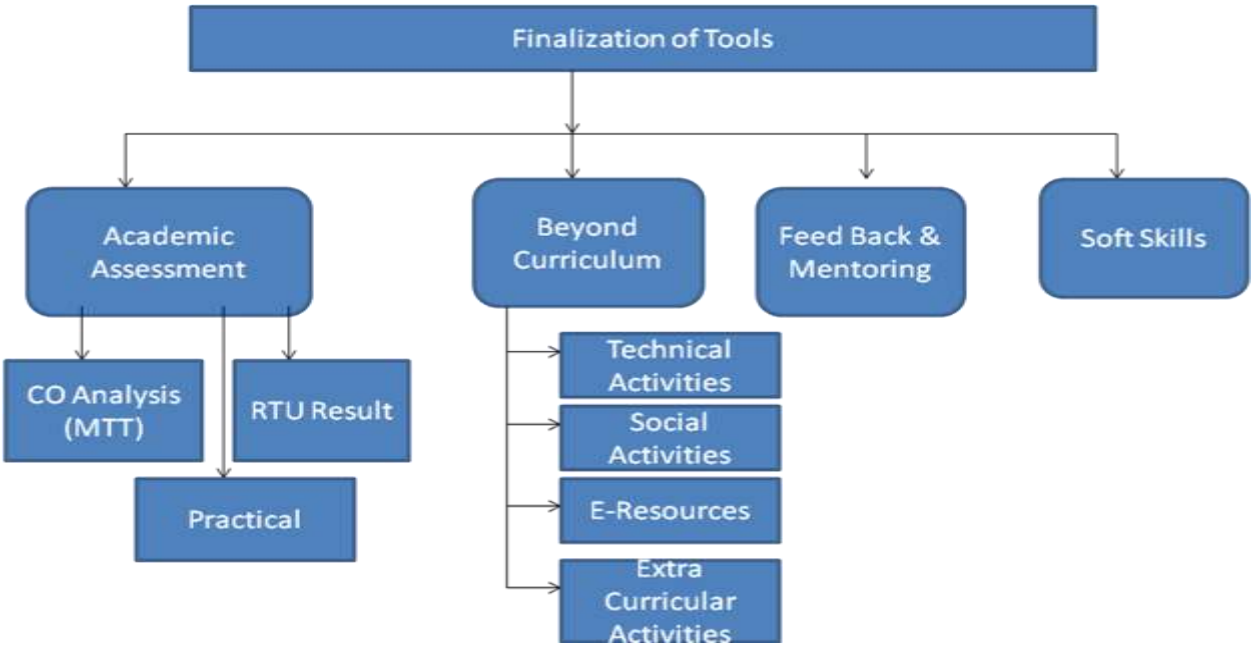


Figure 8.5.1a Process to Calculate Attainment of PO's

Phase –II

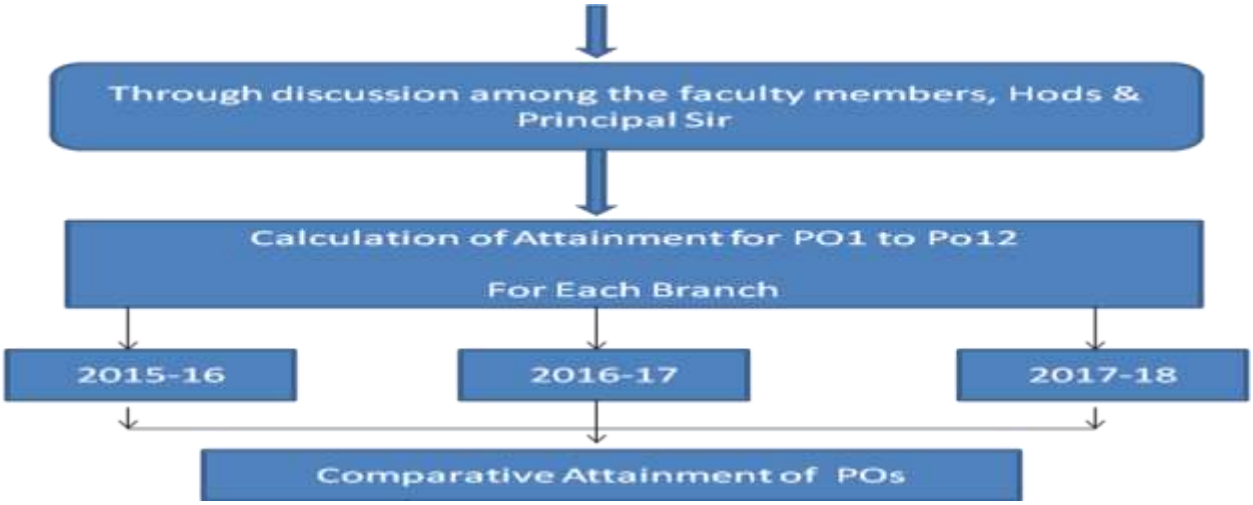


Figure 8.5.1b Process of Finalization of Rubrics

Rubrics for PO Attainment

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Tool	Tools	Mapping	Rubric
Academic Assessment	MTT Result	H	70% students >65%=>100% marks 70% students >60%=>80% 60% students >65%=>60% 60% students >60%=>50% Else =>0 marks
	Final RTU Result	L	70% students >65%=>100% marks 70% students >60%=>80% 60% students >65%=>60% 60% students >60%=>50% Else=> 0 marks
	Lab/Experiments	M	Attendance=> 20%marks Performance =>20% marks Record /File =>10% Internal assessment -1 =>30% External assessment -1 =>20%
Beyond Curriculum	Technical Events	H	>=80% students participated =>100% marks 70-79% students participated=>80% 60-69% students participated=>60% 50-59% students participated=>50% Else=> 0 marks
	Social Events	NA	>=25% students participated =>100% marks 20-24 % students participated =>80%

			15-19 % students participated =>60% 10-14 % students participated =>50% Else=> 0 marks
	E-Resources	M	>=50% students =>100% marks 40-49 % students =>80% 30-39 % students =>60% 20-29 % students =>50% Else=> 0 marks
	Extra Curricular Activity	NA	>=25% students participated =>100% marks 20-24 % students participated =>80% 15-19 % students participated =>60% 10-14 % students participated =>50% Else=> 0 marks
	Mentoring	H	>=100% students mentored => 100% >=90% students mentored=> 90% >=80% students mentored => 80%
			>=70% students studied => 70% Else=>= 0 marks
	Soft Skills	NA	>=80% students retained=> 100% >=70% students retained=> 80% >60% students retained => 70% >=50% students retained=> 60% Else=>= 0 marks

Table B.8.5.1a Assesment Process for Attaining PO1

Note: Sample rubric for assessment of PO1 is defined above and similarly the rubric for assessment of other PO's is considered with different weightage.

PO Attainment Levels through First Year courses:

2018-19

Semeter I

Courses	Subject	PO1	PO2	PO3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO 10	PO 11	PO 12
Course	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO 8	PO 9	PO1 0	PO11	PO 12
CO101	Engineering Mathematics-I	3	1	-	-	-	-	-	-	1	1	-	1
CO102	Engineering Physics	2	1	-	-	-	0.25	-	-	1	0.25	-	1
CO102	Engineering Chemistry	2	1	0.75	0.5	-	0.75	0.75	-	-	0.75	-	-
CO103	Communication Skills	-	-	2	-	-	3	2	3	2	1	-	1

CO104	**Programming for Problem Solving**	**1.5**	**1.75**	**1.75**	**1.75**	**1.25**	**0.5**	**0.75**	**NA**	**0.25**	**1.25**	**NA**	**1.5**
CO105	**Basic Electrical Engineering**	**2.66**	**2.33**	**1**	**1.33**	**1.33**	**-**	**-**	**-**	**2**	**0.33**	**-**	**-**
CO106	**Engineering Physics Lab**	**2**	**1**	**1**	**-**	**-**	**0.5**	**-**	**-**	**1**	**1**	**-**	**2**
CO106	**Engineering Chemistry Lab**	**1.66**	**1.66**	**-**	**1**	**-**	**-**	**0.66**	**-**	**1**	**2**	**-**	**-**
CO107	**Language Lab**	**-**	**1**	**-**	**-**	**-**	**1**	**-**	**-**	**3**	**3**	**-**	**1**
CO108	**Computer Programming Lab**	**1.67**	**1.33**	**1.67**	**0.33**	**0.67**	**1**	**NA**	**NA**	**1**	**0.67**	**NA**	**0.67**

Table B.8.5.1(a) PO Attainment of Sem. I (2018-19)

2017-18
Semeter I

Courses	Subject	PO1	PO2	PO3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO 10	PO 11	PO 12
MA-101	Engineering Mathematics-1	3	2	1	-	1.25	1	2	-	3	2	-	1
HU-103	Human Values	-	-	2	-	-	3	2	3	2	1	-	1
PY-101	Engineering Physics	2	1	1	-	-	1	-	-	1	1	-	1
CS-101	Computer Programming-I	2.75	1.75	1.50	1.75	1.5	1.25	1	-	-	1.25	-	2.5
CE-101	Environmental Engineering and Disaster Management	2	0.75	1	0.5	-	1.75	1.75	1	.75	.5	-	1
HU-104	Human Values: Activities	-	-	1	-	-	3	3	3	1	1	-	1
PY-102	Engineering Physics Lab	2	1	1	-	-	1	-	-	1	1	-	1
CS-102	Computer Programming-I Lab	2	3	2	1	-	-	-	-	2	1	-	1
CE-102	Computer Aided Engineering Graphic	3	-	-	-	-	-	-	-	2	2	-	1
ME-101	Mechanical Workshop Practice	3	-	-	-	-	-	-	-	2	2	-	1
	Average Attainment	2.46	1.58	1.21	1.08	1.37	1.71	1.95	2.33	1.63	1.27	_	1.15

Table B.8.5.1(a) PO Attainment of Sem. I (2017-18)

2017-18
SEM II

Courses	Subject	PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO 10	PO 11	PO 12
MA-102	Engineering Mathematics-II	3	2	1	-	1.25	1	2	-	3	2	-	1
HU-101	Communication Skills	-	1	2	-	-	1	-	-	3	3	-	1
CY-101	Engineering Chemistry	2	1	0.5	0.5	-	0.25	0.5	-	-	0.5	-	-
CS-103	computer Programming-II	2.25	1.75	1.5	2.25	2	1.75	2	--	-	2	-	1.75
CE-103	BAsic Civil Engineering	1.5	1	.5	-	-	.25	.5	.25	.75	.25	.5	.25
ME-102	Basic Mechanical Engineering	2.25	-	.75	2.25	.75	.25	1.5	2.25	.5	1.25	-	1
CY-102	Engineering Chemistry Lab	2	2	-	1	-	-	-	-	1	2	-	-
CS-104	Computer Programming-II	2	2	3	1	-	--	-	-	2	1	2	1
HU-102	Communication Skills Lab	-	1	-	-	-	1	-	-	3	3	-	1
ME-104	Computer Aided Machine Drawing	3	2	2	-	2	2	2	-	-	2	-	2
	Average Attainment	2.25	1.52	1.40	1.40	1.50	0.93	1.41	1.25	1.89	1.70	1.25	1.12

Table B.8.5.1(b) PO Attainment of Sem. II (2017-18)

2016-2017(I Semester)

Courses	Subject	PO1	PO2	PO3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO 10	PO 11	PO 12

101	Communicative English	-	1	1	-	-	-	1.3	-	-	3	-	1
102	Engg. Maths-I	3	3	1.6	1	1	1	1	-	2	2	-	1
103	Engg. Physics-I	3	3	1	.75	1.5	2.5	1.75	-	2	1.25	1	1.5
104	Engg. Chemistry	2	1.3	1	1	-	2	2	-	-	1	-	1
105	Basic EE	2.8	2.6	2	2	1.4	1.2	1.2	-	1.8	1	1.4	2.2
106	Physics Lab	3	3	2.5	1	2.5	3	2.5	2	2.5	1	1	2
107	Chemistry lab	2	1.67	1.67	1	-	2	2	-	1	1	-	1
108	EE Lab	2.8	2.9	1.4	-	-	2	-	-	0.33	-	-	3
110	Workshop	3	1.5	1	0.5	-	1	0.5	-	1	0.5	0.5	1.5
	AverageAttainment	2.7	2.21	1.46	1.03	1.6	1.83	1.53	2	1.51	1.34	0.97	1.57

Table B.8.5.1(c) PO Attainment of Sem.I (2015-16,2016-17,2017-18)

2016-2017(II Semester)

Courses	Subject	PO1	PO2	PO3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO 10	PO 11	PO 12
201	CommunicationTechniques	-	1	2	-	-	1	-	1	3	3	-	1
202	Engg. Maths-II	3	2	1	-	1.25	1	2	-	3	2	-	1
203	Engg. Physics-II	3	3	2	1	1.8	2.2	2	-	1.6	1.4	1	2
204	Chemistry & Env. Engg.	2	1.33	1	-	-	-	2	-	-	1	-	1
205	Engg. Mechanics	3	2	-	-	-	-	-	-	-	-	-	2
206	FOC	2.75	1.5	1.5	1.25	1.25	1	1.25	-	1.75	1.25	-	1.25
207	Physics Lab-II	3	3	2.5	2	3	3	1.5	1.5	2.5	2	1	2
208	Chemistry lab	2	1	1	1	-	1	2	-	1	1	-	1
209	CP Lab	2.7	1.5	1	1.2	1.2	1	1.2	-	1.7	1.2	-	1.2
210	Machine Drawing	3	2	2	-	2	2	2	-	-	2	-	2
211	CT Lab	-	-	1	-	-	1	-	1	3	3	-	1
	Average Attainment	2.71	1.83	1.5	1.29	1.75	1.46	1.74	1.16	2.19	1.78	1	1.4

Table B.8.5.1(d) PO Attainment of Sem.I (2015-16,2016-17,2017-18)

8.5.2. Actions taken based on the results of evaluation of relevant POs (5)

(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

PO Attainment Levels and Actions for improvement – CAY only – Mention for relevant Pos

- **2018 -19 session going on (Results awaited)**

PO Attainment Levels and Actions for improvement – CAY (m1) only – Mention for relevant Pos

(2017-2018)

POs	Target Level in %	Attainment Level in %	Observations
PO1: Engineering knowledge:			
PO1	58.05	46.93	Observations: • Targets are not fully achieved in RTU results. • Students are not exposed to complex engineering problems.
Action 1: More technical activities were conducted to improve the participation of students. Action 2: University question papers are solved in classes.			
PO2: Problem analysis:			
PO2	67.38	55.61	Observations : • Students are not exposed to complex engineering problems • Curriculum designed for I Year does not contain literature research and analysis of problem
Action 1: Students are motivated to participate in science project exhibition for developing an analytical mind which can work towards problem solving. Action 2: Students are motivated for optimum utilization of E-Resources to enhance their knowledge.			
PO3: Design/development of solutions:			
PO3	67.79	62.75	Observations : • I Year curriculum include only basic knowledge of Engineering and sciences.
Action 1: More activities involving designing solutions like Hackathon are initiated in the campus. Action 2: Students are motivated to improve their participation in technical/social/extra-curricular activities.			

PO4: Conduct investigations of complex problems:			
PO4:	51.58	46.91	Observations : • Few activities related to understanding of complex problems and its investigation.
Action 1: Workshops are conducted to give the hands on experience to students and faculty. Action 2: They are motivated to use E- Resources and register themselves in online courses.			
PO5: Modern tool usage:			
PO5	55.54	50.31	Observations : • Target and attainment both are less as students learn basics of computer programming in I Year. • Other subjects does not use modern IT tools for problem solving.
Action 1: Technical events are organized at institute level so that students can participate and learn latest techniques and methods of problem solving. Action 2: Students are motivated to participate in inter college events to get exposure to real world problems.			
PO6: The engineer and society:			
PO6	61.8	56.33	Observations : • The students are found to be less active as far as socia activities were concerned; also they were unaware about the basic health and safety issues with engineering point of view. • Most of the courses of B.Tech first year are not addressing the needs of, health, safety and social concerns regarding engineering practices in real life.
Action 1: The students are motivated to be a part of social groups like Soch, Suhasini, Aashayein, Zarurat available at Institute. Action 2: These groups encouraged students to take part in Swachch Bharat drives, Blood Donation Camps, Village visits, voluntary teaching and mentoring of downtrodden children.			
PO7: Environment and sustainability:			
PO7	54.66	48.79	Observations : • Less awareness of students about the issues related to global and environmental sustainability.
Action 1: Students are encouraged to indulge in projects in which global and environmental issues are improved. Action 2: The activities like Tree Plantation Drive and Cleanliness Drive are organized to instill in them the responsibility towards environment. Action 3: The students were mentored to practice rain water harvesting, water conservation and waste recycling at the individual level.			
PO8: Ethics:			
PO8	14.27	10.99	Observations: • The students were reluctant to bear upon a responsibility in the competitive activities. Moreover, some of the students were found to be

			casual in their conduct.
Action 1: As far as professional conduct and behavior is concerned the students are made to attend anti- ragging seminars, interactive talks on personal conduct and behavior with eminent advisors in the college. Action 2: The college has a well- established spiritual cell which encourages students to experience professional life with high moral conduct and spirituality.			
PO9: Individual and team work:			
PO9	69	63.07	Observations: • Classroom teaching does not provide environment for team work, whereas student can show his/her working as a team member or team leader during practical classes and other co curricular activities.
Action 1: The students are mentored and encouraged by the faculty to participate in group activities and lead the group as a responsible leader. The group activities included Hackathon, Fun activities at college fest, Model United Nations etc. Action 2: The activities like Group discussions, quizzes etc., technical events like J- Techtrix, JECRC Hackathon etc. and volunteering and coordinating for various events in annual fest Renaissance.			
PO10: Communication:			
PO10	49.94	40.27	Observations: • The students are found to be hesitant in public speaking and express their opinion.
Action 1: In order to address this issue, the group of students are asked to prepare and give power point presentations on the topics within the curriculum as well as the beyond the curriculum. Action 2: They are encouraged to participate in house and inter-college competitions to enhance their communication skills.			
PO11: Project management and finance:			
PO11	NA	NA	Observations: • I Year students are not involved in project management and finance, but they can learn the basics by participating in other activities organized in college.
Action 1: Annual Project exhibition is organized in the college where I year students participate learn the basics of project handling and finance.			
PO12: Life-long learning:			
PO12	33.05	25.18	Observations : • The students are ignorant about the significance of the subject in broader context of life.
Action 1: Lecture content includes applications and advances in subject knowledge of new techniques. Action 2: Students are mentored to work for better achievement forever. Action 3: Students are motivated to improve their participation in technical/social/extra-curricular activities.			

Table B.8.5.2a PO Attainment Levels and Actions for improvement for 2017-18

Attainment of Po's From I Year Courses in the year

2017-18

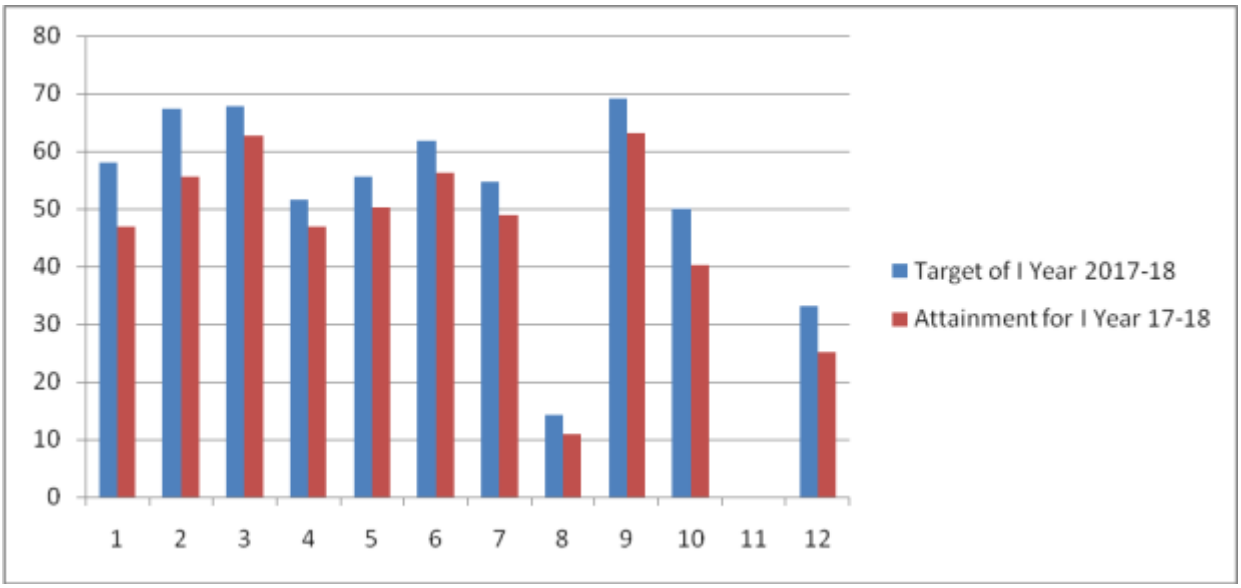


Figure 8.5.2a Attainment of Po's From I Year Courses in the year 2017-18

PO Attainment Levels and Actions for improvement – CAY (m2) only – Mention for relevant Pos

(2016-2017)

POs	Target Level in %	Attainment Level in %	Observations
PO1: Engineering knowledge:			
PO1	62.53	53.64	Observations: • Participation in technical events can be improved. • In RTU result, students are attaining less marks.
Action 1: RTU question papers were solved discussed in regular classes to improve the RTU result. Action 2: Extra classes based on university question paper & pattern was taken. Action 3: more technical activities were conducted to improve the participation of students.			
PO2: Problem analysis:			
PO2	70.03	50.03	Observations : • Curriculum designed for I Year does not contain literature research and analysis of problem • Use of e- resources was less so it can be improved.
Action 1: Department took the initiative to organize National/International conferences. Action 2: Students are motivated to participate in science project exhibition for developing an analytical mind which can work			

towards problem solving.
Action 3: Students are guided to use more & more e-resources.

PO3:Design/development of solutions:

PO3	67.18	55.46	Observations : • I Year curriculum include basic knowledge of Engineering and sciences. • Participation in technical & social activities was less.

Action 1: Students were motivated to improve their participation in technical/social/extra-curricular activities.
Action 2: Students are motivated to join various Technical Clubs in Institute.

PO4: Conduct investigations of complex problems:

PO4:	42.65	38.1	Observations : • Participation in technical activities was less. • Use of e- resources was less . • Students have less understanding of complex problems and its investigation.

Action 1: Participation in technical activities was increased by mentoring & motivation.
Action 2: Workshops are conducted to give the hands on experience to students and faculty.
Action 2: They are motivated to use E- Resources and register themselves in online courses.

PO5: Modern tool usage:

PO5	44.44	38.8	Observations : • Target and attainment both are less as students learn basics of computer programming in I Year. • Other subjects does not use modern it tools for problem solving.

Action 1: More of technical events are organized at institute level.
Action 2: Students are motivated to join robotics/moon rider etc.

PO6: The engineer and society:

PO6	61.2	51.04	Observations : • Students need to be made more sensitive towards social issues.

Action 1: The students are encouraged to join social groups like Soch, Suhasini, Aashayein, Zarurat etc.

PO7: Environment and sustainability:

PO7	48.88	39.49	Observations : • Less awareness of students about the issues related to global and environmental sustainability.

Action 1: Students are encouraged to indulge in projects in which global and environmental issues are improved. Action 2: The activities related to environment and sustainability are organized.			
PO8: Ethics:			
PO8	8.14	7.61	Observations: • The students were reluctant to bear upon a responsibility in the competitive activities. Moreover, some of the students were found to be casual in their conduct.
Action 1: As far as professional conduct and behavior is concerned the students were made to attend anti- ragging seminars, interactive talks on personal conduct and behavior with eminent advisors in the college. Action 2: The college has a well- established spiritual cell which encourages students to experience professional life with high moral conduct and spirituality.			
PO9: Individual and team work:			
PO9	71.85	62.4	Observations: • Team activities should be included in regular practice.
Action 2: The team activities like Group discussions, quizzes etc., technical events like J- Techtrix, and volunteering and coordinating for various events in annual fest Renaissance, MUN.			
PO10: Communication:			
PO10	52.4	40.19	Observations: • The students are unable to express their views on public platform.
Action 1: In order to address this issue, the group of students are asked to prepare and give power point presentations on the topics within the curriculum as well as the beyond the curriculum. Action 2: They are encouraged to participate various competitions to enhance their communication skills.			
PO11: Project management and finance:			
PO11	NA	NA	Observations: • I Year students are not involved in project management and finance, but they can learn the basics by participating in other activities organized in college.
Action 1: Annual Project exhibition is organized in the college where I year students participate learn the basics of project handling and finance.			
PO12: Life-long learning:			
PO12	36.08	32.05	Observations : • The students were ignorant about the significance of the subject in broader context of life.
Action 1: Lecture content includes applications and advances in subject knowledge of new techniques. Action 2: Students were mentored to work for better achievement forever. Action 3: Students were motivated to improve their participation in technical/social/extra-curricular activities.			

Table B.8.5.2b PO Attainment Levels and Actions for improvement for 2016-17

Attainment of Po's From I Year Courses in the year 2016-17

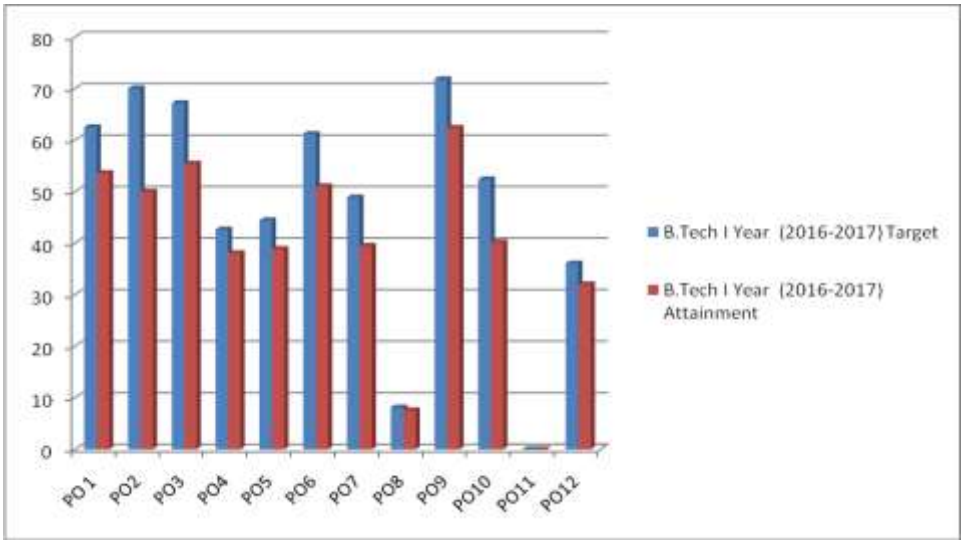


Figure 8.5.2b Attainment of Po's From I Year Courses in the year 2016-17

Gap fulfilling activities

Based on the above observations following actions are taken to overcome the gap

1. **To attain PO 1 : Facilitating & making them learn the use of E- resources while learning:**
    - Soft copy of notes is provided to students for reference.
    - One or two questions are given in assignment which is to be searched from internet only.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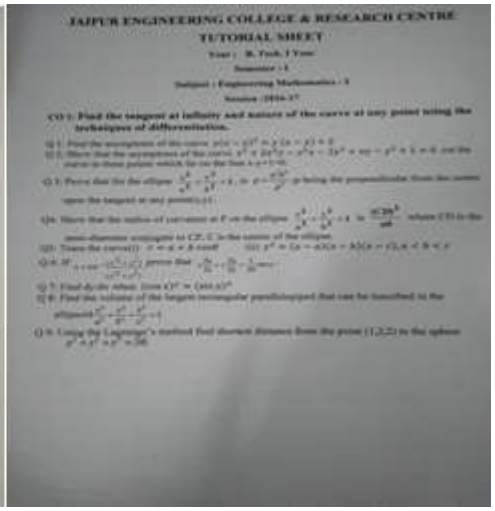
ADDITIONAL ASSIGNMENT


JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE
TUTORIAL SHEET

Note: Similarly, for each PO gap fulfillment such type of activities organized.

CRITERION 9	Student Support Systems	50

9.1 Mentoring System to help at individual level (5)

Type of mentoring: Professional guidance/ career advancement/ course work specific/ laboratory specific/ all round development. Number of faculty mentors: Number of students per mentor: Frequency of meeting
(The institution may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system)

Professional Guidance/ Career Advancement

An effective Student mentoring system has already been implemented in our college to mentor throughout activities, performance and over all development of students.

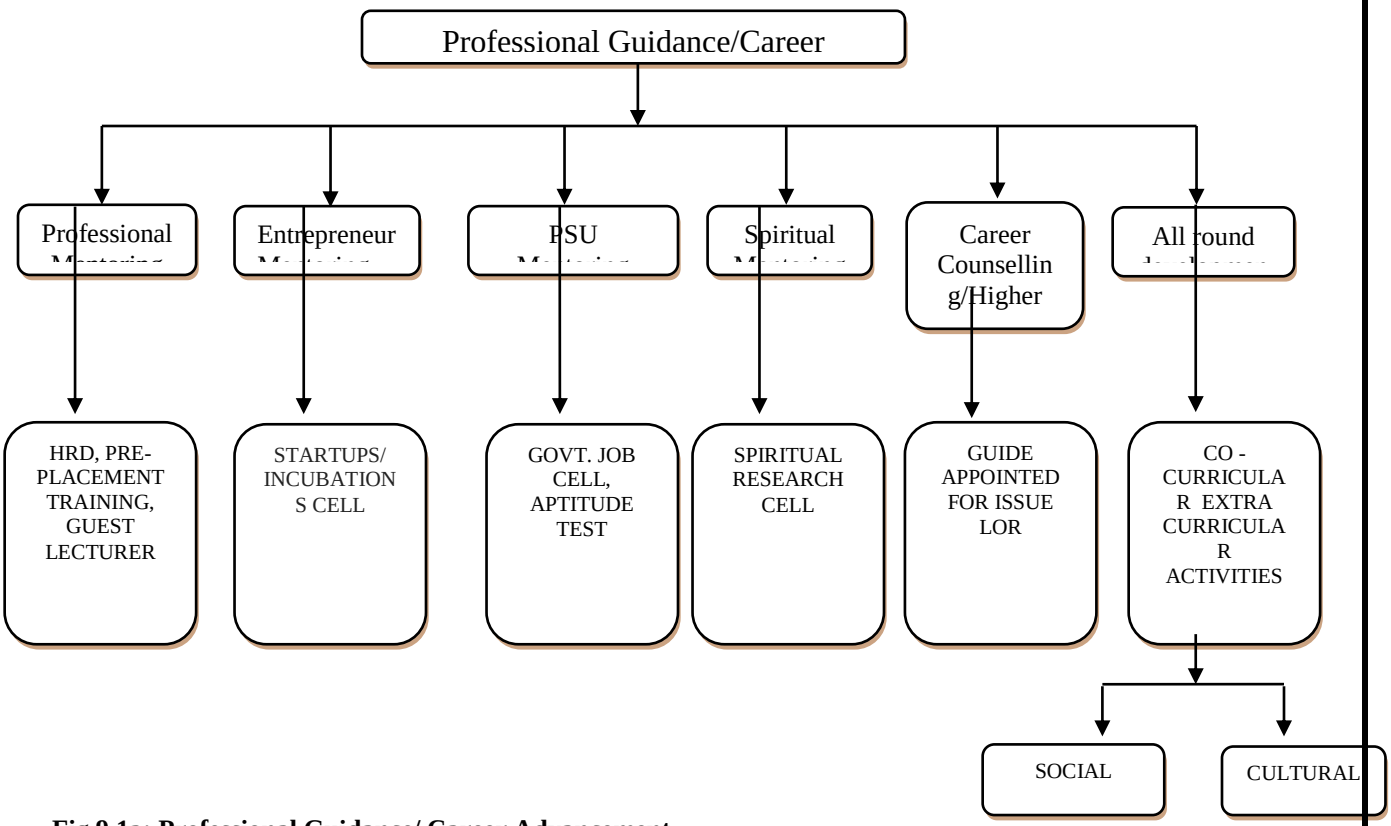


Fig 9.1a: Professional Guidance/ Career Advancement

S.No.	Type of Mentoring	Name
1	PSU Mentoring	Professor (Dr.) Vinay Kumar Chandna
		Mr. P.K.Tiwari (Rtd. IPS)

2	Professional Mentoring	Dr.S.N.Gupta Mr. Mukt Bihari
3	Entrepreneur Mentoring	Mr. SiddharthChaturvedi
4.	Social and Spiritual Mentoring	Mr. Mukesh Agarwal
5.	Higher Studies Mentoring	Ms. Neelakshi Chaturvedi
6.	Overall Development	Mr. Anshul Mittal

Table B.9.1a:Type of Mentoring

- **Professional mentoring**

We have Human Resource & Development cell (HRD), senior advisor and many senior dignitaries who guide students for their career and placement.
Different interactive sessions for students with senior advisor and other senior member are organized to motivate and guide them for enhancing career.

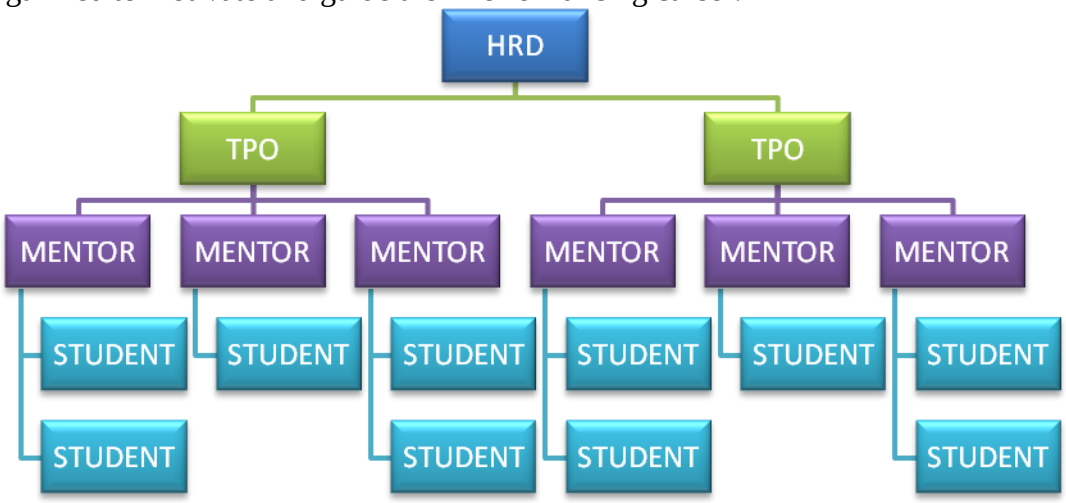


Fig.9.1b:Professional mentoring

- **Resume writing sessions:** Organized for students to guide them for effective resume writing.

S.No.	Year	Speaker	Date	No.of participants
1	2015-16	Mr. P.K.Tiwari	23 July,2015	250
2	2016-17	Mr. P.K.Tiwari	25July,2016	195
3	2017-18	Mr. P.K.Tiwari	21 July,2017	196

Table B.9.1b:Resume writing sessions

- Training conducted for improving specific technical domain practical knowledge in campus itself.

Year	Name of event	Object of event	No. of students participated	Date of event
2016-17	Pre placement training by Face	Bridging gap between academics & Industry	250	18-7-2016 to 6 -8-2016
2017-18	Pre placement training program by Face	Bridging gap between academics & Industry	197	20-7-2018 onwards

Table B.9.1c: Conducted training

Placement trainning Time table

Dates\ Hours	8.30- 9.30	9.30-10.30	10.30-11.30	11.30-12.30	12.30-1.30	1.30-2.30	2.30-3.30
9th July'18 Monday	Report to Mentors	**Department Orientation** HoD/TPO		BREAK	Discussion on Resume Writing	Submit the **RESUME** to mentors	
10th July'18 Tuesday	**Summer Internship** Writeup and Presentation Session Venue: BS12				A breif Introduction to **CBT** and the content		
11thJuly'18 Wednesday	**Group Discussion** and Extempore session/ Interview do's and don'ts				**Project** (Synopsis , Mentor allotment, Reporting dates and Type of questions to be pepared for Interview.)		

Fig.9.1b:

Pre Placement Training (L-1) 1. technical class on C&C++ 2. Orientation Program 3. Resume Writing 4. IS 5. P&S 6. Mot. & Mat. Dist. 7. CBT

Branch	Date	8:30-10:00	10:00-11:30	11:30 - 12:30	12:30-2:00	2:00-3:30
ECA ECB CSA CSB	12-Jul	Orientation Program	distribution (TPO & HoD)		CBT	
	13-Jul	Resume writing	Interview skills		CBT	
	14-Jul	C, C++ (ECA & ECB, C-401) By NM Project / Seminar	C, C++ (CSA & CSB, C-501) By AM Project / Seminar	BREAK	CBT	

Branch	Date	8:30-10:00	10:00-11:30	11:30 - 12:30	12:30-2:00	2:00-3:30
ECC ECD CSC CSD	12-Jul	CBT			Motivation and Material distribution (TPO & HoD)	Orientation Program
	13-Jul	CBT			Resume writing	Interview skills
	14-Jul	CBT		BREAK	C, C++ (ECC & ECD, C-401) By NM Project / Seminar (CSC & CSD, C-501) By __	C, C++ (CSC & CSD, C-501) By AM Project / Seminar (ECC & ECD, C-401) By __

7ECA

PI-Tech1:Mr.Anil Jain, PI-Tech2:Ms.Parul Tyagi ; PI-HR1:Mr. S.S.Manaktala, PI-HR2:Dr. S K Singh; GD:Mr. Devesh Gupta & Mr. Ashish Sharma, Tech Lecture: Mr. Raj Kumar, Mr. Ankur Gangwar, Mr. Aashutosh Sharma, Dr. Lokesh Bansal & Naresh Kumar, Mr. Pravin Sharma.

Date	8:30-9:30	9:30-10:30	10:30-11:30	11:30 - 12:00	12:00-1:00	1:00-2:00	2:00-3:00	3:00-4:00	Check List
16-Jul	APT VENUE: B506			BREAK	Subject: EDC Faculty: Mr. RAJKUMAR	(PI Tech1-AJ at ROOM NO. B509) & (PI Tech2- PT at ROOM NO. BG03) BATCH: A1 (PI HR1-SSM at ROOM NO. BG13) & (PI HR2- SKS at ROOM NO.) BATCH: A2 (GD 1-DG at ROOM NO. BG01) & (GD 2- AS at ROOM NO. BG01) BATCH: A3 TIME SLOT: 1-2 PM		CBT1	
17-Jul	APT VENUE: B506				Subject: EDC Faculty: Mr. RAJKUMAR	(PI Tech1-AJ at ROOM NO. BS09) & (PI Tech2- PT at ROOM NO. BG03) BATCH: A2 (PI HR1-SSM at ROOM NO. BG13) & (PI HR2- SKS at ROOM NO.) BATCH: A3 (GD 1-DG at ROOM NO. BG01) & (GD 2- AS at ROOM NO. BG01) BATCH: A1 TIME SLOT: 1-2 PM		CBT2	PI(Tech)-1 PI(HR)-1 GD-1 Tech-3 CBT-3 APT-3

Pre Placement training Program by FACE

- **Government Job Cell**

  The Initiative taken by institute under the mentorship of Prof.(Dr.) Vinay Chandna for making students career in government sector in 2016-17 . Cell is under the guidance of Mr. P.K.Tiwari and Mr. O.P.Jain in institute to prepare students towards different competitive examination. In this cell we encourage and inspire students for competitive examination like GATE, CAT, MAT etc.

  - Organized classes for GATE aspirants.
  - Provided course material to students.
  - Career opportunities in government sector are shared with the interested students.

Item		CAY (2017-2021)	CAYm1 (2016-2020)	CAYm2 (2015-2019)
National Level Entrance Examination(JEE)	No. of Students admitted	228	235	225
	Opening Score/Rank	138	131	400(Rank)
	Closing Score/Rank	28	43	14004(Rank)
State/University/Level Entrance Examination/Others	No. of Students admitted	N/A	N/A	N/A
	Opening Score/Rank	N/A	N/A	N/A
	Closing Score/Rank	N/A	N/A	N/A
Name of the Entrance Examination for Lateral Entry or Lateral entry details	No. of Students admitted	01	3	2
	Opening Score/Rank	58.42	69.89	61.57
	Closing Score/Rank	58.42	65.51	55.95
Average Marks		70.72	77.69	72.52

- **Entrepreneur cell**

Entrepreneurship cell is established by institute under the mentorship of Mr. SiddharthChaturvedi, our College for encouraging and inspiring students for start-ups and entrepreneur. Various interactive sessions for students with alumni and start-up representative are organized to know the importance of being an entrepreneur and ways to get financial assistance to become an entrepreneur.

Cell is responsible for :

1. Initiative and Development of Start-ups/Incubations
2. Initiative towards centre of excellence
3. Relationship with companies
4. Motivate students, guide and help them in the same direction.

An Entrepreneurship awareness camp organized on 2nd sep, 2016 in which our students and faculties participated.

- Institute has success stories for every pass out year as a result of Entrepreneurship cell and incubation centre.

S.No	Name	Batch	Branch	Organisation	Present Location
1	Gaurav Sharma	2015	CSE	Thank You	Jaipur
2	Monu Kumar	2015	CSE	Kiranevala Trading Pvt Ltd	Jaipur
3	Pulkit Agrawal	2016	CSE	Encode Zero	Delhi
4	Utkarsh Nagpal	2017	CSE	Heal Nectar	Jaipur
5	Dhiraj Kumar	2017	CSE	Replica Classes	Balotra
6	Pramit Jain	2017	CSE	RIBUK SELLER	Jaipur
7	SHIVANSH SHARMA	2018	CSE	urbanclothingfactory	Jaipur
8	SHIV KUMAR	2018	CSE	Hind AI Systems	Nasik
9	Akshat garg	2019	CSE	VE guide	JAIPUR

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Spiritual Mentoring

A special initiative has been taken by our institute in the form of SPIRITUAL RESEARCH CELL. The cell was established on 6th October, 2016. The inauguration was done by the auspicious presence of The Executive Secretary, Brahmakumaris& Vice Chairman, Rajyoga Education & Research Foundation, RajyogiMruthyunjaya Ji, Dr. U.S Agarwal, Principal, SMS Medical College, Jaipur and Meditation Expert, BK SushmaJi.This cell motivates students mentally and builds up their confidence.

Inauguration of Spiritual cell

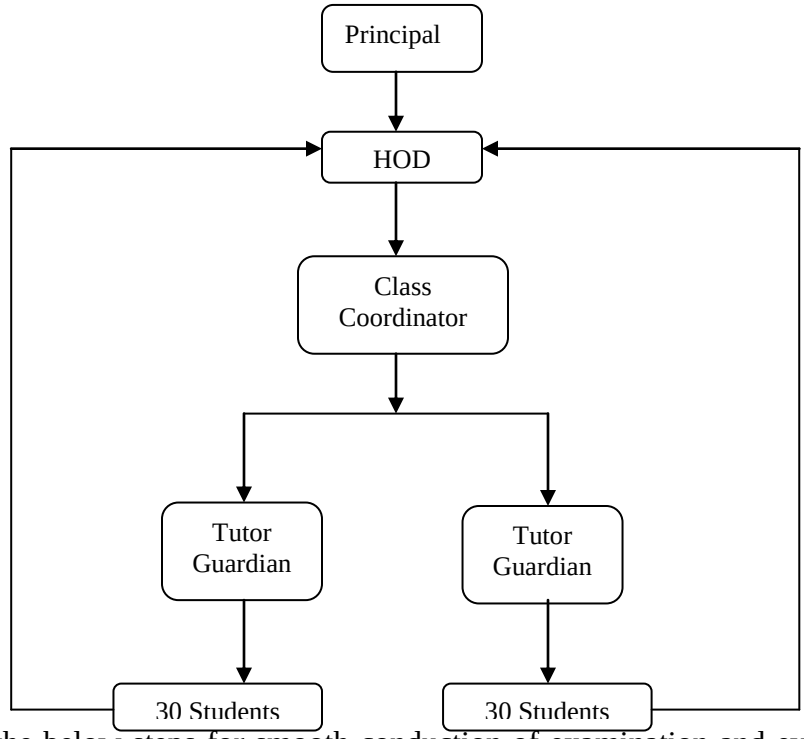
- **Career Counselling /Higher studies**

A Guide has been appointed specifically for higher study counselling and career counselling in December 2016. Guide counselled many students and encouraged them for further studies on the right path for career. Letter of recommendation (LOR) has been issued to some students.

S.No.	Dept. Name	No. of LOR issued(Approx)
1	ECE	5

Course Work Specific/ Laboratory Specific

- For II and III year we have Tutor Guide (TG) who follows instructions given by Class Coordinator (CC).



The department follows the below steps for smooth conduction of examination and evaluation process:

- The department adhere academic calendar prescribed by RTU, Kota
- There is departmental Examination Committee in which two faculty members are included for conduction of Internal Examination and Two for External Examination.

a) The committee circulates notice a week before the commencement of examination by taking prior approval from HOD.

b) Course Coordinator prepares and submit their question paper to respective class coordinator

c) Then class coordinator submits all question papers to Moderation Committee.

d) Moderation Committee in coordination with IQAC selects one question paper among the set of three papers.

e) Selected Question paper send to Internal Examination Coordinator then internal examination coordinator takes printout of the final paper.

f) During the exam two invigilators are assigned in each class room and students sits in the class rooms according to appropriate seating plan.

g) After the completion of exam, answer sheets evaluation, result analysis on basis of CO, weak/strong student list is prepared by course coordinator and submitted to Internal Examination Coordinator. Along with the soft copy.

h) If student secures marks less than 60% in some particular CO then he/she will be considered as weak student. Then course coordinator provides assignment to them and evaluates.

i) Student who secures marks greater than 60% in some particular CO then he/she will be considered as strong student. Then they will be encouraged & motivated for GATE/PSUs/Govt. Exam.

Jaipur Engineering College and Research Centre
Department of Electronics & Communication Engineering
Minutes of Meeting

Date/Day: 22/08/2017 Saturday	**Time: 1:30am to 2:30 noon**	**Location: CP12 Lab, Block-B, JECRC**
Speaker: TG	**Speaker's Designation:** AP	**Attended by:** All Students

Agenda of Meeting: To discuss about course coverage.

Attendees:

Meeting started with the welcome of TG by students. Following were the points of meeting:-

S.No.	Points
1	TG interacted with all students.
2	Discuss about course coverage.

- Discussed about Course and content delivery
- Discussed about problems in the class room
- Coverage of Course and requirement of extra classes

The meeting ended up with the thanks of Chair and next round of meeting would be held with prior notice.

- **All round Development**

  The Initiative taken by institute under the mentorship of Mr. Anshul Mittal is responsible for the overall development of student. His responsibility is to encourage students to participate in different co-curricular and extracurricular activities.

SDO Responsibilities:

- Planning, developing and delivering a variety of student services and activities (co-curricular and extracurricular activities)
- Motivate and engage students also oversee students activity on campus
- Handles promotions of college events manual and e-promotions
- Providing support to student council
- Providing support, guidance and advocating for students and faculty in all aspects of student life.

Co-curricular Activates:

Industrial Trainings/Industrial Visits/Workshops				
Sr.No.	**Department Activity**	**Level of Activity**	**Number of Participant**	**PO Attainment**
1	Embedded Systems & Robotics organized by TechiNest Pvt.	National	56	PO1, PO2, PO3, PO5, **PSO1**
2	Embedded & Robotics organized by SaK Robotics	National	66	PO1,PO2, PO3, PO5,**PSO1**
3	Workshop on CCNA Networking	National	58	PO1,PO2, PO3, PO5
4	Workshop on SPYBOT-Spy Robotic Workshop organized by TechiNest Pvt. Ltd	National	215	PO1, PO2, PO3, PO5,**PSO1**

5	Industrial Visit Genus Power Infrastructures Ltd	National	50	PO1,PO2, PO3, PO5
6	Industrial Visit Tesca Technologies Pvt. Ltd.,	National	27	PO1,PO2, PO3, PO5
7	Industrial Visit PHILIPS LIGHTING	National	510	PO1,PO2, PO3, PO5
8	Industrial Visit at BSNL	National	55	PO1, PO2, PO3, PO5

Interactive sessions with industry experts are organized to increase understanding between students and industry requirements.

Year	Session name	Date of session	Conducted by
2017	Domain Awareness About ❖ Embedded Systems ❖ Microcontrollers ❖ IOT ❖ Programming Boards	(09/02/2017)	Mr. Chetan Prakash Aptron India, Noida
2016-17	process of mobile communication l	**(29/07/2017 to 30/07/2017)**	Mr. Atul Rajput , Huawei
2017-18	Society and Control System	2017	Rajasthan Technical University, Kota Dr. Rajiv Gupta

Industrial visits are conducted for students so they can practically observe the environment and activities in Industries.

Jan 2018-June 2018 (Even Sem)					
S. No.	**Name Of Company**	**Dates of Visit**	**Profile of Company**	**No. of Students**	**Outcome**
1	Tesca Technologies Pvt. Ltd.	17th January 2018	Electronics measurements	27 (3rd year)	1) Single sourcing partner for all Educational solutions. 2) Student Interaction with real application of Electronics Engineering.
2	Genus Power Infrastructures Ltd.,	15th February 2018	Electronics	50	1) Student interacted with real application of Engineering especially in Smart Energy meters. 2) Student learned about various Techniques of Power Generation and Distribution.
3	Phillips Lightings	24th March 2018	Electronics	45	1) Students understood the mechanism behind the manufacturing of lighting systems.
4	Talent Pool	24th March 2018	Telecom, IT	45	1) Students were imparted basic knowledge of telecom strategies.

- Teams from JECRC participated in 2017 and 2018 SIH were guided by faculty member so they can perform better.

Year	No. of students participated	No. of teams
2016-17	18	3
2017-18	24	4

- Teams participated in JECRC hackathon 1.0 in 2018 were guided by faculty member(one mentor with each team)

Year	No. of students participated	No. of teams
2017	224	35

Extracurricular activity:

S.N0.	**Activity/Event**	**Date**
1	Blood Group check-up camp	11 Sep, 2017
2	Engineers Day	15 Sep, 2017
3	SwachhtaPakhwada	1 to 15 Sep,2017
4	Interactive Session with Dr. Kiran Seth	8 Sep 2017

5	Rally on rivers Seminar	26 Sep,2017
6	OMEN gaming Championship	7 Oct,2017
7	Interactive session with Mr. Niko Philips	1 Nov, 2017
8	VandeMataram-Voice of Unity	8 Nov, 2017
9	National Girl Child Day Celebration,	24 Jan, 2018
10	Orphanage Children Interactive Program	12 Feb, 2018
11	Soch	12 Feb 2018
12	Renaissance 2018	25 to 28 March 2018
13	Seminar on Careers in Entertainment Industry	12 March 2018

Class Coordinator Responsibilities*:*

- Creating learning opportunities and motivating the student community.
- Providing guidance on academic, personal and career matters.
- Resolving academic issues of students.
- Tracking academic and extra-curricular performance of students.

  Class coordinatorcollects all data of students from the Tutor guardian

No of students per class coordinator: around 60

No of students per tutor guide: around 30

S.No.	Year	No of Class coordinator	No. of Tutor Guide
1	2015-16	12	
2	2016-17	12	
3	2017-18	12	24

Tutor Guardian responsibilities

- Meet the students periodically and monitor their performance and their activities

  Frequency of meeting once a month

- For IV year we have Mentor Mentee system for guiding students.

The mentor is a model, a guide by the side, a motivator, a trainer and a counsellor to the student.

Mentoring is a process for the informal transmission of knowledge, social capital, and the psychosocial support. Mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less.

Mentor's Responsibilities:

- Take interest in developing student's career and well-being.
- Mentors keep track of their students' progress and achievements, setting milestones and acknowledging accomplishments.
- Monitor student's readiness for Personal Interview (including Resume, Dressing sense etc.)
- Evaluate Student Progress and Performance in Computer Based Tests. Keep record of his/her attendance in the preparatory classes and keep the department HOD informed.
- Encourage students for attending all the sessions for sure success.
- Informing students about the profile of companies coming for recruitment as per information obtained from placement department.
- Engage the Student beyond the Classroom especially for communication practices and emphasize the importance of communication for sure success.
- Keep the department / panel members informed, if any student is not taking his/her sessions seriously.
- Guide student for practical training and project presentation.
- Guide students for technical interview.
- Guide and Evaluate student for GD for companies requiring GD.
- Guide students for General Knowledge about Industries in their domain.
- Provide Ethical Guidance

No of Students per mentor: around 20

S.No.	Year	No. of Mentor
1	2015-16	12
2	2016-17	12
3	2017-18	12

Session 2017-18 Mentor List

S.No	Mentor Name	No. Of students allotted
1	Mr. Ashish Sharma	19
2	Mr. Vikas Sharma	19
3	Mr. Anil Jain	19
4	Ms. Preeti Barot	19
5	Mr. Ankur Gangwar	19
6	Mr. Rajesh Bathija	19
7	Mr. Naresh Kumar	19
8	Ms. Shivam Upadhyay	19
9	Mr. Devesh Gupta	19
10	Mr. Ashok Kumar	19
11	Mr. S S Manaktala	19
12	Ms. Neha Singh	19

9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Feedback collected for all courses: YES/NO; Specify the feedback collection process; Average Percentage of students who participate; Specify the feedback analysis process; Basis of reward/ corrective measures, if any; Indices used for measuring quality of teaching & learning and summary of the index values for all courses/teachers; Number of corrective actions taken.

Feedback collected for all courses: YES/NO;

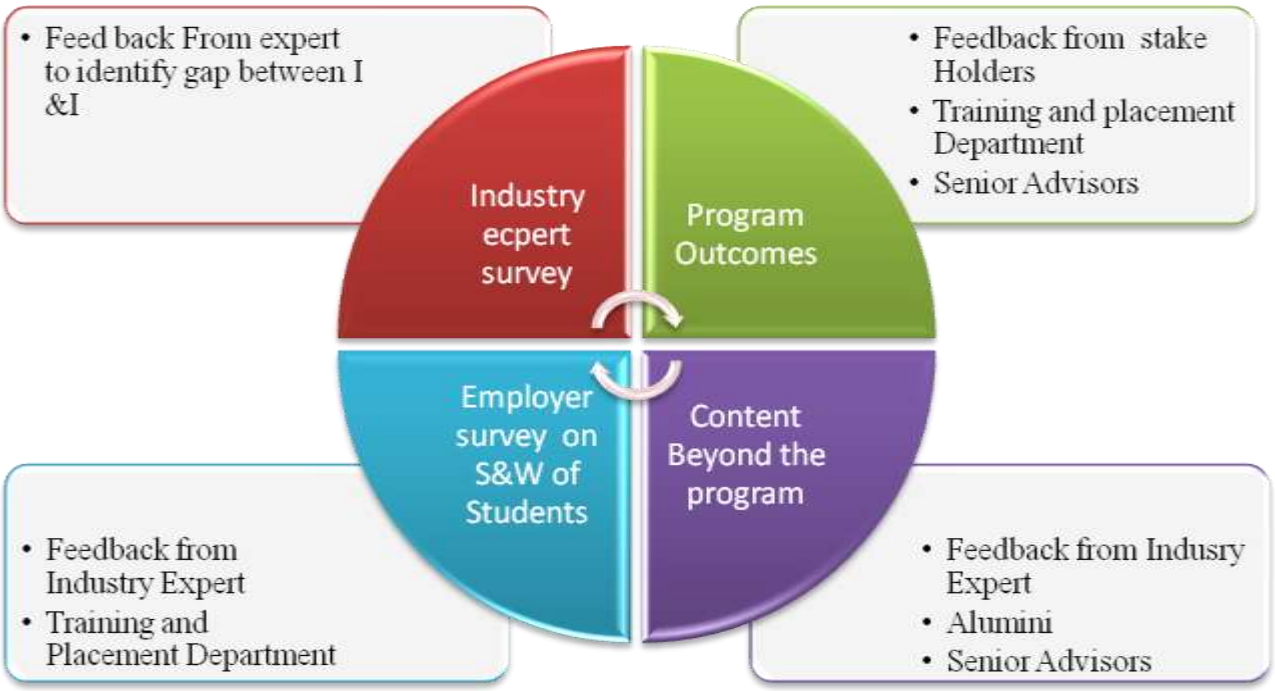
YES

Feedback Analysis Process

Students Feedback Process


Teching Learning process
Exit Survey
Students Feedback
Course out comes/Pro gram Outcom
Placement Training

Stakeholder Feedback



- The Institute understands that the teaching-learning system followed by an educational institution must be constantly improved. To form this process of continuous improvement, the institution must adopt a feedback system that takes into account the suggestions of the students and the interested parties in each program. This finally helps to refine the teaching-learning process and the curriculum.
- The institution shall follow a well-defined and formal feedback system implemented at different levels
- Student comments on the teaching-learning process are also collected from students at class committee meetings.
- At the end of each semester, students must complete an end-of-semester survey. In this case, students will be asked questions that examine the effectiveness of the teaching-learning process to help the student achieve the respective results of the course through the Google form.
- Being an institution that moulds people to build technologies for the future, the Institute constantly insists on updating the students with the current knowledge and skills desired.
- To do this, the institution must regularly gather opinions on the most demanding industrial skills, directly from industry personnel.
- Industry experts will be invited to stakeholder meetings organized by each department, and their views on emerging technologies will be taken periodically.

- Employer surveys should be conducted annually to gather information about the strengths and weaknesses of the students who enrolled in this Institute.
- The employer survey is a key element in determining the skills that students lack experience. The course delivery must be modified to address these gaps for future groups of students.
- Industry experts invite comments from Alumni to be another important component of the commenting system. The Institute has one of the strongest alumni networks. The alumni of the institution cover the whole world and are well connected to the institution thanks to alumni associations. The comments on this link, including individuals from all walks of life, have been essential to improve the quality of education over the years. Comments should be collected periodically from the alumni by appropriate means.
- Graduates should gather opinions to assess whether the institution has been able to impart the skills necessary to achieve the program's objectives. This survey should be used to identify the difficulties encountered by students during their course at the Institute.
- The meetings of the stakeholders of each department, and the views on the emerging technologies become a next will take.
- Departmental committees have Committees for Thematic Groups. Beyond the content, they select the Program that must be provided to the Students, based on the views of the Meetings Collected from the contradictory Interested Parties with the Industry Experts Surveys. Employers Must be done annually compile for information About Students Strengths Weaknesses recruited who are this Institute.
- The employer's investment is a key element in determining the skills with which experiments are experienced. The course entry is found throughout the space for future summaries for student groups.
- The institution aims to produce socially competent and socially competent individuals. Suggestions from members of the local community and social workers should be collected by the institution. To facilitate this, social workers and members of the local community will be invited to all stakeholder meetings. Your views should be used to shape the program.
- For the general improvement of a student's character, the Institute must take into account the reactions of parents and guardians. These will meet at Teacher Parents meetings and stakeholder meetings. The stakeholder meeting should be convened once a year at the departmental level to solicit the views of interested parties on various aspects of the program.

Name of Feedback	Feedback received	Feedback discarded	Valid responses	Action
Vision	1825	255	1570	Analysis of feedback send to IQAC
Mission	1899	303	1596	
PEO	1782	213	1569	
Course Exit	1232	184	1048	
Program Exit	202	20	182	

Faculty Feedback	1089	152	937	

Student evaluation and feedback

At the end of each semester, students must complete an end-of-semester survey. In thiscase, students will be asked questions that examine the effectiveness of the teaching-learning process to help the student achieve the respective results of the course throughthe Google form.

Feedback Form (2017-2018)

This questionnaire has been designed by JECRC to seek a feedback from the students to strengthen the quality of teaching-learning environment.

* Required

1. **Name of the Department** *

2. **Semester** *

3. **Section** *

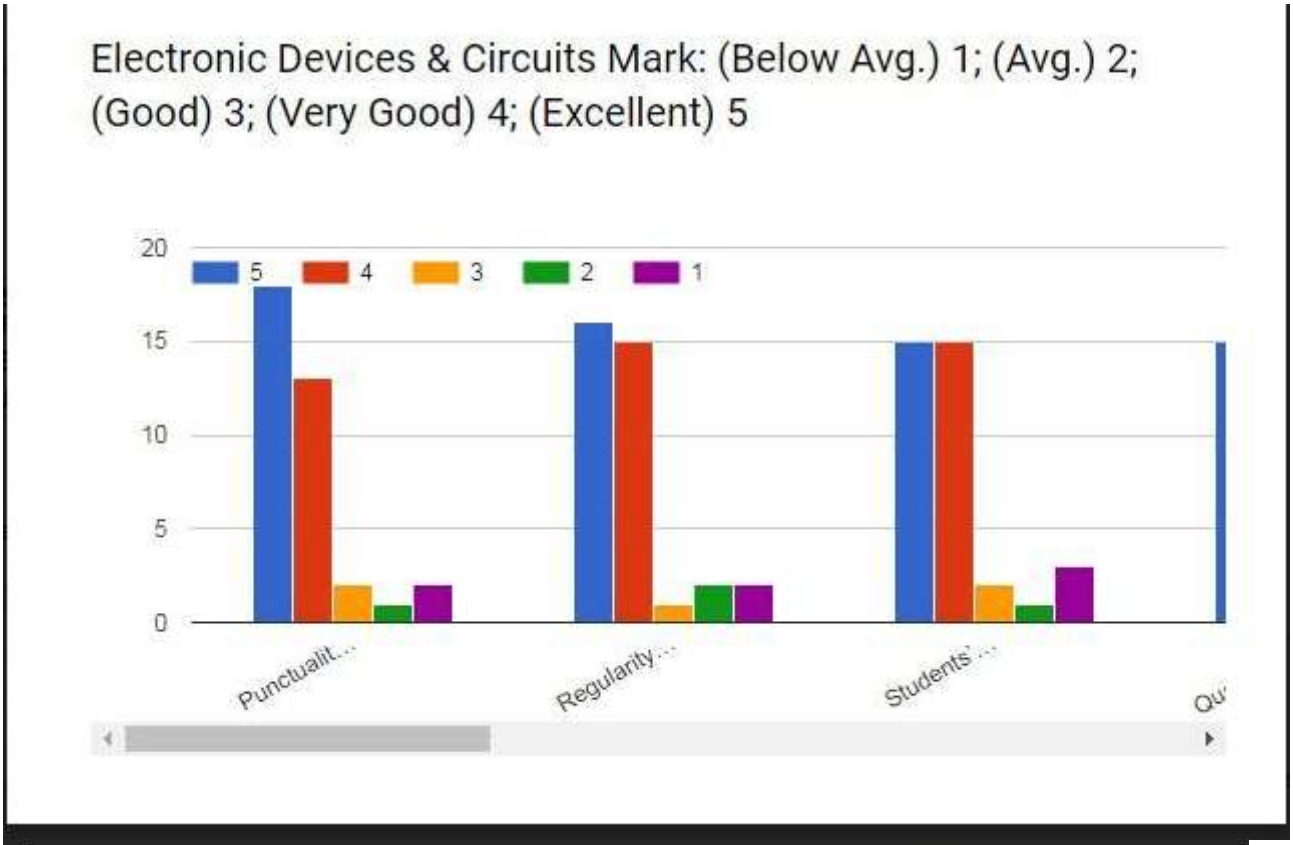
Note: This questionnaire has been designed by JECRC to seek a feedback from the ECE students to strengthen the quality of teaching-learning environment.

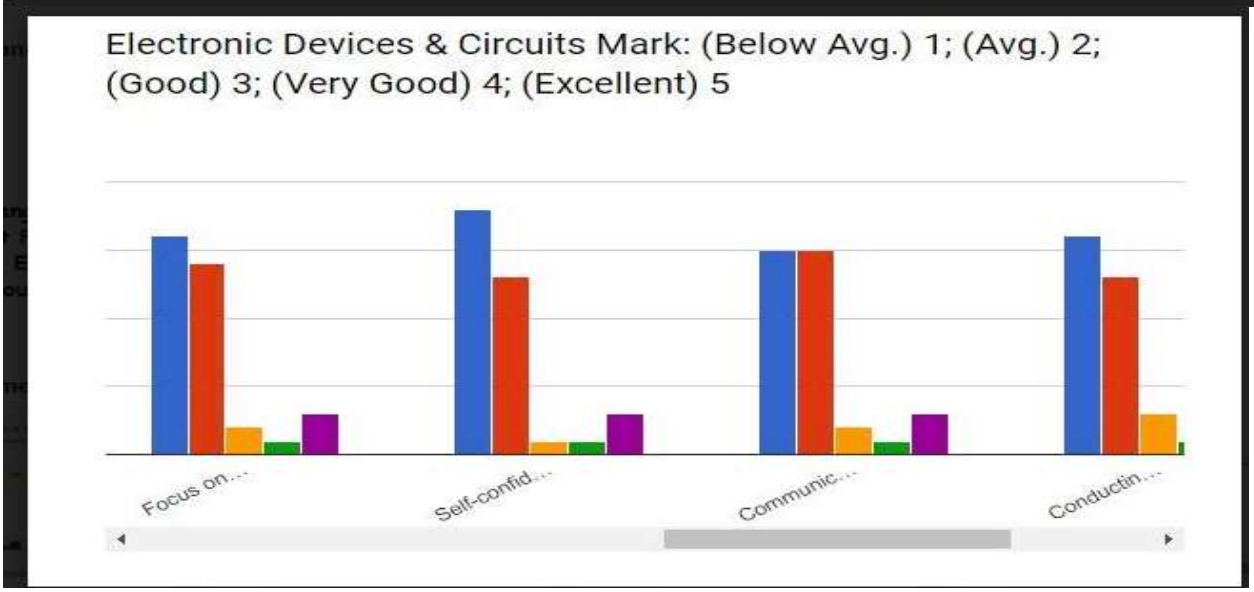
4. **Electronic Devices & Circuits Mark: (Below Avg.) 1; (Avg.) 2; (Good) 3; (Very Good) 4; (Excellent) 5** *

Mark only one oval per row.

	5	4	3	2	1
Punctuality in the Class					
Regularity in taking Classes					
Students' attendance/ presence in the class of teacher who is being evaluated					
Quality of lectures					
Focus on Syllabus					
Self-confidence					
Communication skills					
Conducting the classroom discussions					
Completes syllabus of the course in time					

5. **Name of Subject Teacher** *


Electronic Devices & Circuits Mark: (Below Avg.) 1; (Avg.) 2; (Good) 3; (Very Good) 4; (Excellent) 5
20
15
10
5
0
5
4
3
2
1
Punctualit...
Regularity...
Students'...

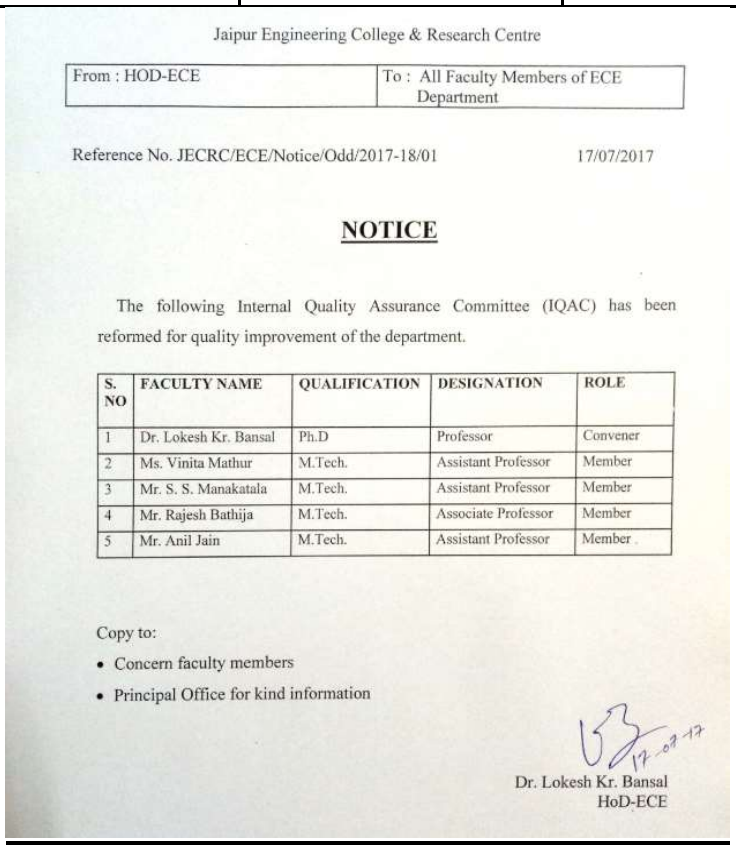

Electronic Devices & Circuits Mark: (Below Avg.) 1; (Avg.) 2; (Good) 3; (Very Good) 4; (Excellent) 5
Focus on...
Self-confid...
Communic...
Conductin...

Corrective measures:

Institute has IQAC (internal quality assurance committee) which evaluate and analysis feedbacks and take corrective actions.
These are action taken by IQAC:

Followings are the team member of IQAC for CAYm1(2017-18)

S.NO.	Name	Designation	Responsibilities
1	Dr. Lokesh Bansal	Professor	Chair
2.	Ms. Vinita Mathur	Assistant Professor	Member
3.	Mr. S. S. Manakatala	Assistant Professor	Member
4.	Mr. Rajesh Bathija	Assistant Professor	Member
5.	Mr. Anil Jain	Assistant Professor	Member



Jaipur Engineering College & Research Centre

From : HOD-ECE	To : All Faculty Members of ECE Department

Reference No. JECRC/ECE/Notice/Odd/2017-18/01 17/07/2017

NOTICE

The following Internal Quality Assurance Committee (IQAC) has been reformed for quality improvement of the department.

S. NO	FACULTY NAME	QUALIFICATION	DESIGNATION	ROLE
1	Dr. Lokesh Kr. Bansal	Ph.D	Professor	Convener
2	Ms. Vinita Mathur	M.Tech.	Assistant Professor	Member
3	Mr. S. S. Manakatala	M.Tech.	Assistant Professor	Member
4	Mr. Rajesh Bathija	M.Tech.	Associate Professor	Member
5	Mr. Anil Jain	M.Tech.	Assistant Professor	Member

Copy to:

- Concern faculty members
- Principal Office for kind information

17-07-17

Dr. Lokesh Kr. Bansal
HoD-ECE

Following are the findings during Academic Audit Process by IQAC team in CAYm1 (2016-17):

AUDIT: 01

- Corrections and modifications (in Dates) are required in departmental academic calendar.
- Require to provide TUT to the students.
- Formatting of few course files is needed.
- For the understanding of subjects, project based learning is needed.
- The quality of the question paper should be improved.
- Motivation in faculty members, towards the research activity is needed.
- For the overall development of the student, Mentoring and Career Development Counseling was needed.

AUDIT: 02

- For the overall development of student some technical events are needed.
- More emphasis is required towards the industry based knowledge.
- Improvement in soft skills of student is required.
- Required motivation in student towards the new research activity and publications.
- More emphasis is given to the performance of weak students.

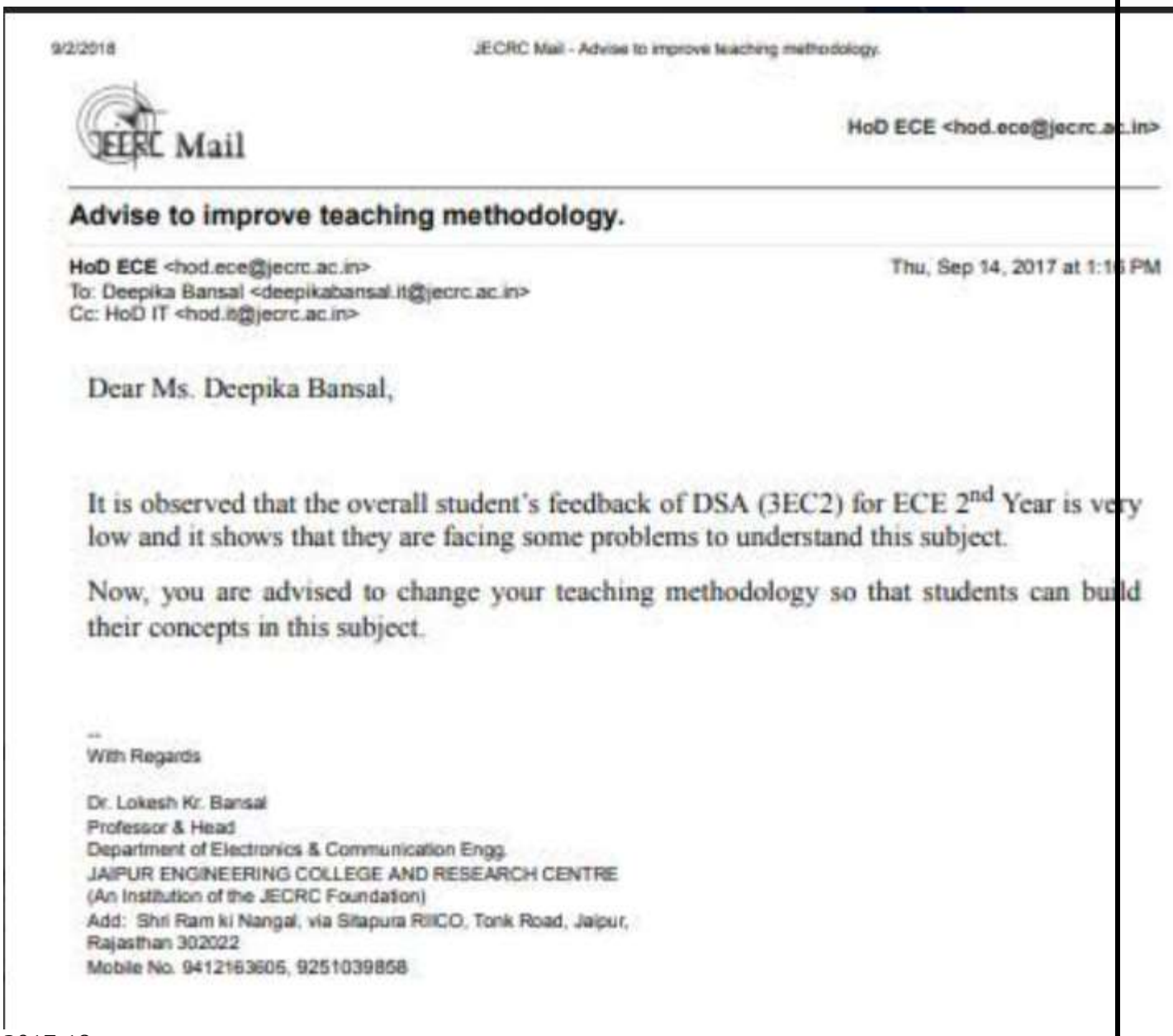
Table 9.2.Action Taken and Improvement

Sr. No.	Description of Activity	Action Taken	Improvement
Teaching & Learning			
2	**Academic Instruction**	• In departmental academic calendar correction in few dates are done and some technical activities are added. • ***Format of course file is modified.*** • TUTs are given to the students.	• Teaching quality is improved.
3	**Modes of teaching**	• ***Interactive lecture methods*** such as Video lectures, Power point presentations, Industrial visits, are adopted by the faculty members.	

4	**Project based learning**	• Students are motivated to execute small projects which they ***exhibit during project expos, technical contests*** etc. • Some ***previous year projects*** are given to the second year students to rebuilt them and bring best in west projects. • An ***event Reverse Engineering*** is conducted to motivate students towards the project making.	• During the current assessment year 57 projects were made. • Our student Mr. Jatin made robotics based project and WON in ***IIT Mumbai.***
Evaluation & Results			
5	**Question Papers**	• ***Moderation and scrutinizing Committee*** ensures the quality of Internal Mid-Semester Examination paper-setting, their solutions and to scrutinize the answer sheets.	• During the CAY our ***one student is secured rank in RTU merit list.***
6	**End semester examination and academic results**	• ***Two internal exams*** and ***end semester*** examinations are conducted.	
7	**Assignments & Class test Methodology**	• ***To assess students' knowledge*** of engineering practices, framework, and problem solving abilities various tests are taken • ***Class Tests*** are taken after every unit completion • ***Assignment based on COs*** is given to the students after completion of each unit for each subject • Assignments questions are chosen from previous years ***university papers*** • ***Performance based*** Assignments are also given to the students • ***Open Book Test are also taken.***	
8	**Evaluation**	• Answer Sheets are ***scrutinized*** • ***Transparency*** in Evaluation	
Faculty improvement			

10	**Faculty Participation in Seminars / Workshops/ FDPs**	• Faculty members are encouraged to attend Seminars/ Workshops/ FDPs conducted by various institutions.	• During the assessment year our 05 faculty members are attended FDP.
11	**Publications**	• Faculty members are encouraged for Publishing research papers in journals and articles in conference proceedings. • ***Financial support from management*** is extended to encourage research activities among faculty members. • For the same ***on duty leave*** is also provided.	• During the assessment year total ***Publications are 40***.
Students Development			
13	**Skill development o f students**	• The emphasis is given for providing Education based on ***the industry requirement.*** • The various ***technical events*** are conducted.	• During the assessment year department conducted ***11 technical events.***
Student activities/ support			
15	**Mentoring**	• Student mentoring system at department level focuses on ***all issues related to stay and growth of the individual student***.	• During the current assessment year ***17 faculty members were Mentor*** and ***12 faculty members*** were class coordinator.
16	**Career Development**	• The placement cell organizes seminars on ***Higher education opportunities*** and conducts aptitude training. • Government Cell .	• In the current assessment year various ***01 industrial training, Industrial visits, Workshops, Seminars*** were conducted for the improvement. • ***Total 111 number*** of students got placed in different companies. • ***09 students qualified GATE*** Examination. • For the improvement in communication skills

			FACE classes were conducted. • Various Mocks related to ***aptitude, group discursion ,personal interviews*** were taken.
17	**Alumni Support**	• ***Alumni meets***/ get together are organized once in a year. • Alumni are invited ***to interact and inspire the students***, to help in developing the curriculum, to give expert lectures in their field of specialization	• Industrial interaction is improved.
Student Feedback			
18	**Students Feedback**	• Feedback system is used to evaluate the ***performance of the faculty***. • It is ensured that the feedback from student is acted upon, and recommendations are applied to enhance teaching quality.	• With this faculty members ***improve their skills*** set.



9/2/2018 JECRC Mail - Advise to improve teaching methodology

JECRC Mail

HoD ECE <hod.ece@jecrc.ac.in>

Advise to improve teaching methodology.

HoD ECE <hod.ece@jecrc.ac.in> Thu, Sep 14, 2017 at 1:16 PM
To: Deepika Bansal <deepikabansal.it@jecrc.ac.in>
Cc: HoD IT <hod.it@jecrc.ac.in>

Dear Ms. Deepika Bansal,

It is observed that the overall student's feedback of DSA (3EC2) for ECE 2nd Year is very low and it shows that they are facing some problems to understand this subject.

Now, you are advised to change your teaching methodology so that students can build their concepts in this subject.

--
With Regards

Dr. Lokesh Kr. Bansal
Professor & Head
Department of Electronics & Communication Engg.
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
(An Institution of the JECRC Foundation)
Add: Shri Ram ki Nangal, via Sitapura RIICO, Tonk Road, Jaipur,
Rajasthan 302022
Mobile No. 9412163605, 9251039858

2017-18

Feedback given by	Feedback on Entity	Nature of feedback	Action taken
Student	infrastructure	Water cooler Maintenance	Repairing done
Student	Faculty/Course	Course coverage	Extra Classes taken
Student	Faculty	Teaching skills	Advisory/Appreciation Given
Student	Course	Topic of course	FDPs
Student	New skills	New technology required	FDPs , Conferences
Student	Course	Beyond Syllabus should be	Expert

		covered	Lectures/seminar
Student	Technical Events	Technical Events proposed	Technical Event conducted
Student	Labs	Practical Required	Workshops

For students and faculty FDP and National and International Conferences was conducted

2017-18	2016-2017
"Embedded Systems (ICT51) 19/03/2018 to 23/03/2018.	
FDP on Effective Mentoring Skills-11-13 July 2017	

Table 9.2a:FDP

- **National and International Conferences**

  - Conferences are the great way to learn about research and development going on in respective fields which inspired many students to publish their own research.
  - It is also a great starting point for those students who want to pursue their career in research fields.

National and International Conferences Details

S. No.	Topics	No. of Faculty Members	No. of students attended	Remarks
1	**"Recent Technological Developments in**	43	11	• To aware research scholars, students and faculty members about the recent developments in the field

	Electronics and Electrical Engineering-2018 (RTDEEE-2018)"			of Electronics Engineering, Communication Systems, Power System, Control Engineering, Neural Networks and Electrical Engineering etc .held on **April 6-7, 2018**
2	**"Recent Advancements in Science and Technology-2018 (RAST-2018)"**			Two days national conference recent trend in Electronics and communication .held on **March 27-28, 2018,** , 2018 at JECRC Jaipur.

- Teams participated in JECRC hackathon 1.0 in 2018 were guided by faculty member(one mentor with each team)

Year	No. of students participated	No. of teams
2017	224	35

JAIPUR ENGINEERING COLLEGE& RESEARCH CENTRE,JAIPUR

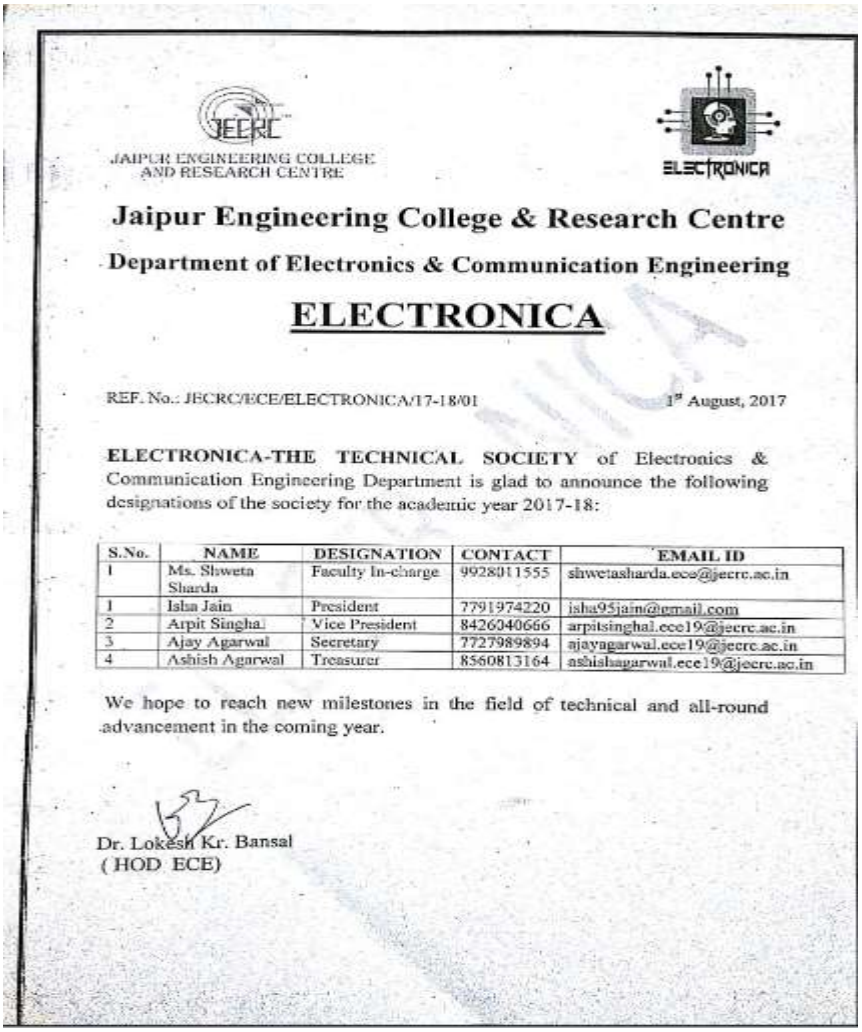
JECRCHACKATHON1.0

ENTRIES FOR JECRCHACKATHON: Department Of ECE

S.N0	Reg.	TEAM	TEAM	TEAM LEADER	DEPARTMENT	SEMESTER	TL	TL EMAIL	MENTOR	PROBLEM
1	JH/EC/01/2017		Cheshta Agrawal	Cheshta Agrawal	ECE	3	7742208664	cheshtagrawal05@gmail.com	Anil Jain	
			MEGHA SHARMA		ECE	3				
			GARIMA AGARWAL		ECE	3				
					ECE	3				
					ECE	3				
					ECE	3				
2	JH/EC/02/2017	JECRCians	Aman Khandelwal	Aman Khandelwal	ECE	3	9887027414	akshataman914@gmail.com	Ritu Vyas	JECRC Hostel Attendance
			Anubhav Khandelwal		ECE	3				
			Mudit Khandelwal		ECE	1				
			Yashika Mittal		ECE	3				
			Vinay		CSE	1				
			Vratika Porwal		ECE	3				
3	JH/EC/03/2017		DEEKSHA JAIN	DEEKSHA JAIN	ECE	3	9587268724	JAINDEEKSHA09061999@GAMIL.COM	PRAVIN KUMAR SHARMA	
			AKSHITA AGARWAL		ECE	3				
			MOHINI SWAMI		ECE	1				
			SHUBHAM JAIN		ECE	3				
			VEDANT		CSE	1				
					ECE	3				

- **Technical Workshops/Activities**

  - We conduct a lot of technical events which are competitive. Not only it results in bigger number of participants but they can also learn a lot more.
  - These events bring out the competitiveness in our students which is going to be useful in real world. Due to this, our students were motivated enough to participate in events launched by big organization Such as NASA.
  - Our students also participate in techno culture festivals such robotic festivals, see Olympiad etc.



JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

ELECTRONICA

Jaipur Engineering College & Research Centre

Department of Electronics & Communication Engineering

ELECTRONICA

REF. No.: JECRC/ECE/ELECTRONICA/17-18/01 1st August, 2017

ELECTRONICA-THE TECHNICAL SOCIETY of Electronics & Communication Engineering Department is glad to announce the following designations of the society for the academic year 2017-18:

S.No.	NAME	DESIGNATION	CONTACT	EMAIL ID
1	Ms. Shweta Sharda	Faculty In-charge	9928011555	shwetasharda.ece@jecrc.ac.in
1	Isha Jain	President	7791974220	isha95jain@gmail.com
2	Arpit Singhal	Vice President	8426040666	arpitsinghal.ece19@jecrc.ac.in
3	Ajay Agarwal	Secretary	7727989894	ajayagarwal.ece19@jecrc.ac.in
4	Ashish Agarwal	Treasurer	8560813164	ashishagarwal.ece19@jecrc.ac.in

We hope to reach new milestones in the field of technical and all-round advancement in the coming year.

Dr. Lokesh Kr. Bansal
(HOD ECE)

Technical Events Table:

Department Activities during CAY(2017-18)

Sr.No.	Department Activity	Level of Activity	Number of Participant	PO Attainment
	Technical Events			
1	Game of Drones	National	42	PO2, PO3, PO9,**PSO1**
2	Quizolic	National	98	PO2, PO3, PO9
3	Techinobuzz	National	58	PO2, PO3, PO9
4	Renovator	National	30	PO2, PO3, PO9
5	Robowar	National	35	PO2, PO3, PO9,**PSO1**
6	Line follower	National	28	PO2, PO3, PO9,**PSO1**
7	Formula Zero	National	40	PO2, PO3, PO9,**PSO1**
8	Rob soccer	National	31	PO2, PO3, PO9,**PSO1**
9	Technical Hack	National	30	PO2, PO3, PO9
10	Tech Tambola	National	45	PO2, PO3, PO9
11	Phoenix	National	28	PO2, PO3,PO9
12	Sumowar	National	20	PO2, PO3, PO9
13	TEDX	International	13	PO2, PO3, PO9,PO10
14	MUN	National	14	PO2, PO3, PO9,PO10
15	HEAKTHON	National	105	PO2, PO3, PO9,PO5

Reward for Faculty in the form of Appraisal

Jaipur Engineering College and Research Centre, Jaipur

FACULTY APPRAISAL FORM (Session 2016-2017)

For best faculty award

Total 200 points

Name of Faculty Member: **Designation:** **Department:**

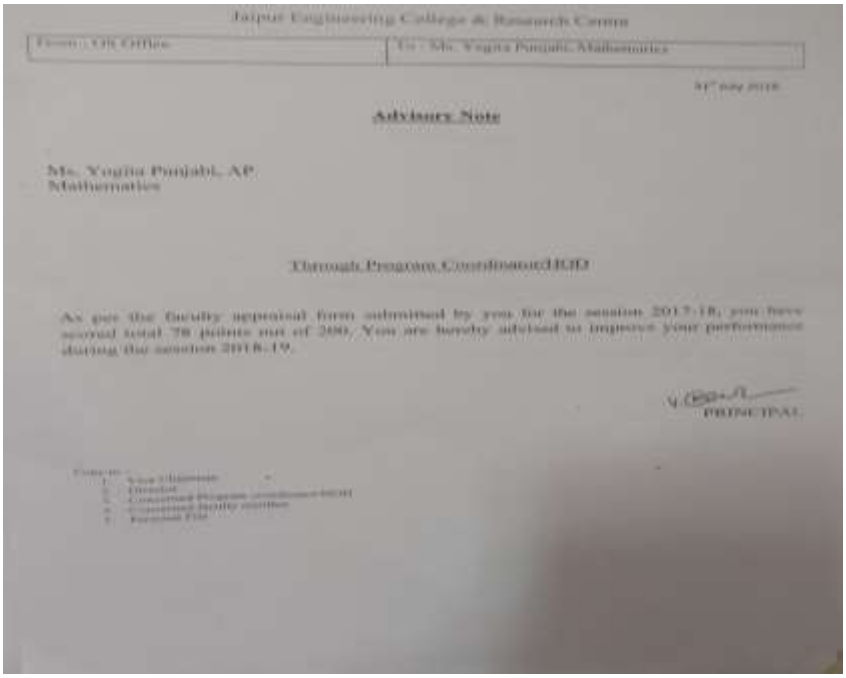
S. No.	Item Name	Maximum Points	Points obtained
1	Academic result 30 points average (90% students having more than 70% : 30 points, 80-89% students having more than 70% result: 27 points, 70-79% students having more than 70% result: 24 points, 60-69% students having more than 70% result: 21, 60-69% students having more than 60%	30	

	result: 18 points, 50-59% students having more than 60% result: 15 points else ZERO)		
	Example:		
	Theory Subject	Points obtained	
	Sub-1	30	
	Sub-2	27	
	Sub-3	0	
	Sub-4	18	
	Average points scored	**75/4 i.e. 18.75**	
	No marks for Labs subjects		
2	Research Publication 20 points average (1 sci indexed publication: 10 points, 1 publication having ISSN number : 5 points, Else ZERO)	20	
3	Faculty development programme 10 point average (one faculty development programme minimum 5 days attended 5 points, 2 points for attending 2 days workshop, subject to maximum of 10)	10	
4	International / National conference 10 points average (5 points for attending International, 3 points for attending National of repute, 2 points for National conference)	10	
5	Research grant average 20 points for having grant of more than 5 lakh, if only project submitted to DST/other govt agency: 10 points, subject to maximum 20	20	
6	Patent 10 points	10	
7	Product development / startup 10 points	10	
8	Course material prepared for Govt job cell 15	15	
9	Innovation in teaching learning, video lecture, online MOOCs, Online notes uploading, any other 20 points	20	
10	Technical activity organized 5 points	5	
11	Participation in social responsibility 5 points / activity subject to maximum of 10	10	
12	Institute level activity organized 5 points, participation 2 points subject to maximum of 5	5	
13	Any award received, session chair in conference, guest lecture, invited talk, etc. 5 points	5	
14	HOD recommendation maximum 30 points (Departmental responsibility 2 points, NBA related activity 5)	30	
	Total	200	

Note: HOD will verify the documentary proof.

Signature of Faculty Signature of HOD

Based on the Above API report faculty members are given appreciation/advisory format for same is mentioned below



Jaipur Engineering College & Research Centre

From : Ofc Office | To : Ms. Yogita Punjabi, Mathematics

Advisory Note

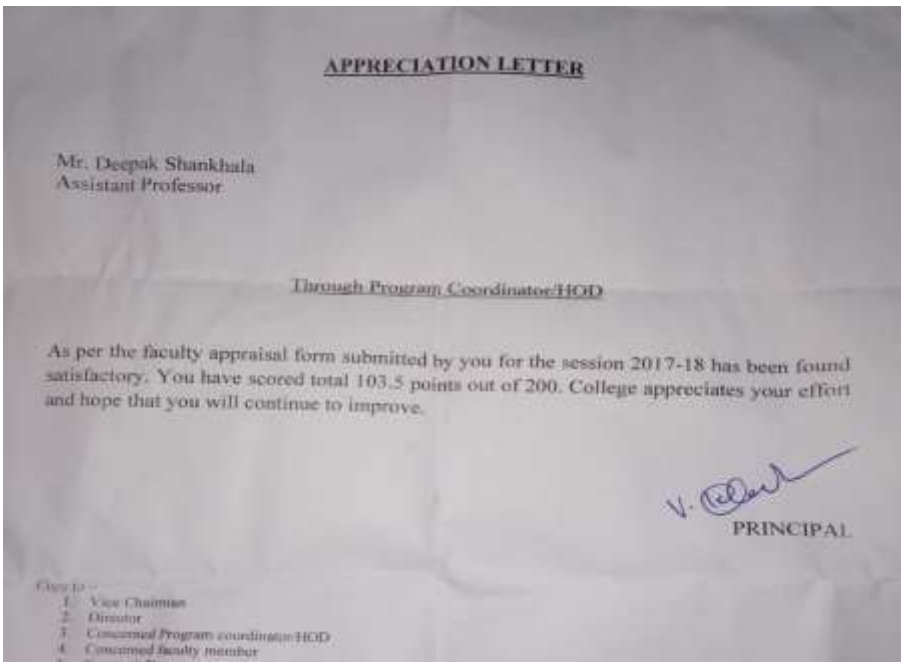
Ms. Yogita Punjabi, AP
Mathematics

Through Program Coordinator/HOD

As per the faculty appraisal form submitted by you for the session 2017-18, you have scored total 78 points out of 200. You are hereby advised to improve your performance during the session 2018-19.

PRINCIPAL

Advisory note



APPRECIATION LETTER

Mr. Deepak Shankhala
Assistant Professor

Through Program Coordinator/HOD

As per the faculty appraisal form submitted by you for the session 2017-18 has been found satisfactory. You have scored total 103.5 points out of 200. College appreciates your effort and hope that you will continue to improve.

PRINCIPAL

Copy to :-
1. Vice Chairman
2. Director
3. Concerned Program coordinator/HOD
4. Concerned faculty member

Appreciation letter

Indices used for measuring quality of teaching & learning and summary of the index values for all courses/teachers

- Students Attendance Report
- MTT Results
- University Results
- Final Passing Percentages
- Placement Record
- Student's performance in National and International conferences
- Student's performance in Technical Workshops
- Student's participation in Intra and Inter college competitions
- Co-curricular and Extra-curricular activities.

Number of corrective actions taken

- **Pre Placement Training/ Extra Technical Classes**

Year	Name of event	Object of event	No. of students participated	Date of event
2017-18	Pre placement training program by Face	Bridging gap between academics & Industry	219	20-7-2018 onwards

Company Based Placement Training.

Sr.No.	Department Activity	Level of Activity	Number of Participant	PO Attainment
1	Embedded Systems & Robotics organized by TechiNest Pvt.	National	56	PO1, PO2, PO3, PO5, **PSO1**
2	Embedded & Robotics organized by SaK Robotics	National	66	PO1,PO2, PO3, PO5,**PSO1**
3	Workshop on CCNA Networking	National	58	PO1,PO2, PO3, PO5

MOU's was done with industries to emphasize on
(a) Internship
(b) Project Workshop for Students

(c) Industrial Visits
(d) Students specific Training

Table 23: Details of MOU

S. No.	Company Name	Date
1.	**Forsk Technologies**	**2-Nov-2017**
2.	**RedHat Technologies**	**7-Nov-2017**
3	**Infosys Campus Connect**	**12-May-2017**
4	**CADD Centre**	**30-Oct-2017**
5	**Wadhwani Foundation**	**13-Oct-2017**
6	**SakRobotix Lab**	**27-Apr-2017**
7	**Salesforce Technologies Ltd.**	**17-Jan-2018**
8	**Indo Vision Services Pvt. Ltd.**	**22-Mar-2017**
9	**Cyber Security**	**May-2018**
10	**TechieNest Pvt.Ltd.**	**Oct-2018**

Sample of MoUs

भारतीय गैर-न्यायिक

दस रुपये

TEN RUPEES

₹.10

Rs.10

INDIA NON JUDICIAL

ଓଡ଼ିଶା ओडिशा ODISHA 37AA 809280

MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN
SAKROBOTIX LAB, Startup Centre, IIT Bhubaneswar
AND

This is an agreement between "Party A", hereinafter called SAKROBOTIx LAB, BHUBANESWAR, ODISHA, INDIA and "Party B", hereinafter called Jaipur Engineering College and Research Centre, Jaipur, INDIA (JECRC).

I. PURPOSE & SCOPE:

The purpose of this MOU is to clearly identify the roles and responsibilities of each party. The MOU is intended to establish a mutual agreement **in establishing a Robotics Research Centre in the Campus of JECRC, providing Internships to JECRC Students and to engage the students in Robotics training and also offering Robotics product development exposure.**

II. BACKGROUND:

SakRobotix Lab Pvt Ltd

SakRobotix is an Indian Robotics Startup headquartered at ... Centre, IIT Bhubaneswar that designs, develops, researches, and sells Robots. Robotics Lab in IIT Robotics ... and offers ... education. The company's hardware product includes ...

For Sakrobotix Pvt. Ltd.

Managing Director

9.3 Feedback on facilities

(Assessment is based on student feedback collection, Analysis and then Corrective Action Taken)

9.3 Feedback on facilities

S. No.	Facility	How feedback is taken	Type of Record	Action Taken
1	Hostel Sh P. K. Gupta (CAO /Chief warden)	Entry in the register / discussion with warden / written application / Grievance cell	About Stay in the hostel	Sharing of room changed from 4 to 3
			About Food	Student committee and warden
			About Timing	Boys and girls timings are fixed but on demand as per requirement permission is provided.
			Maintenance	Entry in register and corrective action
			Medical Exigency	Ambulance register
2	Transport Sh. Ravi Bhatnagar (Bus Incharge)	Written application with Bus In charge	Route	Recorded with bus in charge and appropriate action is taken
			Fees	
			Flexibility / Maintenance of buses	
3	Library Dr. Anita Jain (Chief Librarian)	Departments are taking feedback related to library and thus submitted to librarian	Timing	Appropriate action taken by Library incharge
			Books	
			Publication	
			E-books	
			Swayam	
4	Sports Dr. Rajesh Sharma (Sports Incharge)	Feedback taken by sports incharge	Ground	Sports incharge takes appropriation decision
			Participation	
5	Over all maintenance Sh. Yogendra Sharma	Feedback from Block Incharges	About maintenance & Safety	
6	Security Sh. P. K. Tiwari	Over all security	Meetings every month	Feedback in the meeting
7	Medical Facility	CAO is responsible	Files maintained	Medical OPD First aid

Course Feedback:

- Meeting arrange by all Class Coordinator with the student.
- All issue regarding course or syllabus are discuss (Within 15 days)
- A feedback form share with student.
- All Data are collected.

Sample of Feedback form by the Departments

1. Course feedback form

Feedback Form (2017-2018)

This questionnaire has been designed by JECRC to seek a feedback from the students to strengthen the quality of teaching-learning environment.

* Required

1. **Name of the Department** *

2. **Semester** *

3. **Section** *

Note: This questionnaire has been designed by JECRC to seek a feedback from the ECE students to strengthen the quality of teaching-learning environment.

4. **Electronic Devices & Circuits Mark: (Below Avg.) 1; (Avg.) 2; (Good) 3; (Very Good) 4; (Excellent) 5** *

Mark only one oval per row.

	5	4	3	2	1
Punctuality in the Class					
Regularity in taking Classes					
Students' attendance/ presence in the class of teacher who is being evaluated					
Quality of lectures					

2.

3. Program Exit Form

9/4/2018 Program exit survey

Program exit survey

* Required

Jaipur Engineering College and Research Centre

1. Student Name *

2. University roll number *

3. Percentage till VII semester *

4. Contact Number *

5. E-mail ID *

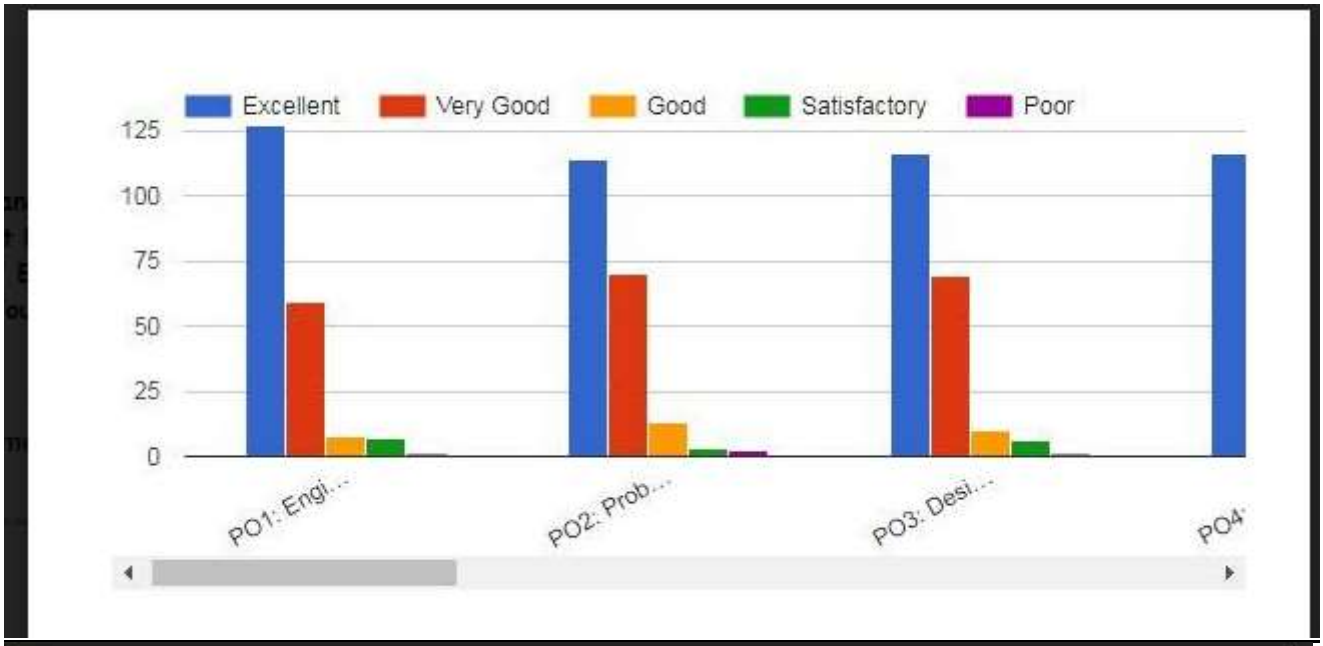
6. Father's Name *

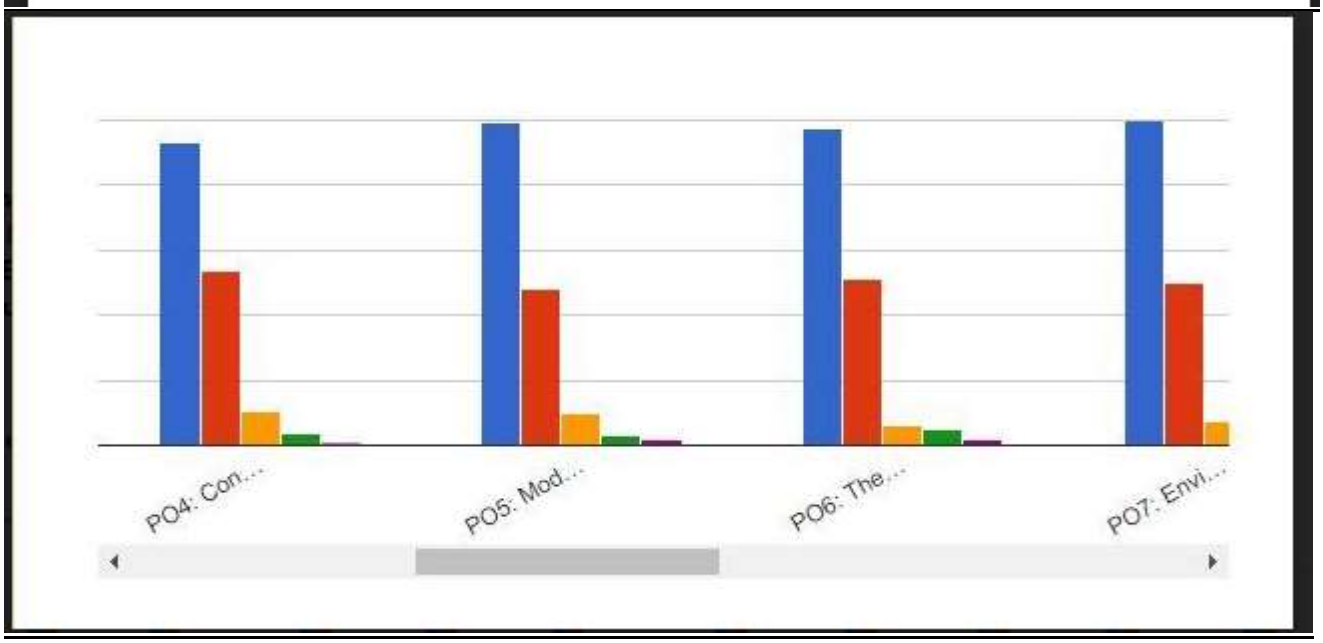
7. Father's Contact number *

8. Have you got placement? *

Mark only one oval.

- ◯ Yes *After the last question in this section, skip to question 17.*
- ◯ No





Lab Feedback:

- Meeting arrange by all Class Coordinator with the student.
- Meeting arranges By HoD with the Lab In charge.
- All issue regarding Lab discuss Like Maintains ,requirement and set up of lab (Within 30days)
- A feedback regarding lab also taken.
- All Data are collected.

Sample of Feedback form by the Departments

QUESTIONS RESPONSES

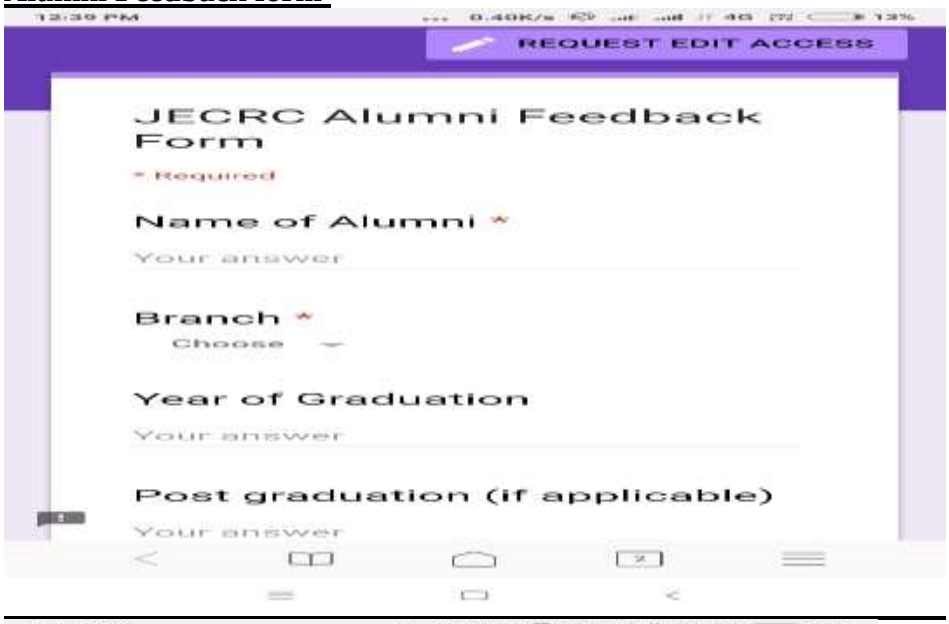
Lab feedback form (Electronics and communication)

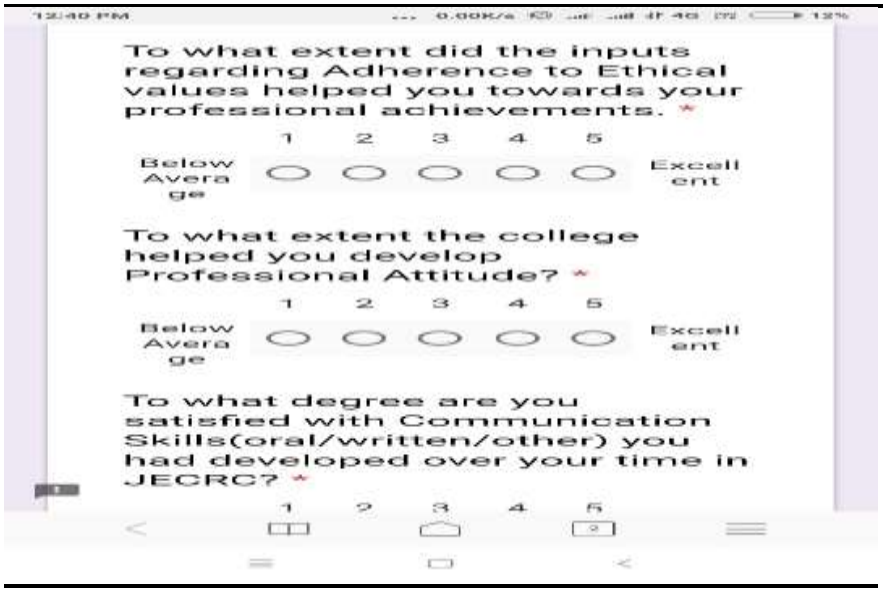
your overall standing in the course

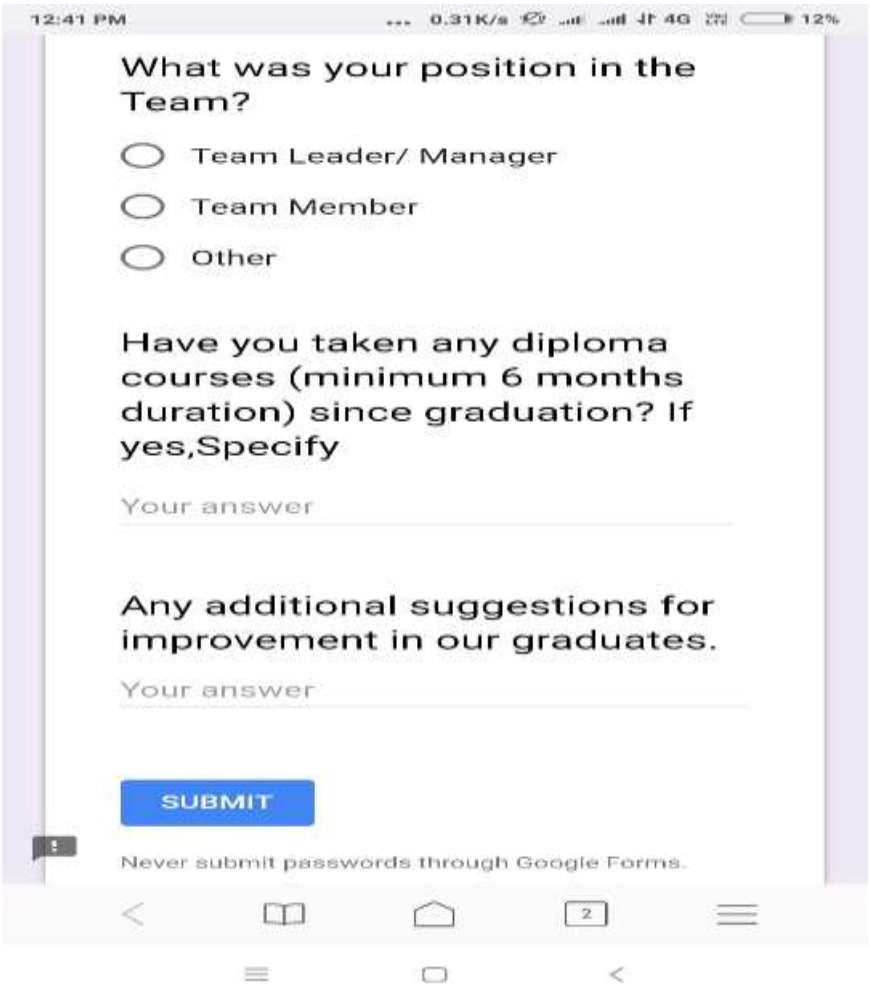
your overall standing in the course

- ○ >90%
- ○ 85-89%
- ○ 60-74%
- ○ <60%
- ○ Other...

Alumni Feedback form







Hostel feedback:

- We have system in which faculty stay and visit hostel. Faculty discuss about various services and facilities provided in hostel
- Feedbacks given by students are subject to discuss with the hostel wardens or in-charges resp.

Cleanliness feedback:

Soch Initiative (Soch –Coordinator)

SWACHCHH JECRC

SOCH-KUCHH KAR DIKHAANE KI, keeping this motto in mind, the **Team Soch** of JECRC stepped an extra mile to realize the dream project of the H'ble Prime Minister Sh. Narendra Modi, **Swachchh Bharat Abhiyan,** by launching an innovative digitally enabled campaign **SWACHCHH JECRC**. This campaign was aimed to contributing to the society in terms of cleaning the JECRC campus through the QR code. This campaign changed the whole idea of cleanliness. Never did anyone think that cleanliness could be monitored digitally.

In this campaign, a special QR code was designed by the technically advanced students of JECRC and put on the posters, dustbins, all over the campus, to expedite the cleanliness drive, which could be accessed through any smartphone, prompting to fill a google form for complaining against any negligence in cleanliness or giving any suggestions regarding the misplacement of the dustbins, areas not cleaned etc for example.

The following link can be used for filling the form:

https://goo.gl/EAnOqd

For any trash, smeared environment, a complaint can be filed by scanning the QR code. By scanning the QR code, a dialog box pops up on the screen which leads us directly to the complaint form. The data filled in the form reaches our supervisors and a response is given within 24 hours.
We get about 10 to 20 number of complaints every day and making it a count of 375 till date which is really astonishing.
In this changing era of digitalization, this innovative ***SWACCH JECRC*** campaign has done a great work.

- 15 days celebration took place as "SwacchataPakhwada" in JECRC, students were participated in this activity, checked for clean campus.
- Students as well as faculties were involved to clean the campus and program continued for 15 days.

Corrective action taken regarding feedback:-
Course feedback corrective action:

- All data which collected by feedback is discuss to HOD by Class Coordinator like course coverage, course learning, content delivery etc.
- HOD assigns a faculty for collected Course Coverage.
- Discuses with subject faculty regarding Strategy for coverage of remaining units.

Lab Feedback corrective action:

- HOD discuses all feedback with Departmental lab In charge.
- Departmental Lab in charge collected all lab status and requirement with budget.
- All data are mention in Lab maintain File.

DEPART. ELECTRONICS & COMMUNICATION

LAB MAINTANCE SHEET

SESSION 2016-17

S.NO.	TRAINER KIT	MAKE & MODEL NO.	FAULT	REPAIRING DATE	STATUS	REMARKS
1	UJT Characteristics	Scientech,PE-01	Reading not coming	6/23/2016	ok	Pot replaced
2	BJT Amp.& Emitter follower	Scientech,NV-6542	O/p Not Coming	6/24/2016	ok	Dry Soldering
3	MOSFET characteristics	Scientech,NV-6541	Reading was not correct	6/25/2016	ok	resistance Connected

4	FET Amp. Trainer	Scientech,NV-6521	O/p Not Coming	8/12/2016	ok	FET Changed
5	Power Supply(+12v,-12v,5v)	Scientech	Supply not coming	10/27/2016	ok	repaired
6	Patch cord 4mm		10 leads broken	12/24/2016	ok	Soldered

LAB INCHARGE

Mr. Lokesh Sharma

LAB INSTRUCTOR

Mr. Amit Jain

All data are mention in Lab maintance File

1	HOD	All CC
2	TPO	All Mentor
3	CC	All Student
4	Lab in charge	All Lab technician
5	Mentor	All student
6	CAO	Block in charge
		Departmental in charge

Lab in charge list

	Odd Semester Labs					Even Semester Labs				
Sr. No.	**Name of Lab**	**Code**	**Venue**	**Lab Incharge**	**Name of Technician**	**Name of Lab**	**Code**	**Venue**	**Name of Faculty Member**	**Name of Technician**
1	Electronics Devices Lab	3EC4-21	BF-14	Mr. Deepak Shankhala	Mr. Hemant Vaishistha	Analog Circuit Lab	4EC4-22	BF-14	Mr. Mangi Lal	Mr. Hemant Vashisht
2	Digital System Design Lab	3EC4-22	BS-04	Ms. Ritu Vyas	Mr. Rajesh Yogi	Micro Controller Lab	4EC4-23	BS-04	Mr. Vikash Mishra	Mr. Rajesh Yogi
3	Signal Processing Lab	3EC4-23	BS-13 (CP-14)	Mr. Rajkumar Jain	Mr. Prem Chand Sharma	RF Simulation Lab	6EC9A	BS-14 (CP-15)	Mr. Sandeep dotya	Ms. Premchand Sharma
4	Electronic Engg. Design lab	5EC7A	BG-04	Mr. Rakesh Kardam	Mr. Babulal sharma	Analog & Digital Communication Lab	4EC4-21	BG-04	Mr.Ashok Kherodia	Mr. Babulal Sharma
5	Communication Lab I	5EC9A	BG-16	Mr. Ashish Kulshrestra	Mr. Gaurav Goyal	Communication Lab II	6EC7A	BG-16	Ms. Shweta Sharda	Mr. Gaurav Goyal
8	Signal Processing Lab	5EC10A	BG-09(CP-12)	Ms. Neha Singh	Mr. Rajender Sirowa	VLSI Lab	8EC7A	CP-12	Ms. Shivam Upadhyay	Mr. Rajender Sirowa
9	Signal & Image Processing Lab	7EC7A	BS-13 (CP-14)	Ms. Preeti Barot	Mr. Prem Chand Sharma	RF Fabrication Lab	8EC5A	BS-13 (CP-14)		Mr. Premchand Sharma
10	Wireless Comm. Lab	7EC8A	BG-01	Ms. Aapurva Kaul	Mr. Harish kumar	Optical Fiber Lab	8EC7A	BG-01	Mr. ankur Gangwal	Mr. Harish kumar
11	Project Lab-I	7EC10A	BS-15	Mr. Rajesh Kumar Bathija	Mr. Sitaram Saini	Project Lab II	8EC8A	BS-15	Mr. Rajesh Kumar Bathija	Mr. Sitaram Saini
12	Computer Programming Lab	3EC3-24	BS-14 (CP-15)	Mr. Arihant Jain	Mr. Prem Chand	Microprocessor Lab	6EC8A	BG-15	Mr. Venimadhav	Ms. Vaishali Yadav
13	Microwave Engg. Lab	5EC8A	DS-08	Ms. Teena Sharma	Mr. Rakesh	Electronics Measurement & Instrumentation Lab	4EC4-24	BG-06	Ms. Deepmala	Mr. Amit Jain
14						Industrial Electronics Lab	6EC10A	BLG-105	Mr. Bhoopesh	Mr. Suresh Gurjar

Jaipur Engineering College and Research Centre
Department of Electronics & Communication

Date/Day: Thursday	**Time: 11:30 pm to 12:15 pm**	**Location: Antenna Lab, Block-B, Department of Electronics & Communication, JECRC**
Speaker: CC	**Speaker's Designation:**	**Attended by:** All student

Minutes of Meeting

Agenda of Meeting:

To discuss the departmental facility

Attendees:

Meeting started with the welcome of CC by all students. Following were the points of meeting:-

S.No.	Points
1	CC interacted with all student
2	discuses all departmental facility
2.	All students gave different idea regarding the topic.
3.	The few common points came out fill up the feed back

The meeting ended up with the thanks of Chair and next round of meeting would be held with pre notice,

Jaipur Engineering College and Research Centre
Department of Electronics & Communication
Minutes of Meeting

Date/Day: 11/12/2014, Thursday	**Time: 11:30 pm to 12:15 pm**	**Location: Antenna Lab, Block-B, Department of Electronics & Communication, JECRC**
Speaker:	**Speaker's Designation:** HOD, ECE Department	**Attended by:** All CC ECE faculty members

Agenda of Meeting:

To discuss the regarding course converge

Attendees:

Meeting started with the welcome of HOD, ECE by all ECE faculties. Following were the points

S.No.	Points
1	HOD interacted with departmental faculty regarding course converge of the subject .
2	All faculties gave different idea regarding the topic.
2.	The few common points came out like Fill up Feedback regarding course converge
3.	Some faculties were assigned to design the feedback form according to their thoughts and they were told to inform students also for this work and can take their views as well.

of meeting:-

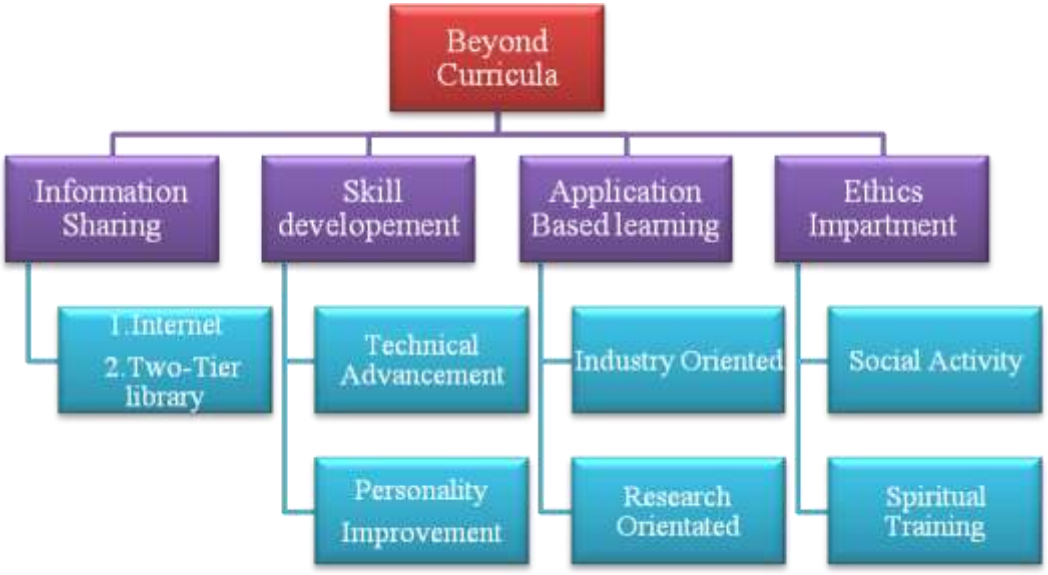
The meeting ended up with the thanks of Chair and next round of meeting would be held with pre notice, meanwhile those faculties who have given assignment were ask to meet HOD after two days.

9.4. Self-Learning (5)

(*The institution needs to specify the facilities, materials and scope for self-learning / learning beyond syllabus, Webinars, Podcast, MOOCs etc. and evaluate their effectiveness)*

Self-Learning

For self-learning or learning beyond syllabus during the semesters we provide information sharing material and organize different types of activities like workshop, training, conferences, club activities, quiz etc. For these activities academic calendar has sufficient provisions and HOD is authorized to change in schedule with permission of respective authorities.



Availability of Facility, Materials and Scope for Learning beyond Syllabus

S.No.	Activities	Beneficiary	Details
1.	2-tier Library System	Faculties & Students	The institute has the effective 2-tier Library System both at Institute and the Departmental level
2	Availability of Internet facility in All labs.	Faculties & Students	The project lab is equipped with internet facility and at any time internet can be made available in all the labs.
3	GATE Classes	VIIsem students	Lectures on specific topics are delivered for the students of final year as part of GATE Preparation and online exam for updation of Academic preparation.

4	Moocs like Swayam	Faculties & Students	SWAYAM is a programme initiated by Government of India, the objective of this effort is to take the best teaching learning resources to all.
5	Webinars	Faculties & Students	Webinars are opportunity for professional development of students and faculty provided on specific topic.
6	Personality Development lectures	VII	Creativity, lateral thinking and communication / people management skills are essential Components for progress in any sphere. Students are encouraged to develop these through goal setting exercises, group discussions, mock interviews and Presentations.
7	Face classes	VII	Special classes conduct to improve Aptitude, Reasoning (Verbal and nonverbal), Soft skill and communication of students for placement purpose.
8	Industrial visit	V,VI	To bridge the gap between Industry and academia, various modules are covered.
9	Training program /Workshop/Seminars	All students	To enhance knowledge and develop technical skill.
10	Technical Events	All students	To enhance the technical knowledge.
11	International /national Conferences	Faculties & Students	For sharing new ideas and innovation common platform is provided.
12	FDP's	Faculty & Technical staff	Development of faculties.
13	Social activities: (A) Zarurat (B) Soch (C) AASHAYEIN (D) Suhasini	All Students	All round development essentially means intellectual, physical, moral, sensible and social development.
14	Spiritual Training	Faculties & Students	For help in increasing mental capacity to focus better

Information Sharing:

Internet and two-tier library are the two information sharing facilities that we have at our institute.

Library

- Our library has over two thousand books related to non-engineering genre. Where students can learn about the daily life, become better at decision making and learn about self development.
- We also have books for competitive exams like GATE, CAT, and other government conducted tests.
- Library also possesses number of reference books for better development.

Details of E-books available

S.No.	Department	No. Of Ebooks
1	CSE	2851
2.	IT	1677
3.	ECE	1419
4.	Civil	635
5.	ME	469
6.	EE	554
7.	Phy	500
	Total	8105

Internet

- Internet is the best way to see, experience and learn about new things.
- Our institute have dedicated 12 Mbps lease line with 100% uptime.
- Students are also given special access to registered websites where they can read about latest research, development and other developments goingon in respective field. (eg. – IEEE, Research GATE)
- All the labs are equipped with Internet connections, which makes it easier to connect to the up todate and latest technology of respective fiel

JECRC
Internet Bill

S.No.	Vendor	Mbps	Bill No.	Duration	Date	Amount
1	Aircel	40	71704201	1-4-14 to 30-6-14	09-03-2014	179776
2	Aircel	40	71850663	1-7-14 to 30-9-14	08-06-2014	179776
3	Aircel	40	71996430	1-10-14 to 31-12-14	08-09-2014	179776
4	Vodafone	65	36070012015	22-11-14 to 31-3-15	01-01-2015	191012
5	Vodafone	65	70329401	1-4-15 to 30-6-15	01-03-2015	191012
6	Vodafone	65	85289367	1-7-15 to 30-9-15	01-06-2015	193800
7	Vodafone	65	100827846	1-10-15 to 31-12-15	01-09-2015	193800
8	Vodafone	65	118265252	1-1-16 to 31-3-16	01-12-2015	194650
9	Vodafone	65	136818069	1-4-16 to 30-6-16	01-03-2016	194650
10	Vodafone	65	156405034	1-7-16 to 30-9-16	01-06-2016	195500
11	Vodafone	65	173342255	1-10-16 to 31-12-16	01-09-2016	195500
12	Vodafone	65	192585695	1-1-17 to 31-3-17	01-12-2016	195500
13	Vodafone	105	216024437	1-4-17 to 31-6-17	01-04-2017	59478
14	Vodafone	105	228881545	1-7-17 to 30-9-17	01-06-2017	236790
15	Vodafone	105	EIRJ081700013973	1-10-17 to 31-12-17	01-09-2017	242967
16	Vodafone	105	EIRJ11700032286	1-1-18 to 31-3-18	01-12-2017	242967
17	Vodafone	105	EIRJ02800053274	1-4-18 to 30-6-18	01-03-2018	242967

Sr. No.	Name of the Laboratory	No. of students Per setup (Batch Size)	Name of the Important equipment	Weekly utilization Status (all the Courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1	EDC LAB	3 (20)	P-N junction diode apparatus Zener .diode apparatus Transistor characteristics apparatus. Clipping & Clamping circuit apparatus. Half wave, Full wave bridge rectifier, Common collector transistor amplifier FET characteristics. Scientech 50Mhz digital storage, Digital function generator 2Mhz. Digital Function generator 2Mhz Two stage R-C coupled amplifier kit.	24	Mr. Sitaram Saini	Lab Technician	Diploma In Electronics
2	Measurement & Instrumentation lab	3 (20)	Wein's Bridge (Capacity), Anderson's Bridge, Maxwell Inductance Bridge, Wein's Bridge (frequency). Ultrasonic digital distance meter. RTD Trainer kit, Single Phase Energy Meter LCR-Q Bridge . Solar Educational Kit Digital Earth Tester	24	Mr.Amit Jain	Sr.Instructor	Polytechnic Diploma
3	Electronic Instrumentation Workshop	3 (20)	Push Pull Power Amplifier Kit, Voltmeter, Voltmeter, Two Stage R-C Coupled Amplifier, Voltage Regulator, Voltage Multiplier, Opamp Designer Trainer Kit, Bootstrap Sweep Generator, Bjt Trainer Kit , Attenuator &Equaliser CRO, Dual Trace With Ct CRO, Dual	24	Ms. Vaishali Yadav	Lab Technician	Diploma In Electronics

			Trace With Ct &FG, DECADE CAPACITANCE BOX, Decade Resistace Box, Decade Inductance Box, Digital Multimeter, Emitter Follower , Function Generator Function Generator With Frequency Counter, FET Trainer Kit, Rectifier Trainer Kit, Oscillator Trainer Kit, Opamp Charcterstic Trainer Kit, P-N Diode & Zener Diode Trainer Kit, Power Supply,				
4	Digital Electronics Lab	3 (20)	Scientech Digital Kit(5), Digital Trainer Kit(10)	24	Mr. Ramovtar Saini	Lab Technician	Diploma In Electronics
5	Analog Electronics Lab	3 (20)	Series Voltage Regulator, Shunt Voltage Regulator, Wein's Bridge Oscillator, FET Common Source Amp. Push Pull Amp. Phase Shift Oscillator, Hartley Colpitt Oscillator, UJT Characteristics, UJT Relaxation, MOSFET, CMOS IC, Digital Storage CRO, Function Generator(6),Cro(6)	24	Mr. babu Lal Sharma	Lab Technician	Diploma In Electronics
6	communication lab 1st	3 (20)	Sampling & Reconstruction Trainer, Data Formatting & Carrier Modulation Transmitter , TDM Pulse Code Modulation Receiver, TDM Pulse Code Modulation Transmitter, Delta, Adaptive Modulation & Demod. PAM, PPM, PWM Mod. & Demod. Transmission Line Trainer , CRO, Digital Storage CRO 150 MHz, FM modulation & Demod, DSB/SSB AM Mod.Tx, DSB/SSB AM Demod. Rx, Power Project Board, TDM PA Mod/Demodulator, Dual Power Supply, Data Formatting & carrier modulation / Receiver Trainer, function Generator	24	Mr. Gaurav Goyal	Lab Technician	Diploma In Electronics

7	DIGITAL COMMUNICATION LAB	3 (20)	PCM, DPCM, CVSD modulation & demodulation trainer, MSK modulation & demodulation Trainer Delta , adaptive delta ,sigma delta Mod. & Demodulation trainer, Cyclic code experimental setup, Block code encoder , Block code decoder ASK, FSK BPSK, DBPSK experimental Setup TDM-PAM trainer kit, Sampling & Reconstruction trainer, Data Formatting and Carrier modulation, Data formatting & carrier Demodulation, 4 channel TDM-PCM transmitter Receiver, QPSK, OQPSK, DQPSK modulation & demodulation trainer	24	Mr. Gaurav Goyal	Lab Technician	Diploma In Electronics
8	Microprocessor Lab	3 (20)	Microprocessor kit 8085(15)	24	Mr.Rajesh Yogi	Lab Technician	Diploma In Electronics
9	MICROWAVE LAB	3 (20)	klystron power supply , Gunn power supply, Microwave test bench(klystron), Microwave test bench (Gunn diode), Spectrum analyzer, VSWR meter, Solid state klystron power supply, CRO 150 MHz, Microwave test bench(klystron), Microwave test bench (Gunn diode), Microwave test bench (s band)	24	Mr.Rakesh Talwara	Lab Technician	Diploma In Electronics
10	ANTENNA AND WIRELESS COMMUNICATION	3 (20)	GPS Trainer Kit, Radar Trainer Kit, CRO dual channel, function generator, cdma direct sequence spread, spectrum (DSSS) trainer kit, antenna trainer lab ATS40, antenna trainer ATS2000, satellite communication trainer kit, antenna digital RF TX ATS200IT, antenna digital RF RX ATS200IT, antenna stepper motor controller ats2001s, satellite communication trainer up link tx, satellite communication trainer down link rx, satellite communication trainer, Satellite transponder, fiber optic trainer, Fiber optic connectors kit display board, fiber optic cable sample kit display board, laser trainer model lt2506, voice communication using DSSS	24	Mr.Harish Kumar	Lab Technician	Diploma In Electronics

Skill Development:

For the overall development of the students, we focus on technical aspects and personality improvement. Which not only makes them a better student, they are also being prepared for future obstacles both on education level and personal level.

Technical Advancements

- We provide GATE examination preparation to our students. Which helps them with both better placements in Govt. PSUs and for those who are interested in higher studies. Due to this program our no.of students are getting into prominent institutes for higher studies and some of them have also been selected for govt jobs

Session 2017-18

Item		**CAY (2017-2021)**	**CAYm1 (2016-2020)**	**CAYm2 (2015-2019)**
National Level Entrance Examination(JEE)	No. of Students admitted	228	235	225
	Opening Score/Rank	138	131	400(Rank)
	Closing Score/Rank	28	43	14004(Rank)
State/University/Level Entrance Examination/Others	No. of Students admitted	N/A	N/A	N/A
	Opening Score/Rank	N/A	N/A	N/A
	Closing Score/Rank	N/A	N/A	N/A
Name of the Entrance Examination for Lateral Entry or Lateral entry details	No. of Students admitted	01	3	2
	Opening Score/Rank	58.42	69.89	61.57
	Closing Score/Rank	58.42	65.51	55.95
Average Marks		70.72	77.69	72.52

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- We also conduct mock tests, online tests and quizzes to prepare our students for better performance which makes it easier for the student to perform and crack those

competitive exams.

Year	No. of Student Appeared online exam
2015-16	250
2016-17	195
2017-18	196

- In the Digital India, Moocs are the best way to learn a new skill which is the easier way to advance your Career. Programs like SWAYAM is being used in our institute and many students and faculties have enrolled and learning new skills.

Swayam Registration details of ECE Faculty Members

Sr. No.	Name of Faculty	Mail id Registered with SWAYAM	Name of Course	Course Opening/Starting Date	Course Completion Date
1	Anil jain	aniljain.ece@jecrc.ac.in	modern digital comm. technique	24-7-17	13-10-17
2	Pravin Kumar Sharma	pks_2009@ymail.com	Principles of Human Reaources Management	30-07-2007	06-10-2017
3	Mangilal meghwal	mangilal.ece@jecrc.ac.in	Modern digital communication techniques	24/07/17	13/10/17
4	Shikha gaur	shikhagaur.ece@jecrc.ac.in	technical english for engineers	24/7/2017	15/9/2017
5	rajesh kumar bathija	rajesh.ece@jecrc.ac.in	analog circuits	24/07/2017	15/09/2017
6	Ashish Kulshrestha	ashishkulshrestha.ece@jecrc.ac.in	Analog Communication	24/07/2017	13/10/2017
7	Ashutosh Sharma	ashutoshsharma.ece@jecrc.ac.in	Introduction to Wireless and Cellular Communications	24/07/2017	13/10/2017
8	Ankur Gangwar	kiteankurgangwar@gmail.com	controls engineering	24 Jul , 2017	13 Oct , 2017
9	raj kumar jain	rajkumarjain.ece@jecrc.ac.in	controls engineering	24/07/2017	13/10/2017
10	vikash mishra	vikashmishra.ece@jecrc.ac.in	Basic Electrical Circuits	24/07/2017	30/09/17
11	Vinita Mathur	vinitamathur12@gmail.com	Controls engineering	24/07/2017	13/10/2017
12	Jitendra Sharma	jitendrasharma.ece@jecrc.ac.in	Analog communication	24/07/2017	13/10/2017
13	Lokesh Kumar Sharma	lokeshsharma.ece@jecrc.ac.in	Basic Electrical Circuits	24/07/2017	13/10/2017
14	Bhoopesh Kumawat	bhoopesh.ece@jecrc.ac.in	Introduction to Wireless and Cellular Comm	24/07/2017	13/10/2017
15	Ashok Kumar	ashokkumar.ece@jecrc.ac.in	Introduction to Wireless and Cellular Comm	24/07/2017	13/10/2017
16	Ritu Vyas	rituvyas.ece@jecrc.ac.in	Introduction to Wireless and Cellular Comm	24/07/2017	13/10/2017
17	HONEY AGARWAL	honeyagarwal.ece@jecrc.ac.in	Introduction to Research	24 July 2017	30 Sept 2017
18	Shivam	shivam.ece@jecrc.ac.in	Controls Engineering	24/07/2017	13/10/2017

SECTION A SEM III

Swayam Portal Registration Details of ECE Students

S.No	Roll. No.	Name of students	Year/sem	Name of course	Course Start date
1	16EJCEC001	AANCHAL GUPTA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
2	16EJCEC002	ABHISHEK GOYAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
3	16EJCEC004	ABHISHEK SINGH	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
4	16EJCEC005	ADITYA KHANDELWAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
5	16EJCEC006	ADITYA SHARMA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
6	16EJCEC007	AJAY PAREEK	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
7	16EJCEC008	AKSHAT KUMAR MALVIYA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
8	16EJCEC009	AKSHITA AGRAWAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
9	16EJCEC010	AMAN KHANDELWAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
10	16EJCEC011	AMAN SAXENA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
11	16EJCEC012	AMAN TOTUKA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
12	16EJCEC013	AMBUZ SHUKLA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
13	16EJCEC014	AMISHA KABRA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
14	16EJCEC015	ANAND GUPTA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
15	16EJCEC016	ANAND NENAWA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
16	16EJCEC017	ANCHAL AGARWAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
17	16EJCEC018	ANJALI BHARTI	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
18	16EJCEC019	ANJALI NYATI	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
19	16EJCEC020	ANJUL ASAWA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
20	16EJCEC021	ANKIT KUMAR GUPTA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
21	16EJCEC022	ANKIT SINGH	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
22	16EJCEC023	ANSHUL DHAKA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
23	16EJCEC025	ANUBHAV KHANDELWAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
24	16EJCEC026	ANUBHAV KUMAR JHA	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
25	16EJCEC027	ANUJ GOYAL	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
26	16EJCEC028	APUL JAIN	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
27	16EJCEC029	ARUN SONI	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017
28	16EJCEC030	ARVIND KUMAR	2nd Yr./ III Sem.	Basic Electrical Circuits	24/07/2017

246	15EJCEC033	ANKIT SANKHLA	3rd Yr/ V Sem	Analog communication	24/07/2017
247	15EJCEC034	ANMOL MADAN	3rd Yr/ V Sem	Analog communication	24/07/2017
248	15EJCEC035	ANSHU SAXENA	3rd Yr/ V Sem	Analog communication	24/07/2017
249	15EJCEC036	ANSHUMAN DWIVEDI	3rd Yr/ V Sem	Analog communication	24/07/2017
250	15EJCEC037	ANSHUMAN SHARMA	3rd Yr/ V Sem	Analog communication	24/07/2017
251	15EJCEC038	ANUSHREE SHARMA	3rd Yr/ V Sem	Analog communication	24/07/2017
252	15EJCEC039	ARPIT MANGAL	3rd Yr/ V Sem	Analog communication	24/07/2017
253	15EJCEC040	ARPIT SINGHAL	3rd Yr/ V Sem	Analog communication	24/07/2017
254	15EJCEC041	ARUSHI KHANDELWAL	3rd Yr/ V Sem	Analog communication	24/07/2017
255	15EJCEC042	ARUSHI YADAV	3rd Yr/ V Sem	Analog communication	24/07/2017
256	15EJCEC044	ASHISH AGARWAL	3rd Yr/ V Sem	Analog communication	24/07/2017

NO OF SUDENTS ATTENDED THESES MOOCS

YEAR 2017-2018

Class	No. of Students
2nd Yr./ III Sem.	215
3rd Yr/ V Sem	221

Personality Improvement

- With our efforts in personality development and face classes no. of students have been selects at prominent companies with good starting packages.

- PD classes are the part of curriculum for all students.

Year	Name of event	Object of event	No. of students participated	Date of event
2015-16	Pre Placement training Program by FACE	Bridging gap between academics & Industry	180	12-10-2015 To 14-10-2015
2016-17	Pre placement training by Face	Bridging gap between academics & Industry	184	18-7-2016 to 6 -8-2016
2017-18	Pre placement training program by Face	Bridging gap between academics & Industry	186	20-7-2018 onwards

We invite faculties from various institutes for the face classes which teach our students about aptitude, verbal and non-verbal reasoning etc.

- Mentors of Face Classes :

Session 2017-18 Mentor List

S.No	Mentor Name	No. Of students allotted
1	Mr. Ashish Sharma	19
2	Mr. Vikas Sharma	19
3	Mr. Anil Jain	19
4	Ms. Preeti Barot	19

5	**Mr. Ankur Gangwar**	**19**
6	**Mr. Rajesh Bathija**	**19**
7	**Mr. Naresh Kumar**	**19**
8	**Ms. Shivam Upadhyay**	**19**
9	**Mr. Devesh Gupta**	**19**
10	**Mr. Ashok Kumar**	**19**
11	**Mr. S S Manaktala**	**19**
12	**Ms. Neha Singh**	**19**

Industrial Oriented Visits:

- Students are getting an insight on how their lifes going to be and what does it mean to be an engineer?
- Industrial visits are conducted on regular basis which a great way to learn and see things in action.

Jan 2018-June 2018 (Even Sem)					
S. No.	**Name Of Company**	**Dates of Visit**	**Profile of Company**	**No. of Students**	**Outcome**
1	Tesca Technologies Pvt. Ltd.	7th January 2018	Electronics measurements	27 (3rd year)	1) Single sourcing partner for all Educational olutions. 2) Student Interaction with real application of Electronics Engineering.
2	Genus Power nfrastructures Ltd.,	15th February 2018	Electronics	50	1) Student interacted with real application of Engineering especially in Smart Energy meters. 2) Student learned about various Techniques of Power Generation and Distribution.
3	Phillips Lightings	4th March 2018	Electronics	45	1) Students understood the mechanism behind the manufacturing of lighting systems.
4	Talent Pool	4th March 2018	Telecom, IT	45	1) Students were imparted basic knowledge of telecom strategies.

Technical Events:

- We conduct a lot of technical events which are competitive. Not only it results in bigger number of participants but they can also learn a lot more.

- These events bring out the competitiveness in our students which is going to be useful in real world. Due to this, our students were motivated enough to participate in events launched by big organization Such as NASA.
- Our students also participate in techno culture festivals such robotic festivals, Olympiad etc.

Research Oriented

Conference:

- Conferences are the great way to learn about research and development going on in respective fields, which inspired many students to publish their own research.

- It is also a great starting point for those students who want to pursue their career in research fields.

National and International Conferences Details

S. No.	Topics	No. of Faculty Members	No. of students attended	Remarks
1	**"Recent Technological Developments in Electronics and Electrical Engineering-2018 (RTDEEE-2018)"**	43	11	• To aware research scholars, students and faculty members about the recent developments in the field of Electronics Engineering, Communication Systems, Power System, Control Engineering, Neural Networks and Electrical Engineering etc .held on **April 6-7, 2018**
2	**"Recent Advancements in Science and Technology-2018 (RAST-2018)"**			Two days national conference recent trend in Electronics and communication .held on **March 27-28, 2018,** , 2018 at JECRC Jaipur.

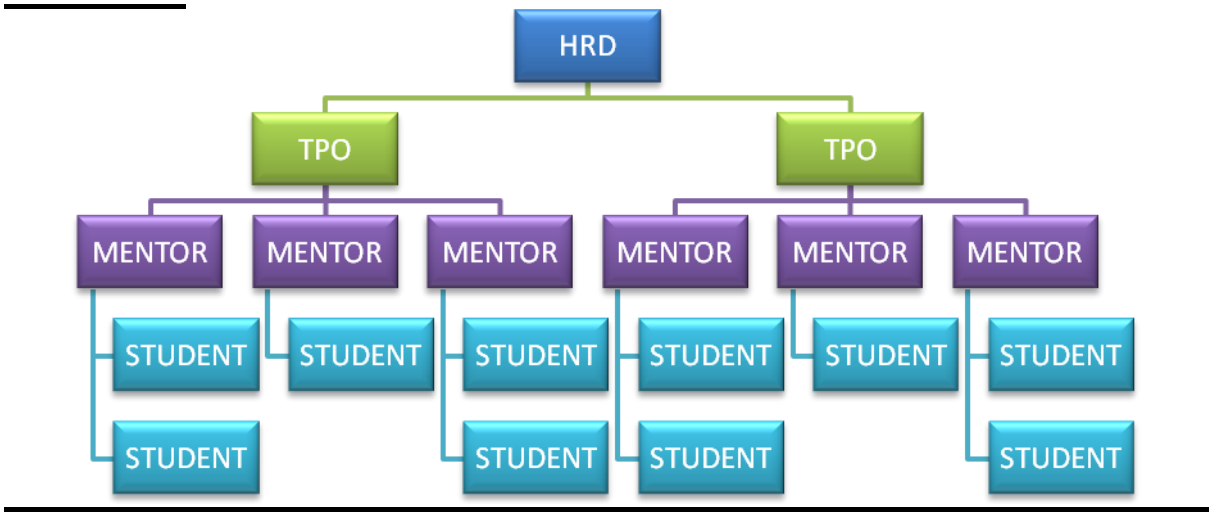
- **Social Activity**
  We have students inclined clubs such as Zarurat, Soch, Aashayein and Suhasani among other.
  These clubs collectively called ABHYUDAY.
  These clubs are managed by our students which conduct free classes for orphaned children, poor children. Which provides them with sense of charity and doing good for others.
  Not only they are learning to be better human beings, they are also setting an example by helping others.

- **Spiritual Trainings**

  We heard so much news about student's suicides which makes it easier to understand that, how stressful a student's life can be.
  We have special spiritual area where our students can experience calm, learn to meditate and learn to deal with the bad situations in life in a healthy way.
  Of audio and video books are also available.
  This is very important, because they are learning to face and deal with their problems not run away from them.

9.5 **Career Guidance, Training, Placement(10)**

The institution may specify the facility, its management and its effectiveness for career guidance including counselling for higher studies, campus placement support, industry interaction for training/internship/placements, etc.)



Professional Guidance:-

We provide opportunities to students to improve placement percentage like interactions with MNC, Exhibition to provide internship.

S.No.	Name of Event	Date	Description
1	Placement Guidance Organized by HRD	August 2016	The event was graced by Mr. Sanjeev Khosla, MD, Accenture & Mrs. ShobhaKariappa, VP, Recruitment.
2	ISRO Exhibition	April 2016	For the first time in Rajasthan an exhibition of the "Space Endeavours of India" was conducted by ISRO (Indian Space Research Organization) at JECRC University in April 2016.
3	SIH 2K17 Organized by MHRD, Govt of India	March-April 2017	JECRC was among the only twenty eight colleges selected in the country.
4	Interactive Session Organized by SanjevOhri	September 2017	This session conducted by Dr. Sanjeev Ohri ,Uk.
5	Interactive Session SPIC MACAY	September 2017	Conducted by Dr. Kiran Seth, founder, SPIC MACAY
6	Awareness Workshop (SIH 2K18)	January 2018	Workshop about second edition of smart india hackathon
7	JECRC Hackathon	10th January 2018 And 11th January 2018	200 students teams participated in a 24 hour nonstop digital product development competition
8	Careers in Entertainment industry ("masalePyarVaale")	2018	Held a screening of a short film "masalePyarVaale" of New York Film

			Academy.
9	Exhibition Organized by ISRO.	April 2018	Space Endeavours of India was conducted by ISRO
10	SIH 2K18 Organized by MHRD, Govt of India	30th -31st March 2018	JECRC was among the only twenty eight colleges selected in the country.

GATE Examination Preparation

- We provide GATE examination preparation to our students which help them with both better placements in Govt. PSUs and for those who are interested in higher studies. Due to this program our no.of students are getting into prominent institutes for higher studies and some of them have also been selected for govt jobs

.

Campus Placement Support/Training

A training and placement cell is established and responsible for campus placement (off campus also) and training which improve students skills both technical and behavioural. A cell provide various opportunities for student placements and organize sessions / training programs.

1	Interactive Session (TCS Representative)	Aug,2015	An interactive session with Anurag Chawla and Vaibhav Bansal both employed at TCS
2	Interactive Session (TCS Commune Program)	2017	The talent acquisition head, North India for TCS, Mr. Narendra Chandel visited JECRC to interact with students regarding the TCS Campus Commune Program..

Training in Institute:

Year	Name of event	Object of event	No. of students participated	Date of event
2015-16	Pre Placement training Program by FACE	Bridging gap between academics & Industry	180	12-10-2015 To 14-10-2015
2016-17	Pre placement	Bridging gap	184	18-7-2016 to 6

	training by Face	between academics & Industry		-8-2016
2017-18	Pre placement training program by Face	Bridging gap between academics & Industry	186	20-7-2018 onwards

TP Squad:-Our institute has a group of faculties called TP squad which interact with companies/industries for training/internship/placement.

Jaipur Engineering College and Research Centre
Department of Electronics and communication Engineering
Minutes of Meeting

From: ECE-T&PSquad	To: All Concerned

Noting Reference No. JECRC/ECE-TnPS/MoM/2017/December/09 00/12/2017

Minutes of Meeting

Agenda –

1. Formation of CSE-Training &Placement Squad
2. Placement strategy for Un-placed students
3. Task assignment.

Meeting Venue and Date: EDC Conference Room A block at 2:00 O'clock on Saturday, December 09, 2017

Chaired By:
Dr. Lokesh Bansal
Attendees

1. **Faculty Coordinators:**
2. **Students Coordinators:**

Points put up for Discussion as per agenda:–

1. The meeting started with motivational triggers connecting the current action with a bigger vision.
2. 12 well trained and placed students of 7th Semester (some listed above) were identified for taking the action further.

3. It was decided for unplaced 162 students of CSE department, each student coordinator will be allotted a group of 15 students.
4. Future course of action was chalk out, based on following categories:
   a. For **Competition based hiring,** the student coordinators under the mentor-ship of faculty coordinator, will help their group for better preparation by identifying coding tricks and algorithms or training as per the requirements.
   b. For **Companies lined up by HR Team,** the student coordinators will motivate and extend their help in identifying the company specific set of questions and training available on the internet.
   c. For **Identification of Personal Contacts,** faculty coordinator along with students will approach organizations to take the things further in positive direction.
   d. For **Establishing Contact with Alumni,** both identified faculty member along with a team of students will approach Alumni of JECRC Foundation for the placement of students.

5. It has been decided the student allotment will be completed by December 11, 2017 with the help of existing mentors.
6. The meeting ended with a clear understanding of the vision and assignment to be carried out for achieving the same.

Copy To:
All Concerned

Entrepreneurship

Institute has a cell which improve entrepreneurship development skills in students by doing activities such as seminars, workshops and awareness camps.(Entrepreneurship and incubation).

- To improve Entrepreneurship skills in students.
- Cell conducts many workshops and awareness camps for students.
- Cell has incubation centre and associated with start-ups.
- Cell schedules interactions with alumni start-ups.

S.No.	Name of Event	Date	Description
1	Interactive Session Motivational speaker	September 2015	An interactive session for students by renowned motivational speaker Mr. Vijay Batra
2	Workshop On Entrepreneurship Skill Development	Feb, 2016	A workshop was conducted by EDC JECRC on Entrepreneurship Skill Development The expert speaker was Dr. Pankaj Bharti from Entrepreneurship Development Institute of India,
3	Entrepreneurship awareness camp	March 2016	A three day Entrepreneurship Awareness Camp was

			organized at JECRC in association with DST The camp witnessed a registration of 300 students and a footfall of 12 eminent speakers from the start up ecosystem of the country.
4	JOSH Meets	May 2016	JOSH Meets, an opportunity for interactive sessions with six achievers from various fields
5	Interactive session With Alumni	August 2016	An interactive session with the alumnus of JECRC & Co-Founder, celebal, Sh. Anirudh Kala was conducted training & placement opportunities for students of JECRC at Celebal were identified.
6	Orientation Session Organized by Career Development Centre, JECRC	2017	Career Development Centre, JECRC &Intraversity organized an orientation session for students to help them grab international internship opportunities. Dr. Harsh Mishra, Founder iSEED&Dr.K. C. Jacob, President & Managing Consultant, Horton International spoke to students about opportunities in Singapore & Hong Kong.
7	TEDx Talk	March 2017	The first TEDx talk in any RTU affiliated college was conducted in JECRC on 25th March 2017 wherein 10 international speakers spoke to our students

Entrepreneurship awareness camp

Government Job Cell

Government job cell was established in our institute in the year 2016 to prepare students towards different competitive examination. In this cell we encourage and inspire students for competitive examination by doing activities like interactive sessions with central government head, NBS head.

S.No.	Name of Event	Date	Description
1	Interactive Session NBS by G. D. Bakshi	October 2015	An interactive session with Major Gen. Dr.G. D. Bakshi was organized for students in October 2015.
2	Interactive Session with the "Metal King of India"	November 2015	An interactive session with the "Metal King of India", Mr. Anil Agarwal, Chairman, Vedanta Resources Plc.
3	Interactive Session By MHRD, Government of India	February 2017	An interactive session with Sh. Anil Swarup, Secretary, (SE & L), MHRD, Government of India was organized for students of JECRC.

4	JECRC MUN	April 2017	The 6th edition of JECRC MUN was held in April 2017, presenting five different committees UN GA-DISEC, NSC, UN HRC, SOCHUM & ICJ.
5	7th Edition of JECRC MUN	April 2017	GA-DISEC, UNSC, UN-HCR, CSW AND Loksabha along with international press

All round development:

Many technical events like conferences and workshops are organized in the institute to improve and present technical skills of students.

- National level competition for students like Smart India Hackathon was held in institute.
- To prepare teams a faculty guide was assigned to a particular team and an intra college competition like JECRC hackathon was organized to check, improve technical skills level of shortlisted teams.

S.No.	Name of Event	Date	Description
1	Ideation Feedback And Social Media Contest	Nov, 2015	contest under the Digital for Customer Engagement program of SAP, U.S.was organized exclusively for students of JECRC.
2	J Techtrix An Exhibition	Nov, 2015	A two day exhibition of projects of 1st Year students was held at JECRC
3	National Conference RTDEEE-2016	August 2016	A two-day national conference RTDEEE-2016, (Recent Technological Developments in Electronics & Electrical Engineering)
4	Interactive Session (TCS Campus Commune Program)	2015	The talent acquisition head, North India for TCS, Mr. Narendra Chandel visited JECRC to interact with students regarding the TCS Campus Commune Program
5	Interactive Session (TCS Representative)	Aug,2015	An interactive session with Anurag Chawla and Vaibhav Bansal both employed at TCS
6	Interactive Session (HEXA CCIE +	Oct,2015	An interactive session with world's only HEXA CCIE +

	CCDE) BY Khawar Butt		CCDE, Khawar Butt was organized for students
7	"Sustainability Development: Challenges & Opportunities. (Short term training course)	From 12th To 16th October 2015	Mechanical Department in association with NITTTR, Chandigarh on "Sustainability Development: Challenges & Opportunities.
8	workshop on "Implementation of logical operations in Software, Image Processing and GUI (Workshopby IIT Mumbai and Techienest Jaipur)	February 2016	A two day workshop on "Implementation of logical operations in Software, Image Processing and GUI directly from industry experts, MATLAB, MATLAB projects & interaction with renowned Industry Experts" was held for students by IIT Mumbai and Techienest Jaipur
9	"Automotive Design and Development" (A training Program)	From 8th To 22nd February 2016.	"Automotive Design and Development" in association with Elite Techno Group
10	International Workshop (Open source software)	September 2016	An international workshop on open source software was conducted at JECRC in association with CSI, Jaipur Chapter and Drupal Jaipur Community. Our special guests were Mr. Micheal Canon, COO and Mr. Nathan Roach, Content Marketing Associate, Axelerant Technologies, Atlanta, US
11	J Techtrix (An Exhibition)	April 2017	J Techtrix, a daylong exhibition of projects of our students was held at JECRC in April 2017 wherein more than forty selected projects were on display
12	SIH-2K17 (Smart India Hackathon) organized by MHRD, Govt of India	April 2017	The grand finale of Smart India Hackathon organized by MHRD, Govt of India was held at JECRC . JECRC was among the only twenty-six colleges selected

			in the country for this event wherein 47 teams from all over India came to participate in a 36-hour nonstop Coding competition.
13	Interactive Session (TCS Commune Program)	2017	The talent acquisition head, North India for TCS, Mr. Narendra Chandel visited JECRC to interact with students regarding the TCS Campus Commune Program..
14	National Conference (RESSD-2016)	October	A two-day national conference RESSD-2016, (Renewable Energy Sources & Sustainable Development) was conducted keynote speaker was Prof. S. K. Ghosh, Dept. of Civil Engineering, IIT Roorkee.
15	Expert Talk Organized by CSE department	November 2017	An invited talk by prof. Peter Kent &Prof. David Wing, CEO UKE was organized by CSE department
16	Sales force Training	2018	Students were trained on modules of Trailhead
17	Interactive Session Organized by CSE department	2018	Conducted by Dr. Niko Philips, Oxford College
19	ICETEAS-2018	February 2018	ICETEAS was organized at JECRC
20	J-Techtrix 3rd Edition An Exhibition	17th March 2018	JECRC's student project exhibition.
21	SIH-2K18 (Smart India Hackathon)	30th -31st March 2018	JECRC was among the only twenty eight

	organized by MHRD, Govtof India		colleges selected in the country.

9.6 Entrepreneurship development cell (EDC):

Entrepreneurship cell is established in mentorship of Mr. Siddharth Chaturvedi, our College for encouraging and inspiring students for start-ups and entrepreneur. Various interactive sessions for students with alumni and start-up representative are organized to know the importance of being an entrepreneur and ways to get financial assistance to become n entrepreneur.

S.No.	Name of Event	Date	Description
1	Interactive Session Motivational speaker	Sep-15	An interactive session for students by renowned motivational speaker Mr. Vijay Batra
2	Workshop On Entrepreneurship Skill Development	Feb, 2016	A workshop was conducted by EDC JECRC on Entrepreneurship Skill Development The expert speaker was Dr. Pankaj Bharti from Entrepreneurship Development Institute of India,
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6	Orientation Session Organized by Career Development Centre, JECRC	2017	Career Development Centre, JECRC & Intraversity organized an orientation session for students to help them grab international internship opportunities. Dr. Harsh Mishra, Founder iSEED & Dr. K.C. Jacob, President & Managing Consultant, Horton International spoke to students about opportunities in Singapore & Hong Kong.
7	TEDx Talk	Mar-17	The first TEDx talk in any RTU affiliated college was conducted in JECRC on 25th March 2017 wherein 10 international speakers spoke to our students

Cell is responsible for :

- ✓ Relationship with companies:
  - ➢ Company like celebal tech has visited our campus for 2017-18 batch placements and this company is owned by jecrc alumni.
  - ➢ Backbone soft wares also visited jecrc campus and owned by JECRC alumni.(2010 batch)
- ✓ Motivate students, guide and help them in the same direction.

- **EDC Activities:**

Year	Name of the event	Conducted by	Date	Participants
2015-16	Entrepreneurship awareness camp	DST govt of raj	28-3-2016 to 30-3-2016	25
2016-17	Entrepreneurship awareness camp	DST govt of raj	2-9-2016	60
2017-18	Entrepreneurship awareness camp	JECRC	29,30-8 2017	63

- Institute has success stories for every pass out year as a result of Entrepreneurship cell and incubation centre.

S.No.	Name of students	Event	Date	Organized by	Event outcomes
1	Harshil Jian	National Start-up Fest	13-16 Oct 2017	AICTE	Certificates
2	Manav Sharma	National StartUp Fest	13-16 Oct 2017	AICTE	Certificates
3	Kushagra Singh	National StartUp Fest	13-16 Oct 2017	AICTE	Certificates

- Our students namely HARSHIL JAIN, MANAV SHARMA and KUSHAGRA SINGH have been shortlisted for National Start-Up Fest 2017, which will be organized by All India Council for

Technical Education (AICTE) in collaboration with Vijnana Bharati (VIBHA) and partnering with other government agencies such as DBT, DST, DIPP, AIM - NITI Aayog, NRDC, FITT-IIT Delhi etc. under aegis of India International Science Festival (IISF 2017), a joint mega event of Ministry of Science and Technology and Ministry of Earth Sciences was held during October 13th – 16th 2017 at Chennai. Their idea has been selected from 1.7 lacs entries among the top 29 start-up ideas of India.

Our students Mithlesh Yadav, Rishabh Anand, Anshul Dhaka,Chirag Maheshwari,Gourav Goyal,Hardik Rathi, Jaya Mittal,Juhi Garg team of Xananoids win the following events at different places.

- Won 2nd prize in JECRC Hackathon for project on home automation. 10th-11th january 2018.
- Won 2nd prize in sumowar in JECRC college, Jaipur.15th march 2018.
- Won 2nd prize in Robowar at Manipal University,Jaipur.
- Won 2nd prize in Robo-soccer at Manipal University,Jaipur.17th-18th march 2018.
- Won 1st prize in Robo rumble at NIT Delhi.23-24th march 2018.
- Won 1st prize in Robowar in JECRC college, Jaipur.
- Won 3rd prize in Sumowar in JECRC college, Jaipur.25-28th march 2018.

- Our students Mr. Sumit Mittal ,ECE second year , Pankaj Mahirshi (ME), Diksha Lath(IT) developers of CAI have added one more success story. They have developed Emergency Medical Aid App (First of its kind) for passengers of West Central Railways. On 8th Feb 2018 they were invited by officials of the Indian railways to demonstrate the app before the CMD and GM (Mr. Girish Pillai) of

the same zone at Zonal office Bharatpur. They were awarded and extolled by the General Manager also.

Student Achievements

- Mr. Utkarsh Goyal, Student of third year, has been selected as Microsoft Student Partner 2017-18. He has cleared all rounds of rigorous selection process. We congratulate him on behalf of entire ECE department.
- The team of Xananoids club took part in plinth tech fest of LNMIIT in the transporter and stood second in it. The team c onsist of Mithlesh (ECE) Rishabh (ECE) Harish (Mech) Gaurav (Mech) Jitendra (Mech) and Shubham (CSE).
- Mr. Mahendra Godara , ECEC final year student secured 258 all india rank in GATE-2018.
- Ms. Pragya Agarwal (Session 2015-2016) secured 10th Position in Merit list of Rajasthan Technical University, Kota with 84.16%.
- Our students Simran Bhatia , Vidushi Gaur , Kapil Bimdal , Charu Upadhyay, Hanu Rohit, actively coordinate TEDx JECRC , which was, an international event themed “DISCOVER SOCIETY”. The aim was to bring the IDEAS WORTH SPREADING to the handpicked intellectual students of JECRC who would take inspirations from those ideas and change the world for good.
- Rohit Raj from ECE branch (2nd year) has been selected as a scholar in Google India Challenge Scholarship 2018 by Udacity on 7th February 2018.
- Ms. Rashi Bansal of ECE department (Second year) won the event “PARIDHAN” of National Tech Management Fest held at JK Lakshmipat University, Jaipur.
- Ms. Rashi Bansal of ECE department (Second year) secured first position in the event “PANACHE” conducted by Creative Arts and Cultural Society held at MNIT, Jaipur.

- Our students namely HARSHIL JAIN, MANAV SHARMA and KUSHAGRA SINGH have been shortlisted for National Start-Up Fest 2017, which will be organized by All India Council for Technical Education (AICTE) in collaboration with Vijnana Bharati (VIBHA) and partnering with other government agencies such as DBT, DST, DIPP, AIM - NITI Aayog, NRDC, FITT-IIT Delhi etc. under aegis of India International Science Festival (IISF 2017), a joint mega event of Ministry of Science and Technology and Ministry of Earth Sciences was held during October 13th – 16th 2017 at Chennai. Their idea has been selected from 1.7 lacs entries among the top 29 startup ideas of India.

Our students Mithlesh Yadav, Rishabh Anand, Anshul Dhaka,Chirag Maheshwari,Gourav Goyal,Hardik Rathi, Jaya Mittal,Juhi Garg team of Xananoids win the following events at different places.

- Won 2nd prize in JECRC Hackathon for project on home automation. 10th-11th january 2018.
- Won 2nd prize in sumowar in JECRC college, Jaipur.15th march 2018.
- Won 2nd prize in Robowar at Manipal University,Jaipur.
- Won 2nd prize in Robo-soccer at Manipal University,Jaipur.17th-18th march 2018.
- Won 1st prize in Robo rumble at NIT Delhi.23-24th march 2018.
- Won 1st prize in Robowar in JECRC college, Jaipur.
- Won 3rd prize in Sumowar in JECRC college, Jaipur.25-28th march 2018.

- Our students Mr. Sumit Mittal ,ECE second year , Pankaj Mahirshi (ME), Diksha Lath(IT) developers of CAI have added one more success story. They have developed Emergency Medical Aid App (First of its kind) for passengers of West Central Railways. On 8th

Feb 2018 they were invited by officials of the Indian railways to demonstrate the app before the CMD and GM (Mr. Girish Pillai) of the same zone at Zonal office Bharatpur. They were awarded and extolled by the General Manager also.

- Ms. Chestha Agrawl won the DRDO National level essay competition-2017 on the topic of "DRDO Achievements & Way Ahead".
- Ms. Lakshita Sharma, third year student participates in Rajasthan senior state football tournament.
- Ms. Lakshita Sharma, third year student got selected in top 11 players of Rajasthan senior national football tournament .
- Ms. Lakshita Sharma, third year student was the winner of GIT college tournament (vanquish) .
- Ms. Lakshita Sharma, third year student was the winner of Rajasthan technical university tournament (RTU).

9.7 Co-curricular and extracurricular activities:

Co-curricular Activities:

Co-curricular Activates:

Industrial Trainings/Industrial Visits/Workshops				
Sr.No.	**Department Activity**	**Level of Activity**	**Number of Participant**	**PO Attainment**
1	Embedded Systems & Robotics organized by TechiNest Pvt.	National	56	PO1, PO2, PO3, PO5, **PSO1**
2	Embedded & Robotics organized by SaK Robotics	National	66	PO1,PO2, PO3, PO5,**PSO1**
3	Workshop on CCNA Networking	National	58	PO1,PO2, PO3, PO5
4	Workshop on SPYBOT- Spy Robotic Workshop organized by TechiNest Pvt. Ltd	National	215	PO1, PO2, PO3, PO5,**PSO1**
5	Industrial Visit Genus Power Infrastructures Ltd	National	50	PO1,PO2, PO3, PO5
6	Industrial Visit Tesca Technologies Pvt. Ltd.,	National	27	PO1,PO2, PO3, PO5
7	Industrial Visit PHILIPS LIGHTING	National	510	PO1,PO2, PO3, PO5
8	Industrial Visit at BSNL	National	55	PO1, PO2, PO3, PO5

Industrial visits are conducted for students so they can practically observe the environment and activities in Industries.

Jan 2018-June 2018 (Even Sem)					
S. No.	**Name Of Company**	**Dates of Visit**	**Profile of Company**	**No. of Students**	**Outcome**
1	Tesca Technologies Pvt. Ltd.	17th January 2018	Electronics measurements	27 (3rd year)	1) Single sourcing partner for all Educational solutions. 2) Student Interaction with real application of Electronics Engineering.
2	Genus Power Infrastructures Ltd.,	15th February 2018	Electronics	50	1) Student interacted with real application of Engineering especially in Smart Energy meters. 2) Student learned about various Techniques of Power Generation and Distribution.
3	Phillips Lightings	24th March 2018	Electronics	45	1) Students understood the mechanism behind the manufacturing of lighting systems.
4	Talent Pool	24th March 2018	Telecom, IT	45	1) Students were imparted basic knowledge of telecom strategies.

- Each team who participated in 2017 and 2018 SIH held at JECRC were guided by assigned faculty member so they can perform better.

- Teams from JECRC participated in 2017 and 2018 SIH were guided by faculty member so they can perform better.

Year	No. of students participated	No. of teams
2016-17	18	3
2017-18	24	4

- Teams participated in JECRC hackathon 1.0 in 2018 were guided by faculty member(one mentor with each team)

Year	No. of students participated	No. of teams
2017	224	35

Extra Curricular Activities

Session 2017-2018

S. no.	Name of event	date	Details
1	Deputy high commissioner of U.K. visited JECRC.	July 2017	Visit of Deputy High Commissioner was held in JECRC.
2	JECRC Alumni were awarded on first year induction day.	Aug 2017	An induction day for 2021 batch was celebrated and alumni were awarded on this day.
3	An engineer's day celebration, Top rankers in RTU and achievers in sports were decorated.	Sep 2017	An engineer's day celebrated in JECRC, top rankers and achievers were awarded.
4	"SwacchataPakhwada" celebrated, Cleanliness raised.	1 to 15 Sep 2017	15 days celebration took place as "SwacchataPakhwada" in JECRC, students were participated in this activity, checked for clean campus.
5	Seminar on "Rally for Rivers".	Sep 2017	A seminar on " Rally for Rivers" were held in JECRC. Students were participated.
6	An interactive session by kiranseth on SPIC MACAY.	Sep 2017	A session by Mr. Kiran seth on SPIC MACAY, students were part of this.
7	OMEN by HP and mountain dew ESL india college gaming championship.	Oct 2017	A college championship of gaming competition was held.
8	Blood donation drive	Oct 2017	Blood donation camp was organized for students. They donated blood.
9	Vandeymatram-voice of unity	Nov 2017	Thousands of student participated across state. JECRC students were also part of this.

10	An invited talk with prof.peterkent and prof. david wing CEO UKEI.	Nov 2017	Session was organized in JECRC for students.
11	National girl child day celebration	Jan 2018	National girl child day was celebrated in JECRC.
12	69 th republic day celebration	Jan 2018	Republic day was celebrated
13	OCIP(orphanage children interactive program) by Abhyuday group- SOCH	Feb 2018	An event organized by abhyuday group-SOCH,which were for orphanage children.
14	An invited Talk on" Society and control system" by vice chancellor RTU Kota.	Feb 2018	Chancellor RTU kota presented talk on Society and control system.
15	National level cultural fest RENAISSANCE.	March 2018	National level cultural fest RENAISSANCE
16	Social group activity by Abhyuday group-Zarurat	March 2018	Abhyuday group-zarurat organized an event for children , some competitions were held in JECRC
17	Sports activity during RENAISSANCE.	March 2018	Many sports activities and competitions were organized for students during annual fest RENAISSANCE.
18	Seminar on entertainment industry by alumnus.	March 2018	Seminar was held by JECRC alumnus on entertainment in JECRC.
19	An Exhibition by ISRO	April 2018	ISRO conducted exhibition in JU, students of JECRC were participated

JECRC Alumni Activities

Sno.	Name of Event	Date	Place of Event
1	**Alumni VS Faculty Cricket Match**	**25/03/2018**	**JECRC**
2	**Seminar on Career in Entertainment Industry**	**12/03/2018**	**JECRC**

3	**JECRC Alumni Startup Meet**	**15/02/2018**	**JECRC**
4	**Distinguished Alumni Awards**	**13/08/2017**	**JECRC**
5	**#R17 Let's Hangout**	**16/03/2017**	**JECRC**
6	**#R17 Cricket Match**	**16/03/2017**	**JECRC**
7	**Alumni Panel Discussion Second Edition**	**11/03/2017**	**JECRC**
8	**Career Oriented Interaction with Alumni**	**11/03/2017**	**JECRC**
9	**JECRC Alumni Meet**	**28/05/2017**	**Patna, Bihar**
10	**Reminisce-A Flash from the past**	**05/03/2017**	**JECRC**
11	**Interactive Session with JECRC Alumni**	**26/08/2017**	**JECRC**
12	**JECRC Alumni Meet**	**11/12/2016**	**Mumbai-Pune**
13	**Alumni Meet and Greet Session**	**29/09/2016**	**JECRC**
14	**JECRC Alumni Meet**	**17/09/2016**	**NewYork**
15	**Josh Meets**	**29/05/2016**	**JECRC**
15	**Alumni Treasure Hunt Alumni Panel Discussion**	**22/03/2016**	**JECRC**
16	**Mr. and Ms. Alumni Competition-2016**	**07/03/2016**	**E Competition**
17	**Let's Hangout**	**01/03/2016**	**JECRC**

CRITERION 10	**Governance, Institutional Support and Financial Resources**	**120**

10. GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

10.1 Organization, Governance and Transparency (40)

10.1.1. State the Vision and Mission of the Institute (5)

(Vision statement typically indicates aspirations and Mission statement states the broad approach to achieve aspirations)

VISION AND MISSION

VISION

- To become a renowned centre of outcome based learning and work toward academic, professional, cultural and social enrichment in the lives of individuals an communities.

MISSION

- Focus on evaluation of learning outcome and motivate students to inculcate researcl aptitude by project based learning.
- Identity based on informed perception of Indian, regional and global needs, th areas of focus and provide platform to gain knowledge and solutions.
- Offer opportunities for interaction between academia and industry.
- Develop human potential to its fullest extent so that intellectually capable an imaginatively gifted leaders can emerge in a range of professions.

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10.1.2. Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein, in a tabular form. A few sample minutes of the meetings and action-taken reports should be annexed.
The published rules including service rules, policies and procedures; year of publication shall be listed. Also state the extent of awareness among the employees/students.

2017-
2018

MEMBERS OF GOVERNING BODY

S.No	Name	Post	Address
1	Sh. M.L. Sharma	Chairman	F-30, MAJOR SHAITAN SINGH COLONY, SHASTRI NAGAR,JAIPUR- 302016
2	Dr. Vinay Kumar Chandna	Member Secretary	E-806,Asha Deep Apartment Green Avenue,Jagatpura,Jaipur-302027
3	Dr. Umesh Kumar Pareek	Member	CTS bus stand, Sanganer, Jaipur-302019
4	Sh. Manish Jain	Member	MALVIYA NAGAR 13/22,A,Jaipur-302017
5	Dr. Naveen Hemrajani	Invited from other University	
6	Nominee from the AICTE	(Ex-officio)	Regional Office,Plot No.1A, 5th Floor, Building of Directorate of Technical Education & Industrial Training, (Govt. of Punjab), Sector-36A, Chandigarh- 160036 Chandigarh
7	An industrialist /Technologist/Educationist from the Region to be nominated by the State Govt./UT.	(Ex-officio)	
8	Nominee of the State Govt./UT.	(Ex-officio)	–
9	Dr. Rajesh Singhal, Professor	Member	RTU, Akelgarh,Rawatbhata Road,Kota
10	Indovision Services Pvt. Ltd. Authorized Huawei Network Academy Partner (HIT)	Member (Invities)	3rd floor, Centrum Mall, Khasra Number 369, MG Road, Sultanpur, New Delhi
11	Wadhwani Operating Foundation	Member (Invities)	Four Main Street, Suite 120, Los Altos, CA 94022
12	Forsk Technologies Private Ltd.	Member (Invities)	# M-5, Software Building, IT Park, Industrial Area EPIP, Sitapura, Jaipur
13	CADD Centre Training Services Pvt. Ltd., Chennai	Member (Invities)	Local office – 106-107, Mahima Majesty, Ram Gali No. 6, Raja Park, Jaipur

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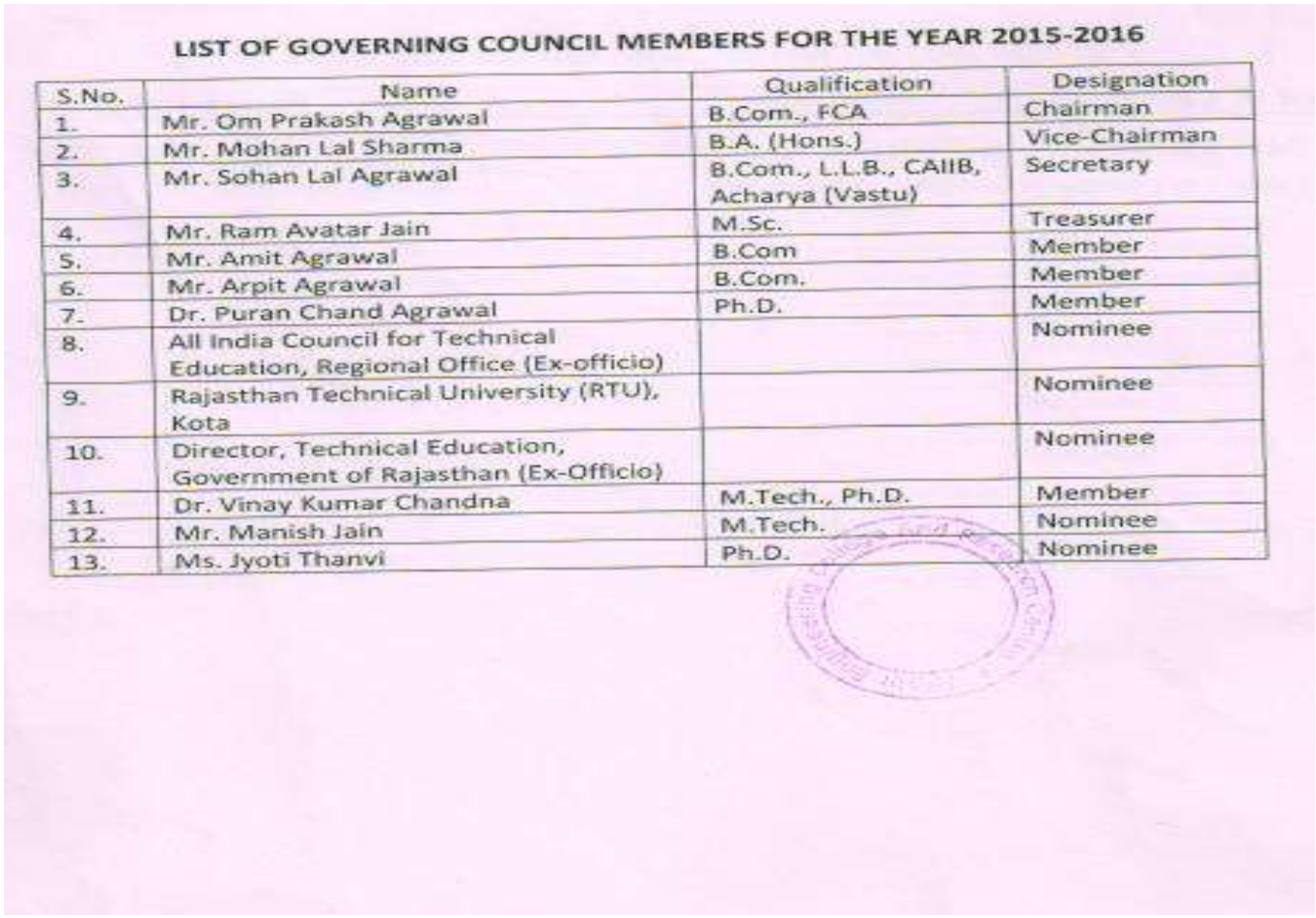
LIST OF GOVERNING COUNCIL MEMBERS FOR THE YEAR 2016-2017

S.No.	Name	Qualification	Designation
1.	Mr. Om Prakash Agrawal	B.Com., FCA	Chairman
2.	Mr. Mohan Lal Sharma	B.A. (Hons.)	Vice-Chairman
3.	Mr. Sohan Lal Agrawal	B.Com., L.L.B., CAIIB, Acharya (Vastu)	Secretary
4.	Mr. Ram Avatar Jain	M.Sc.	Treasurer
5.	Mr. Amit Agrawal	B.Com	Member
6.	Mr. Arpit Agrawal	B.Com.	Member
7.	Dr. Puran Chand Agrawal	Ph.D.	Member
8.	All India Council for Technical Education, Regional Office (Ex-officio)		Nominee
9.	Rajasthan Technical University (RTU), Kota		Nominee
10.	Director, Technical Education, Government of Rajasthan (Ex-Officio)		Nominee
11.	Dr. Vinay Kumar Chandna	M.Tech., Ph.D.	Member
12.	Mr. Manish Jain	M.Tech.	Nominee
13.	Ms. Jyoti Thanvi	Ph.D.	Nominee



LIST OF GOVERNING COUNCIL MEMBERS FOR THE YEAR 2015-2016

S.No.	Name	Qualification	Designation
1.	Mr. Om Prakash Agrawal	B.Com., FCA	Chairman
2.	Mr. Mohan Lal Sharma	B.A. (Hons.)	Vice-Chairman
3.	Mr. Sohan Lal Agrawal	B.Com., L.L.B., CAIIB, Acharya (Vastu)	Secretary
4.	Mr. Ram Avatar Jain	M.Sc.	Treasurer
5.	Mr. Amit Agrawal	B.Com	Member
6.	Mr. Arpit Agrawal	B.Com.	Member
7.	Dr. Puran Chand Agrawal	Ph.D.	Member
8.	All India Council for Technical Education, Regional Office (Ex-officio)		Nominee
9.	Rajasthan Technical University (RTU), Kota		Nominee
10.	Director, Technical Education, Government of Rajasthan (Ex-Officio)		Nominee
11.	Dr. Vinay Kumar Chandna	M.Tech., Ph.D.	Member
12.	Mr. Manish Jain	M.Tech.	Nominee
13.	Ms. Jyoti Thanvi	Ph.D.	Nominee

Functions and Responsibilities

Chairman: Overall Incharge of the College

Principal: responsible for faculty development and research activities; smooth functioning of the institute.

Program Coordinators / HODs: Are responsible for administration and academic activities of their program / departments.

Dean I Year: is responsible for administration and academic activities related to I year.

Dean II Shift: is responsible for administration and academic activities related to II shift.

Maintenance Incharge: is responsible for maintenance related issues in the campus.

T & P Officer: is responsible for Training and placement related activities in the Campus.

Registrar: Deals with admissions, registration and results of students and all other issues related to students and the Rajasthan Technical University.

Accounts: All issues related to student fees, budget and payment.

Establishment: Deals with all issues related to staff recruitment, increments, promotions, provident fund, gratuity and salary bills etc.

Financial Power Deligation to the Program Coordinators/HODs – impress amount of Rs. 10,000/- is sanctioned to the all Program Coordinators/HODs and on submission of accout further amount is dispursed.

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NATIONAL SOCIETY FOR ENGINEERING RESEARCH AND DEVELOPMENT, JAIPUR.

10-10-2015

Delegation of powers to the various authorities

The Chairman, JECRC Foundation, and the National Society for Engineering Research and Development, has directed me to convey the delegation of powers to the various authorities working in the NSERD promoted institutions. Our Esteemed Chairman is of the view that the College Principal and the Registrar should have adequate powers so that they are in a position to comply with the requirements of the regulatory and supervising bodies, and conduct day-to-day affairs in a positive and peaceful manner, under their own authority and signatures.

With a view to ensuring smooth and unambiguous functioning of the colleges, viz., Jaipur Engineering College And Research Centre, as also JECRC UDML College of Engineering, the delegated powers / authority are detailed hereunder:

Designated Authority	Powers delegated
a) Principal	i) As Head of the Institution, he shall exercise his authority for institution building. He will act as Competent Authority for all Faculty Members and Officer staff and be responsible for overall human resource management, their appointment, utilization, retrenchment, termination, disciplinary action, etc. He will exercise signing powers as Competent Authority. ii) He will act as superintendent and guide for all items of work related to AICTE, RTU (Affiliating University), UGC, MHRD, Technical Education Department GOR, State Level Fees Determination Committee, and other regulatory or higher bodies. iii) Establish a climate in which faculty members and the students can develop self-discipline, and promote research. iv) To formulate the Budget and assess the infrastructural and other requirements well in advance and get the same approved from the Secretary, NSERD before execution. v) Impress amount of Rs. 1,00,000/- (Rs. One Lakh Only) is also delegated for routine exercise.
b) Registrar	a) He shall act Competent Authority for all office and sub-staff, and exercise signing powers as competent authority for their appointment, utilization, retrenchment, termination, disciplinary action, etc. b) He shall act as **Compliance Officer** to fulfill the regulatory guidelines etc. of AICTE, RTU (Affiliating University), UGC, MHRD, Technical Education Department GOR, State Level Fees Determination Committee, and other regulatory or higher bodies. He shall act as

1

	signing authority in all such matters. c) The Registrar shall be the custodian of records and property of the college, and be directly responsible to the Director/Principal of the College for the proper discharge of his duties and functions, and exercise such other powers and perform such other duties as may be assigned to him by the Director/Principal. d) **In the absence of Director / Principal, all powers shall vest in Registrar and he shall exercise the authority and signing powers of the Principal including Competent Authority for Faculty Members, etc.**

2. This Delegation of Powers will take place with immediate effect.

3. With a view to explaining these powers and clarifying the doubts, if any, a meeting will be held shortly, for which I am directed to request (1) Shri Amit Agrawal (2) Shri Arpit Agrawal (3) Shri M.L. Sharma, Principals and Registrars of both the colleges to attend the said meeting. Convenient date, time and venue of the meeting shall be communicated separately.

4. The concerned Principals and Registrars are requested to note the Delegation of Powers and acknowledge receipt.

By Order,

S.L. Agrawal
Executive Director
JECRC Foundation
Jaipur.

Jaipur Engineering College And Research Centre

Dated : 12th June 2015.

2

Frequency of the Meetings

Jaipur Engineering College & Research Centre

From : Principal Office	To : All BOG Members

Noting Reference No. JECRC/02/2017-18 04/05/18

Call of Meeting

Venue: Board Room, Block A

Date & Time May 19, 2018 at 11:00 AM

Agenda:

1. Confirmation of minutes of the last meeting during 2015-16
2. Annual report of the College for the academic year 2016-17
3. Annual report of the College for the academic year 2017-18
4. Proposed activities for the new academic year 2018-19
5. Any other issues with the permission of the Chair

Members:

S. No	Name	Post	Address
1	Sh. M.L. Sharma	Chairman	F-30, Major Shaitan Singh Colony, Shastri Nagar,Jaipur- 302016
2	Dr. Vinay Kumar Chandna	Member Secretary	E-806, Asha Deep Apartment Green Avenue,Jagatpura,Jaipur-302027
3	Dr. Umesh Kumar Pareek	Member	CTS bus stand, Sanganer, Jaipur-302019
4	Sh. Manish Jain	Member	Malviya Nagar,13/22,A,Jaipur-302017
5	Dr. Naveen Hemrajani	Invited from other University	
6	Nominee from the AICTE	(Ex-officio)	Regional Office,Plot No.1A, 5th Floor, Building of Directorate of Technical Education & Industrial Training, (Govt. of Punjab), Sector-36A, Chandigarh
7	An industrialist/ Technologist / Educationist from the Region to be nominated by the State Govt./UT.	(Ex-officio)	
8	Nominee of the State Govt./UT.	(Ex-officio)	–
9	Dr. Rajesh Singhal, Professor	Member	RTU, Akelgarh,Rawatbhata Road,Kota
10	Indovision Services Pvt. Ltd. Authorized Huawei Network Academy Partner (HIT)	Member (Invities)	3rd floor, Centrum Mall, Khasra Number 369, MG Road, Sultanpur, New Delhi
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13	CADD Centre Training Services Pvt. Ltd., Chennai	Member (Invities)	Local office – 106-107, Mahima Majesty, Ram Gali No. 6, Raja Park, Jaipur

Dr. Vinay Kumar Chandna
Principal
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur-302 005

MINUTES OF MEETING

Last meeting of BOG was held on 22/06/2016 in the board room of the College. Following are the action taken on the meeting –

1. Graduate Attributes are shared with all concerned Program Coordinators, HODs, Dean I Year, Dean II Shift
2. Shortcomings related to placements were taken care of and accordingly tie-ups made with external agencies for preparation for the placements.
3. Government job cell was formed with an aim to guide for Government related jobs, preparation for GATE, other competitive examinations etc.
4. A placement team has been formed for the placement of students who are not eligible (i.e. they have cleared their degree with back) for the placement. This team is working with a nomingclature of Outreach placement cell with a moto to place such non eligible students.
5. Internal Quality Assessment measure has been taken care of viz., the course outcome analysis, gap analysis, content beyond syllabus, lab maintenance, publication, co-curricular activities, moderation of internal papers etc.
6. Initiation is taken to establish relation with the industry, in view of the same students are undergoing for training in different areas. MoUs are signed with the industries.
7. Activities related to social initiatives were taken care of.
8. The related documents submitted to RTU
9. As per RTU the QIV points were made available for the year 2016-17 were 616/1000.
    a. The corrective measures were taken on the same and for the year 2017-18 and the documents were again sent to RTU Kota for inspection.
    b. On the basis of documents the points will be awarede by RTU and significant improvement has been reported.
    c. Further, the departments are working on outcome based education and the letter related to content beyond syllabus is sent to the University.

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4

Minutes of the meetings

Jaipur Engineering College & Research Centre

From : Principal Office	To : All BOG Members

Noting Reference No. JECRC/02/2017-18/238 25/04/18

Annual Board of Governance Meeting Notice

Academic year 2017-18 is almost over and the new academic year 2018-19 is commencing from July 02, 2018. There is a meeting on May 30, 2018 at 11:00 AM in the Board room of College campus to discuss the following agenda items –

1. Confirmation of minutes of the last meeting
2. Annual report of the College for the academic year 2017-18
3. Proposed activities for the new academic year 2018-19
4. Any other issues with the permission of the Chair

All are requested to be present in the meeting.

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Copy to –
1. Shri M.L. Sharma, Chairman
2. Dr. Vinay Kumar Chandna, Member Secretary
3. Dr. Umesh Kumar Pareek, Member
4. Shri Manish Jain, Member
5. Dr. Naveen Hemrajani, Member
6. The Hon'ble Vice Chancellor, RTU Kota
7. The Member Secretary, AICTE, New Delhi
8. Indovision Services Pvt. Ltd. Authorized Huawei Network Academy Partner (HIT)
9. Wadhwani Operating Foundation
10. Forsk Technology Private Ltd.
11. CADD Centre Training Services Pvt. Ltd. Chennai

Jaipur Engineering College & Research Centre

From : Principal Office	To : All Program Coordinators/HODs

Noting Reference No. JECRC/02/2017-18/269 29/05/18

Minutes of the Meeting

Venue : Board Room – Block A

Date & Time Wednesday; May 30, 2018 at 11:00 AM

Agenda

1. Confirmation of minutes of the last meeting during 2015-16
2. Annual report of the College for the academic year 2016-17
3. Annual report of the College for the academic year 2017-18
4. Proposed activities for the new academic year 2018-19
5. Any other issues with the permission of the Chair

Special invited Guest:

1. Shri Amit Agrawal, Special invited Guest

Members Present:

1. Shri M.L. Sharma, Chairman
2. Prof. (Dr.) V.K. Chandna, Member Secretary
3. Shri Manish Jain, Member
4. Dr. Umesh Kumar Pareek, Member
5. Dr. Naveen Hemrajani, Invited from other University
6. Dr. Sylvester Fernandes, Member (Invitees)
7. Shri Rajeev Bhargava, Member (Invitees)

Members absent:

1. Dr. Rajesh Singhal, Member (RTU Kota)
2. Nominee from the AICTE
3. Nominee of the state Govt./UT.
4. An Industrialist nominated by the State Govt.
5. Shri Deepak Motwani, Member (Invitees)
6. Shri Atul Kumar, Member (Invitees)

V. 29/5/18

Contd..2/-

Meeting started at 11:00 AM; following items were discussed –

1. With the permission of the Chair, Dr. Vinay Kumar Chandna, Member Secretary welcomes all the dignitaries.
2. He read the last minutes of the meeting and further it was approved by the members unanimously.
3. He presents the annual report of the year 2016-17 and 2017-18, following items were discussed –
   a. Vision and Mission of the institute
   b. 12 points Program outcome
   c. Decentralization of power – institute's organization chart was discussed. He informed that an amount of Rs. 10,000/- is sanctioned to all the Program Coordinators/HODs, Dean II Shift, Dean I year, all section incharges to meet out the immediate requirement of the fund. He also clears that on the submission of account further amount is disbursed.
   d. Students' result analysis
   e. For the placement data; it was made clear that placement percentage is based on unique offers. The data of higher education, engaged with family business, startups etc. will be included later.
   f. Nine MoUs at National level and two MoUs at International level were signed to enhance the students' technical knowledge as per the market requirements. Shri Rajeev Bhargava suggested that we should adopt a process in which these certified courses should be validated by the MSME / University. These certificate courses may be examined by the university if possible it can be from JECRC University. Member secretary has noted the same for further action.
   g. Content beyond syllabus was discussed. Shri Manish Jain informed the members about the duration of the course. Member secretary informed that these courses are running after the college hours. Students are taking interest in these courses.
   h. Research Grants from the Govt. agencies and also proposed FDP/workshop/Seminar during the 2018-19 was discussed in brief. Member secretary informed that proposal of approx. 70 lacs were submitted to the Govt. agencies for conducting the different activities.
   i. Budget and expenditure discussed in brief. Member secretary made clear that "other then R&D" means academic activities, it is not included research related activities. Shri Amit ji appreciated the R&D activities he pointed out that in the year 2015-16 budget was Rs. 2,50,000/- and in the year 2018-19 (proposed) it rose to Rs. 20,00,000/- it shows that students are taking interest in R&D activities.
   j. QIV rating 2016-17 and 2017-18 was discussed. In the year 2016-17 the score was 616/1000 and after efforts this year it rose to 740/1000. Shri Amit Agrawal asked what is the highest marks so far, member secretary replied it will be checked out.

V. Pl 29/11/18

k. Member secretary told that faculty members will be motivated for paper publication at international level repute journals.
l. Proposed activities for the coming year were discussed in brief.

4. Inputs by the industry –
   a. Dr. Silvester suggested that more budget for the students' R&D activities should be incorporated in more elaborate manner i.e. budget should be clearly mentioned R&D, transportation, other expenditure etc.
   b. Centre of excellence should be opened 24x7.
   c. Result oriented training program should be incorporated.
   d. Shri Rajeev Bhargava suggested development of digital content
   e. These types of meetings should be twice in a year.
   f. In next meeting more representatives from the industry should be incorporated.

5. The meeting ended with a vote of thanks to the Chair.

Member Secretary

JECRC
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Ref: JECRC/2017-18/559 Date: 18/5/18

To

The Hon'ble Vice Chancellor,
Rajasthan Technical University,
Rawatbhata Road,
Kota.

Subject: **Annual Board of Governors Meeting at JECRC Jaipur**

Dear Sir,

Annual Board of Governors meeting of Jaipur Engineering College & Research Cenre, Tonk Road, Jaipur is schedule on Wednesday the 30th May 2018 at 11:00 AM in the board Room Block-A, college campus.

You are requested kindly depute University representative for the Annual Board meeting.

Thank you & with regards,

V. Chandna

Dr. Vinay Kumar Chandna
PRINCIPAL

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur - 303 905

JECRC Foundation
Jaipur Engineering College and Research Centre
JECRC Campus, Shri Ram Ki Nangal,
Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302 022
t: 0141 2770120, 2770232 f: 0141 2770803 e: info@jecrcmail.com

Attendance therein

ATTENDANCE OF GOVERNING BODY MEETING

S.No	Name	Post	Signature
1	Sh. M.L. Sharma	Chairman	
2	Dr. Vinay Kumar Chandna	Member Secretary	
3	Dr. Umesh Kumar Pareek	Member	
4	Sh. Manish Jain	Member	
5	Dr. Naveen Hemrajani	Invited from other University	
6	Nominee from the AICTE	(Ex-officio)	
7	An industrialist /Technologist/Educationist from the Region to be nominated by the State Govt./UT.	(Ex-officio)	
8	Nominee of the State Govt./UT.	(Ex-officio)	
9	Dr. Rajesh Singhal, Professor, RTU Kota	Member	
10	Indovision Services Pvt. Ltd. Authorized Huawei Network Academy Partner (HIT)	Member (Invities)	
11	Wadhwani Operating Foundation	Member (Invities)	
12	Forsk Technologies Private Ltd.	Member (Invities)	DR. SYLVESTER FERNANDES
13	CADD Centre Training Services Pvt. Ltd., Chennai	Member (Invities)	RAJEEV BHARGAVA

The published rules including service rules, policies and procedures

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

HAND BOOK

OF

RULES & REGULATIONS

Jaipur Engineering College & Research Centre
Sri Ram Ki Nangal, Via-Vatika Tonk Road,
Jaipur – 303 905

12/02/2018

PROPOSAL FOR INCREMENT / RETENTION BENEFIT

1. It is proposed to provide 3% increment on Basic and AGP.
2. It is proposed to provide 2% DA on Basic and AGP each year. Additional DA may be announced if necessary.
3. The above proposed increment will have an impact of approximately 4% as compared to previous impact of 4.5%.
4. It is proposed to provide additional 3% increment (Basic + AGP) after completion of three years of service at JECRC under following conditions
   a. Faculty member of Applied Science must have PhD qualification. They are given one year time for the registration and five year time for the completion of PhD there after their benefit may be considered from the date of completion certificate.
   b. Associate Professor must have PhD qualification. They are given one year time for the registration and five year time for the completion of PhD there after their benefit may be considered from the date of completion certificate.
   c. Assistant professor must have M.E. / M.Tech qualification. They are given one year time for the registration and three year time for the completion of M.E. / M.Tech there after their benefit may be considered from the date of completion certificate.
      AND
   d. At least 50% students must have more than 60% marks in the theory subject's the faculty member is delivering.
      AND
   e. Publish at least one paper in reputed conference / journal during previous year.
      AND
   f. If someone leaves the service within one year after availing the benefit, he/she has to deposit the whole amount of benefit before leaving.
5. It is proposed to provide two increments (6%) additional increment (Basic + AGP) after completion of five, ten and fifteen years of service at JECRC (taking 1/7/17 as base month and year to all the faculty members) under following conditions
   a. Faculty member of Applied Science must have PhD qualification. They are given one year time for the registration and five year time for the completion of PhD there after their benefit may be considered from the date of completion certificate.
   b. Associate Professor must have PhD qualification. They are given one year time for the registration and five year time for the completion of PhD there after their benefit may be considered from the date of completion certificate.
   c. Assistant professor must have M.E. / M.Tech qualification. They are given one year time for the registration and three year time for the completion of M.E. / M.Tech there after their benefit may be considered from the date of completion certificate.
      AND
   d. At least 50% students must have more than 60% marks in the theory subject's the faculty member is delivering.
      AND
   e. Publish at least one paper in reputed conference / journal.

(2)

6. There will be additional benefit such as Mobile Number may be provided to all the HOD's, TPO's and Mentors of each semester students.
7. Faculty members who will complete Five years of service after 1/7/17 and before 31/12/ 17 may be provided retention benefit of 3% in addition to conventional increment only.
8. Assistant professors, Associate professors and Professors are provided with 5, 7, 10 days of duty leave respectively for taking examination, attending conference and any other academic assignment as assigned.
9. The faculty members who do not qualify criteria 5 for consecutive three years, retention benefits may be withdrawn.
10. Faculty member who publish a paper in a reputed conference / journal listed in UGC approved list only will be provided 50% of the registration charges subject to a maximum of Rs. 5000/- (Five Thousand) only.
11. In case of promotion the next increment date will be the date of promotion. However, in case of any ambiguity the committee will decide the next increment date.
12. These will not be applied to non teaching staff including class IV servants.

V. Chandna

Dr. V. K. Chandna

OFFICE OF THE CENTRAL MONITORING COMMITTEE (3)

JECRC Campus, Shri Ram Ki Nangal, Via-Sitapura, Near Sanganer Sadar Thana, Tonk Road, Jaipur-302022

Promotion Policy

Under the fitment of proposal and increment retention benefit the faculty members are kept in the pay scale AGP of 6000, 7000, 8000 for Assistant Professors, 9000 AGP for Associate Professors. 10,000 AGP for Professors.

The change of AGP for one level to another AGP 6000 AGP 7000 after five years, from AGP7000, AGP 8000 after four years and from AGP 8000 to AGP 9000 after three years as per AICTE. Along with the faculty members who wish to promote to AGP 9000 must have minimum qualifications of Ph.D and must appear in front of Selection Committee for the same.

The above benefits will be applicable if the faculty member have at least 50% points out of 200 self appraisal points.

Jaipur Engineering College and Research Centre, Jaipur

FACULTY APPRAISAL FORM (Session 2018-2019)

For best faculty award

Total 200 points

Name of Faculty Member: Department:

Designation:

S. No.	Item Name	Maximum Points	Points obtained
1	Academic result 30 points average (90% students having more than 70% : 30 points, 80-89% students having more than 70% result: 27 points, 70-79% students having more than 70% result: 24 points, 60-69% students having more than 70% result: 21, 60-69% students having more than 60% result: 18 points, 50-59% students having more than 60% result: 15 points else ZERO) Example: Theory Subject / Points obtained Sub-1: 30 Sub-2: 27 Sub-3: 0 Sub-4: 18 Average points scored: 75/4 i.e. 18.75 **No marks for Labs subjects**	30	
2	Research Publication 20 points average (1 sci indexed publication: 10 points, 1 publication having ISSN number : 5 points, Else ZERO)	20	
3	Faculty development programme 10 point average (one faculty development programme minimum 5 days attended 5 points, 2 points for attending 2 days workshop, subject to maximum of 10)	10	
4	International / National conference 10 points average (5 points for attending International, 3 points for attending National of repute, 2 points for National conference)	10	
5	Research grant average 20 points for having grant of more than 5 lakh, if only project submitted to DST/other govt agency: 10 points, subject to maximum 20	20	
6	Patent 10 points / Product development / startup	10	
7	New Skills / additional specialization / certification course	25	
8	Innovation in teaching learning, video lecture, online MOOCs, Online notes uploading, any other 20 points	20	
9	Technical activity organized	5	
10	Participation in social responsibility 5 points / activity subject to maximum of 10	10	
11	Institute level activity organized 5 points, participation 2 points subject to maximum of 5	5	
12	Any award received, session chair in conference, guest lecture, invited talk, etc.	5	
13	HOD recommendation maximum 30 points (Departmental responsibility 2 points, NBA related activity 5)	30	
	Total	200	

Note: HOD will verify the documentary proof.

Signature of Faculty Signature of HOD

CHAPTER – 1

INTRODUCTION

PREAMBLE:

The courses under Jaipur Engineering College & Research Centre, Jaipur (JECRC) are recognized by the AICTE. The JECRC, Jaipur is affiliated to University of Rajasthan, Jaipur. Being the affiliated institutions, the conditions of services of these institutions are normally governed by the rules framed in this respect by the AICTE/ Rajasthan University / State Government. Additionally, for academic staff the College will also be guided by the relevant rules of the AICTE. Taking this in view, the Jaipur Engineering College & Research Centre, Jaipur has framed a document, which gives the a brief idea of the conditions of service and the benefits attached to the employment etc. Further, the information given in this booklet may be subject to revision from time to time. In addition to the conditions of service, the institutes have made certain procedural guidelines to make the administration more smooth and transparent. These are also included here in this document.

1.1 The service conditions shall be applicable to all employees of the Jaipur Engineering College & Research Centre, Jaipur (JECRC). They may be supplemented or amended from time to time based on AICTE/ Affiliating University/ State Government rules. However, the management shall have the right to relax any of the rules.

1.2 For any other matters or details relevant to the service conditions of the employees, not specifically covered here, the College shall be guided by the rules, norms and procedures as prescribed by the Rajasthan Government / AICTE/ Rajasthan University from time to time.

1.3 Definitions:

(a) "Chairman" means the Chairman of the Executive Council
(b) "College," means the Jaipur Engineering College & Research Centre, Jaipur / any other college under the domain of Governing Council
(c) "Executive Council," means the Executive Body of the college
(d) "Funds," means the Funds of the College
(e) "Governing Council," means the Governing Body of the college
(f) "President," means the President of the Governing Council
(g) "Principal," means the Principal of the Jaipur Engineering College & Research Centre, Jaipur
(h) "Secretary," means the Secretary of the Governing Council
(i) "Society," means the National Society for Engineering Research and Development, Jaipur
(j) "Financial Year," means the year commencing from 1st April and closing on 31st March of the next calendar year.
(k) "University," means the affiliating University

(l) Academic Year means period of academic activity from 1st July to 30th June of the next year.
(m) "Faculty" means a teaching staff of the College
(n) "Employee" means anybody who has been employed by the College either as 'faculty' or on any post covered under 'other staff'
(o) "University" means Affiliating University
(p) "Regular Employee" means the faculty or other staff appointed in the prescribed scales of the post either on probation or confirmed one.
(q) Ad-hoc employee means appointed on ad-hoc basis for specific period either in the scale or with consolidated salary with specific conditions as shown in the appointment order.

NOTE: For teaching positions, the eligibility will be as per AICTE & the affiliating University norms.

CHAPTER – 2

APPOINTMENTS AND ITS TERMS AND CONDITIONS

FACULTY STAFF:

2.1 There are various categories of employees at the College. Their salary scales are given separately in this document. Normally, regular appointments particularly as faculty will be made by direct selection by inviting applications through public advertisement. The required qualifications for faculty staff are generally as prescribed by the AICTE.

2.2 The regular employees of the institute will be eligible to the Dearness Allowance and other allowances as sanctioned by the BOG of the College from time to time.

2.3 The paramount consideration in the appointment or promotion of an employee shall be guided by the desired standards of efficiency, competence and integrity.

2.4 Selection and compensation of employees shall be made without distinction as to race, sex, or religion and the same shall be made on competitive basis.

Terms and conditions of appointment

The appointments shall be made subject to the following terms:

2.5 (a) The terms of appointment provide for termination by a notice on either side of one month. If anyone desires to be relieved prior to the completion of the notice period, he/she will be required to pay to the College an amount equal to his / her salary and allowances for the deficient notice period. However, the management will have the right to waive the notice period.

(b) Unless waived in part or in full by the appointing authority, there will be a probationary period for three months. At the end of the probationary period, it may be extended by the appointing authority for a period upto one year. The services of an employee on probation can be terminated without notice and without assigning any reason.

(c) The age of superannuation will be 70 years for the faculty and 62 years for other staff unless extended by the competent authority.

Other service conditions will be generally agree with the norms and executive instructions of the AICTE / Affiliating University / Rajasthan Government and as amended by the College from time to time.

2.6 An employee shall not without the previous written permission of the Managing Trustee in the case of Director / Principal and in case of teaching and other staff of the Director / Principal respectively be engaged directly or

indirectly in any trade, business or occupation or any other remunerative or non-remunerative work.

2.7 Besides appointments in regular scale, the appointments of the faculty and staff may be made on fixed terms on ad-hoc or contract basis. These appointments will carry a consolidated salary or salary in the scale. Fixed term appointees are eligible for vacation and it is admissible to one who has completed minimum service of one semester. In case a fixed term appointment gets converted into a regular appointment for various terminal purposes, the continuity of service will be reckoned from the date of the commencement of the term of appointment.

2.8 Pay Scales:

(i) Normally, the pay scales of the faculty will be as per the recommendations of AICTE and as approved by the state Government.

(a) The existing structure of the scales are as under –

S. No.	Category	Pay scales
1	Lecturer	8000 – 275 – 13500
2	Senior Lecturer	10000 – 325 – 15200
3	Assistant Professor	12000 – 420 – 18300
4	Professor	16400 – 450 – 20900 – 500 – 22400

2.9 Annual increment will fall due on completion of one year of continuous service.

2.10 Incentives for Higher Qualifications - At the time of recruitment as Lecturers, advance increments may be admissible to those who hold higher degrees as under:

(a) Two increments will be admissible to those Science / Humanities teachers with M. Phil and to those technical faculty with M.E. / M.Tech.
(b) A staff will be eligible for two increments as and when he /she acquires a Ph.D. Degree in his / her service career.

2.11 Career Advancement for faculty

The promotions under Career Advancement Scheme will be as per the guidelines given below. All the promotions in career advancement will be "in-situ" basis and therefore the work allocation (teaching load, etc) may remain the same after promotion and additional responsibilities may also be assigned.

(C) Professor:

In addition to the sanctioned position of Professors, which must be filled in through direct recruitment through all India advertisements, promotions may be made from the post of Assistant Professor after 10 years of service as Assistant Professor. The selection committee for promotion to the post of Professor will be the same as that for direct recruitment.

Some of the desirable activities of candidates for the post of Professors will be as follows -

(a) Research contribution: books, articles, research papers etc. published (at least four papers in journals required) The best three written contributions of the papers (as defined by her/him) may be sent in advance to the experts to review before coming for the selection. The candidate should be asked to submit these in 3 sets with the applications.
(b) Seminars/ conferences attended: must have attended at least 4 seminars/conferences at national or international level or must have attended summer / winter schools (short-term course) of total duration of 4 weeks.
(c) Significant contribution to teaching / academic environment / project supervision / sponsored projects / institutional corporate life etc.
(d) Adequate extension and field outreach activities
(e) Development of course material / monographs
(f) Participation in continuing education programmes
(g) Other academic and administrative contributions

2.12 Career Advancement for Faculty

(a) Provides for movement of:
(i) Lecturer to Senior Lecturer (Senior Scale)
(ii) Senior Lecturer to Assistant Professor

(b) Calls for promotion under Career Advancement Scheme: The candidate must have consistently satisfactory performance

Non Faculty

2.13 Pay Scales – qualifications of other staff:

(i) The other staff there will be of two categories viz. (a) technical staff (b) administrative / ministerial staff.
(ii) The pay scales and qualifications for different technical posts will be on par with AICTE/State Government/ University Rules.
(iii) Similarly for administrative staff, the same will be on par with university / government rules.

Minimum length of service for eligibility to move into the grade of Senior Lecturer would be four years for those with Ph.D., five years for those with M.Phil, M.Tech and six years for others at the level of lecturer. For eligibility to move into the Grade of Assistant Professor, the minimum length of service as Senior Lecturer shall be five years.

For movement into grades of Assistant Professor and above, the minimum eligibility criterion would be Ph.D. Those without Ph.D. can go upto the level of Senior Lecturer.

An Assistant Professor with a minimum of ten years of service in that grade will be eligible to be considered for appointment as a Professor. The selection committees for Career Advancement shall be same as those for direct recruitment for each category.

The requirement of consistently satisfactory performance appraisal reports shall be the mandatory requirement for Career Advancement from Lecturer to Senior Lecturer and from Senior Lecturer to Assistant Professor.

(A) Senior Lecturer:

A lecturer will be eligible for placement in a senior scale through a procedure of selection, if she / he has:

(i) Completed 5 years of continues service at the College. However, relaxation of one year and two years respectively, will be given to those with M.Phil, M.E. / M.Tech. and Ph.D.
(ii) Organization of short term course/conference or research publications will be considered an additional qualification.
(iii) Consistently shown satisfactory performance.

(B) Assistant Professor:

A senior lecturer will be eligible for promotion to the post of Asstt. Professor if she/he has:
(i) Completed 5 years of service in the senior scale
(ii) Obtained a Ph.D. degree or has equivalent published work.
(iii) Made some mark in the areas of research, quality of publications, contribution to education innovation, design of new courses and curricula and extension activities.
(iv) Organization of short term course/conference or research publications will be considered an additional qualification.
(v) Shows consistently good performance.

Promotion to the post of Assistant Professor will be through a process of selection by a selection committee.

Selection Procedure

All the vacancies of faculty staff and other staff will be advertised in prominent newspapers. The selection will be done on competitive merit which shall be judged by a duly constituted selection committee.

NOTE:

The staff members of the College deputed for any training program / conferences/seminar/workshop etc. has to serve the institute at least for one year after completion of training. In case he /she resigns from the post before completion of the one year, the recovery of the salary & other expenses paid to him / her for training /deputation period would be made.

CHAPTER – 3

HOLIDAYS, LEAVE AND VACATIONS

3.1 Holidays:

The College will observe public holidays in a calendar year as fixed by the competent authority. This will be announced at the end of the previous year.

3.2 Vacations:

3.2.1 Faculty Staff are entitled to 45 days vacation in a year provided they have joined the College on or before the 1st of July. The entitlement will be worked on pro-rata basis for faculty staff joining by end of October. A faculty staff joining after October will not be entitled to any vacation during the current academic year.

3.2.2. Total vacation may be broken up in parts like (1) a week around Dipawali, (2) a week in winter and (3) the remaining in Summer.

3.2.3. For non teaching staff, the vacation entitlement in a full year is 30 days. This also may be broken up in three parts like (1) a week around Dipawali, (2) a week in winter and (3) the remaining in Summer.

3.3. Leave:

3.3.1 No holidays or leave shall be claimed as a matter of right by an employee except such holidays or leave as are enforceable by law.
3.3.2 Sundays will be normally treated as holidays.
3.3.3 List of possible holidays will be announced in the beginning of the calendar year. However, at times a holiday / Sunday may be declared as a working day on need basis.

3.4. Casual Leave:

3.4.1 A faculty staff shall normally be entitled to 15 days casual leave in a year on accrual basis. The accounting period is from 1st of July to 30th of June next year.
3.4.2 A non faculty staff shall normally be entitled to 12 days casual leave in a year on accrual basis. The accounting period is from 1st of July to 30th of June next year.
3.4.3 An employee can normally avail of 1 day's casual leave in a month during the probation period provided that he has at least 20 days of uninterrupted duty record at the college.
3.4.4 Sundays and holidays can be prefixed or suffixed with casual leave after a written request has been made to this effect.

3.4.5 Casual leave shall be permitted on recommendation of the in-charge (HOD) keeping in view the interests of the College / Department/ Section as the case maybe.

3.5 Medical Leave

3.5.1 Employees unable to carry out their regular duties due to continuous ill health (for more than 3 months) will not be permitted to continue in service.

3.5.2 Maternity leave shall be admissible to a female employee of this college for a maximum period of 60 days with the following provisions –

3.5.2.1 She is a regular employee and has served the College continuously for not less than three years.

3.5.2.2 The employee will be eligible for full pay during the leave period.

3.5.2.3 The employee shall be given 50% of the total emoluments every month during the period of her absence subject to production of maternity certificate and the balance 50% shall be provided to her in six equal monthly installments after resuming duties.

3.5.2.4 The employee under special circumstances arising out of medical complications may be permitted leave without pay for the required period.

3.6 Leave other than specified leave

3.6.1 Any employee absenting from duty without proper permission for 6 days will lose the benefit of salary on the following or intervening Sunday and any Holiday in continuity. He/She shall be liable to be dismissed from service if his/her absence from duty persists for 15 days in this manner.

3.6.2 Any employee who has been dismissed from service earlier but has been given employment again shall be treated as a new employee and the benefits of the earlier period of service shall automatically lapse.

3.7 Academic leave / duty leave

3.7.1 An employee going for attending the work entrusted by the College or for participating in a Conference etc shall be treated as on duty, provided the participation in the Conference has been approved by the College and they produce a certificate of participation on return. Some faculty staff may also be provided TA

& DA and the registration if any may also be reimburse depending upon the length of the service of the employee.

3.7.2 An employee going out of station on duty in connection with College work shall be suitably compensated for his outstation travel and stay.

CHAPTER – 4

PROVIDENT FUND, GRATUITY

4.1 Provident Fund

Every employee of the College shall be entitled for the benefit of Contributory Provident Fund. Some of the important salient features of the scheme are identical to EPF rules.

4.2 Employees State Insurance Scheme

Employee of the College shall be entitled for the benefit of Employees State Insurance Scheme (ESI) as per the Central Government rules.

4.3 Gratuity

The employers of the College will also be eligible for gratuity as per provision of act.

The main components of this benefit are as under:
(1) Gratuity shall be payable to an employee on the termination of his/her employment after he/she has rendered continuous service for not less than five years.
(a) on his/her superannuation or
(b) on his/her retirement or
(c) on his/her death or disablement due to accident or illness

- Provided that the completion of continuous service of five years shall not be necessary where termination of the employment of any employee is due to death or disablement.
- Provided further that in the case of death of the employee, gratuity payable to him/her shall be paid to his/her nominee, if no nomination has been made, to his/her heirs, and where any such nominees or heirs is a minor, the share of such minor shall be deposited with the controlling authority who shall invest the same for the benefit of such minor in such bank or other financial institution, as may be prescribed, until such minor attains majority.

CHAPTER – 5

TESTING AND CONSULTANCY RULES

The College staff shall be encouraged to take a consultancy and testing jobs from industry and others R&D agencies on payment basis. They will be permitted to use the infrastructure of the College. The consultancy / testing fee will be apportioned between the consultants and others who make a contribute to it and also to the College.

1) Remuneration to Regular Faculty & Staff:

(a) Testing:

The distribution of total income between the College and the employees will 30:70. The 70% staff distribution is as under as per the institution Rules:

1	The faculty staff	65%
2	Lab. Technician	
3	Lab. Attendant	
4	Office Staff / Administration staff involved & Dept. Clerk	5%

(b) Consultancy:

The distribution of total income between the College and the employees will 30:70 but after deducting all expenses.

30% will be retained by the College	After deducting all expenses
70% distributed amongst the concerned staff	

CHAPTER – 6

INCENTIVE RULES

Incentive rules have been classified into two categories. These are (i) Performance based and (ii) Time based

6.1 Based on Performance Appraisal

Period of Stay	Performance Appraisal Rating	Proposed Incentive
After Probation	Excellent	+ one increment/DA increase/BOTH
After 2 yrs	Very Good/ Excellent	+ one increment/DA increase/BOTH Conf Participation on duty leave + Registration Fee + Basic Travel (city to city)
After 3 yrs	Very Good/ Excellent	+ HRA / DA Increase / BOTH + Conf Participation on duty leave + Registration Fee + Basic Travel (city to city) + B&L + Book allowance (Rs 1000 per year) + Professional Society membership (90%) + Promotional Opportunity
After 4 yrs	Excellent	As above + Conveyance Allowance (Personal Vehicle) + Medical Allowance / Group Medical Scheme
After 5 yrs	Excellent	As above + Phone Allowance + Lap Top subsidy (80%) + Contribution to EMI for Car/Housing Loan + LTC + Education Allowance + Gratuity

Promotional Opportunities:
(a) Lecturer to Sr Lecturer
(b) Sr Lecturer to Assistant Professor
(c) Assistant Professor to Professor

Guidelines:
(a) Eligibility to be as per AICTE recommendation
(b) Lecturer to Sr Lecturer promotion on informal appraisal
(c) Sr Lecturer to Assistant Professor: Through a formal internal appraisal
(d) Assistant Professor to Professor: Open Competition

Appraisal -
(a) Academically Sound
(b) Quality of Teaching (Lectures, Tutorials, Labs)
(c) Laboratory Development
(d) R&D

(e) Books and Manuals
(f) Participation in other activities like (i) Placement, (ii) Student Development, (iii) Examination work, (iv) Co-curricular and ECA, (v) Contribution to College/ Industry interaction (vi) College administration ...

6.2 Time Based

a. Faculty Staff

S.No.	Items	Remarks
1	Additional Increment	One additional increment in the III year if there has been no promotion / change of designation / salary revision etc.
2	Promotion	A faculty staff joining as a lecturer will be promoted to the post of a Sr. Lecturer in the sixth year if there has been no promotion / change of designation / salary revision etc. Similarly a staff member joining as a Sr. lecturer will be promoted as an Assistant Professor if there has been no promotion / change of designation / salary revision etc.
3	Conveyance	From third year: Conveyance allowance @250/- per month for staff (with salary upto Rs. 20000/- pm) and Rs. 500/- per month (for staff with salary above 20000/-pm)
4	Internet (Staff members have to ask for it)	From third year: Staff members having internet at residence in their own name can claim minimum BSNL rental
5	Conference / Short course etc.	a. Duty leave will be admissible b. After one year: registration fee will be reimburse c. After two years: all above and city to city travel cost will be reimbursed d. After three years: All above and subsidy towards boarding & lodging
6	HRA	To be paid @ 7.5% of basic pay from IV year
7	Book allowance (Staff members have to ask for it)	From third year : Cost of relevant books purchased by faculty to be reimbursed upto Rs. 1000/- PA
8	Education Allowance (Staff members have to ask for it)	From sixth year : 50% of tuition fee for two children. This is restricted to Rs. 500/- per month per child. This further subject to the spouse not claiming this allowance from other organization.
9	Mediclaim	Efforts are being made to cover all the staff through mediclaim policy applicable from third year onwards.

11

b. Other Staff (Other than faculty staff)

S.No.	Items	Remarks
1	Additional Increment	One additional increment in the III year if there has been no promotion / change of designation / salary revision etc.
2	Promotion	A staff will be promoted to the next higher post in the sixth year provided there has been no promotion / change of designation / salary revision etc. If next higher post is not existing, suitable increments may be given.
3	Conveyance	From third year: Conveyance allowance @250/- per month for staff (with salary upto Rs. 20000/- pm) and Rs. 500/- per month (for staff with salary above 20000/-pm)
4	Conference / Short course etc.	a. Duty leave will be admissible b. After one year : registration fee will be reimburse c. After two years : all above and city to city travel cost will be reimbursed d. After three years: All above and subsidy towards boarding & lodging
5	HRA	To be paid @ 7.5% of basic pay from IV year
6	Education Allowance	From sixth year : 50% of tuition fee for two children. This is restricted to Rs. 500/- per month per child. This further subject to the spouse not claiming this allowance from other organization.
7	Mediclaim	Efforts are being made to cover all the staff through mediclaim policy applicable from third year onwards.

CHAPTER – 7

Assessment

7.1 Performance Appraisal of Faculty:

The performance of faculty appointed on regular basis will be assessed at two stages viz (a) During Probation and (b) Confirmation

(a) During Probation:

The faculty staff will be required to submit his/her self performance appraisal one weak advance of probation. The HOD will give his own observations as Reporting Officer and the Director or the Principal will review the document.

Depending upon the assessment of the staff, the staff member may be confirmed in his/her position or probation may be extended if necessary. The faculty staff will be informed of the deficiencies when the probation period is extended.

During the period of extension of the probation, the HOD will continuously observed the working of the concerned staff member and will suggest ways to improve the performance.

(b) Evaluation after Confirmation:

Even after confirmation, the performance of the faculty shall continuously be monitored on the same lines as in self assessment form. This report will be considered for the benefit to be awarded under career advancement scheme, upward promotion even by direct selection and for other incentives.

7.2 Evaluation of other Staff:

On the similar lines as for faculty, the evaluation of the other staff also will be done. However, the proforma of such evaluation will be different depending upon the nature of the post.

CHAPTER – 8

CONDUCT RULES

8.1 Code of conduct

(a) Every employee shall, at all times, maintain absolute integrity and devotion to duty, and also be honest and impartial in his/her official dealings.

(b) An employee shall, at all times, be courteous in his/her dealings with other members of the staff, students and members of the public.

(c) Unless otherwise stated specifically in the terms of appointment, every employee is a full time employee of the institute. He/She may be called upon to perform such duties, as may be assigned to him/her by the competent authority beyond scheduled working hours and on holidays and Sundays. These duties shall, inter-alia, include attendance at meetings of committees to which he/she may be appointed by the College or any of its authorities.

(d) An employee shall observe the scheduled hours of work during which he/she must be present at the place of his/her duty.

(e) Except for valid reasons and/or unforeseen contingencies, no employee shall be absent from duty without prior permission.

8.2 No employee shall, in any radio broadcast or in any document published anonymously or in his/her own name or any other person or in any communication to the press or in any public utterance, make any statement of fact or opinion which has the effect of an adverse criticism of the College.

8.3 No employee shall pass any confidential information of the College to any unauthorized person or agency.

8.4 No employee of the institute shall, engage, directly or indirectly, in any trade or business or any private tuition or undertake any employment outside his/her official assignments.

8.5 An employee who gets involved in some criminal proceedings shall immediately inform the competent authority through the Head of the Department to which he/she is attached, irrespective of the fact whether he/she has been released on bail or not. An employee who is detained in police custody, whether on criminal charge or otherwise, for a period longer than forty eight hours shall not join his/her duties in the College unless he/she has obtained written permission to that effect from the competent authority.

8.6 No employee shall, except with the previous sanction of the competent authority, have recourse to any Court of Law or to the press for the indication of any official act which has been the subject matter of adverse criticism or an act of defamatory character. Provided nothing in this rule shall be deemed to prohibit an employee from vindicating his/her private character or any act done by him/her in his/her private capacity.

8.7 (a) Whenever an employee wishes to put forth any claim, or seeks redressal of any grievance or of any wrong done to him/her,he/she must forward his/her

case through proper channel, and shall not forward advance copies of his/her application to any higher authority, unless the lower authority has rejected the claim, or refused relief or the disposal of the matter is unduly delayed.
(b) No employee shall be signatory to any joint representation addressed to the authorities for redressal of any grievance or of any other matter.

8.8 An employee shall, regarding imposition of penalties for breach of any of these rules and regarding preference of appeals against any action taken against him/her, be governed by the rules made in this behalf from time to time by the competent authority.

8.9 A faculty staff shall be responsible for the results of the students of the class being engaged by him/her.

This will necessarily mean:

a) Planning the course of lectures for the entire semester and suggesting suitable text and reference books to the students.

b) Delivering well prepared lectures with the help of handouts and teaching aids.

c) Preparing tutorial sheets with representative problems.

d) Keeping an up-to-date account of attendance of students

e) Conducting assessment of students as per the approved policies

f) Explaining the steps taken to improve the situation / difficulty being faced in performing the duties and offering suggestions, if any, to improve the efficiency.

g) The department will prepare an academic calendar for the department in conformity with the College calendar. The faculty staff will be following this calendar.

h) Punctuality in arriving at the college, engaging classes shall be an important trait of a faculty staff.

i) Faculty staff shall generally be available to students for discussion and guidance during college hours. The day's work of making attendance, checking answer books and entering and submitting marks and other details shall be completed before he/she leaves the college.

j) The faculty staff shall regularly intimate the tutor guardians of the progress of the students. The tutor guardian, in turn, shall call the

students and try to find out the reasons for poor performance and deficiency in attendance. If necessary the tutor guardian shall inform the parents about the performance of the student and shall also maintain a record of the same.

8.10 Dress Code:

1. Male Staff – Should preferably wear shirts (no T-shirts) and Trousers (no Jeans). Ties also may be worn.
2. Female Staff – Should wear sarees.

N.B.

(This Hand Book contains guidelines for smooth functioning of the institute. These are guidelines and should not be interpreted as rules and hence can not be challenged in the Court of Law)

******

10.1.3. Decentralization in working and grievance redressal mechanism

HEAD OF ACADEMIC PROGRAM / DEPARTMENTS AND ADMINISTRATION

Program/Department/Section	Head
Principal	Prof. (Dr.) Vinay Kumar Chandna
Dean II Shift	Dr. M.P. Singh
Dean – I Year	Prof. Umesh K. Pareek
Dy. Dean – I Year	Dr. Rekha Mithal
Civil Engineering	Ms. Monika Sharma
Computer Science & Engineering	Dr. Bhavna Sharma
Electrical Engineering	Dr. Sandeep Vyas
Electronics & Communication Engineering	Dr. Lokesh Bansal
Mechanical Engineering	Dr. M.P. Singh
Information Technology	Shri Sunil Jangir
Physics	Dr. R.K. Mangal
Chemistry	Dr. Barkha Srivastava
Mathematics	Dr. Ruchi Mathur
English & Humanities	Dr. Mukul Sharma
Management & Administration	
Vice Chairman	Shri M.L. Sharma
Senior Advisor	Shri O.P. Jain
Senior Advisor	Shri P.K. Tiwari
Senior Advisor	Prof. S.N. Gupta
Chief Administrator Officer	Shri P.K. Gupta
Registrar	Prof. (Dr.) Anurakt Williamson
Librarian	Dr. Anita Jain
Sports Officer	Dr. Rajesh Sharma
Chief Hostel Warden	Shri P.K. Gupta
OS Office	Shri Amitabh Gupta
Accounts Officer	Shri Sumit Agarwal Shri Sandesh Pathak

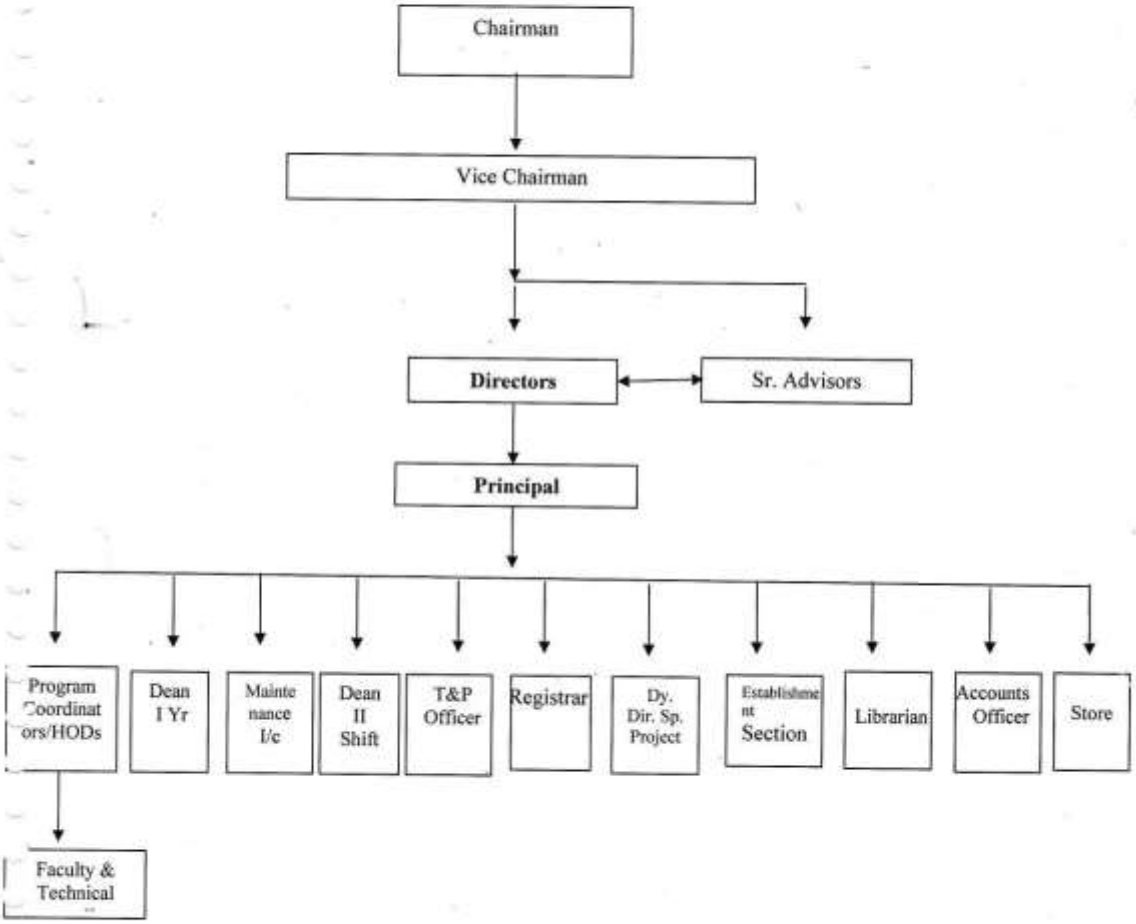
Management committee:

Shri O.P. Agrawal	Chairman
Shri M.L. Sharma	Vice Chairman
Shri Amit Agrawal	Director
Shri Arpit Agrawal	Director

DECENTRALIZATION OF POWER

In the institute power are transferred from Chairman to the lower level, it can be seen in the organization chart.

Organization Chart



V. Par
PRINCIPAL
Jaipur Engineering College & Research Centre

17

Composition of grievance redressal cell including Anti-Ragging Committee & Sexual Harassment Committee

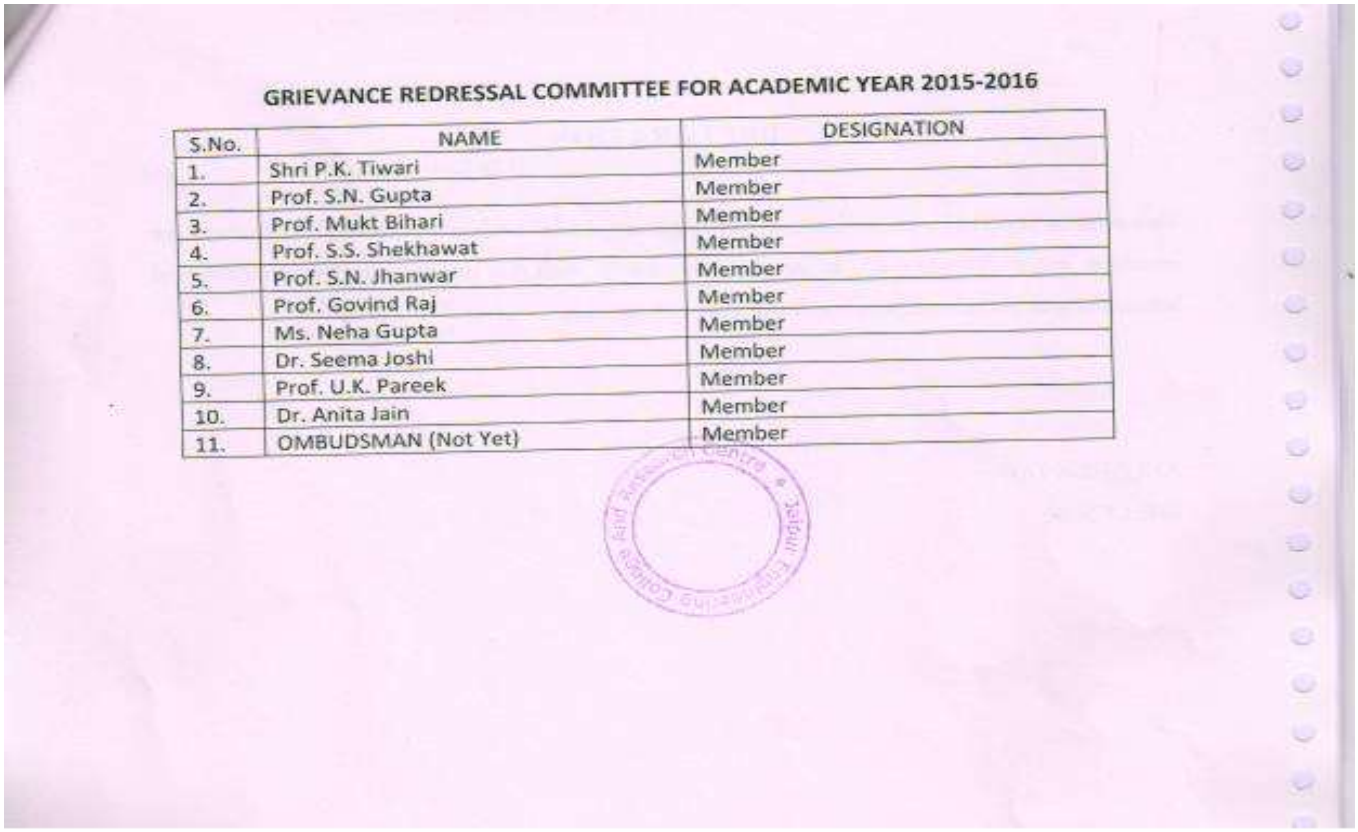
Application Status: **Submitted**
Application Sub-Status: **Payment Received**

Report Generated on :-09/02/2018

Sr. No.	Committee Type	Appointment Order Reference No.	Date of Appointment	Name of the Committee Member	Profession	Address	Associated With	Mobile No.	E-Mail Address	Fax No.
1	OMBUDSMAN	94	25/10/2017	Not Yet Appointed	Not	Not	Not	7442473105	rtu.dir.acad@gmail.com	2473857
2	Grievance Redressal	94	25/10/2017	Ms.RAJ PAREEK	EDUCATIONIST	JECRC,SHRI RAM KI NANGAL,VIA SITAPURA RIICO,OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682911	rajpareek@jecrc.ac.in	2770803
3	Grievance Redressal	94	25/10/2017	Mr. Ashok Sharma	warden	JECRC,SHRI RAM KI NANGAL VIA SITAPURA,RIICO,OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682914	ashok@jecrc.ac.in	2770803
4	Grievance Redressal	94	25/10/2017	MS. YOGITA PUNJABI	EDUCATIONIST	228-A/3 PARVATI NAGAR RAJA PARK JAIPUR	JECRC	9887015652	yogita234@gmail.com	277803
5	Grievance Redressal	94	25/10/2017	Dr. Vijay Singh Rathore	Educationst	s-5, bankers colony canchyawala jaipur	JECRC	9783307390	vijaydiamond@gmail.com	277803
6	Grievance Redressal	94	25/10/2017	Sh. Anshul Mittal	EDUCATIONIST	11 CIMMCO STFF COLONY BHARATPUR RAJ 321001	JECRC	9772620462	anshul.o.mittal@gmail.com	277803
7	Grievance Redressal	94	25/10/2017	Dr. V.K.Chandna	Principal	A-104,ASHA DEEP,GREEN AVENUE NEAR GYAN VIHAR UNIVERSITY,JAGATPURA,JAIPUR	JECRC	9891406784	principal@jecrcmail.com	2770803
8	Grievance Redressal	94	25/10/2017	Shri P K Gupta	Chief Hostel Warden	170/190, Sector-17, Pratap Nagar, Jaipur	JECRC	9982682915	muktbihari.cse@jecrc.ac.in	2770803
9	Grievance Redressal	94	25/10/2017	Dr. Rajesh Sharma	Educationist	137, Pashim Vihar, Vaishali, Sirsi Road, Jaipur	JECRC	9024224830	shekhawat48@gmail.com	2770803
10	Grievance Redressal	94	25/10/2017	Dr. U.K.Pareek	educationist	Near CTS Bus Stand, Vyason Ka Mohalla, Sanganer, Jaipur	JECRC	9785505667	ukpareek69@yahoo.co.i	2770803

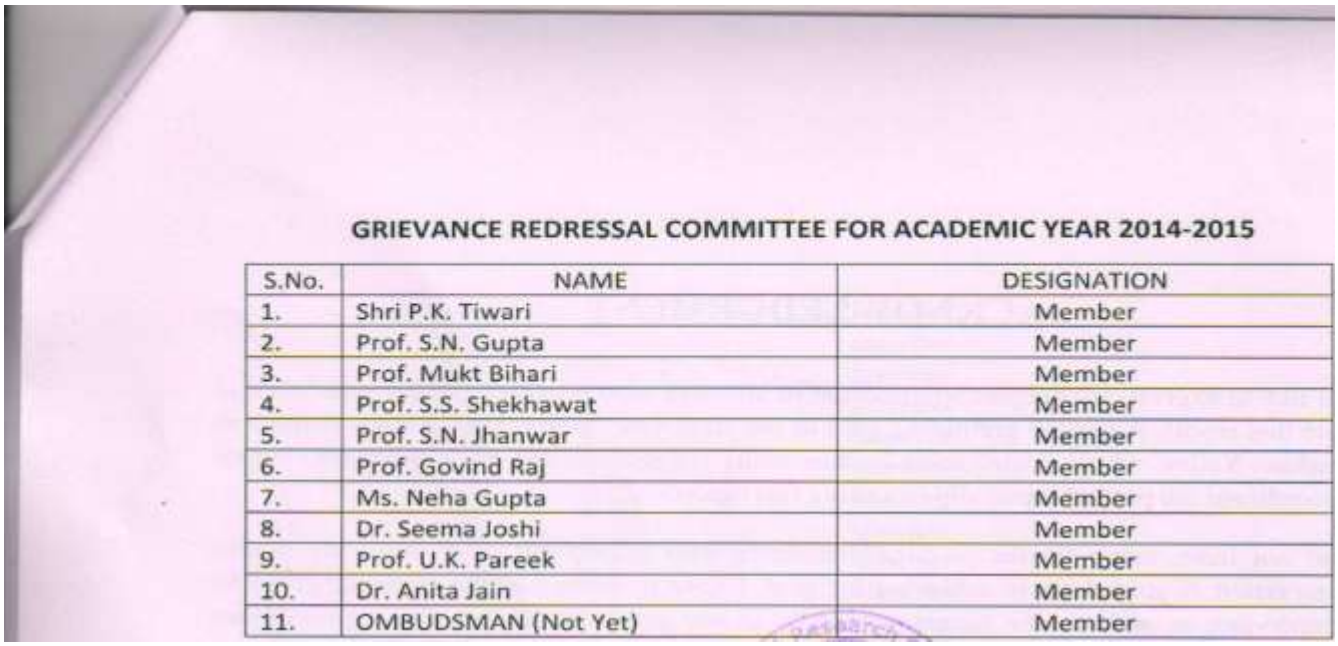
GRIEVANCE REDRESSAL COMMITTEE FOR ACADEMIC YEAR 2016-2017

S.No.	NAME	DESIGNATION
1.	OMBUDSMAN (NOT YET)	Member
2.	Shri P.K. Tiwari	Member
3.	Shri Manish Jain	Member
4.	Shri P.K. Gupta	Member
5.	Dr. Rajesh Sharma	Member
6.	Ms. Ruchi Mathur	Member
7.	Shri Anshul Mittal	Member



GRIEVANCE REDRESSAL COMMITTEE FOR ACADEMIC YEAR 2015-2016

S.No.	NAME	DESIGNATION
1.	Shri P.K. Tiwari	Member
2.	Prof. S.N. Gupta	Member
3.	Prof. Mukt Bihari	Member
4.	Prof. S.S. Shekhawat	Member
5.	Prof. S.N. Jhanwar	Member
6.	Prof. Govind Raj	Member
7.	Ms. Neha Gupta	Member
8.	Dr. Seema Joshi	Member
9.	Prof. U.K. Pareek	Member
10.	Dr. Anita Jain	Member
11.	OMBUDSMAN (Not Yet)	Member



GRIEVANCE REDRESSAL COMMITTEE FOR ACADEMIC YEAR 2014-2015

S.No.	NAME	DESIGNATION
1.	Shri P.K. Tiwari	Member
2.	Prof. S.N. Gupta	Member
3.	Prof. Mukt Bihari	Member
4.	Prof. S.S. Shekhawat	Member
5.	Prof. S.N. Jhanwar	Member
6.	Prof. Govind Raj	Member
7.	Ms. Neha Gupta	Member
8.	Dr. Seema Joshi	Member
9.	Prof. U.K. Pareek	Member
10.	Dr. Anita Jain	Member
11.	OMBUDSMAN (Not Yet)	Member

2017-2018

N W R 1 - 3 5 1 3 1 1 1 0 2 7 1 7 - 0 1 0 1 0 2 8

Application Report - Part 1

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-09/02/2018

Sr. No	Legal System Software	Legal Application Software	Internet Bandwidth in Mbps	Internet Contention Ratio	PCs/Laptop exclusively available to students	PCs/Laptop available in Administrative Office	No. of PCs/Laptop available in Library	No. of PCs/Laptop in language lab	PCs/Laptop available to Faculty Members	Printers available to student
1	8	28	105	1:1	706	14	12	56	80	55

Hostel Facility

Sr No.	No. of rooms having Single bed/room & Area of room in sq.m.	Building No.	Name of Building	No. of rooms having Double/Two bed/room & Area of room in sq.m.	Building No.	Name of Building	No. of rooms having Triple/Three bed/room & Area of room in sq.m.	Building No.	Name of Building	No. of rooms having Four bed/room & Area	Building No.	Name of Building
1	Boys 0 & 0	0	0	79 & 16.72	BH-1	BH-1	72 & 27.32	BH-2	BH-2	Boys 0 & 0	0	0
2	Girls 3 & 9.5	GH-1	Girls Hostel	3 & 13.7	GH-1	Girls Hostel	36 & 21	0	Girls Hostel	Girls 21 & 32	GIRLS HOSTEL	GH-1

Operational Funds

Bank Name	Account No.	Bank Statement Date	Cash Balance
HDFC Bank Ltd.	50200006658098	30/01/2015	22353221

Financial Details(in Rs)

Funds/ Grants from Central Government	0	Funds/ Grants from UGC	0
Funds/ Grants from Student Fees	404675675	Funds/ Grants from Donations	0
Funds/ Grants from State Government	0	Funds/ Grants from Other Bodies	0
Funds/ Grants raised from Other Sources/ Internal Revenue	3995683	Salary to the Teaching Staff	91265845
Remuneration to Visiting/Guest Faculty	0	Salary to Non-teaching Staff:	45070840
Library (Investments)	195808	Equipment (Investments)	516424
Building Maintenance Expenses	5087369	Other Expenditure (if any)	197585407

Company/Industry Details

Are you a Company/Industry wishing to set up a new Institute?:		No	
Type of Company/Industry:	NA	Is the company having Minimum 100 Cr Turnover for the last 3 years? (Attach supporting documents):	NA
Company/Industry PAN No.:	NA	Company/Industry TAN No.:	NA
Company/Industry Registered Address:	NA	Company/Industry Year of Registration:	NA

Ombudsman/Grievance Details

Grievance Committee Appointment	Yes	OMBUDSMAN Appointment	Yes

Ombudsman Appointment/Grievance Committee Details

10

09-02-18

Date of Signature(dd/mm/yyyy)

Printed By : ae927181

Seal of Institute

Name & Signature of Director/Principal

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur - 303 905

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N W R 1 - 3 5 1 3 1 1 1 0 2 7 1 7 - 0 1 0 1 0 2 9

Application Report - Part 1

Application Status: **Submitted**
Application Sub-Status: **Payment Received**

Report Generated on :-09/02/2018

Sr. No.	Committee Type	Appointment Order Reference No.	Date of Appointment	Name of the Committee Member	Profession	Address	Associated With	Mobile No.	E-Mail Address	Fax No.
1	OMBUDSMAN	94	25/10/2017	Not Yet Appointed	Not	Not	Not	744247 3105	rtu.dir.acad@gmail.com	2473857
2	Grievance Redressal	94	25/10/2017	Ms.RAJ PAREEK	EDUCATIONIST	JECRC,SHRI RAM KI NANGAL,VIA SITAPURA RIICO,OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682911	rajpareek@jecrc.ac.in	2770803
3	Grievance Redressal	94	25/10/2017	Mr. Ashok Sharma	warden	JECRC,SHRI RAM KI NANGAL VIA SITAPURA,RIICO,OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682014	ashok@jecrc.ac.in	2770803
4	Grievance Redressal	94	25/10/2017	MS. YOGITA PUNJABI	EDUCATIONST	228-A/3 PARVATI NAGAR RAJA PARK JAIPUR	JECRC	9887015652	yogita234@gmail.com	277803
5	Grievance Redressal	94	25/10/2017	Dr. Vijay Singh Rathore	Educationst	s-5, bankers colony panchyawala jaipur	JECRC	9783307390	vijaydiamond@gmail.com	277803
6	Grievance Redressal	94	25/10/2017	Sh. Anshul Mittal	EDUCATIONST	11 CIMMCO STFF COLONY BHARATPUR RAJ 321001	JECRC	9772620462	anshul.o.mittal@gmail.com	277803
7	Grievance Redressal	94	25/10/2017	Dr. V.K.Chandna	Principal	A-104,ASHA DEEP,GREEN AVENUE NEAR GYAN VIHAR UNIVERSITY,JAGATPURA,JAIPUR	JECRC	9891406784	principal@jecrcmail.com	2770803
8	Grievance Redressal	94	25/10/2017	Shri P K Gupta	Chief Hostel Warden	170/190, Sector-17, Pratap Nagar, Jaipur	JECRC	9982682915	muktbihari.cse@jecrc.ac.in	2770803
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10	Grievance Redressal	94	25/10/2017	Dr. U.K.Pareek	educationist	Near CTS Bus Stand, Vyason Ka Mohalla, Sanganer, Jaipur (Raj)-2732271	JECRC	9785506667	ukpareek69@yahoo.co.in	2770803

Anti-Ragging Related Details Provided by the Institute

1	Constitution of Anti-Ragging Committee	Yes
2	Constitution of Anti-Ragging Squad	Yes
3	Undertaking obtained from all Students	Yes
4	Appointment of Counselors	Yes

09-02-18

Date of Signature(dd/mm/yyyy)

Seal of Institute

V. Pal

Name & Signature of Director/Principal.

Printed By : ae927181

Principal
Jaipur Engineering College &
Research Centre,
Tonk Road, Jaipur - 303 905

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Application Report - Part 1

Application Status: **Submitted**
Application Sub-Status: **Payment Received**

Report Generated on :-09/02/2018

5	Undertaking obtained from parents of all the students	Yes
6	Undertaking obtained from students staying in Hostel	Yes
7	Undertaking obtained from parents of students staying in Hostel	Yes

Anti-Ragging Committee/Squad Details

Sr. No.	Committee Type	Appointment Order reference No.	Date of Appointment	Name of the Committee Member	Profession	Address	Associated With	Mobile No.	E-Mail Address	Fax No.
1	Anti-Ragging Squad	95	25/10/2017	Dr. VINAY KUMAR CHANDNA	EDUCATIONIST	A/04, ASHA DEEP, GREEN AVENUE, NEAR GYAN VIHAR UNIVERSITY, JAGATPURA, JAIPUR	JECRC	98914 06784	principal@jecrcmail.com	
2	Anti-Ragging Committee	95	25/10/2017	Dr.U.K.Pareek	EDUCATIONIST	CTS Bus Stand Vyaso ka Mohalla Sanganer Jaipur 302029	JECRC	97855 06667	ukpareek69@yahoo.co.in	
3	Anti-Ragging Committee	95	25/10/2017	Mr. Anshul Mittal	EDUCATIONIST	A-11, Cimmco Staff Colony, Bharatpur (Raj)-321001	JECRC	97726 20462	ansul.o.mittal@gmail.com	
4	Anti-Ragging Committee	95	25/10/2017	Mr. Ravi Bhatnagar	Transport Incharge	193/313 Pratap Nagar Sanganer Jaipur 302033	JECRC	90241 49459	ravibhatnagar1982@gmail.com	
5	Anti-Ragging Committee	95	25/10/2017	SH. O P JAIN	RETD. REVENUE OFFICER	JECRC CAMPUS, SHRI RAM KI NANGAL, VIA SITAPURA RIICO, TONK ROAD, JAIPUR	JECRC	94133 35550	opjain@jecrc.ac.in	
6	Anti-Ragging Committee	95	25/10/2017	MS. SHRUTI KALRA	EDUCATIONIST	53-A SCHEME-3 PRATAP NAGAR,NEAR GLASS FACTORY TONK ROAD,JAIPUR	JECRC	94143 71413	shrutikalra.ece@jecrc.ac.in	
7	Anti-Ragging Committee	95	25/10/2017	SH. P K GUPTA	CHIEF HOSTEL WARDEN	447, SHANTI NAGAR, DURGAPURA, JAIPUR	JECRC	99826 82475	ceo@jecrc.ac.in	
8	Anti-Ragging Committee	95	25/10/2017	Dr. M.P..Singh	EDUCATIONIST	467 SRI RAM VIHAR NEW MAHAL YOJANA JAGATPURA JAIPUR 302017	JECRC	94142 03639	mpsingh_76@yahoo.co.in	
9	Anti-Ragging Committee	95	25/10/2017	MS. RAJ PAREEK	HOSTEL WARDEN GIRLS	JECRC CAMPUS, SHRI RAM KI NANGAL, VIA SITAPURA RIICO, TONK ROAD, JAIPUR	JECRC	99826 82911	rajpareek@jecrc.ac.in	
10	Anti-Ragging Committee	95	25/10/2017	DR. ANITA JAIN	LIBRARIAN	D-268, SARVANAND MARG, MALVIYA	JECRC	98292 30353	anita.lib@jecrc.ac.in	

09-02-18
Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur - 302 905

Printed By : ae927181

NWRI-3513110270171-0101031

Application Report - Part 1

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-09/02/2018

						NAGAR, JAIPUR				
11	Anti-Ragging Committee	95	25/10/2017	Ms. Neelam Chaplot	EDUCATIONST	52 GOVERDHAN COLONY NEW SANGANER ROAD JAIPUR 302012	JECRC	94143 96960	neelam.chaplot@gmail.com	

Renewable Energy Related Details/Conservation of Energy Details

Sr. No.	Particulars	Details Provided by Institute
1	Total land available (in Sqm.)	51204
2	No. of buildings with roof tops	9
3	Annual electricity consumption (No. of units) during previous financial year	740619
4	Electricity Bill Average rate per unit paid during previous financial year (Rs. / unit) & No. of units used	9
5	Renewable Energy, if any, used at present	Yes
6	Land available for placing solar photovoltaic panels (in Sqm.)	6000
7	Total approximate roof- top area available for placing solar photovoltaic panel (in Sqm.)	10770
8	Whether a policy has been adopted to use only LED lamps ?	Yes
9	Remarks	LED LIGHTS ARE INSTALLED IN THE COMPUS AT APPROPREIED PLACES

Other Facilities

All Weather Approach (Motorized Road)	Yes	Backup Electric Supply	Yes
Barrier free Environment	Yes	CCTV Security	Yes
ERP Software	Yes	Electric Supply	Yes
General Insurance	Yes	Group Insurance	Yes
Institution Web Site	Yes	Insurance for Students	Yes
Medical & Counseling facilities	Yes	Notice Boards	Yes
Public Announcement System	Yes	Potable Water Supply	Yes
Post & Banking/ATM	Yes	Projectors in Classrooms	Yes
Sewage Disposal System	Yes	Staff Quarters	No
Telephone & FAX	Yes	Transport Facility	Yes
Vehicle Parking Facility	Yes	First Aid Facility	Yes
Rain Water Harvesting	Yes	Solar Power Systems	Yes
Appointment Of Student Counselor	Yes	Establishment Of Anti Ragging Committee	Yes
Establishment Of Committee For SC/ST	Yes	Provision to watch MOOCS Courses through Swayam	Yes
Implementation of Unnat Bharath Abhiyan	Yes	Institution-Industry Cell:	Yes

Stand Alone Language Laboratory (Minimum 25 PCs/Laptop up to total intake of 1000.Further additional 25 PCs/Laptop per intake of 1000):	Yes
Safety Provisions including fire and other calamities	Yes
Establishment of Internal Complaint Committee (ICC) Committee As per section 4 of Sexual Harassment of Women at Workplace(Prevention, Prohibition and Redressal) Act, 2013	Yes
Establishment of Grievance Redressal Committee in the Institute and Appointment of OMBUDSMAN by the University	Yes
Digital Payment for all Financial Transactions as per MHRD Directives	Yes
Compliance of the National Academic Depository(NAD) as per MHRD Directives	Yes
Display Board within the premises as well as in the Website of the Institution indicating the Feedback Facility of Students and Faculty Available in the AICTE Web Portal	Yes
Implementing Food Safety and Standard Act,2006 in the Institution	Yes
Implementation of Schemes Announced by MHRD	Yes
Offering of Skill Development Courses Approved by the Council	Yes
Participation in the National Institutional Ranking Framework(NIRF)	Yes
Fabrication Facility Laboratory(FABLAB) Tinkering Laboratory/Innovation Laboratory	Yes
Waste Management and Environment Improvement Measures to Ensure a Sustainable Green Campus	Yes
Copies of AICTE Approvals (LOA and EOA of subsequent years)obtained since Inception of Institution till date shall be placed in the Website of the Institution	Yes
Applied for Membership of National Digital Library	Yes
Establishment of Online Grievance Redressal Mechanism	Yes
Whether the institution has implemented Safety and Security measures in the Campus?	Yes
Availability of quality sanitary napkins through sanitary napkin vending machines and ensuring safe and environment friendly disposal of used sanitary napkin through sanitary napkin incinerator	Yes

09-02-18
Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

Jaipur Engineering College & Research Centre, Tonk Road, Jaipur - 303 905

Printed By : ae927101

2016-2017

Application Report - Part 1

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-20/02/2017

Funds/ Grants from UGC	0
Funds/ Grants from Other Bodies	0
Funds/ Grants raised from Other Sources/ Internal Revenue	7261361
Salary to the Teaching Staff	67120428
Remuneration to Visiting/Guest Faculty	81287
Salary to Non-teaching Staff:	44746952
Library (Investments)	308332
Equipment (Investments)	2084357
Building Maintenance Expenses	3828578
Other Expenditure (if any)	253130122

Company/Industry Details

Are you a Company/Industry wishing to set up a new Institute?:	No
Type of Company/Industry:	Not Applicable
Is the company having Minimum 100 Cr Turnover for the last 3 years? (Attach supporting documents):	Not Applicable
Company/Industry PAN Number:	Not Applicable
Company/Industry TAN Number:	Not Applicable
Company/Industry Registered Address:	Not Applicable
Company/Industry Year of Registration:	Not Applicable

Funds/Grants Received Details

Data not entered by Institute

Funds/Grants Received Details (Contd.)

Data not entered by Institute

Ombudsman/Grievance Details

Grievance Committee Appointment	Yes
OMBUDSMAN Appointment	Yes

Ombudsman Appointment/Grievance Committee Details

Sr. No.	Committee Type (1)	Appointment Order reference Number(2)	Date of Appointment (3)	Name of the Committee Member (4)	Profession (5)	Address (6)	Associated With(7)	Mobile Number (8)	e Mail Address (9)	Fax No. (10)
1	OMBUDSMAN	92	22/07/2015	Not Yet Appointed	Not	Not	Not	7442473105	rtu.dir.acad@gmail.com	2473857
2	Grievance	92	10/10/2016	Dr. U.K.Paree	educationist	Near CTS	JECRC	9785506667	ukpareek69@yah	2770803

Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

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***Note :- All the Dates in the Report are in dd/mm/yyyy format

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Application Report - Part 1

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-20/02/2017

	Redressal			k		Bus Stand, Vyason Ka Mohalla, Sanganer, Jaipur (Raj)-2732271			oo.co.in	
3	Grievance Redressal	92	10/10/2016	Ms. PARUL TYAGI	EDUCATIONIST	54/60, Mansarovar, Near Ryan Public School, Jaipur (Raj)	JECRC	9772970343	tyagi.parul82@gmail.com	2770803
4	Grievance Redressal	92	10/10/2016	Ms.RAJ PAREEK	EDUCATIONIST	JECRC, SHRI RAM KI NANGAL,VIA SITAPURA RIICO, OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682911	rajpareek@jecrc.ac.in	2770803
5	Grievance Redressal	92	10/10/2016	Mr. Ashok Sharma	warden	JECRC, SHRI RAM KI NANGAL VIA SITAPURA,RIICO,OPP EPIP GATE TONK ROAD,JAIPUR	JECRC	9982682914	ashok@jecrc.ac.in	2770803
6	Grievance Redressal	92	10/10/2016	Dr. V.K.Chandna	Principal	A-104,ASHA DEEP, GREEN AVENUE NEAR GYAN VIHAR UNIVERSITY,	JECRC	9891406784	principal@jecrcmail.com	2770803

Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

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Application Report - Part 1

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-20/02/2017

						JAGAT PURA,JAIPUR				
7	Grievance Redressal	92	10/10/2016	Shri Manish Jain	Educationist	102, Anukampa Aptt., Trimurti Marg, Malviya Nagar, Jaipur	JECRC	9460124570	sngupta@jecrc.ac.in	2770803
8	Grievance Redressal	92	10/10/2016	Shri P K Gupta	Chief Hostel Warden	170/190, Sector-17, Pratap Nagar, Jaipur	JECRC	9982682915	muktbihari.cse@jecrc.ac.in	2770803
9	Grievance Redressal	92	10/10/2016	Dr. Rajesh Sharma	Educationist	137, Pashim Vihar, Vaishali, Sirsi Road, Jaipur	JECRC	9024224830	shekhawat48@gmail.com	2770803
10	Grievance Redressal	92	10/10/2016	Ms. NEELAM CHAPLOT	Educationist	"52, Goverdhan Colony, New Sanganer Road, Sodala, Jaipur (Raj)"	JECRC	9414396960	neelam.chaplot@gmail.com	2770803
11	Grievance Redressal	92	10/10/2016	Shri Anshul Mittal	Warden	1/1305, Malviya Nagar, Jaipur	JECRC	9829740762	govindraj@yahoo.co.in	2770803

Anti-Ragging Related Details Provided by the Institute

Constitution of Anti-Ragging Committee	Yes
Constitution of Anti-Ragging Squad	Yes
Undertaking obtained from all Students	Yes
Appointment of Counselors	Yes
Undertaking obtained from parents of all the students	Yes
Undertaking obtained from students staying in Hostel	Yes
Undertaking obtained from parents of students staying in Hostel	Yes

Anti-Ragging Committee/Squad Details

Sr.	Commi	Appointment	Date of	Name of	Professio	Address	Associated	Mobile	Fax	eMail Address

Signature(dd/mm/yyyy)

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Application Report - Part 1

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No.	ttee Type (1)	Order reference Number(2)	Appointm ent (3)	the Committe e Member (4)	n (5)	(6)	With(7)	Number (8)	No (9)	(10)
1	Anti-Raggin g Squad	92	10/10/201 6	Dr. VINAY KUMAR CHANDN A	EDUCATI ONIST	A/04, ASHA DEEP, GREEN AVENUE , NEAR GYAN VIHAR UNIVER SITY, JAGATP URA, JAIPUR	JECRC	98914067 84	277 080 3	principal@jecrc mail.com
2	Anti-Raggin g Commit tee	92	10/10/201 6	SH. MUKT BIHARI	EDUCATI ONIST	170/190 SECTOR 17,PRTA P NAGAR JAIPUR	JECRC	99826829 15	277 080 3	muktbihari@jec rc.ac.in
3	Anti-Raggin g Commit tee	92	10/10/201 6	Mr. Anshul Mittal	EDUCATI ONIST	A-11, Cimmco Staff Colony, Bharatpu r (Raj)- 321001	JECRC	97726204 62	277 080 3	ansul.o.mitttal @gmail.com
4	Anti-Raggin g Commit tee	92	10/10/201 6	SH. O P JAIN	RETD. REVENUE OFFICER	JECRC CAMPU S, SHRI RAM KI NANGAL , VIA SITAPU RA RIICO, TONK ROAD, JAIPUR	JECRC	94133355 50	277 080 3	opjain@jecrc.a c.in
5	Anti-Raggin g Commit tee	92	10/10/201 6	MS. SHRUTI KALRA	EDUCATI ONIST	53-A SCHEM E-3 PRATAP NAGAR, NEAR GLASS FACTOR Y TONK ROAD,J AIPUR	JECRC	94143714 13	277 080 3	shrutikalra.ece @jecrc.ac.in
6	Anti-Raggin g Commit tee	92	10/10/201 6	SH. P K GUPTA	CHIEF HOSTEL WARDEN	447, SHANTI NAGAR, DURGA PURA, JAIPUR	JECRC	99826824 75	277 080 3	cao@jecrc.ac.i n

Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

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7	Anti-Ragging Committee	92	10/10/2016	SH. MANISH JAIN	EDUCATIONIST	13/22-A, MALVIYA NAGAR, JAIPUR	JECRC	9214699647	2770803	manish_jecrc@yahoo.com
8	Anti-Ragging Committee	92	10/10/2016	MS. RAJ PAREEK	HOSTEL WARDEN GIRLS	JECRC CAMPUS, SHRI RAM KI NANGAL, VIA SITAPURA RIICO, TONK ROAD, JAIPUR	JECRC	9982682911	2770803	rajpareek@jecrc.ac.in
9	Anti-Ragging Committee	92	10/10/2016	DR. ANITA JAIN	LIBRARIAN	D-268, SARVANAND MARG, MALVIYA NAGAR, JAIPUR	JECRC	9829230353	2770803	anita.lib@jecrc.ac.in
10	Anti-Ragging Committee	92	10/10/2016	SH. R. P. JAIN	OFFICE SUPRINTENDRNT	6/418, MALVIYA NAGAR, JAIPUR	JECRC	9636079550	2770803	rpjain@jecrc.ac.in

Renewable Energy Installation Details/Conservation of Energy

Total land available (in Sq. mts.)	51204
No. of buildings with roof tops	9
Annual electricity consumption (No. of units) during previous financial year	623237
Electricity Bill-Average rate per unit paid during previous financial year (Rs. / unit) & Number of units used	9
Renewable Energy, if any, used at present	Yes
Renewable Energy Type(solar/Wind/Tidal/etc)	Solar base water heating system is installed at roof top at the hostel. There are 9 such unit avaible in the premises.
Land available for placing solar photovoltaic panels (in sq. mts.)	5000
Total approximate roof- top area available for placing solar photovoltaic panel (in sq.mts.)	9577
Whether a policy has been adopted to use only LED lamps ?	Yes
Remarks	LED LIGHTS ARE INSTALLED IN THE COMPUS AT APPROPREIED PLACES

Date of Signature(dd/mm/yyyy)

Seal of Institute

Name & Signature of Director/Principal

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JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE,

(SHRI RAM KI NANGAL,VIA SITAPURA RIICO,OPP.EPIP GATE,TONK ROAD,JAIPUR-302022)

13.10.2015

OFFICE ORDER

Students' & Hostellers Grievance Redressal Committee

With a view to redressing the grievances of the students and the hostellers, Committee consisting of the undernoted members is constituted:

S.NO.	NAME	POST	MOBILE NO.
1	Sh. P.K. Tiwari, (Sr. Advisor)	Chairman	9829044224
2	Prof. Dr.V.K. Chandna	Co-Chairman	9891406784
3	Prof. Dr.U.K. Pareek	Secretary	9785506667
4	Prof. Dr.Jyoti Thanvi	Member	9772781250
5	Sh. Manish Jain	Member	9214699647
6	Sh. Mukesh Agarwal	Member	9214044474
7	Sh. Sunil Jangir	Member	9251039749
8	Ms.Jisha Vargise	Member	9784468656
9	Ms. Parul Tyagi	Member	9772970343
10	Sh. R.S.Agarwal	Member	9460117479
11	Ms.Raj Pareek	Member	9982682911
12	Dr. Rajesh Sharma	Member	7877546888
13	Sh. K.B.Pareek	Member	9982682909
14	One Invited member		

The committee will meet every second and forth Wednesday from 3:15 PM To 4:00 PM to hear the complaints of students and also look into the arrangements of hostels.

Jaipur Engineering College & Research Centre

PRINCIPAL

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE,
(SHRI RAM KI NANGAL, VIA SITAPURA RIICO, OPP.EPIP GATE, TONK ROAD, JAIPUR-302022

2015-2016

Anti Raging Committee

An anti raging committee to prevent raging is the JECRC Campus has been constituted,following are the members of the anti raging committee.

S.NO.	NAME	POST	MOBILE NO.
1`	Sh. O.P.Jain	Chairman	9413335550
2	Sh.M.L.Sharma	Vice-Chairman	9414279663
3	Dr. V.K.Chandna	Principal	9891406784
4	Sh. P.K.Tiwari	Sr. Advisor	9772524494
5	All Programme-Co-Ordinators	All HOD's	-
6	Sh.R.S.Agarwal	Registrar	9460117479
7	Sh.P.K.Gupta	Chief Administrative Officer	9982682475
8	Dr. Jyoti Thanvi	Chief Co-Ordinator(Ist Year)	9772781250
9	Sh.R.P.Jain	Office Superintendent	9636079550
10	Sh.K.B.Pareek	Chief Warden	9982682909
11	Dr.Anita Jain	Chief Librarian	9829230353
13	Dr. U.K.Pareek	Member	9785506667
14	Sh.L.Senthil	Member	8952934577

(Chairman)

OFFICE OF THE CENTRAL MONITORING COMMITTEE

JECRC Campus, Shri Ram Ki Nangal, Via-Sitapura, Near Sanganer Sadar Thana, Tonk Road, Jaipur-302022

8-8-18

MINUTES OF THE MEETING HELD ON 26/07/2018 TO CURB THE MENACE OF RAGGING

A) Meeting was held on 26th July 2018 in JECRC campus at 15 hours. The agenda of meeting was to curb the menace of ragging in College campus. The following were present: -

1. Shri M.L. Sharma, Vice-Chairman
2. Prof. S.N. Gupta, Senior Advisor
3. Shri R.S. Agarwal, Director ABD
4. Dr. Anurakt Williamson , Registrar
5. Dean – I Year
6. Dean – II Shift
7. Shri Anshul Mittal
8. Shri P.K. Gupta Chief Administrative Officers/Chief Warden and other Wardens
9. All Heads of the Departments
10. All Administrative Heads
11. Shri Malli Ram- Security Guard

B) **Agenda of the Meeting**: - The meeting was held specifically for the purpose of having discussion to curb the menace of ragging in our institutions and also to keep the campus ragging free as was being done in previous years

C) 1. Shri M.L. Sharma, Vice-Chairman of this committee first welcomed all the participants, thanked all the members for refrain the campus ragging free, as no case of ragging was reported to the Central Monitoring Committee. He also mentioned that today's news in News Paper that ragging cases were doubled in past all over the country.

2. In the Meeting, the discussions were made in details pertaining to features of the Regulations framed by the UGC and as directed by the Raghavan Committee constituted by the Hon'ble Supreme Court. The members discussed the following main points.

   a) Constitute of Anti Ragging & Anti Ragging squads, Monitoring Cell & Disciplinary Committee.

   b) Obtaining undertakings from Students & Parents.

OFFICE OF THE CENTRAL MONITORING COMMITTEE

JECRC Campus, Shri Ram Ki Nangal, Via-Sitapura, Near Sanganer Sadar Thana, Tonk Road, Jaipur-302022

c) Security in Campus & Busses.

d) Preparation and display of Posters in Campus, Mr. Anshul Mittal was asked to help in preparation of some effective display.

e) Duties & responsibilities of Hostel Wardens and coordinators particularly during the first quarter of the session.

f) Holding Meetings, Seminars, Joint sensitization programmes involving students, faculty, parents, guardians, District authorities.

g) Notices with telephone numbers of important persons to be used by students in case of ragging.

h) Identifying vulnerable places in the campus.

3. Dr. U.K. Pareek suggested that more alertness is required at recess period. Dr. Barkha Srivastava, Dr, Lokesh Bansal, Dr. Seema Joshi, Shri Atul Kulshreshtha, Shri Ashok Sharma-Warden, and Shri Malli Ram also gave suggestions to make the campus ragging free.

4. The Registrar informed the members that posters have already been displayed in the campus, committees have been formed, UGC's guidelines & Supreme Courts directions have been included in the prospectus & vulnerable places have been identified.

5. The Registrar also expressed his views to take precautions before misshaping with new-comers and stressed on the point that every staff member whether he/she included in Anti Ragging squad or not should take appropriate action if he/she finds any kind of harassment with junior students. Efforts should be made that not even a single case of ragging occurs in any circumstances. Vice Chairman Shri M.L. Sharma added that there should be in this context some extent of the balanced view approach should be adopted.

a) In hostels, the deputed faculties must render their duties especially in night shift sincerely and counsel both first year and senior class students.

OFFICE OF THE CENTRAL MONITORING COMMITTEE

JECRC Campus, Shri Ram Ki Nangal, Via-Sitapura, Near Sanganer Sadar Thana, Tonk Road, Jaipur-302022

b) At main gate, the security guard must maintain incoming and outgoing students register for new admitted students who avails hostel facility specially in the evening time.

6. All the discussions made in the meeting were taken as approved.

7. In the end Shri M.L.Sharma, Vice-Chairman, Anti-Ragging Committee thanked all the members for their active participation. In concluding remarks he stated that we have to be more vigilant particularly for the vulnerable positions, so identified, including Hostels and cafeteria. He further observed that for involvement of a student in ragging, we may punish him, but more important thing was to prevent such incidents.

8-8-18

Prof. (Dr.) A. Williamson
Registrar
Jaipur Engineering College and Research Centre

Copy to: -
1. Shri M.L. Sharma, Vice-Chairman
2. Shri Amit Agrawal, CMD,
3. Shri Arpit Agrawal, Director
4. Shri P.K. Tewari, Senior Advisor
5. Dr. V.K. Chandna, Principal
5. Registrar, JECRC, Jaipur
6. Shri P.K. Gupta, Chief Administrative Officer/Chief Warden

JECRC

Notice No-
Date – 27/07/2018

ANTI RAGGING ORGANISATION

Sh. O.P. Jain	**Chairman**
Sh. P.K. Tiwari	**Chief Mentor**
Prof. U. K. Pareek	**Chief Proctor**

A. Anti-ragging committee –

The team of staff members specified for a particular zone shall take regular rounds of zone and shall maintain complete vigilance for the prevention of ragging in the areas under their control. They will maintain regular report of their observations. Ragging incidents if any, shall be reported immediately to the under mentioned for further action at their following mobile numbers-

Prof. U.K. Pareek	Chief Proctor	9785506667
Sh. P.K. Gupta	C.A.O	9982682475
Prof. M. P. Singh	Proctor	9414203639

S. No.	Name	Phone No.	Zone	Control Area
1	**Sh. Gajendra Sharma (In-charge)** Sh. Amit Mithal Sh. Pradeep Sharma Sh. Vikas Sharma Sh. Veni Madhav Sharma Mr. Teekam Singh		A	Police station to college main gate Reporting time 8.00 AM
2	**Ms. Neelam Choudhary (In-charge)** Sh. Prahlad Sharma Ms. Geetika Gautam Sh. Ashish Ameria Sh. Arihant Jain		B	Main gate to cycle stand and porch
3	**Dr. Manish Srivastava (In-charge)** Sh. Kuldeep Sharma Sh. Rajendra Gupta Sh. Lalit Sharma Sh. Narendra Singh		C	Canteen, Café Block & D Block
4	**Sh. Ashok Sharma (In-charge)** Ms. Sanjay Devi Dr. Rajesh Sharma Ms. Yogita Panjabi		D	Hostel to Block-A
5	**Sh. S.S. Manaktala (In-charge)** Sh. Ram Singh Dr. Rajesh Sharma Sh. Honey Agarwal Sh. Sandeep K. Dotiya Sh. Ashish K. Kulshrestha		E	Hostels to B Block and Hostels to C Block
6	**Dr. Bhuvnesh Bhardwaj (In-charge)** Dr. Manish Srivastava Sh. Anil Jain Sh. Devendra Sharma Sh. Hemant Vashisth		F	Electrical & Electronics and Block B
7	**Ms. Manju Vyas (In-charge)** Ms. Shikha Maheshwari Ms. Richa Sharma Ms. Sarita Sh. Tovindra Kumar Sahu Sh. Sachin Gupta		G	Block -A

8	**Dr. Rajesh Bhatija (In-charge)** Sh. Ravi Kumar Jangir Sh. Aashish Nagpal Sh. Mangi Lal Ms. Ritu Vyas Sh. Hanuman Pd.		H	Playground & field, Canteen and around
9	**Ms. Sheela Soni (In-charge)** Ms. Neha Singh Ms. Sonali Chadha Ms. Parul Tyagi		I	Area near Girls Hostel
10	**Dr. Anita Jain (Incharge)** All other library staff		J	Library – 1
11	**Mr. Kamlesh Choudhary (In-charge)** Ms. Monika Sharma Mr. Amit Mittal Mr. Jitesh Kumar Jain All Library-3 staff (block C)		K	Block C - Basement Floor
12	**Dr. Rekha Mithal (In-charge)** *Ms.* Barkha Srivastava Ms. Sarita Poonia # Sh. Dilip Parjapta Sh. Jitendra Gupta		L	Block C – Ground Floor
13	**Dr. Seema Joshi (In-charge)** Dr. R.K. Mangal Dr. S. K. Dixit Dr. Tripti Gupta Dr. Poonam Gupta		M	Block C – First Floor
14	**Sh. Shiv Shankar Sharma (In-charge)** Dr. S. K. Singh Mr. Vishal Sagtani Ms. Rekha Vijay Sh. Piyush Gautam Dr. Sunil Srivastava		N	Block C – Second Floor
15	**Sh. Sunil Jangir (In-charge)** Ms. Kusum Yadav Mr. Naveen Kumar Kedia Sh. Manoj Pathak		O	Block C – Third Floor
16.	**Jitendra Sharma (In-charge)** Raj Kumar Jain Ashish Sharma Devesh Gupta	-	-	Near Shiv Temple, Tea Stall, outside the JECRC main gate.
17.	**Yogesh Dubey (In-charge)** Shrikant Bansal Abhay Bhatt Man Mohan	-	-	Block D

Notwithstanding the above, it is expected from all teaching faculty and other staff members that if they come across any incident of harassment of the new comers they shall intervene immediately and try to prevent RAGGING. The matter may also be brought to the notice of the above.

Notes:-

1. **Every faculty member should ensure proper handing over of the class to the next faculty member. He/ She should not leave the class without a proper supervision and presence of faculty member.**
2. **The nearest HOD of the area should ensure one of the faculty members of the area is always present in verandas to maintain discipline.**
3. **All institute staff should invariably wear their I-cards.**

The wardens of the hostels should ensure that all Ist semester students leave the hostels everyday by 8.25 AM positively and preferably in one group.

Anonymous random surveys have been planned in different zones. The proctors, mentors and others will also be meeting each section of Ist year classes at least once in a fortnight.

Anti-ragging Committee Session 2018-19

S.No	Name	Designation	Mobile No.
1.	Dr. U.K Pareek	Chief Protcter	09785506667
2.	Ms. Bhawana Sharma	Proctor	09214465405
3.	Mr. Anshul Mittal	Proctor	09772620462
4.	Ms. Shruti Kalra	Proctor	09414371413
5.	Dr. M.P Singh	Proctor	09414203639
6.	Dr. Anita Jain	Chief Librarian	09829230353
7.	Ms. Roopsi Singh	Warden Girls Hostel	08601436125
8.	Mr. Ravi Bhatnagar	Transport In charge	09024149459
9.	Sh. PK Gupta	Chief Warden/C.A.O	09982682475

Dr. A. Williamson, Registrar 08209270915

Principal

Copy to –

1. Vice Chairman, Director, All concerned
2. All HOD, Librarian A & C Block.
3. CAO/Chief Warden with a request to get the above notice circulated among all the staff members working under their control.

essage

ice Suptd. JECRC <os@jecrc.ac.in> Sat, Aug 18, 2018 at 3:49
hodcse <hod.cse@jecrc.ac.in>, HoD IT <hod.it@jecrc.ac.in>, hodme <hod.me@jecrc.ac.in>, Hodee
od.ee@jecrc.ac.in>, hodce <hod.ce@jecrc.ac.in>, hodchem <hod.chem@jecrc.ac.in>, hodmaths
od.maths@jecrc.ac.in>, hodeh <hod.eh@jecrc.ac.in>, hodphy <hod.phy@jecrc.ac.in>, hodece <hod.ece@jecrc.ac.i
"p.k. Gupta" <cao@jecrc.ac.in>, Registrar JECRC <registrar@jecrc.ac.in>, Principal JECRC
incipal@jecrcmail.com>, Librarian JECRC <librarian@jecrc.ac.in>, "U.K. Pareek" <ukpareek.math@jecrc.ac.in>

ear Sir/Madam,

lostel night duty from 21.08.2018 to 10.09.2018 is being enclosed for information and needful.

egards
mitabh Gupta

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

Circular No. 11
8.08.2018

CIRCULAR

ollowing faculty members will also perform the night duty from **8 PM to 9 AM** as per the date
entioned below. They will visit the hostel mess during this period and will take meal in th
espective hostel. They will report to Chief Hostel Warden -

Date	Day	Girl's Hostel	Boy's Hostel
21.08.2018	Tuesday	Ms. Shikha Maheshwari, CSE	Mr. Anoop Kumar Mehta, CSE Mr. Hetram Sharma, Civil
22.08.2018	Wednesday	Ms. Nida Khanam, Civil	Mr. Bhoopesh Kumawat, ECE Mr. Manish Pal,EE
23.08.2018	Thursday	Ms. Sonali Chadha, EE	Mr. Satyendra Kumar , ME Mr. Brijesh Kumar Singh, IT
24.08.2018	Friday	Ms. Ruchida Barman, E&H	Mr. Akhil Maheshwari, Civil Mr. Sachin Gupta, CSE
25.08.2018	Saturday	Ms. Deepika Bansal, IT	Mr. Shailendra Srivastava, EE Mr. Jitendra Kumar Sharma, ECE
26.08.2018	Sunday	Dr. Rekha Mithal, Chemistry	Mr. Ravi Yadav, ME Mr. Narendra Sipani, Civil
27.08.2018	Monday	Ms. Palak Jindal, ME	Mr. Pradeep Sharma, CSE Mr. Nikhil Jain, ME

mail.google.com/mail/u/0/?ui=2&ik=33998498f2&jsver=TKereZPtSMY.en.&cbl=gmail_fe_180822.12_p2&view=pt&q=night%20duty&qs=tru...

28.08.2018	Tuesday	Ms. Geetika Gautam, CSE	Mr. Vikas Mishra, ECE Mr. Sunil Kumar Sharma, EE
29.08.2018	Wednesday	Dr. Vinita Mathur, ECE	Mr. Taj Bahadur Singh, ME Mr. Shashi Kant Singh, CSE
30.08.2018	Thursday	Dr. Sarita Poonia, Maths	Mr. Satya Prakash Saini, ME Mr. Prateek Kumar Sharma, Civil
31.08.2018	Friday	Ms. Yogita, ECE	Mr. Shailesh Arrawatia, CSE Mr. Ashish Boiradia, Civil
01.09.2018	Saturday	Ms. Richa Upadhyay, CSE	Mr. Pravin Kumar Sharma, CSE Dr. Sunil Kumar Srivastava, Maths
02.09.2018	Sunday	Ms. Rekha Vijay, Chemistry	Mr. Jitendra Gupta, ME Dr. Sanjay Gaur, CSE
03.09.2018	Monday	Ms. Shikha Srivastava, IT	Mr. Anil Jain, ECE Dr. Vishal Saxena, Maths
04.09.2018	Tuesday	Ms. Anima Sharma, CSE	Mr. Man Mohan Siddh, ME Mr. Sandeep Kumar Dotya, ECE
05.09.2018	Wednesday	Dr. Seema Joshi, Chemistry	Mr. Gajendra Sharma, CSE Mr. Tejendra Singh, ME
06.09.2018	Thursday	Ms. Parul Tyagi, ECE	Mr. Dayal Singh Rathore, ME Mr. Ashish Sharma, ECE
07.09.2018	Friday	Ms. Shweta Sharda, ECE	Dr. Mukul Kumar Sharma, E&H Mr. Nitin Chhabra,ME
08.09.2018	Saturday	Ms. Archana Vijayvergia, E&H	Mr. Shrikant Bansal, ME Mr. Honey Agarwal, ECE
09.09.2018	Sunday	Dr. Tripati Gupta, Maths	Mr. Ravi Kuamr Jangir, ME Mr. Veni Madhav Sharma, ECE
10.09.2018	Monday	Ms. Swati Vijay, IT	Mr. Yogesh Kumar Agarwal, Civil Mr. Devesh kumar, ME

All are required to submit their **report** in writing along with **Annexure A** to the Chief Hostel Warden next day. The CCL for the same shall be granted on the written recommendation of the CAO.

Principal

Copy to-

1. Vice –Chairman
2. Director
3. Chief Hostel Warden
4. All Programme Coordinator/HoD's – with a request to get the duty noted from all

ROLES & RESPONSIBILITIES CHART FOR NIGHT DUTY IN HOSTEL

-

S. NO.	FROM	TO	LOCATION OF DUTY	REPORTING TO	SIGNATURE OF WARDEN
1.	8 PM	9 PM	Presence in the Mess	Warden	-
2.	9 PM	10 PM	Presence in the Lawn by the Male faculty member & Quadrangles by the Female faculty member	Warden	-
3.	10 PM	11 PM	Hostel rooms visit	Warden	-
4.	11 PM	11.30 PM	Tea time		-
5.	11.30 PM	12.30 PM	Hostel rooms visit.	Warden	-
6.	12.30 AM		Rest	-	-
7.	3 AM	4 AM	Round of hostel and ground.	Warden	-
8.	8 AM	9 AM	Tea & Breakfast	-	-

-

Date: -

Signature of Faculty member

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
REPORT ON NIGHT DUTY

Dear Sir

Our night duty was scheduled on 3 August 2018 (Friday) to avoid ragging in (if any) Boys Hostel-I and Boys Hostel-II. We arrived at JECRC campus at 8 PM and reported to hostel warden Mr. Ashok Sharma. We stayed there overnight and visited both boys hostels BH-1 and BH-2 and nothing found suspicious. Also we talked to first year students, they don't have any issue till moment. They are enjoying their new phase of life. We instructed them to call/inform immediately to their respective hostel warden in case if they find anything uncomfortable.

Annexure -A

ROLES & RESPONSIBILITIES CHART FOR NIGHT DUTY IN HOSTEL

S. NO.	FROM	TO	LOCATION OF DUTY	REPORTING TO	SIGNATURE OF WARDEN
1.	8 PM	9 PM	Presence in the Mess	Warden	
2.	9 PM	10 PM	Presence in the Lawn by the Male faculty member & Quadrangles by the Female faculty member	Warden	
3.	10 PM	11 PM	Hostel rooms visit	Warden	
4.	11 PM	11.30 PM	Tea time	—	—
5.	11.30 PM	12.30 PM	Hostel rooms visit.	Warden	
6.	12.30 AM		Rest	—	—
7.	3 AM	4 AM	Round of hostel and ground.	Warden	
8.	8 AM	9 AM	Tea & Breakfast	—	—

Date: -3/8/18

Signature of Faculty member

1. Lalit Kumar Sharma
2. Piyush Gautam

8/8/2018 JECRC Mail - Fwd: Vigilance Duty of Faculty members in CSE Department

JECRC Mail

Anurakt Williamson Registrar <registrar@jecrc.ac.in>

Fwd: Vigilance Duty of Faculty members in CSE Department

1 message

Principal JECRC <principal@jecrc.ac.in> Wed, Aug 8, 2018 at 2:37 PM
To: Registrar JECRC <registrar@jecrc.ac.in>

---------- Forwarded message ----------
From: **HoD CS** <hod.cse@jecrc.ac.in>
Date: Wed, Aug 8, 2018 at 12:50 PM
Subject: Vigilance Duty of Faculty members in CSE Department
To: Geet Kalaniq <geetkalani.cse@jecrc.ac.in>, Amit Mithal <amitmithal.cse@jecrc.ac.in>, Pradeep Sharma <pradeepsharma.it@jecrc.ac.in>, "Dr.Sanjay Gaur" <sanjaygaur.cse@jecrc.ac.in>, Ashish Ameria <ashishameria.cse@jecrc.ac.in>, Gajendra Sharma <gajendrasharma.cse@jecrc.ac.in>
Cc: Manju Vyas <manjuvyas.cse@jecrc.ac.in>, Principal JECRC <principal@jecrc.ac.in>

Dear All,

Following faculty members are assigned vigilance duty around main gate and around the local shop areas. They must take round every day and ensure that no students are found sitting there.

1) Mr. Geet Kalani	Between 12::00-1:00 pm
2) Mr. Amit Mithal	Between 12::00-1:00 pm
3) Mr. Pradeep Sharma	Between 3:00-500 pm
4) Dr. Sanjay Gaur	Between 3:00-500 pm
5) Mr. Ashish ameria	Between 10- 11AM
6) Mr Gajendra Sharma	Between 9-10 AM

Any act of indiscipline found must be reported immediately.

Thanks and regards

Dr. Bhavna Sharma
Head, Department of Computer Science & Engineering
Jaipur Engineering College & Research Centre
Address: JECRC Campus, via Sitapura, Tonk Road, Jaipur-302022, Rajasthan, India

--
Warm Regards
Dr. Vinay Kumar Chandna,
B.E., M.E. Ph.D. (Electrical)
SM IEEE, LM ISTE, LMCSI
Principal,
Jaipur Engineering College and Research Centre (Jaipur),
Tonk Road, Jaipur
Past Treasurer PES Delhi Chapter,
Chair IEEE Education Society,
98914 06784 **(M)**

JECRC

Notice No-

Date – 31.07.2017

ANTI RAGGING ORGANISATION

Sh. O.P. Jain	**Chairman**
Sh. P.K. Tiwari	**Chief Mentor**
Prof. U. K. Pareek	**Chief Proctor**

A. Anti-ragging committee –

The team of staff members specified for a particular zone shall meet and devise an action plan to take regular rounds of zones and shall maintain complete vigilance for the prevention of ragging in the areas under heir control. They will maintain regular report of their observations. Ragging incidents if any, shall be reported immediately to the under mentioned for further action at their following mobile numbers-

Prof. U.K. Pareek	Chief Proctor	9785506667
Sh. P.K. Gupta	C.A.O	9982682475
Prof. M. P. Singh	Proctor	9414203639

S.No.	Name	Zone	Control Area
1	**Sh. Mukesh Agarwal** Sh. Amit Mithal Sh. Gajendra Sharma Sh. Udbhav Bhatnagar Sh. Pradeep Sharma Sh. Vikas Sharma	A	Police station to college main gate Reporting time 8.00 AM
2	**Ms. Neelam Chaplot** **Sh. Prahlad Sharma** Ms. Geetika Gautam Sh. Ashish Ameria Sh. Arihant Jain	B	Main gate to cycle stand and porch
3	**Dr. Manish Srivastava** **Sh. Kuldeep Sharma** Sh. Rajendra Gupta Sh. Lalit Sharma Sh. Narendra Singh	C	Canteen and Workshops (D and E Block)
4	**Sh. P.K. Gupta** **Sh. Ashok Sharma** **Ms. Raj Pareek** Dr. Rajesh Sharma	D	Hostel to Block-A

Department of Electronics & Communication Engineering

5	**Sh. S.S. Manaktala- Proctor** **Sh. Ram Singh** **Ms. Poonam Gupta** **Dr. Rajesh Sharma** Sh. Honey Agarwal Sh. Sandeep K. Dotiya Sh. Ashish K. Kulshrestha	E	Hostels to B Block and Hostels to C Block
6	**Sh. Shruti Kalra-Proctor** **Dr. Bhuvnesh Bhardwaj** **Dr. Manish Srivastava** ~~Ms. Shikha Gaur~~ Sh. Anil Jain Sh. Devendra Sharma Sh. Veni Madhav Sharma Sh. Hemant Vashisth Sh. Vishwas Verma	F	Electrical, Electronics and Mechanical .....
7	**Sh. R.S. Agarwal, Mentor** ~~**Sh. R.P. Jain**~~ **Dr. Anita Jain** Ms. Shikha Maheshwari Ms. Manju Vyas Ms. Richa Sharma Ms. Sarita Sh. Tovindra Kr. Sahu Sh. Aizaj Khan Sh. Sachin Gupta	G	Block -A
8	**Dr. Rajesh Sharma** **Dr. S.K. Dixit, Mentor** Sh. Ravi Kumar Jangir Sh. Aashish Nagpal Sh. Mangi Lal Ms. Ritu Vyas Sh. Hanuman Pd.	H	Play ground & field, Canteen and around
9	**Ms. Raj Pareek, Mentor** **Ms. Sheela Soni** ~~Ms. Suman Devi~~ Ms. Neha Singh Ms. Sonali Chadha Ms. Vinita Mathur Ms. Parul Tyagi	I	Area near Girls Hostel
10	**Dr. Anita Jain** All other library staff	J	Library – 1
11	**Mr. Kamlesh Choudhary** **Ms. Monika Sharma** **Mr. Amit Mittal** Mr. Jitesh Kumar Jain Mr. Rohit Singhal All Library-3 staff (block C)	K	Block C - Level – 1
12	**Dr. Rekha Mithal** **Prof. K.K. Agarwal** *Ms.* Barkha Srivastava Ms. Sarita Poonia Sh. Dilip Parjapta	L	Block C - Level – 2

	Sh. Jitendra Gupta		
13	**Dr. Seema Joshi- Proctor** **Dr. R.K. Mangal** **Dr. S. K. Dixit** **Dr. Tripti Gupta** **Dr. Poonam Gupta** **Ms. Yogita Panjabi**	M	Block C - Level – 3
14	**Sh. Shiv Shankar Sharma** **Sh. Manoj Pathak** Dr. S. K. Singh Mr. Vishal Sagtani Ms. Rekha Vijay Sh. Piyush Gautam Dr. Sunil Srivastava	N	Block C - Level – 4
15	**Sh. Sunil Jangir** Ms. Kusum Yadav Mr. Naveen Kumar Kedia Ms. Pallavi Singh	O	Block C - Level-5
16	**Sh. P.K. Gupta** **Sh. Manish Jain** **Sh. R.S. Agarwal & staff** **Sh. R.P. Jain & staff** **Dr. Umesh K. Pareek** Sh. Ashok Patni Sh. Ramesh Rawat	P	College & other areas, General assistance to the Principal
17.	**Rajesh Kumar Bathija** Raj Kumar Jain Ashish Sharma Devesh Gupta	-	Near Shiv Tample, Tea Stall, outside the JECRC main gate.
18.	**Atul Kulshrestha** Ashok Singh Chundawat Rahul Kumar Malee Shailendra Srivastava	-	Block D

* Names in bold letters are the incharges of their respective zones.

Notwithstanding the above, it is expected from all teaching faculty and other staff members that if they come across any incident of harassment of the new comers they shall intervene immediately and try to prevent RAGGING. The matter may also be brought to the notice of the above.

Notes:-

1. **Every faculty member should ensure proper handing over of the class to the next faculty member. He/She should not leave the class without a proper supervision and presence of faculty member.**
2. **The nearest HOD of the area should ensure one of the faculty members of the area is always present in varandas to maintain discipline.**
3. **All institute staff should invariably wear their I-cards.**

The wardens of the hostels should ensure that all the I semester students leave the hostels everyday by 8.25 AM positively and preferably in one group.

Anonymous random surveys have been planned where proctors and mentors and also other subject experts will be meeting each section of the I year classes atleast once in a fortnight. The random survey will be carried out in any of the randomly selected regular classes, so that the students are not aware of the forthcoming surveys.

B. Anti-ragging Committee Session 2017-18

S.No	Name	Designation	Mobile No.
1.	Dr. U.K Pareek	Chief Protcter	09785506667
2.	Ms. Neelam Chaplot	Proctor	09414396960
3.	Mr. Anshul Mittal	Proctor	09772620462
4.	Ms. Shruti Kalra	Proctor	09414371413
5.	Dr. M.P Singh	Proctor	09414203639
6.	Dr. Anita Jain	Chief Librarian	09829230353
7.	Ms. Raj Pareek	Warden Girls Hostel	09982682911
8.	Mr. Ravi Bhatnagar	Transport Incharge	09024149459
9.	Sh. PK Gupta	Chief Warden/C.A.O	09982682475

Sh. R.S. Agarwal, Registrar 09460117479

Principal July/17

Copy to –

1. Vice Chairman, Director, All concerned
2. All HoD,Librarian A & C Block.
3. CAO/Chief Warden with a request to get the above notice circulated among all the staff members working under their control.

Jaipur Engineering College and Research Centre

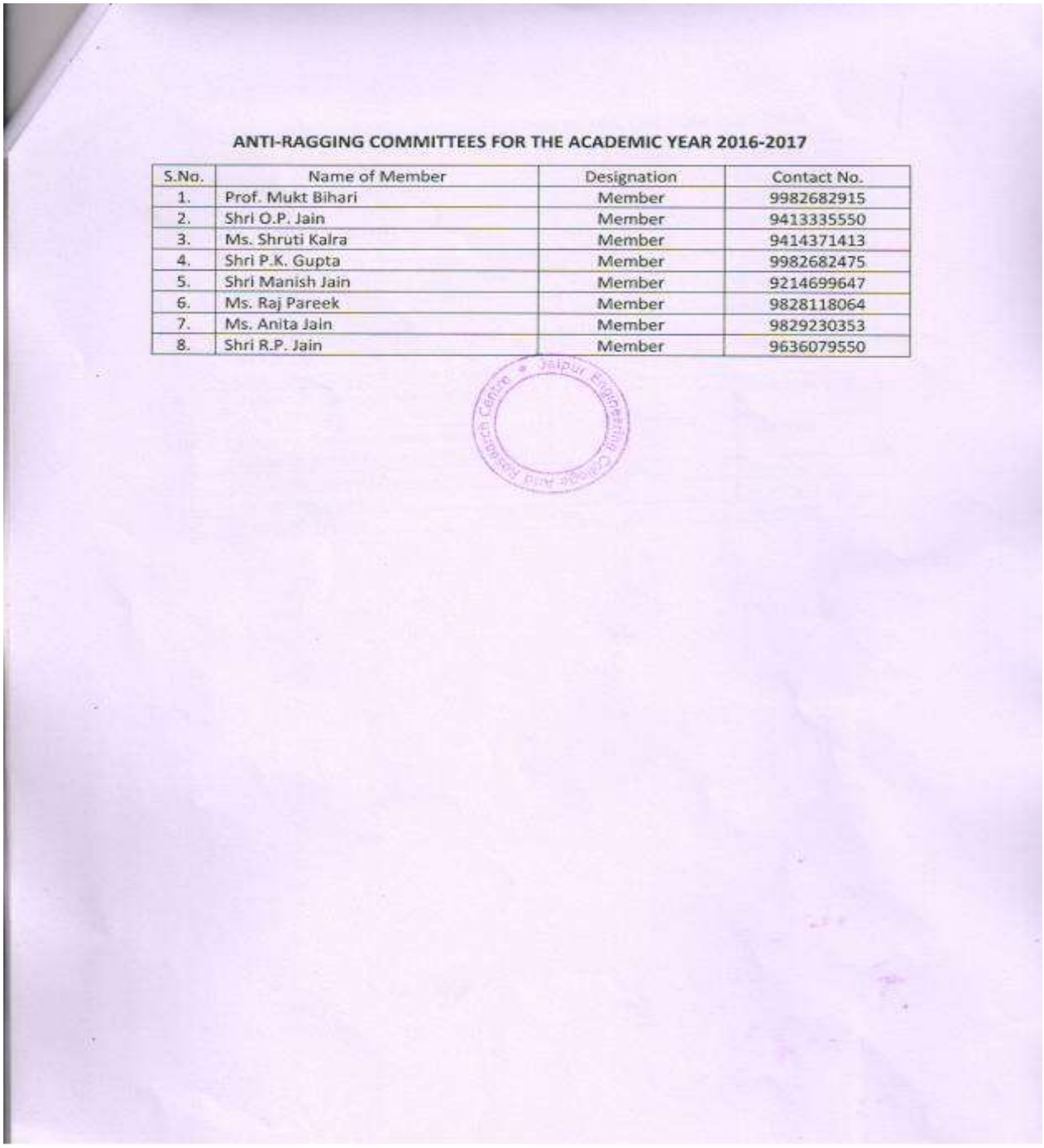
Anti Ragging Committee Session 2016-17

S.No	Name	Designation	Mobile No.
1.	Prof. Mukt Bihari	Chief Proctor	09982682915
2.	Aizaz Khan	Assistant Registrar	09982682906
3.	Dr. U.K Pareek	Dean 1st Year	09785506667
4.	S.S Manaktala	Proctor	09828089494
5.	Shiv Shankar Sharma	Proctor	09929860331
6.	Sh. Manish Jain	Proctor	09214699647
7.	Dr. Seema Joshi	Proctor	09251039861
8.	Ms. Shruti Kalra	Proctor	09414371413
9.	Dr. Anita Jain	Chief Librarian	09829230353
10.	Ms. Raj Pareek	Warden Girls Hostel	09982682911
11.	Sh. R.P. Jain	Office Supdt. & Transport Incharge	09636079550
12	Sh. PK Gupta	Chief Warden	09982682475

Please contact above members with regarding to above mentioned subject.

Registrar

Note: All Notice Board including Hostel Notice Board.



ANTI-RAGGING COMMITTEES FOR THE ACADEMIC YEAR 2016-2017

S.No.	Name of Member	Designation	Contact No.
1.	Prof. Mukt Bihari	Member	9982682915
2.	Shri O.P. Jain	Member	9413335550
3.	Ms. Shruti Kalra	Member	9414371413
4.	Shri P.K. Gupta	Member	9982682475
5.	Shri Manish Jain	Member	9214699647
6.	Ms. Raj Pareek	Member	9828118064
7.	Ms. Anita Jain	Member	9829230353
8.	Shri R.P. Jain	Member	9636079550

JECRC

Notice No. 11.....

Date. 28/07/16

ANTI RAGGING ORGANISATION

Sh. O.P. Jain	**Chairman**
Sh. P.K. Tiwari	**Chief Mentor**
Prof. Mukt Bihari	**Chief Proctor**

A. Anti-ragging committee –

The team of staff members specified for a particular zone shall meet and devise an action plan to take regular rounds of zones and shall maintain complete vigilance for the prevention of ragging in the areas under heir control. They will maintain regular report of their observations. Ragging incidents if any, shall be reported immediately to the under mentioned for further action at their following mobile numbers-

Prof. Mukt Bihari	Chief Proctor	9982682915
Sh. P.K. Gupta	C.A.O	9982682475
Prof. U.K. Pareek	Proctor	9785506667

S.No.	Name	Zone	Control Area
1	**Sh. Manish Jain – Proctor** **Sh. Mukesh Agarwal** Sh. Amit Mithal Sh. Gajendra Sharma Sh. Udbhav Bhatnagar Sh. Pradeep Sharma Sh. Vikas Sharma	A	Police station to college main gate Reporting time 8.00 AM
2	**Ms. Neelam Chaplot** **Sh. Prahlad Sharma** Ms. Geetika Gautam Sh. Anshul Mittal Sh. Arihant Jain	B	Main gate to cycle stand and porch
3	**Prof. Gobind Raj** **Sh. Kuldeep Sharma** Sh. Rajendra Gupta Sh. Lalit Sharma Sh. Narendra Singh	C	Canteen and Workshops (D and E Block)
4	**Sh. P.K. Gupta** **Sh. Ashok Sharma** **Ms. Raj Pareek** Dr. Rajesh Sharma	D	Hostel to Block-A

Department of Electronics & Communication Engineering

5	**Sh. S.S. Manaktala- Proctor** **Sh. Ram Singh** **Ms. Poonam Gupta** **Dr. Rajesh Sharma** Sh. Honey Agarwal Sh. Sandeep K. Dotiya Sh. Ashish K. Kulshrestha	E	Hostels to B Block and Hostels to C Block
6	**Sh. Shruti Kalra-Proctor** **Prof. R. Gobind Raj** **Prof. R.O. Rustagi** Ms. Shikha Gaur Sh. Anil Jain Sh. Devendra Sharma Sh. Veni Madhav Sharma Sh. Hemant Vashisth Sh. Vishwas Verma	F	Electrical, Electronics and Mechanical .....
7	**Sh. R.S. Agarwal, Mentor** **Sh. R.P. Jain** **Dr. Anita Jain** Ms. Shikha Maheshwari Ms. Manju Vyas Ms. Richa Sharma Ms. Anima Sharma Sh. Tovindra Kr. Sahu Sh. Aizaj Khan Sh. Sachin Gupta Sh. ABL Mathur	G	Block -A
8	**Dr. Rajesh Sharma** **Dr. S.K. Dixit, Mentor** Sh. Ravi Kumar Jangir Sh. Aashish Nagpal Sh. Mangi Lal Ms. Ritu Vyas Sh. Hanuman Pd.	H	Play ground & field, Canteen and around
9	**Ms. Raj Pareek, Mentor** **Ms. Sheela Soni** Ms. Suman Devi Ms. Neha Singh Ms. Sonali Chadha Ms. Vinita Mathur Ms. Parul Tyagi	I	Area near Girls Hostel
10	**Dr. Anita Jain** All other library staff	J	Library – 1
11	**Ms. Anjana Poonia** **Prof. S.K. Sur** **Prof. S.K. Saxena** Sh. Kartik Chawala Sh. Sumit Saini All Library-3 staff (block C)	K	Block C - Level – 1
12	**Dr. Rekha Mithal** **Prof. M.L. Rawat** **Prof. K.K. Agarwal** *Ms.* Barkha Srivastava	L	Block C - Level – 2

	Ms. Sarita Poonia Sh. Rajendra Sen Sh. Dilip Parjapta Sh. Jitendra Gupta Sh. Mount Malik		
13	**Dr. Seema Joshi- Proctor** **Dr. R.K. Mangal** **Dr. Urmila Gupta** **Ms. Priyanka Verma** **Dr. Poonam Hariyani** **Sh.Shivani Agrawal**	M	Block C - Level – 3
14	**Sh. Shiv Shankar Sharma** **Sh. Manoj Pathak** Dr. Ankush Dr. Savita Sangwan Ms. Rekha Vijay Sh. Piyush Gautam Sh. Kanishk Jain Sh. Neha Jain	N	Block C - Level – 4
15	**Sh. Sunil Jangir** Ms. Kusum Yadav Sh. Swati Vijay Ms. Neha Jain	O	Block C - Level-5
16	**Sh. P.K. Gupta** **Sh. Manish Jain** **Sh. R.S. Agarwal & staff** **Sh. R.P. Jain & staff** **Dr. Umesh K. Pareek** Sh. Ashok Patni Sh. Ramesh Rawat	P	College & other areas, General assistance to the Principal
17.	**Rajesh Kumar Bathiya** Raj Kumar Jain Ashish Sharma Devesh Gupta	-	Near Shiv Tample, outside the JECRC main gate.
18.	**Atul Kulshrestha** Ashok Singh Chundawat Rahul Kumar Malee Shailendra Srivastava	-	Block D

* Names in bold letters are the incharges of their respective zones.

ction to be taken to curb ragging during the session 2015-16

Inbox x

Principal JECRC 2:31 PM (37 minutes ago)

to vc, Arpit, opjain, pktiwari, cao, hod.cse, hodece, HoD, Hodee, hodme, hodce, suchintyasur.ce, ranjeetpandey.., jyotithanvi.ma., hodmaths, hodeh, hodchem, hodphy, ruchimathur.ma., rekhamithal.ch., Saritapoonia.m., rajendrasen.ch., me, librarian, jyotithanvi_28

Jaipur Engineering College & Research Centre

From : Principal Office	To : All Programme Coordinators

Noting Reference No. JECRC/01/2015-16/09 22/07/2015

Sub.: Action to be taken to curb ragging during the session 2015-16

As you are aware that II,III and IV year classes are already started and the I year classes are commencing from August 6, 2015. Therefore you along with your colleagues are requested to make it convenient to attend the meeting in the auditorium on Wednesday the 29th of July, 2015 at 3:15 PM. You are also requested to come prepare with the following agenda items –

ACTION TO BE TAKEN TO CURB RAGGING SESSION 2015-2016

1. Notice explaining as to what constitutes ragging are to be put up on the Notice Board.
2. Notice for prohibition & prevention of ragging is to be displayed.
3. Declarations from student & parents are to be obtained.
4. Meetings with Hostel Wardens, student representatives, parents/guardian, faculty & district administration are to be held.
5. Multi color posters of big size for promotion of law and nature of punishment for involvement in ragging is to be displayed at conspicuous places.
6. Vulnerable position in the campus are to be identified.

7. Induction programme is to be planned.
8. Printed leaflet to be handed over to the students containing contact Nos of persons to be informed in case of ragging takes place and also informing about the calendar of events, including induction.
9. List of contact nos to be displayed inside each bus.
10. Joint sensitization programme of freshers and seniors to be planned and organized.
11. Letters to the parents of first year completing students are to be sent informing about the law regarding ragging and punishments.
12. Monitoring cell is to be formed.
13. Individual meeting with the freshers for psychological counseling is to be planned/held.
14. Anonymous random survey across 1st year batch freshers every fortnightly is to be planned for the first 3 months of the session.
15. Meeting with faculty and non-teaching staff to be held to apprise them of about their responsibility towards curbing the menace of ragging.
16. Anti ragging committee and Anti ragging squad, to be formed and information about their constitution to be given to the Central Monitoring Committee.
17. An appropriate committee to monitor, promote and regulate healthy interaction between freshers and senior students, to be formed institution wise.
18. Posters informing that the burden of proof shall be on the preparator of ragging and not on the victim to be displayed.
19. Posters acknowledging non-involvement of seniors in the past to be displayed.
20. Seminar/Meeting with district authorities to promote the feeling of ragging free campus to be planned and held.
21. Admission brochure to contain the directions of Hon'ble Supreme Court and the UGC.
22. Hostel Wardens to obtain declarations from the students and their parents duly signed & verified.
23. Websites of the institutions to contain the directions of the Supreme Court and UGC regarding ragging.
24. Tight security in the campus to be planned and executed.
25. Advertisement for admission to clearly mention that ragging is totally banned in the Institution.
26. The school leaving certificate/TC/MC and character certificate shall contain, report about the behavioural pattern of the students.
27. Hostel wardens to have mobile phones to be accessible at all hours.
28. For the initial period of 3 months, from the date of start of the college, hostellers should not be allowed to move out from the hostel between 8.30 pm to 5.00 am.
29. Disciplinary committees to be formed.
30. Audio-visual aids, counseling session, workshops, Painting, design competitions may be organized.
31. Services of Shri P.K. Tiwari, Senior Advisor and retired Director General Police should be utilized to make the students understand the repercussions of their involvement in

ragging. For this purpose, class wise programmes may be chalked out in consultation with Shri P.K. Tiwari, Senior Advisor, and thereafter, action may be taken accordingly.

32. Each & Every HOD to hold meetings with their Department and impress upon the faculty and staff that, curbing the menace of ragging, was the duty of each Individual being a member of the Institute.

PRINCIPAL

Copy to –

1. Vice Chairman
2. Director
3. Sr. Advisors
4. All Programme Coordinators
5. Chief Hostel Warden, CAO, Librarian
6. Registrar, OS – As discussed, submit the report on Monday i.e. on July 27, 2015

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Dear Students,

1. We welcome and congratulate you for seeking admission in this college. It is a fact that in this transitional phase you have left your school life and probably homely environment and would be entering into a new phase. Therefore, we would be more than willing to help you solving problems/difficulties, if any faced by you as a fresher and would extend all the necessary help.
2. To overcome the menace of ragging, college, administration has already made plans for FRESHERS' inducationa and orientation, which promote efficient and effective means of integrating. These planse will be communicated to you by the office shortly.
3. Besides, we all would ensure that ugly scar of ragging is obliterated from the face of all educational institutions. Here, we would like to inform you that you may turn up to the following persons in case of any help/guidance in the most unlikely event of the so-called ragging.

S.No.	Name	Designation	Mobile Number
1.	Dr. UK Pareek	Chief Proctor	9785506667
2.	Ms. Ruchi Mathur	Proctor	9828159024
3.	Mr. Anshul Mittal	Proctor	9772620462
4.	Ms. Shruti Kalra	Proctor	9414371413
5.	Dr. M. P. Singh	Proctor	9414203639
6.	Dr. Anita Jain	Chief Librarian	9829230353
7.	Ms. Sanjay Raghav	Warden Girls Hostel	9982603534
8.	Mr. Ravi Bhatnagar	Transport Incharge	9024149459
9.	Sh. PK Gupta	Chief Warden/CAO	9982682475
10.	Sh. Ashok Sharma	Warden Boys Hostel	9982682914

4. You are instructed that you should desist form doing anything against your will even if required by the seniors and should not have any fear, as the institution cares for you and shall not tolerate any mischief against any student.
5. You are requested not to hesitate in seeking any help and guidance and to report any incidents of harassment, teasing etc., either as victim or even as a witness.

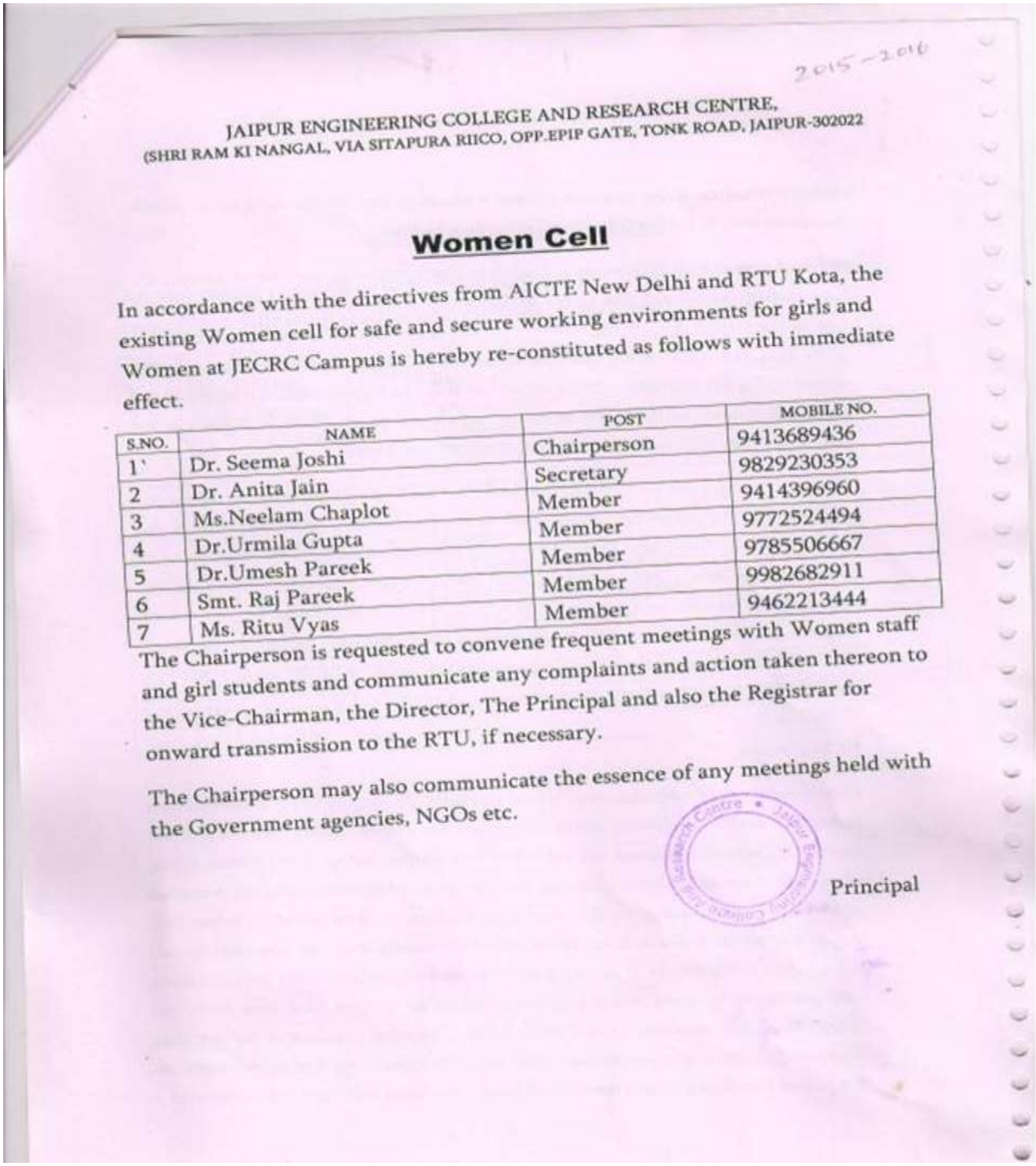
May I add that your college has always been ragging-free.

Wishing you a bright future in the college.

July 2015

Principal

WOMEN CELL



2015-2016

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE,
(SHRI RAM KI NANGAL, VIA SITAPURA RIICO, OPP.EPIP GATE, TONK ROAD, JAIPUR-302022

Women Cell

In accordance with the directives from AICTE New Delhi and RTU Kota, the existing Women cell for safe and secure working environments for girls and Women at JECRC Campus is hereby re-constituted as follows with immediate effect.

S.NO.	NAME	POST	MOBILE NO.
1`	Dr. Seema Joshi	Chairperson	9413689436
2	Dr. Anita Jain	Secretary	9829230353
3	Ms.Neelam Chaplot	Member	9414396960
4	Dr.Urmila Gupta	Member	9772524494
5	Dr.Umesh Pareek	Member	9785506667
6	Smt. Raj Pareek	Member	9982682911
7	Ms. Ritu Vyas	Member	9462213444

The Chairperson is requested to convene frequent meetings with Women staff and girl students and communicate any complaints and action taken thereon to the Vice-Chairman, the Director, The Principal and also the Registrar for onward transmission to the RTU, if necessary.

The Chairperson may also communicate the essence of any meetings held with the Government agencies, NGOs etc.

Principal

10.1.4. Delegation of financial powers

NATIONAL SOCIETY FOR ENGINEERING RESEARCH AND DEVELOPMENT, JAIPUR.

10-10-2015

Delegation of powers to the various authorities

The Chairman, JECRC Foundation, and the National Society for Engineering Research and Development, has directed me to convey the delegation of powers to the various authorities working in the NSERD promoted institutions. Our Esteemed Chairman is of the view that the College Principal and the Registrar should have adequate powers so that they are in a position to comply with the requirements of the regulatory and supervising bodies, and conduct day-to-day affairs in a positive and peaceful manner, under their own authority and signatures.

With a view to ensuring smooth and unambiguous functioning of the colleges, viz., Jaipur Engineering College And Research Centre, as also JECRC UDML College of Engineering, the delegated powers / authority are detailed hereunder:

Designated Authority	Powers delegated
a) Principal	i) As Head of the Institution, he shall exercise his authority for institution building. He will act as Competent Authority for all Faculty Members and Officer staff and be responsible for overall human resource management, their appointment, utilization, retrenchment, termination, disciplinary action, etc. He will exercise signing powers as Competent Authority. ii) He will act as superintendent and guide for all items of work related to AICTE, RTU (Affiliating University), UGC, MHRD, Technical Education Department GOR, State Level Fees Determination Committee, and other regulatory or higher bodies. iii) Establish a climate in which faculty members and the students can develop self-discipline, and promote research. iv) To formulate the Budget and assess the infrastructural and other requirements well in advance and get the same approved from the Secretary, NSERD before execution. v) Impress amount of Rs. 1,00,000/- (Rs. One Lakh Only) is also delegated for routine exercise.
b) Registrar	a) He shall act Competent Authority for all office and sub-staff, and exercise signing powers as competent authority for their appointment, utilization, retrenchment, termination, disciplinary action, etc. b) He shall act as **Compliance Officer** to fulfill the regulatory guidelines etc. of AICTE, RTU (Affiliating University), UGC, MHRD, Technical Education Department GOR, State Level Fees Determination Committee, and other regulatory or higher bodies. He shall act as

Chairman: Overall Incharge of the College

Principal: responsible for faculty development and research activities; smooth functioning of the institute.

Program Coordinators / HODs: Are responsible for administration and academic activities of their program / departments.

Dean I Year: is responsible for administration and academic activities related to I year.

Dean II Shift: is responsible for administration and academic activities related to II shift.

Maintenance Incharge: is responsible for maintenance related issues in the campus.

T & P Officer: is responsible for Training and placement related activities in the Campus.

Registrar: Deals with admissions, registration and results of students and all other issues related to students and the Rajasthan Technical University.

Accounts: All issues related to student fees, budget and payment.

Establishment: Deals with all issues related to staff recruitment, increements, promotions, provident fund, gratuity and salary bills etc.

Financial Power Deligation to the Program Coordinators/HODs – Impress amount of Rs. 10,000/- is sanctioned to the all Program Coordinators/HODs and on submission of accout further amount is dispursed.

10.1.5. Transparency and availability of correct/unambiguous information in public Domain

All Information's are available at College Website, Students Broachers, Liberty etc.


JECRC-Brochure-2018.pdf
jecrcfoundation.com/pdf/JECRC-Brochure-2018.pdf
Principal's Message
Vision
Mission
JEC FOUNDATION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Courses Offered
Training and Placements
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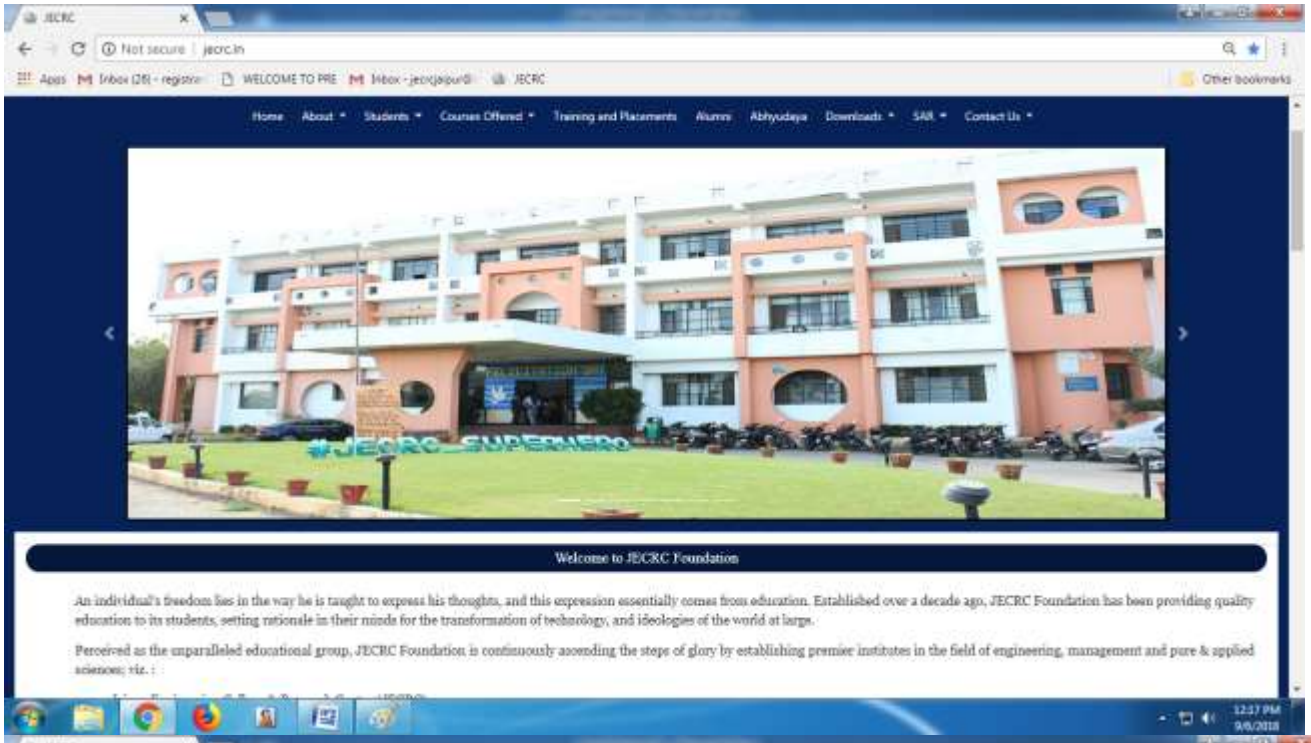
Welcome to JECRC Foundation
An individual's freedom lies in the way he is taught to express his thoughts, and this expression essentially comes from education. Established over a decade ago, JECRC Foundation has been providing quality education to its students, setting rationale in their minds for the transformation of technology, and ideologies of the world at large.
Perceived as the unparalleled educational group, JECRC Foundation is continuously ascending the steps of glory by establishing premier institutes in the field of engineering, management and pure & applied sciences; viz. :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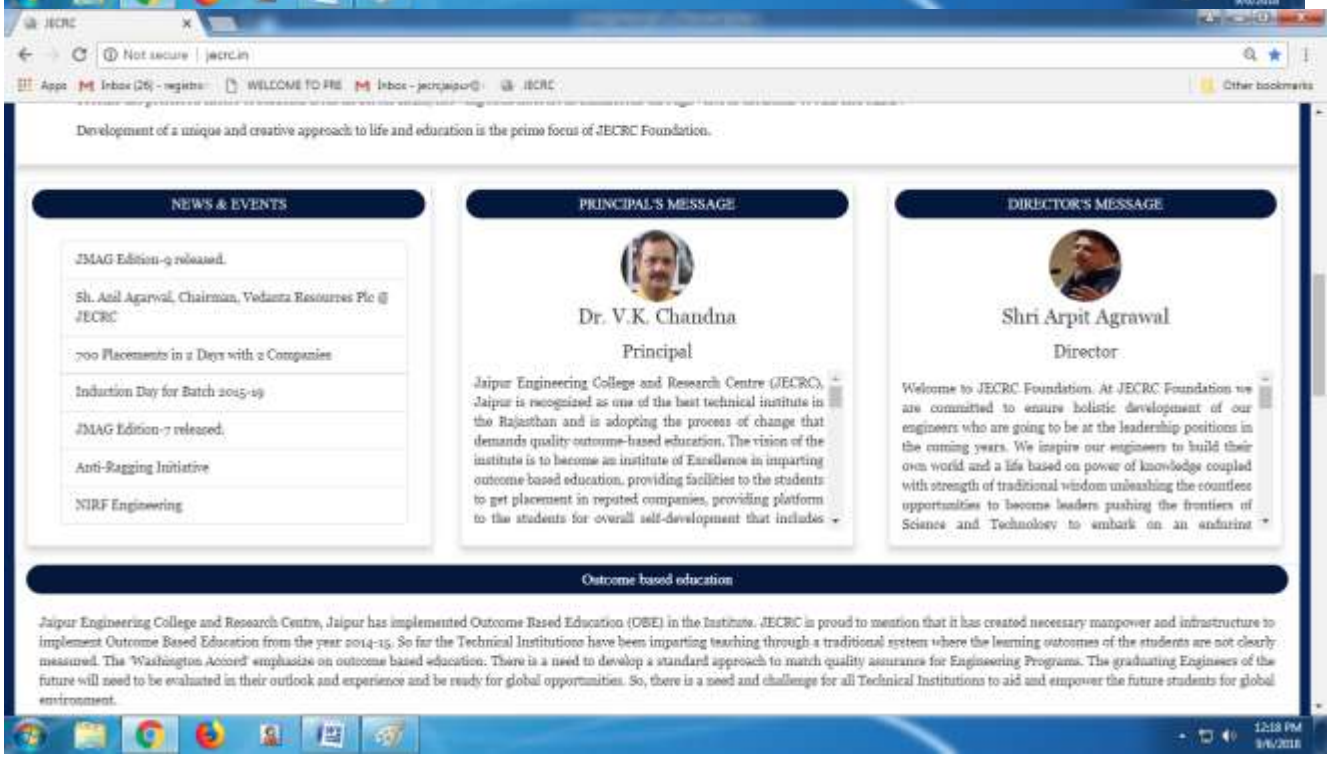
JECRC
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Development of a unique and creative approach to life and education is the prime focus of JECRC Foundation.
NEWS & EVENTS
JMAG Edition-9 released.
Sh. Anil Agarwal, Chairman, Vedanta Resources Plc @ JECRC
700 Placements in 2 Days with 2 Companies
Induction Day for Batch 2015-19
JMAG Edition-7 released.
Anti-Ragging Initiative
NIRF Engineering
PRINCIPAL'S MESSAGE
Dr. V.K. Chandna
Principal
Jaipur Engineering College and Research Centre (JECRC), Jaipur is recognized as one of the best technical institute in the Rajasthan and is adopting the process of change that demands quality outcome-based education. The vision of the institute is to become an institute of Excellence in imparting outcome based education, providing facilities to the students to get placement in reputed companies, providing platform to the students for overall self-development that includes
DIRECTOR'S MESSAGE
Shri Arpit Agrawal
Director
Welcome to JECRC Foundation. At JECRC Foundation we are committed to ensure holistic development of our engineers who are going to be at the leadership positions in the coming years. We inspire our engineers to build their own world and a life based on power of knowledge coupled with strength of traditional wisdom unleashing the countless opportunities to become leaders pushing the frontiers of Science and Technology to embark on an enduring
Outcome based education
Jaipur Engineering College and Research Centre, Jaipur has implemented Outcome Based Education (OBE) in the Institute. JECRC is proud to mention that it has created necessary manpower and infrastructure to implement Outcome Based Education from the year 2014-15. So far the Technical Institutions have been imparting teaching through a traditional system where the learning outcomes of the students are not clearly measured. The 'Washington Accord' emphasize on outcome based education. There is a need to develop a standard approach to match quality assurance for Engineering Programs. The graduating Engineers of the future will need to be evaluated in their outlook and experience and be ready for global opportunities. So, there is a need and challenge for all Technical Institutions to aid and empower the future students for global environment.


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Perceived as the unparalleled educational group, JECRC Foundation is continuously ascending the steps of glory by establishing premier institutes in the field of engineering, management and pure & applied sciences; viz. :
Jaipur Engineering College & Research Centre (JECRC)
JECRC University
Every year, more than 5000 students entrust JECRC Foundation with the responsibility of shaping their minds for a better future. Commanding the priority list of best engineering colleges in Jaipur, it has become the preferred choice of students from all across India, showing keen interest in admissions through various mediums of JEE and REAP.
Outcome based education
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Outcome Based Education
OBE
OBLT
OBA
The OBE Framework
The Outcome Based Education focuses on outcomes through achievement of learning objectives of their program. The OBE strongly emphasize student centric learning and adaptation of modern teaching-learning systems. JECRC has gone far ahead in implementing OBE where every student will distinctly write-down the learning outcomes in every hour of lecture he/she attends. The Teachers have been given specialized training to embark on OBE method of delivery and use of modern teaching-learning systems. With this OBE, it is expected that the students distinctly gain excellent knowledge in their relevant branch and contribute to the development of the organizations where they are employed.
JECRC is also a Centre for imparting training on NBA which emphasize on OBE. The OBE process at JECRC is expected to raise the standards of Technical Education imparted in the Institute in the coming years. JECRC is committed for creating knowledge, skills and problem solving abilities among students of all ranks.


JECRC
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Photo Gallery
OUR PRIDE
SMART INDIA
JECRC 0.1
TEDx JECRC

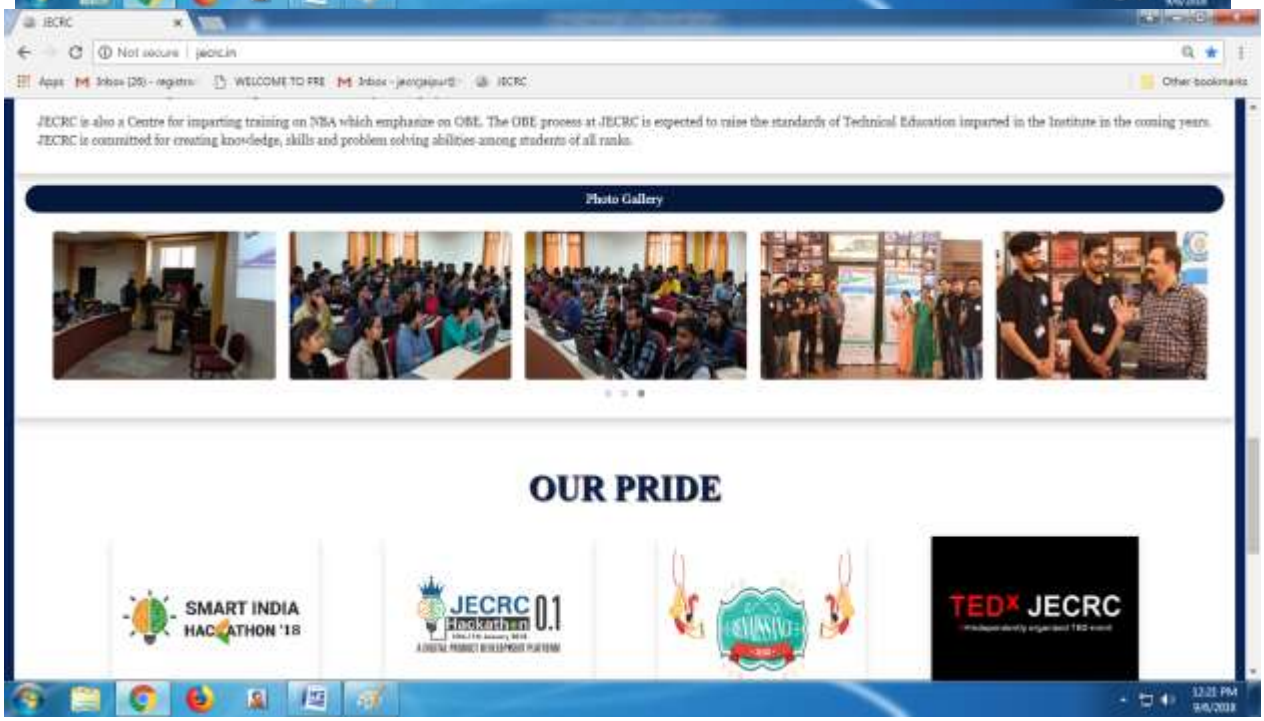
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Photo Gallery
OUR PRIDE
SMART INDIA HACKATHON '18
JECRC 0.1 Hackathon
TEDx JECRC

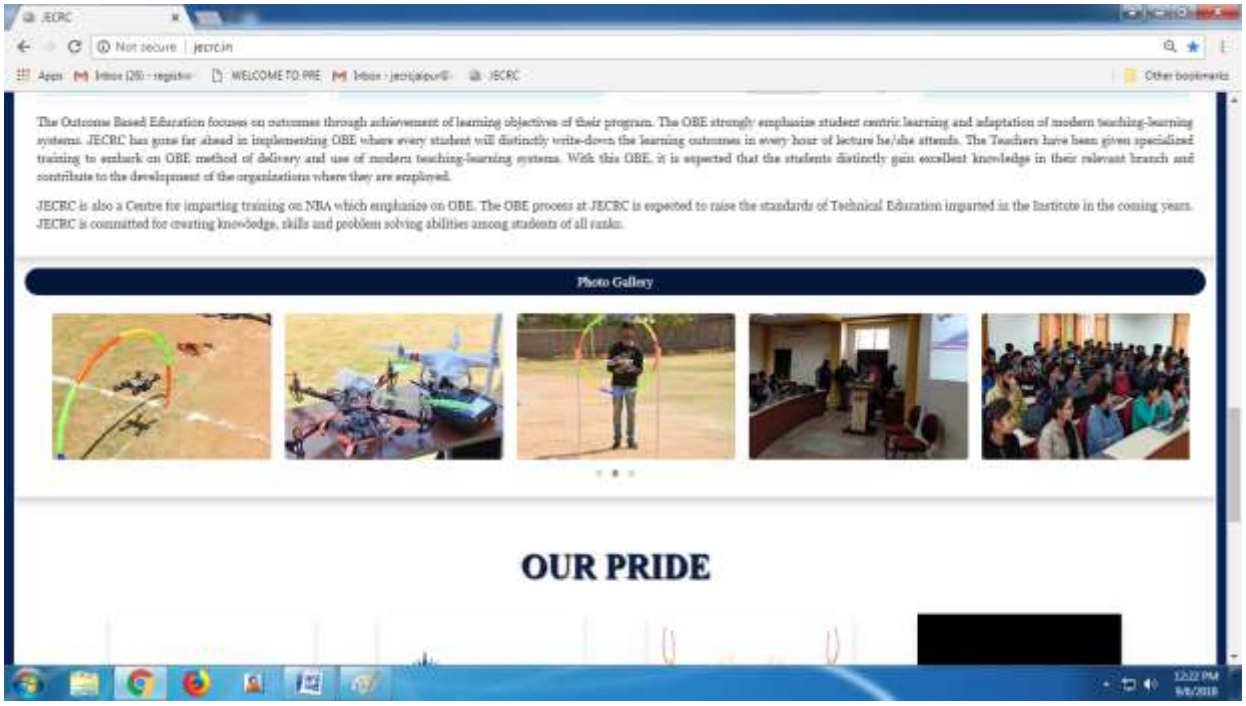
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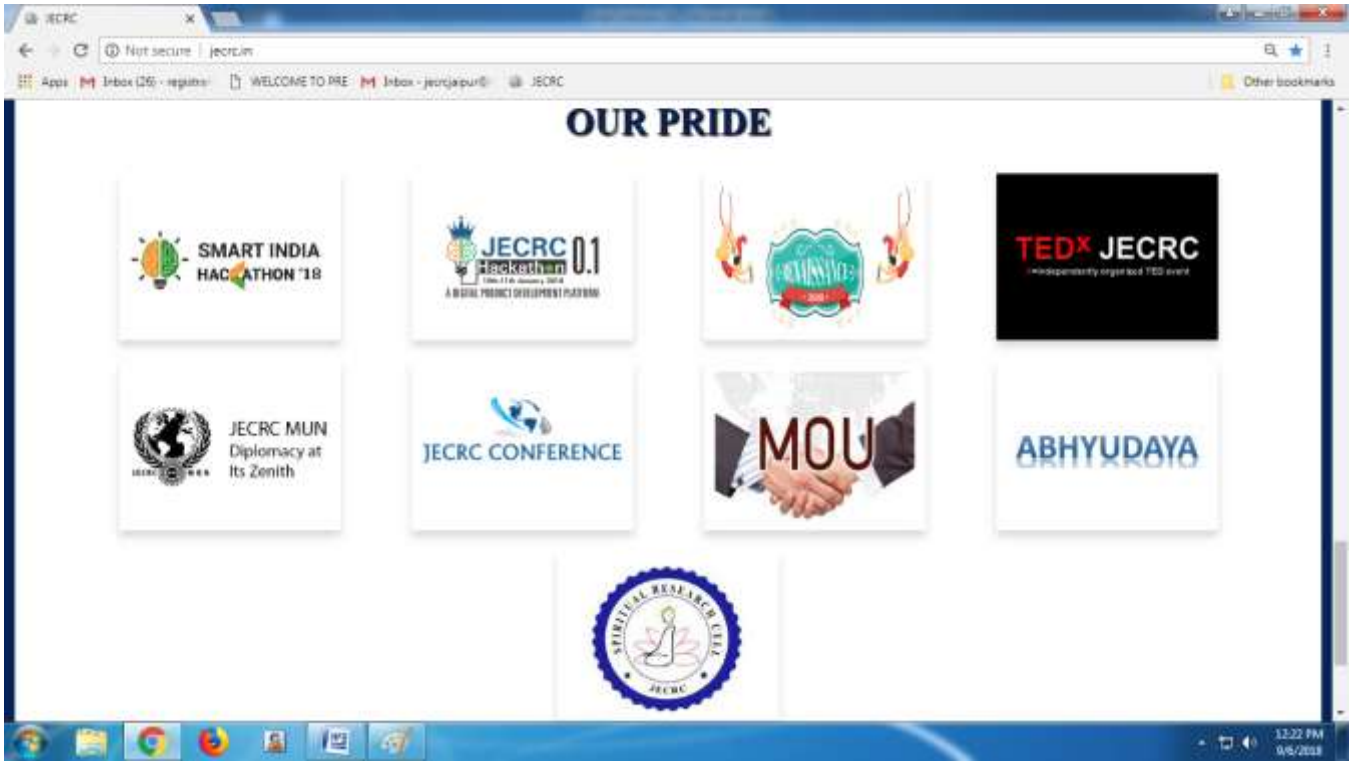
Photo Gallery
OUR PRIDE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JECRC Hackathon 0.1
TEDx JECRC
JECRC MUN
Diplomacy at Its Zenith
JECRC CONFERENCE
MOU
ABHYUDAYA


Jaipur Engineering College And Research Centre
Approved by AICTE & Affiliated to Rajasthan Technical University, Kota (REAP CODE: 020)
Shri Ram ki Nangal, via Sitapura RIICO, Tonk Road, Sukhpuria, Bambala, Jaipur, Rajasthan 302022
Home
About
Students
Courses Offered
Training and Placements
Alumni
Abhyudaya
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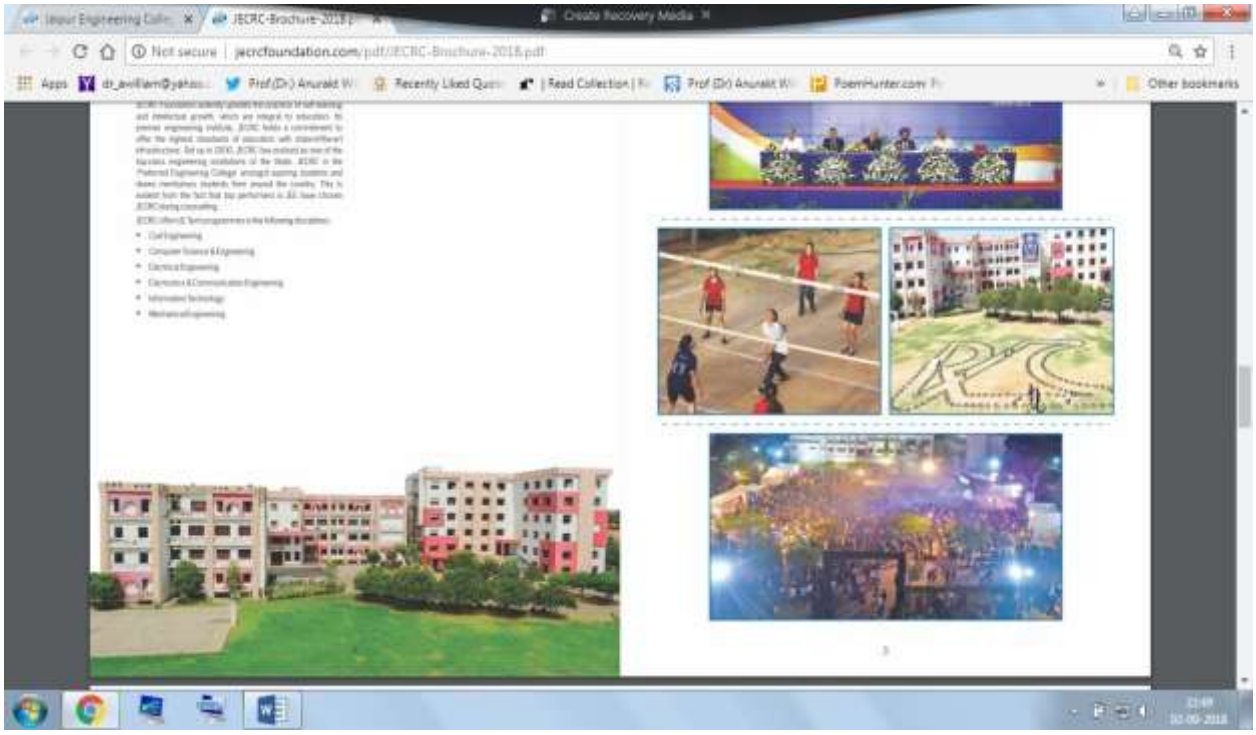
JECRC Brochure
CSE Newsletter
ME Newsletter
ECE Newsletter
IT Newsletter
CE Newsletter
Bonafide Form
Welcome to JECRC Foundation

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THE HIGHEST NUMBER
Of Microsoft Student Partner
10
www.jecrcfoundation.com


CONTACT US
News & Events
Welcome to JECRC Foundation
"When education sees its course, a dream opens its eyes", is the belief of the foundation under the aegis of which top engineering colleges in India are set up. Education is just a spark for which it ignites the minds and inflames the intellect. Ignited minds change the world and bring us a better tomorrow.
It goes beyond developing one's knowledge and sharpening his skills as it paves the way for progress of a nation and its generations to come.
In the 18 years of educational journey the JECRC Foundation has set up some of the best engineering colleges and nurtured the essence of growth in education. The JECRC Engineering College was the first venture of the foundation in the league of the best colleges for B.Tech in Rajasthan. The Foundation has earned respect of being the most reputed educational group in north India with the establishment of some of the best colleges in Rajasthan, prime focus being the holistic approach and overall development of its students.
01 JMAG Edition-9 released
02 Sh. Anil Agarwal, Chairman, Vedanta Resources Plc @ JECRC
Anti-Ragging Initiative
NIRF Engineering
NIRF Overall
Photo Gallery
Media Coverage
JECRC UDML
JECRC UNIVERSITY
JECRC Foundation
JECRC UNIVERSITY
BUILD YOUR WORLD
LEEP-2018
INTERNAL SLIDING REAP-2018
INTERNAL SLIDING NOTICE
College & Hostel Fee
Ist Installment Demand Notice
2018


JECRC Foundation: Notic
Not secure | jecrcfoundation.com/anti_ragging.php
Apps
Other bookmarks
JECRC Foundation
ABOUT US
INSTITUTIONS
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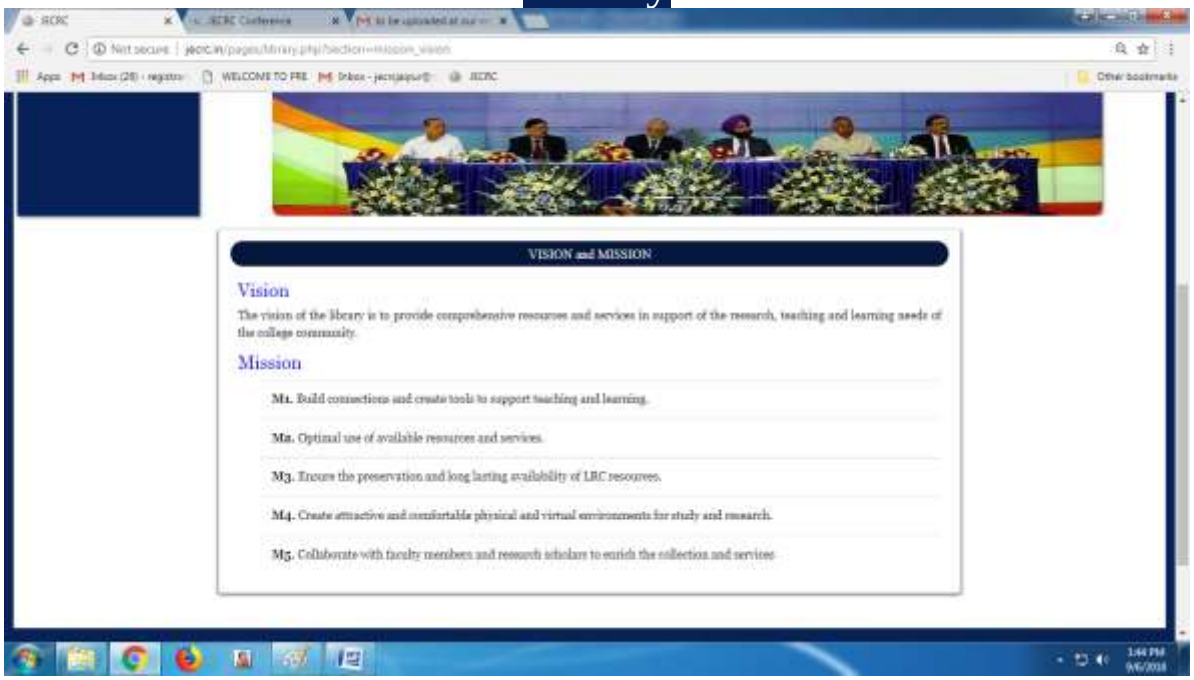
UNIQUE INITIATIVES
GLOBAL COLLABORATIONS
EVENTS & WORKSHOPS
ACHIEVEMENTS
DIGNITARIES AT CAMPUS
INDUSTRIAL LIAISONS
PLACEMENTS
RECRUITMENT
CENTRE FOR DEEP LEARNING
CONTACT US
Anti-ragging Initiatives
As per guidelines issued by the Hon'ble Supreme Court of India, an 'Anti-ragging Committee' has been formed at JECRC Foundation. The High-powered committee is functioning under the Chairmanship of Mr M.L. Sharma. The committee has been established to check the menace of ragging in the premises of the institute.
Any student found guilty of ragging can face severe punishment, which may include debarring from lectures & examinations, expulsion, rustication or fine. Any complaint of ragging will also be lodged with police. However, with collective efforts of the faculty, management's direction and support of our students no incidence of ragging.
» UGC Regulation
» Supreme Court Directives
» Anti Ragging Affidavit from Parents
» Anti Ragging Affidavit from Students
» Anti-Ragging Committee

Anti-Ragging Committe

S.No.	Name	Designation	Mobile Number
1.	Dr. CK Pareek	Chief Proctor	9785506667
2.	Ms. Ruchi Mathur	Proctor	9828159024
3.	Mr. Anshul Mittal	Proctor	9772620462
4.	Ms. Shruti Kalra	Proctor	9414371413
5.	Dr. M.P. Singh	Proctor	9414203639
6.	Dr. Anita Jain	Chief Librarian	9829230353
7.	Ms. Sanjay Raghav	Warden Girls Hostel	9982603534
8.	Mr. Ravi Bhatnagar	Warden Girls Hostel	9982603534
9.	Sh. PK Gupta	Chief Warden/CAO	9982682475
10.	Sh. Ashok Sharma	Warden Boys Hostel	9982682904

Library



VISION and MISSION

Vision

The vision of the library is to provide comprehensive resources and services in support of the research, teaching and learning needs of the college community.

Mission

M1. Build connections and create tools to support teaching and learning.

M2. Optimal use of available resources and services.

M3. Ensure the preservation and long lasting availability of LRC resources.

M4. Create attractive and comfortable physical and virtual environments for study and research.

M5. Collaborate with faculty members and research scholars to enrich the collection and services


JECRC
JECRC Conference
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jecrc.in/pages/research.php?section=home
Apps
WELCOME TO PRE
JECRC
Other bookmarks
Spiritual Research Lab
Meditation Survey at College
Yoga Day at JECRC University
Self Empowerment through Meditation


JECRC
JECRC Conference
Not secure
jecrc.in/pages/research.php?section=home
Apps
WELCOME TO PRE
JECRC
Other bookmarks
Self Empowerment through Meditation
AICTE Health Survey
Self Empowerment through Meditation -II
Research Presentation at London International Conference
Yoga Class during Smart India Hackathon


ABOUT US
INSTITUTIONS
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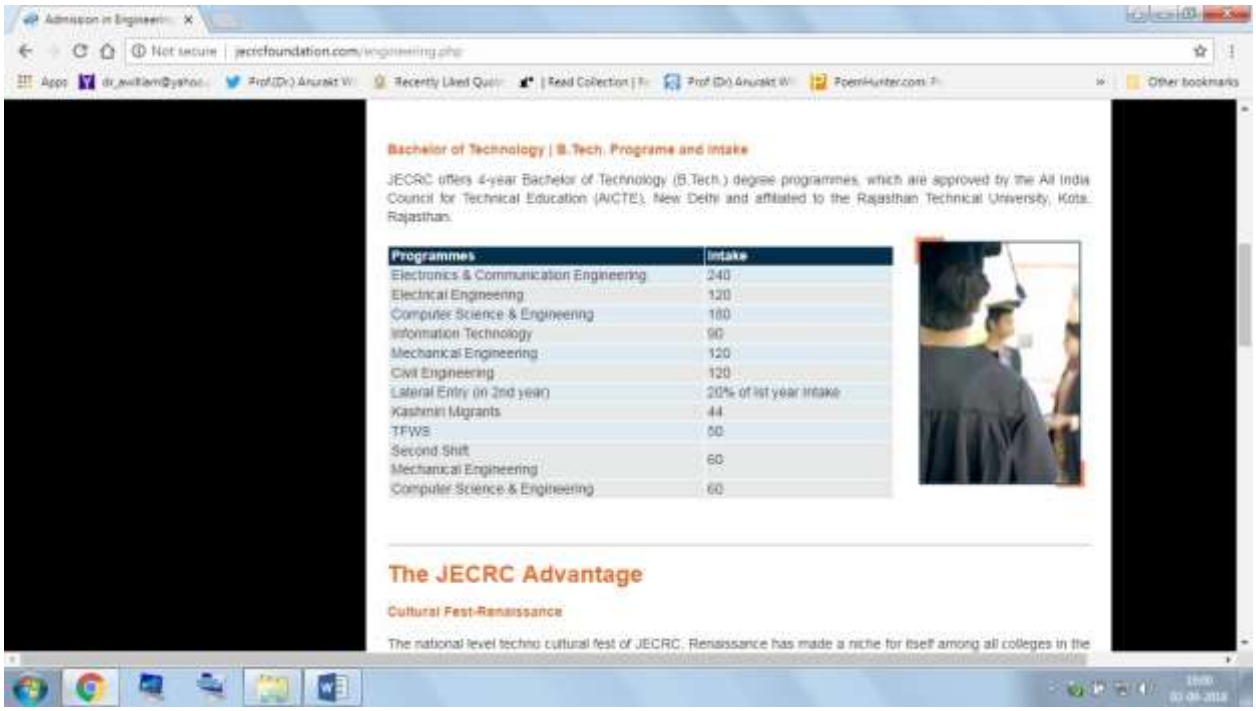
GLOBAL COLLABORATIONS
EVENTS & WORKSHOPS
ACHIEVEMENTS
DIGNITARIES AT CAMPUS
INDUSTRIAL LIAISONS
PLACEMENTS
RECRUITMENT
CENTRE FOR DEEP LEARNING
CONTACT US
Jaipur Engineering College & Research Centre
Admission Enquiry
Brochure
Faculty List
The JECRC Foundation ardently upholds the practice of self learning and intellectual growth, which are integral to education. Its premier college for B.Tech in Rajasthan. JECRC holds a commitment to offer the highest standards of education with state-of-the-art infrastructure.
Set up in the year 2000, The JECRC has a well-qualified and experienced faculty, excellent management and infrastructure, that ensure academic
excellence and overall development of its students. The JECRC is the most preferred choice amongst the aspiring students for B.Tech. programmes. This is evident from the recent trends witnessed during the RPET and AIEEE/JEE counselling.
Bachelor of Technology | B.Tech. Programe and Intake


Bachelor of Technology | B.Tech. Programe and Intake
JECRC offers 4-year Bachelor of Technology (B.Tech.) degree programmes, which are approved by the All India Council for Technical Education (AICTE), New Delhi and affiliated to the Rajasthan Technical University, Kota, Rajasthan.
Programmes
Intake
Electronics & Communication Engineering 240
Electrical Engineering 120
Computer Science & Engineering 180
Information Technology 90
Mechanical Engineering 120
Civil Engineering 120
Lateral Entry (in 2nd year) 20% of Ist year intake
Kashmiri Migrants 44
TFWS 50
Second Shift
Mechanical Engineering 60
Computer Science & Engineering 60
The JECRC Advantage
Cultural Fest-Renaissance
The national level techno cultural fest of JECRC, Renaissance has made a niche for itself among all colleges in the


Jaipur Engineering College And Research Centre
Trainings and Placements
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Vision and Mission
Center for Deep
Learning
Industrial Liaisons
Companies List
Statistics
Placements at a Glance


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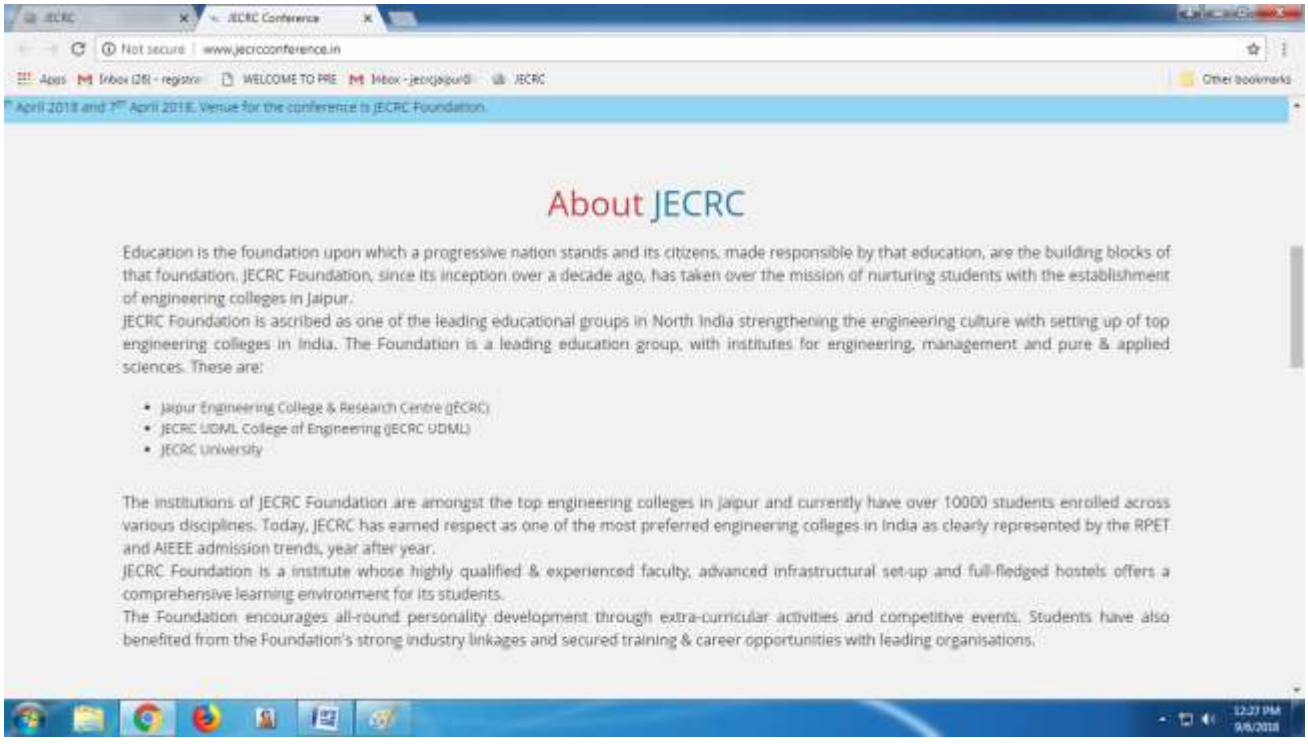
Sectors of Mass Recruiter
Infosys
accenture
IBM
• Aerospace and Defense
• Airlines
• Automotive
• Industrial Manufacturing
• Oil & Gas
• Banking & Financial
• Automotive & Industries
• Energy
• Chemicals
• High Tech
• Consumer Goods & Services
• Capital Market
• Artificial Intelligence
• Mobile Technologies
• Life Science
• Telecommunication
• Banking & Financial


JECRC CONFERENCE
Jaipur,Rajasthan,India
Organized By :
Our Conferences :
ICITDA 2018
1st International conference of Department of Information Technology
RTDEEE 2018
2nd International conference of Department of Electrical and Electronics & Communication Engineering
RTDME 2018
2nd International conference of Department of Mechanical Engineering
ICETEAS 2018
1st International conference of Department of Computer Science and Engineering
ICMMC 2018
2nd International conference of Department of Mathematics


About JECRC
Education is the foundation upon which a progressive nation stands and its citizens, made responsible by that education, are the building blocks of that foundation. JECRC Foundation, since its inception over a decade ago, has taken over the mission of nurturing students with the establishment of engineering colleges in Jaipur.
JECRC Foundation is ascribed as one of the leading educational groups in North India strengthening the engineering culture with setting up of top engineering colleges in India. The Foundation is a leading education group, with institutes for engineering, management and pure & applied sciences. These are:
Jaipur Engineering College & Research Centre (JECRC)
JECRC UDML College of Engineering (JECRC UDML)
JECRC University
The institutions of JECRC Foundation are amongst the top engineering colleges in Jaipur and currently have over 10000 students enrolled across various disciplines. Today, JECRC has earned respect as one of the most preferred engineering colleges in India as clearly represented by the RPET and AIEEE admission trends, year after year.
JECRC Foundation is a institute whose highly qualified & experienced faculty, advanced infrastructural set-up and full-fledged hostels offers a comprehensive learning environment for its students.
The Foundation encourages all-round personality development through extra-curricular activities and competitive events. Students have also benefited from the Foundation's strong industry linkages and secured training & career opportunities with leading organisations.

College Broachers

INFORMATION FOR THE NEW ENTRANTS

Vision of the Institute

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission of the Institute

- Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.
- Identify, based on informed perception of Indian, regional and global needs, the areas of focus and provide platform to gain knowledge and solutions.
- Offer opportunities for interaction between academia and industry.
- Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders may emerge.

JECRC is a dream Institute for many aspirants where the ambiance is different from that of your school and provides platform to nurture overall development in education and extra-curricular activities. The management, faculty members, staff members and the students in the higher classes may expect you to behave like a grown-up and responsible citizen. During the tenure of your degree course, you have to take your own responsibility regarding required attendance in the college and participation in Co-curricular and Extra-curricular activities. If you are sincere towards studies and attend the theory, practical and tutorial classes regularly (the attendance should not be less than 75%) and take all the tests and examinations as per the requirement of the affiliating University, then not only your learning attribute will improve but also your performance to get your in the direction of higher studies/placements.

JECRC Institute promotes varied experiences and the outcome based teaching-learning provides the information about your learning outcomes. The information of different activities (academic and / or otherwise) is provided through the notices on the Notice Boards and also you have to be in constant touch with your mentor as assigned to you.

Further, your efforts of getting more than 60% marks in aggregate without any back paper throughout will help you to access the platform to get placement in a reputed organization with higher salary package through campus interview selection process.

The institute will provide you the platform to groom yourself in various activities at leadership positions, also provide you the opportunity in the direction of lifelong learning, ethics, innovation, project management etc. along with technical knowledge.

To adapt yourself to the changed environment, you may consider the below mentioned points :

1. Inculcate the habit of coming to the college well-in-time and attend the all the classes regularly.
2. Wearing slippers are not allowed on the campus.
3. Wearing college identity card on the campus is compulsory
4. If you are commuting to the campus through two wheelers, wearing good quality helmet is compulsory even for pillion.
5. You may approach your mentor/proctor/HOD for any queries/concerns.
6. You should maintain the originality of your own personality and should not be unduly impressed or swayed by your friends in the College. You must know what is right/wrong for you.

I am sure, with these points of advice, you will smoothly sail through the transition period and emerge as an excellent professional.

PRINCIPAL

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

CONDUCT RULES AND GUIDELINES FOR STUDENTS

A. **Discipline and wisdom** are essential traits of a professional. Students of JECRC are expected to observe the highest standards of discipline.

B. **The following acts by a student shall be construed as indiscipline:**

1. **Misbheavior** with teachers, employees of the college, colleagues, girls students, juniors, wardens, proctors and visitors and acting against decorum in college premises-classrooms, laboratories, playgrounds, any type of transportation and hostels.
2. **Ragging** New Students.
3. Using **insulting, abusive and indecent language** in general and in the college premises and hostel, in particular.
4. **Damaging college property** including apparatus, books, fixtures and fittings, building, vehicles, fauna and flora in the college.
5. **Not attending class** and not participating in curricular activities as per the University ordinances.
6. **Not appearing in class tests and examinations.**
7. **Not paying attention to mentor** advice and warning notices.
8. **Wearing poor, indecent** and **Provocative dresses.**
9. **Coming late** to the college and leaving early.
10. **Leaving college premises** or hostel **without permission** of the Principal, Teacher, mentor, warden etc. as the case may be.
11. **Not paying dues and fee in time.**
12. **Not following the college calendar** and timing for co-curricular and extracurricular activities such as games and sports, cultural activities etc.
13. Forming clubs, association, society, forum or groups without the permission of appropriate authority such as Principal, Mentor, warden, proctor or other college authority.
14. **Spreading unfounded rumors** or canards, which may disrupt the college activities and disturb the college discipline.
15. **Using unfair means** in test and examinations.
16. **Causing injury to any person** or participating in acts of hooliganism within and outside the college campus and in public places such as roads, bus stand, cinema halls, railway station, airport, factories, restaurants, dhabas , hotels etc.
17. Indulge in any act, which may on investigation be confirmed as an act of indiscipline by the college or by Law.

C. **Reporting of Acts of Indiscipline**

The following will observe and report acts of indiscipline by the students to the Apex Disciplinary Committee consisting of the Senior Advisor, Principal, director HRD, one or more HODs and a member of the society or its nominee.

1. **Class/Subject teacher :** Late coming, shortage of attendance, indiscipline, ragging and lack of attentiveness or concentration in classes, indecent clothing, poor performance in test and examinations and laboratory activities and workshops.
2. **Mentor :** General behaviour of student with teachers, colleagues, employees etc.
3. **Warden :** Behaviour in hostels and default in paying dues.
4. **Librarian :** Behaviour in library, damages to books, theft of books etc.
5. **Proctor :** Late coming / early going, general behaviour in the campus with colleagues, teachers, employees etc. Discipline in the public place.
6. **Any employee :** Affected by an act of indiscipline.
7. **Any Student :** Affected by act of indiscipline.

D. Anti-Ragging Measures

a) All students shall follow the UGC/AICTE Regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009, State Government/RTU/College Authorities Guidelines etc. on the subject.

b) Any violation of the guidelines would result in expulsion from the college besides the penal action as may be decided by the authorities in this regard.

E. Penalty for acts of Indiscipline

When an act of indiscipline has been reported to the Apex Discipline Committee (ADC) a sub-committee formed by ADC shall investigate the reported act of indiscipline thoroughly and submiit a detailed report on the incident.

The ADC will then examine the report and take suitable action against the incumbent depending on the serverity of the act of indiscipline.

The following penalty may be imposed on a student.

1. Warning and Reprimand
2. Fine
3. Warning and Fine
4. Deduction of marks in DECA marks
5. Withholding permission to participate in an activity or examination
6. Rustication from the College for a certain period
7. Reporting to police if the act falls under penal law
8. Removal from hostel

F. Some Specific Penalties

S. No.	Area of Indiscipline	PUNISHMENT (one or more)
1.	Class attendance less than 75%	Not allowed to appear in examinations
2.	Coming late to college	1. Warning 2. Deduction of discipline marks
3.	Damage to items and property	1. Recovery of cost 2. Appropriate fine
4.	Damage / Theft of Books	1. Warning 2. Recovery of double the cost of Book 3. Fine of Rs. 250/-
5.	Misbehavior	1. Warning 2. Fine of Rs. 1000/- to 2000/-
6.	Indiscipline in Hostel	1. Warning 2. Fine of Rs. 1000/- to 2000/- 3. Rustication from Hostel
7.	Unfair means in examinations	1. Action as per university rules including Police case
8.	Hooliganism / Ragging	1. Warning 2. Deduction of discipline marks 3. Police case 4. Fine that can go to even Rs. One Lakh 5. Rustication from the college

Principal

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

HOSTEL RULES AND REGULATIONS

1. **General**
   a) The hostel facility includes boarding and lodging and is meant for those students of JECRC Foundation who are not residents of Jaipur and are serious about their studies, can maintain proper discipline and decorum.
   b) Hostel facility may be provided to the students, who are of Jaipur only if spare capacity is available at the direction of administration.
   c) The rooms are double and triple seated with facilities such as cot, study table, chair and wardrobe. The students will have to bring their own mattress and pillow with linen.
   d) All residents of the hostel shall follow the hostel rules & regulations.
   e) Hostel room is allotted for the academic session i.e. beginning of session to 3 days after the last date of RTU exams.

2. **Hostel Charges**
   a) The annual hostel charges such as rent and boarding and other miscellaneous charges are decided by the College administration. Such charges are payable by the resident in two instalments. The first instalment is payable at the beginning of the session along with Rs. 5000/- as security deposit. The second instalment is payable as decided by the administration.
   b) If the dues are not paid timely, the membership for the hostel shall cease automatically and the student shall have to apply afresh for renewal /readmission.
   c) No refund shall be made by the college if a resident leaves the hostel before the expiry of the session, and the balance outstanding fee if any will be recoverable from the student.

3. **Vacating the Hostel**
   a) If a resident wishes to leave the hostel he/she will have to give one month's notice and will be allowed to leave only when the Principal and the Chief Warden/CAO give their permission. However, no claim for any refund of charges will be entertained.
   b) Further, if a resident is found or held guilty of indiscipline, ragging or any other such activity which is against the rules, norms and instructions of the institute, he/she shall be directed to leave the hostel by the Chief Warden/CAO. In such cases also there shall be no refund of any charges.
   c) Security charges of Rs. 5000/- will however be refunded after getting a no dues certificate from the Chief Warden/Warden.
   d) If a resident is found involved in ragging, his admission to the hostel and in the college will be cancelled and in view of Supreme Court's directives a case will be registered in the Police Station against him / her.

4. **Mess Rules**
   a) Residents shall take all their meals in the hostel mess. This includes breakfast, lunch, tea and dinner. Non-vegetarian meals or snacks including eggs shall neither be served nor be permitted.
   b) Residents will be served meals only during the prescribed timings as indicated below :

S.No.	Activites	Summer
1.	Breakfast	7.30 to 8.25 a.m.
2	Lunch	11.45 a.m. to 1.15 p.m.
3	Tea	5.30 to 6.00 p.m.
4	Dinner	8.00 to 9.00 p.m.

c) All residents shall be provided common menu.
d) Residents shall not carry their meals wholly or in part, outside the mess. They shall not carry any utensil or other property of the mess outside the dining hall. In case of non-compliance, a fine of Rs. 50/- will be charged from the defaulters.
e) Residents shall not interfere with cooking or other services and shall not handle mess equipment any time.
f) Sick residents may be allowed to eat their meals in their rooms with the written permission of the warden.
g) No outsider shall take breakfast, lunch, tea or dinner without prior written permission of the warden. If permitted, the host resident shall pay the charges in advance to the college through coupons available at college counter.
h) Resident shall coperate with the mess employees and deal with them in a polite and courteous manner.
i) Residents shall pay thier mess dues regularly as prescribed.
j) Lodging and board facility may be made available during vacation provided atleast 60 of the residents stay in the hostel. No boarding charges will be refunded at any time once paid.
k) Dress code - All residents will enter the hostel dining hall in proper presentable dress at all times. Students shall not be allowed to enter in bathroom slippers, shorts and sleeping suits.

5. Entry in / Out of Hostel

a) The following timing shall be observed for maintenance of discipline in Hostel and Institute Campus.
   a. Opening of Hostel Gate - 06.00 a.m.
   b. Closing of Hostel Gate (Boys) - 09.30 p.m.
   c. Closing of Hostel Gate (Girls) - 07.30 p.m. (Summer), 6.00 p.m. (Winter)
b) Residents shall not go outside their rooms between 10:00 and 6:00 a.m. without permission of the Chief Warden/Warden I/C except for attending institute's functions or authorised academic work in the institute. Attendance may be taken during these hours.
c) Residents shall not leave station without obtaining prior written permission of the warden. They shall report to the warden immediately on return.
d) Residents shall not invite any unauthorised person in their hostel. They shall deal only with the authorized vendors, washermen, cobblers etc. during the prescribed hours any pay them at prescribed rates.
e) Visit of outside person (including parents) to residents of hostel will be restricted up to the "Visitors room" only. No hosteller shall take his/her guest to his room in any circumstances. In exceptional circumstances, parents may be allowed to stay for a day in the guest room, on prior approval of Principal/CAO/Chief Warden, on payment of the prescribed charges which are presently Rs. 250/- per bed per day. In no case shall the parent stay in the hosteller's room.
f) No visitors or parents are allowed to enter the hostel rooms in any case.
g) No resident shall stay in the hostel during college hours without a valid reason which must be informed to warden. It is clarified that illness or health reason will be taken as a valid reason, Free period, visitors from outside etc. will not be taken as a valid reason.
h) No day-scholar is permitted to enter the hostel during college hours. Suitable action and fine will be imposed upon him/her if reported by the Chief Warden/CAO.
i) No resident shall leave the college campus without making necessary entries in the register kept with the guard at the college gate/hostel gate. After return he/she enter the time of return in the register.

6. Use & Facilities

a) A student who has opted for hostel shall reside only in the hostel and the room allotted to him/her.
b) Residents shall be reponsible for all furniture, electrical and other fixtures in the their rooms. They shall not

disfigure or paint of stick photos, posters etc on walls, doors and windows or otherwise damage them. Failing Which Damage Charges Shall be levied per room. Residents are expected to maintain perfect discipline and proper atmosphere.

c) Proper use of water and electricity shall be ensured and lights shall be switched off and taps closed when not in use. Defaulters shall be punished @ Rs 100/- per day

d) Proper permission (at least 1 day in advance) shall be taken in writing from warden for going to LG or home.

e) Girls hostellers shall obtain a gate pass from the warden for going out of hostel/campus which shall be limited to 06 nos per month. First year girl hostellers are not allowed any outing in the first six months. However, to cater for any of their urgent legitimate requirements, a warden shall accompany/take them outside the campus once a fortnight, on Sunday for 3-4 hours.

f) At the end of academic year or while leaving the institute, each resident shall handover the charge of his room with all furniture and fixture to hostel warden and pay the cost of all damages and shortage is detected in his her room. In case of non compliance a fine Rs. 250/- will be charged.

g) Residents shall not use heaters or any other power appliance in their rooms.

h) Use of alcoholic drinks or narcotic materials or gambling in any from is strictly prohibited in the hostel and institute premises. Defaulters shall be expelled from the hostel.

i) Residents shall maintain decorum and dignity and shall not create any nuisance or disturbance for the neighbouring residents.

j) Residents shall not organize any party assembly or activity in the hostel without the permission of the Principal.

k) Residents shall not invite any speaker to address a hostel meeting without the permission of the Chief Warden/CAO/Principal.

l) Residents shall not remove newspaper, magazine, furniture, radio, TV or games-material from the common rooms or mishandle or damage them.

m) Residents shall cooperate with the Warden and fellow hostellers and obey warden's instructions on all matters concerning hostel/mess.

7. **Problem Solving Committee**

The residents would form a committee of three residents who would discuss the problems related to hostel every fortnight with the Chief Warden /CAO / Principal with facts and possible suggestions so that reasonable solutions could be found to their problems.

8. **Rights of College Administration**

a) On matters not coverned by these rules, the discretion of Warden / Administration shall be final and binding.

b) The college administration has full right to deny accommodation to any or all students at anytime in the overall interest of the college.

c) The college administration reserves the right to change the rules and regulation in the overall interest of the college.

I have read & Understood the above

(Signature of Student) (Signature of Parents)

Chief Warden / CAO

LIBRARY RULES

A. MEMBERSHIP

1. All the students of JECRC are members of the library.
2. Books will be issued only on presentation of the IDENTITY CARD.

B. WORKING HOURS

1. The library will remain open from 8.15 to 8.00 pm. till further notice.
2. Issue and return services will be available between 8.30 am and 5.00 pm.

C. PROCEDURE

1. Always-bring your "IDENTITY CARD" while you are in the library.
2. Keep you bags, file, books and other materials outside the library in the space provided.
3. Silence should be maintained while you are in the library. Please don't distrub the arrangement at your will.
4. Books will be issued for 14 days. The book should be returned to the library by the DUE DATE otherwise a sum of Rs. 1/- (Rupee one) per day per book will be charged as DUE OVER CHARGE.
5. Once issued the book will not be re-issued on the same day. If there is a demand from any other student, the same book will be retained and will be issued to that student.
6. Members can ask for a title not available in the library but required for academics work.
7. To recall any books before the due date.
8. REFERENCE BOOK'S DICTIONARIES, DIRECTORIES, PERIODICALS are not issuable. Members are expected to refer to the same in the library only.
9. Any damage done to the BOOK AND PERIODICAL replacement, the double cost will be charged along with a fine. Any kind of MARKING, WRITING OF NAME, FOLDING OF PAGES" will be treated as CAUSING DAMAGE".
10. The "RESERVE TEXT BOOK, REFERENCE BOOK" will be issued for reading room only on your identity care. If there is no reserve book please contact Librarian/Asstt. Librarian for help.
11. At the end of the session, every student should return the library cards before proceeding, failing which no new cards will be issued and a fine will be charged.
12. Students have to put their signature in the register available at the entrance of the library and show identity card. Without identity card, no entry will be allowed in the library.
13. Any student found not obeying the library rules and disturbing the library will be deprived of the library facility
14. Reader should observe strict silence inside the library.
15. User of mobile phone are not permitted in the library block.

CHIEF LIBRARIAN

TRANSPORT RULES & REGULATIONS

1. Transport Fee for the entire session will be paid in advance at the beginning of the session.
2. Boarding in the bus will not be allowed without valid Identity card / Fee receipt for the current session.
3. Pickup time from every point is fixed and the bus will not wait at any pickup point.
4. Pickup point and bus route would be decide by the college administration. Every one is required to board the bus from a designated point only.
5. Bus facility is not available on Sunday/Holidays/during Vacation.
6. The college administration is not liable to provide alternative transport arrangement :-
   (i) If a student is required to attend college during Sunday/Holiday/Vacation. Student will have to make his/her own arrangement to reach the college.
   (ii) If a student misses the bus for any reason.
   (iii) If the student is required to go to any other college for examination / other work.
7. The college management is not responsible for theft/loss of property during travel in bus.
8. In case of breakdown of the college bus, no charges towards alternative conveyance would be paid.
9. No one would be compensated for the distance covered by him/her for boarding the bus from designated point.
10. Ragging is strictly prohibited by law. Any student who is travelling in the college bus found indulging himself/hereself directly/ indirectly in disciplinary activities like theft case/ ragging / fighting / quarrelling/ use of abusive language/ misbehave with fellow students, juniors/seniors and also with staff members, disciplinary action shall be initiated against him/her as deemed necessary or may be handed over to police for legal proceedings according to nature of offence for which entire responsibility will lie with the concerned student.
11. Every one is expected to maintain a proper discipline during the journey. Any loss or damage to college bus due to indisciplinary activities by a student during the journey will attract penalty as per rules.
12. The boarding is entirely at risk of the student availing transport faculty. The college administration does not own any type of responsibility towards compensation of any nature whatsoever.
13. Anit-Ragging Measures
    a) all students using the bus facility shall follow the UGC/AICTE regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009, state Government/RTU/College Authorities Guidelines etc. on the subject. The bus facility user student and his/her parent will have to submit separate undertakings in the form of affidavits, before making use of the bus facility.
    b) Any violation of the gridlines would result in expulsion from the bus facility and/or college besides the penal action as may be decided by the authorities in this regard.
14. In case of any emergency, contact transport incharge.

Date .....

Signature of Parent/Guardian **Signature of Student**

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Dear Students,

1. We welcome and congratulate you for seeking admission in this college. It is a fact that in this transitional phase you have left your school life and probably homely environment and would be entering into a new phase. Therefore, we would be more than willing to help you solving problems/difficulties, if any faced by you as a fresher and would extend all the necessary help.
2. To overcome the menace of ragging, college, administration has already made plans for FRESHERS' inducationa and orientation, which promote efficient and effective means of integrating. These planse will be communicated to you by the office shortly.
3. Besides, we all would ensure that ugly scar of ragging is obliterated from the face of all educational institutions. Here, we would like to inform you that you may turn up to the following persons in case of any help/guidance in the most unlikely event of the so-called ragging.

S.No.	Name	Designation	Mobile Number
1.	Dr. UK Pareek	Chief Proctor	9785506667
2.	Ms. Ruchi Mathur	Proctor	98281590XX
3.	Mr. Anshul Mittal	Proctor	9772620462
4.	Ms. Shruti Kalra	Proctor	9414371413
5.	Dr. M. P. Singh	Proctor	9414203639
6.	Dr. Anita Jain	Chief Librarian	9829230353
7.	Ms. Sanjay Raghav	Warden Girls Hostel	9982603534
8.	Mr. Ravi Bhatnagar	Transport Incharge	9024149459
9.	Sh. PK Gupta	Chief Warden/CAO	9982682475
10.	Sh. Ashok Sharma	Warden Boys Hostel	9982682914

4. You are instructed that you should desist form doing anything against your will even if required by the seniors and should not have any fear, as the institution cares for you and shall not tolerate any mischief against any student.
5. You are requested not to hesitate in seeking any help and guidance and to report any incidents of harassment, teasing etc., either as victim or even as a witness.

May I add that your college has always been ragging-free.

Wishing you a bright future in the college.

Principal

10.2. Budget Allocation, Utilization, and Public Accounting at Institute level Summary of current financial year's budget and actual expenditure incurred (for the institutionexclusively) in the three previous financial years.

BUDGET AND EXPENDITURE

Other then R&D

(in INR)

S.No.	Year	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	2016-17	96,48,900	80,47,282	50,65,769	30,94,911
2	2017-18	1,70,65,541	1,53,70,784	81,79,279	73,91,115
3	2018-19 (Proposed)	2,05,05,170			

Training & Placement Budget for students : As per audited statement from accounts.

R&D Budget of institute for students

(in INR)

S.No.	Year	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	2015-16	2,50,000	2,50,000	2,50,000	0
2	2016-17	5,00,000	4,97,600	4,97,600	0
3	2017-18	10,00,000	10,03,100	10,03,100	0
3	2018-19 (Proposed)	20,00,000			

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Non Recurring Budget of the institute

(in INR)

S.No.	Year	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	2016-17	79,00,000	73,88,210	73,88,210	0
2	2017-18	81,00,000	68,92,020	68,92,020	0
3	2018-19 (Proposed)	85,00,000			

Budget and Expenditure (year wise summary)

Year 2016-17

(In INR)

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Computer Science & Engineering	2148200	1570026	1233095	336931
2	Electrical Engineering	121500	55386	25734	29652
3	Civil Engineering	24000	23813	13813	10000
4	Electronics & Communication Engineering	813200	481715	156698	360950
5	InformationTechnology	119000	105027	1711	104450
6	Mechanical Engineering	407300	308069	105500	278900
7	First Year	537100	545024	43439	501585
8	Alumni Annual budget	352500	337478	337478	0
9	JECRC MUN	411000	372331	95000	277331
10	Soch	87000	86000	33000	53000
11	Zarurat	350000	317500	215000	102500
12	Aashayein	125000	105116	95736	9380
13	Suhasini	18000	15350	3900	11450
14	Library	700000	477100	477100	0
15	Sports	150000	125263	77063	48200
16	Student Development Cell	557100	523114	523114	0
17	Other Activities at College level	2728000	2598970	1628388	970582
Total		**96,48,900**	**80,47,282**	**50,65,769**	**30,94,911**

Difference of Total Expenditure: Expenditure by the institute and Fund generated from other sources is the seed money for the upcoming events.

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Year 2017-18

(In INR)

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Computer Science & Engineering	3469800	3052595	2187173	865422
2	Electrical Engineering	343725	241134	42585	198549
3	Civil Engineering	1548000	1503364	15408	1487956
4	Electronics & Communication Engineering	2952900	2654761	1644598	1103670
5	Information Technology	645700	450022	133924	361500
6	Mechanical Engineering	1502770	1338669	828870	570500
7	First Year	404860	264987	47987	217000
8	Alumni Annual Budget	143500	147006	147006	0
9	JECRC MUN	403786	375144	101813	273331
10	Soch	60500	59000	13500	45500
11	Zarurat	332500	286300	168050	118250
12	Aashayein	189500	180900	180900	0
13	Suhasini	24000	21500	9000	12500
14	Library	700000	634300	634300	0
15	Sports	150000	130659	75659	55000
16	Student Development Cell	619000	578315	578315	0
16	Other Activities at College level	3575000	3452128	1370191	2081937
Total		**1,70,65,541**	**1,53,70,784**	**81,79,279**	**73,91,115**

Difference of Total Expenditure: Expenditure by the institute and Fund generated from other sources is the seed money for the upcoming events.

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Proposed Year 2018-19

(In INR)

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Computer Science & Engineering	7550000			
2	Electrical Engineering	692950			
3	Civil Engineering	177720			
4	Electronics & Communication Engineering	1965000			
5	Information Technology	950000			
6	Mechanical Engineering	1372000			
7	First Year	424000			
8	Alumni Annual Budget	200000			
9	JECRC MUN	421000			
10	Soch	70000			
11	Zarurat	350000			
12	Aashayein	145000			
13	Suhasini	42500			
14	Library	1000000			
15	Sports	180000			
16	Student Development Cell	675000			
17	Other Activities at College level	4290000			
Total		**2,05,05,170**			

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10.3. Program Specific Budget Allocation, Utilization

Computer Science & Engineering

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	84400	80129	6100	74029
2	Co-Curricular Activity	288800	267902	5000	262902
3	Consumable Items	1275000	842943	842943	0
4	Non Consumable Items	500000	379052	379052	0
Total		**21,48,200**	**15,70,026**	**12,33,095**	**3,36,931**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	1401800	1135742	270800	864942
2	Co-Curricular Activity	18000	17355	16875	480
3	Consumable Items	1500000	1351209	1351209	0
4	Non Consumable Items	550000	548289	548289	0
Total		**34,69,800**	**30,52,595**	**21,87,173**	**8,65,422**

Proposed for Year 2018-19

S.No.	Activity	Proposed Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	2300000			
2	Co-Curricular Activity	200000			
3	Consumable Items	1550000			
4	Non Consumable Items	3500000			
Total		**75,50,000**			

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Information Technology

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	19000	14210	1711	13550
2	Co-Curricular Activity	100000	90817	0	90900
Total		**1,19,000**	**1,05,027**	**1,711**	**1,04,450**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	605700	418937	133924	330500
2	Co-Curricular Activity	40000	31085	0	31000
Total		**6,45,700**	**4,50,022**	**1,33,924**	**3,61,500**

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	950000			
2	Co-Curricular Activity	0			
Total		**9,50,000**			

Consumable and non consumable items are taken care with the Computer Science & Engineering budget.

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Electrical Engineering

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	56500	50452	20800	29652
2	Co-Curricular Activity	0	0	0	0
3	Consumable Items	15000	4934	4934	0
4	Non Consumable Items	50000	0	0	0
Total		**1,21,500**	**55,386**	**25,734**	**29,652**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	276525	238094	41745	196349
2	Co-Curricular Activity	2200	2200	0	2200
3	Consumable Items	15000	840	840	0
4	Non Consumable Items	50000	0	0	0
Total		**3,43,725**	**2,41,134**	**42,585**	**1,98,549**

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	685000			
2	Co-Curricular Activity	0			
3	Consumable Items	7950			
4	Non Consumable Items	0			
Total		**6,92,950**			

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Mechanical Engineering

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	218500	131500	3500	202000
2	Co-Curricular Activity	78800	74569	0	76900
3	Consumable Items	110000	102000	102000	0
4	Non consumable items				
Total		**4,07,300**	**3,08,069**	**1,05,500**	**2,78,900**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	583500	450000	4000	495000
2	Co-Curricular Activity	71000	63799	0	75500
3	Consumable Items	123270	93270	93270	0
4	Non consumable Items	725000	731600	731600	0
Total		**15,02,770**	**13,38,669**	**8,28,870**	**5,70,500**

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	315000			
2	Co-Curricular Activity	120000			
3	Consumable Items	187000			
4	Non Consumable items	750000			
Total		**13,72,000**			

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Civil Engineering

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	15000	15000	5000	10000
2	Co-Curricular Activity	0	0	0	0
3	Consumable Items	9000	8813	8813	0
4	Non Consumable Items	0	0	0	0
Total		**24,000**	**23,813**	**13,813**	**10,000**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	82000	81081	0	81081
2	Co-Curricular Activity	0	0	0	0
3	Consumable Items	16000	15408	15408	0
4	Non Consumable	1450000	1406875	0	1406875
Total		**15,48,000**	**15,03,364**	**15,408**	**14,87,956**

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	100000			
2	Co-Curricular Activity	0			
3	Consumable Items	77720			
4	Non Consumable Items	0			
Total		**1,77,720**			

PRINCIPAL
Jaipur Engineering College &
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Tonk Road, Jaipur-302 005

Electronics & Communication Engineering

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	303200	325017	0	360950
2	Co-Curricular Activity	0	0	0	0
3	Consumable Items	10000	2463	2463	0
4	Non consumable Items	500000	154235	154235	0
Total		**8,13,200**	**4,81,715**	**1,56,698**	**3,60,950**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	1327900	1010163	0	1103670
2	Co-Curricular Activity	0	0	0	0
3	Consumable Items	25000	11648	11648	0
4	Non consumable Items	1600000	1632950	1632950	0
Total		**29,52,900**	**26,54,761**	**16,44,598**	**11,03,670**

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	1340000			
2	Co-Curricular Activity	0			
3	Consumable Items	25000			
4	Non consumable Items	600000			
Total		**19,65,000**			

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur-303 905

I Year

Year 2016-17

(In INR)

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	286000	303800	0	303800
2	Co-Curricular Activity	26100	25873	2323	23550
3	Consumable Items	141000	139689	28349	111340
4	Non Consumable Items	84000	75662	12767	62895
Total		**5,37,100**	**5,45,024**	**43,439**	**5,01,585**

Year 2017-18

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	288660	173750	0	173750
2	Co-Curricular Activity	40400	44800	1550	43250
3	Consumable Items	73000	45547	45547	0
4	Non Consumable Items	2800	890	890	0
Total		404860	264987	47987	217000

Proposed Year 2018-19

S.No.	Activity	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Curricular Activity	323000			
2	Co-Curricular Activity	10000			
3	Consumable Items	81000			
4	Non Consumable Items	10000			
Total		**4,24,000**			

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur - 303 905

Utilization of allocated funds

Budget and Expenditure - Non Recurring

Year 2016-17

(In INR)

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Deepawali Gifts to the staff members	1000000	917520	917520	0
2	Tent and others	200000	200000	200000	0
3	Printing (Banner, Posters, Brochures etc.)	1200000	1183321	1183321	0
4	Civil Maintenance	5500000	5087369	5087369	0
Total		**79,00,000**	**73,88,210**	**73,88,210**	**0**

Year 2017-18

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Deepawali Gifts to the staff members	1000000	1000000	1000000	0
2	Tent and others	1000000	940000	940000	0
3	Printing (Banner, Posters, Brochures etc.)	1100000	1147973	1147973	0
4	Civil Maintenance	5000000	3804047	3804047	0
Total		**81,00,000**	**68,92,020**	**68,92,020**	**0**

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur - 303 905

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Proposed 2018-19

(In INR)

S.No.	Branch/Section	Budget	Total Expenditure	Expenditure by the Institute	Fund generated from other sources
1	Deepawali Gifts to the staff members	1000000			
2	Tent and others	1000000			
3	Printing (Banner, Posters, Brochures etc.)	1500000			
4	Civil Maintenance	5000000			
Total		**85,00,000**			

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Tonk Road, Jaipur - 303 905

CONTENT BEYOND SYLLABUS

(1) By the Industries

S. No.	Training	SPOC	Starting date	Last date	No. of Students	Fee collected (Rs.)
1	Linux - Red Hat-I	ECE/CS	17.01.18	26.01.18	173 (CS-119, IT-21, EE-4, ECE-29)	34600
2	Linux - Red Hat-II	ECE/CS	19.02.2018	28.02.2018	62 (40-CS, 8-EC,14-IT)	12400
3	Customer Relationship Management - Sales force	IT	17.01.18	22.3.2018	111 (CS-74, IT-33, EE-01, ECE- 03)	444000
4	Apps & Ideas	ECE,ME	07.09.17	15.02.18	17 (EC-6, CS-8, IT-1, ME-2)	51000
5	Robotics - SakRobotics	ECE	19.01.18	22.01.18	66 (EC-11, I yr -55)	99000
6	Embedded System-Techienest-Slot 1	ECE	22.01.18	15.3.2018	35- EC	175000
7	Embedded System-Techienest- Slot 2	ECE	8.2.2018	5.4.2018	21-EC	105000
8	AutoCAD	CE	12.3.2018	16.4.2018	16-CE	56000
9	AutoCAD, Solidworks and Ansys Software-CADD centre	ME	29.1.2018	21.4.2018	38-ME	296000
10	Machine learning and IOT-Forsk	CS	01.02.18	22.3.2018	27 (CS-9,IT-9,EC-8, EE-1)	132300
11	Core JAVA and Android	EE	9.2.2018	21.4.2018	42-EE	126000
12	Expert Lectures - Engineers Academy	Expert Lectures in each branch, January-March 2018				Free
					Total Rs.	15,31,800

(2) By the Faculty Members

S. No.	Training	SPOC	Starting date	Last date	No. of Students	Fee collected
1	Python	IT	17.01.18	15.02.18	33-IT	Free
2	Organization of student developer (OSD)	IT	18.01.18	20.03.18	11-IT	Free
3	C, C++	CSE	22.01.18	--	22- CS	Free

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RESEARCH GRANTS

S.No.	Topic	Agency	Amount (Rs.)	Remarks
1	Rural Technology Business Incubation (RTBI)	DST Rajasthan	30,00,000	F.No. 15(2)DST/ EDP-SDP/2016-17/Part 1/3432 dt 25.01.18
2	Validation and scientific basis of meditation and omnics and their role as therapeutic targets	DST CSRI	42,56,400	File No. SR/CSRI/131/2012

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PROPOSED FDP/WORKSHOP/SEMINAR
2018-19

1. By the RTU Kota

S. No.	Topic	Agency	Amount (Rs.)	Remarks
1	Mathematical Modelling and optimization of industrial problems	TEQIP III – RTU (ATU)	2,00,000	No. RTU/TEQIP-III/F(56)/2017-18/114-22 dt 23.02.18
2	Smart India Hackathon and Innovation & Startup competition	TEQIP III – RTU (ATU)	Budget yet to finalize by the RTU. Our request for Rs. 10 Lacs send to RTU	No. RTU/TEQIP-III/F (56)/2017-18/1272-81 dt 25.04.18
3	MOOCs and Digital Content Development	TEQIP III – RTU (ATU)	2,00,000	RTU/TEQUIP-III/F(56)/2017-18/284-292 dt 30.04.18
4	Business Entrepreneurship Development (BED Lab)	TEQIP III – RTU (ATU)	4,77,500	Activity during 18-22 Dec. 18
5	Art of Innovative & Impactful Teaching	TEQIP III – RTU (ATU)	4,77,500	Activity during 25-29 Sep 18
6	Emerging trends in optical fiber and photonics for future communication systems	TEQIP III – RTU (ATU)	4,77,500	Activity during Aug 28 – 1 Sep 18
7	Renewable Energy Management and techniques for a sustainable future	TEQIP III – RTU (ATU)	4,77,500	Activity during 12-16 Nov 18

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PROPOSAL SENT TO THE GOVERNMENT AGENCIES FOR DIFFERENT ACTIVITIES

S. No.	Date of submission	Funding agency	Project	Funding amount (Rs.)	Remarks
1	22/12/2016	NSTMIS, Deptt. of Sci. & Tech., New Delhi	Quantitative and Qualitative Assessment of Drivers and Barriers to Green Manufacturing in the state of Rajasthan	46,38,700	Not approved
2	10/01/2018	RTU Kota	Third International Congress on Information and Communication Technology (ICICT)-2018 at UK London	12,10,000	
3	29/11/2017	AICTE, New Delhi	Grant for conference ICETEAS-2018	5,00,000	
4	30/11/2017	AICTE, New Delhi	TA grant for ICICT-2018 UK London – Dr. V.K. Chandna	2,20,000	
5	30/11/2017	AICTE, New Delhi	TA grant for ICICT-2018 UK London – Dr. V.S. Rathore	2,20,000	

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Tonk Road, Jaipur-302 905

CONSULTANCY

	2014-15	2015-16	2016-17
Total number of consultancy projects	18	10	22
Total number of client organizations	02	02	15
Amount	3,90,750.00	2,62,630.00	2,30,401.00

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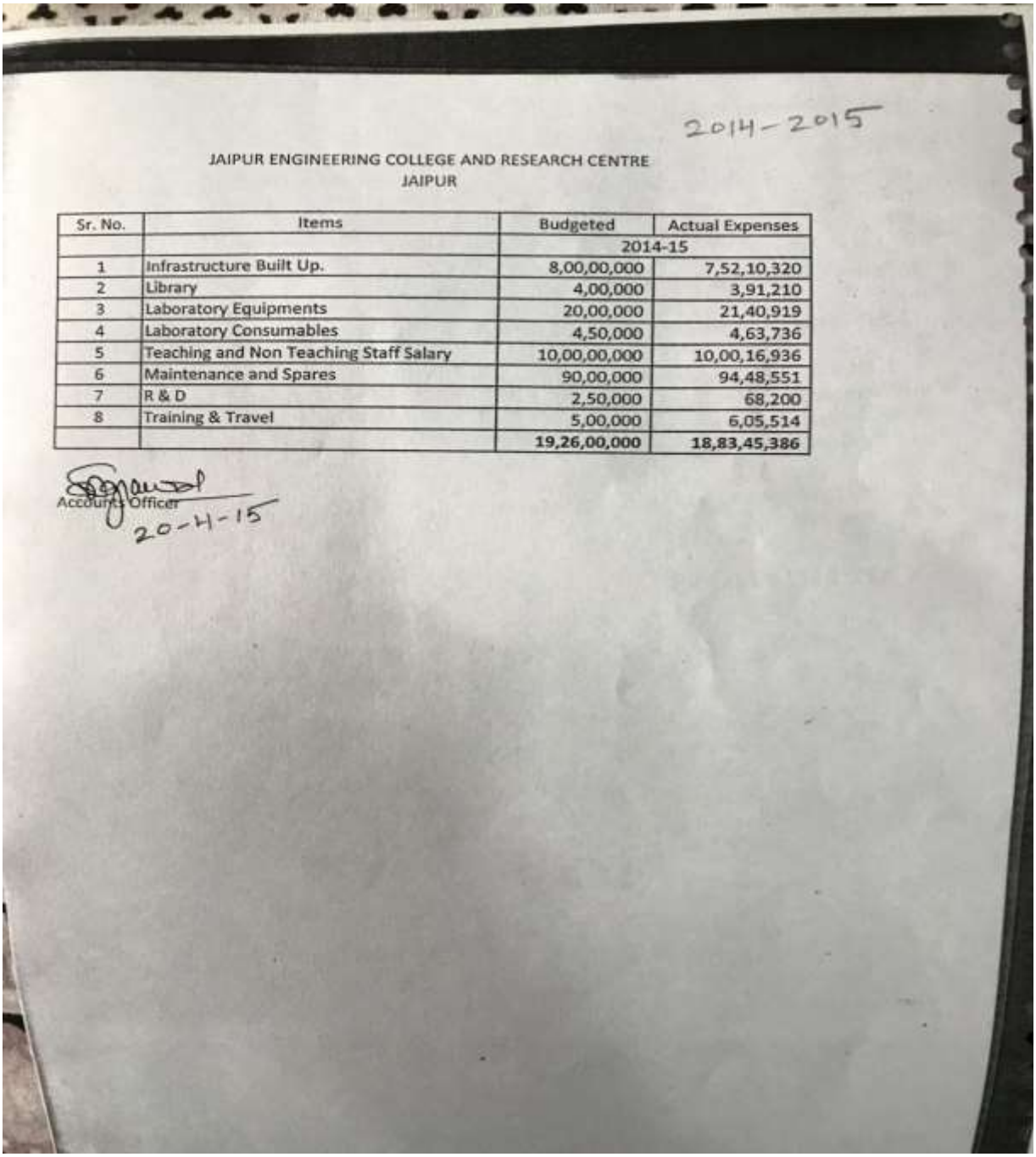
ii. **TEQIP Activities by RTU Kota**

S.No.	Activity	Date	Budget Amount	Reference No.
1	Smart India Hackathon and Innovation & Startup competition	Dec. 2018	Yet to finalize by the RTU Committee	No. RTU/TEQIP-III/F (56)/2017-18/1272-81 dt 25.04.18
2	MOOCs and Digital Content Development	20-21 Dec 2019	Rs. 2,00,000	RTU/TEQUIP-III/F(56)/2017-18/284-292 dt 30.04.18

The audited statements

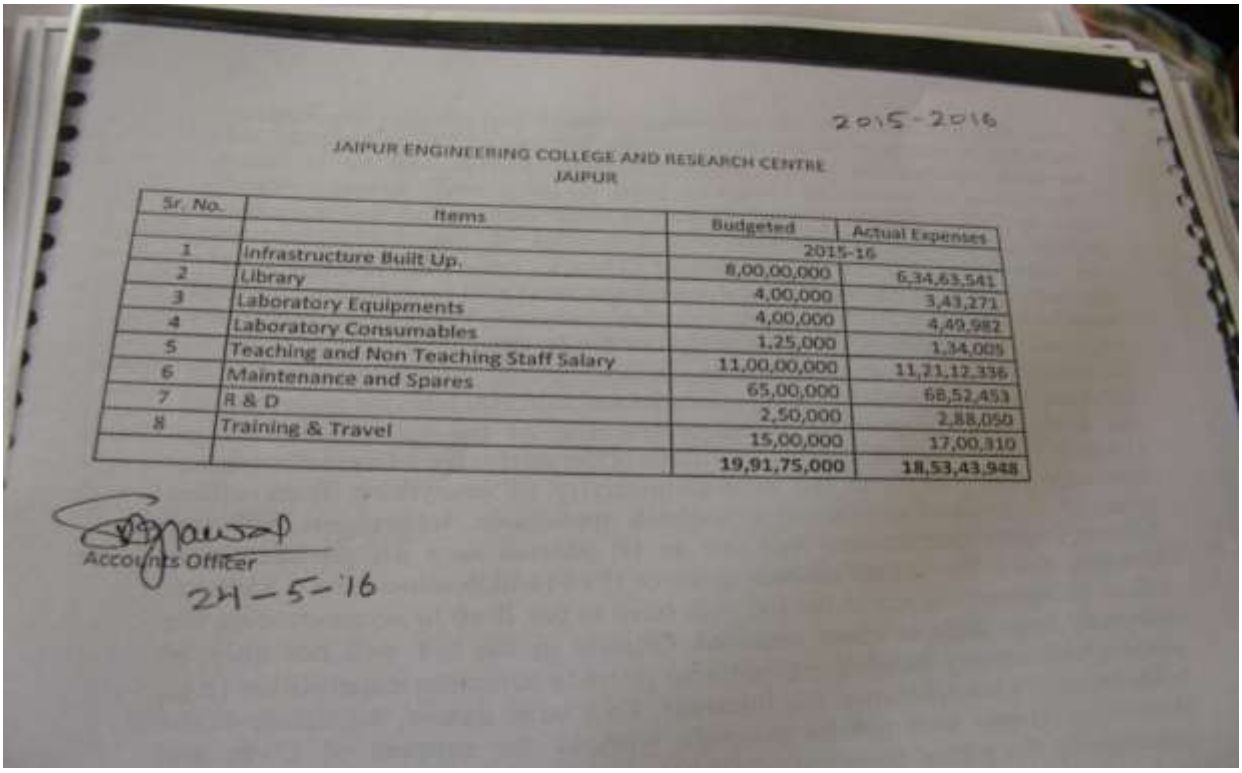


2014-2015

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
JAIPUR

Sr. No.	Items	Budgeted	Actual Expenses
		2014-15	
1	Infrastructure Built Up.	8,00,00,000	7,52,10,320
2	Library	4,00,000	3,91,210
3	Laboratory Equipments	20,00,000	21,40,919
4	Laboratory Consumables	4,50,000	4,63,736
5	Teaching and Non Teaching Staff Salary	10,00,00,000	10,00,16,936
6	Maintenance and Spares	90,00,000	94,48,551
7	R & D	2,50,000	68,200
8	Training & Travel	5,00,000	6,05,514
		19,26,00,000	**18,83,45,386**

Accounts Officer
20-4-15



2015-2016

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
JAIPUR

Sr. No.	Items	Budgeted	Actual Expenses
		2015-16	
1	Infrastructure Built Up.	8,00,00,000	6,34,63,541
2	Library	4,00,000	3,43,271
3	Laboratory Equipments	4,00,000	4,49,982
4	Laboratory Consumables	1,25,000	1,34,005
5	Teaching and Non Teaching Staff Salary	11,00,00,000	11,21,12,336
6	Maintenance and Spares	65,00,000	68,52,453
7	R & D	2,50,000	2,88,050
8	Training & Travel	15,00,000	17,00,310
		19,91,75,000	**18,53,43,948**

Accounts Officer
24-5-16

Audited statement from Accounts

Sr. No.	Items	Budgeted	Actual Expenses
		2016-2017	
1	Infrastructure Built Up	10,00,00,000.00	9,67,79,760.00
2	Library	2,00,000.00	1,95,808.00
3	Laboratory Equipments	0.00	0.00
4	Laboratory Consumables	1,50,000.00	1,54,970.00
5	Teaching & Non Teaching Staff Salary	13,00,00,000.00	13,37,26,913.00
6	Maintenance & Spares	50,00,000.00	50,87,369.00
7	R & D	0.00	0.00
8	Training & Travel	15,00,000.00	14,97,872.00
	Total	**23,68,50,000.00**	**23,74,42,692.00**

Accounts Officer 26/5/18

Audited statement of Accounts

Sr. No.	Items	Budgeted	Actual Expenses
		2017-2018	
1	Infrastructure Built Up	12,00,00,000.00	11,85,85,024.00
2	Library	2,00,000.00	3,51,024.00
3	Laboratory Equipments	0.00	0.00
4	Laboratory Consumables	1,50,000.00	4,16,767.00
5	Teaching & Non Teaching Staff Salary	13,00,00,000.00	13,87,01,705.00
6	Maintenance & Spares	50,00,000.00	38,04,047.00
7	R & D	0.00	0.00
8	Training & Travel	15,00,000.00	23,26,635.09
	Total	**25,68,50,000.00**	**26,41,85,202.09**

Accounts Officer 26/5/18

10.4. Library and Internet

Application Deficiency Report

Type	Available	Required	Deficiency
Internet Bandwidth	100	46	No
Printers	52	29	No
A1 size Color Printers	1	0	No
Legal Application S/W	28	20	No
Legal System S/W	5	3	No
PCs to Student ratio	606	580	No

Library Facilities

Type	Available	Required	Deficiency
Volumes	25694	24500	No
Titles	4838	4550	No
National Journals	37	36	No
Library Management Software	1	1	No
Reading Room Capacity	165	150	No
MultiMediaPC	15	10	No

Instructional Area-Common Facilities

Type	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
Computer Center	181	150	No
Library & Reading Room	509	400	No

Land Area Details

Type	Actual Room Area (Acres)	Expected Room Area (Acres)	Deficiency
Total Area of Land	10.54	2.0	No
Maximum number of Pieces	1	2	No
Minimum per Piece of Area	10.54	2.5	No

ENGINEERING AND TECHNOLOGY / Existing Programme

Type	Level	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
Class Room-Tutorial Room	UNDER GRADUATE	4434	3366	No
Additional Workshop/Labs	UG/PG	800	800	No
Workshops	UG/PG	488	200	No
Drawing Halls	UG/PG	140	132	No
Seminar Hall	UG/PG	544	396	No
Laboratories-All	UG/PG	4525	3168	No

XX- No Rooms Available
DNA- Data Not Available / Insufficient Data
Blank Field-Data Not Entered
* Laboratories required and Actual Number includes Total Number of Laboratories, Research Laboratories, and Additional WS/Labs for UG and PG courses, as applicable

Date of Signature (dd/mm/yyyy)

Seal of Institute

Name & signature of Director /Principal

***Note - All the Dates in the Report are in dd/mm/yyyy format

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Page 4 of 5

Type	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
Boys Common Room	68	75	No
Girls Common Room	85	75	No
Cafeteria	180	150	No
Stationery Store	16	10	No
First aid cum Sick Room	15	10	No

Computational Facilities

Type	Available	Required	Deficiency
Internet Bandwidth	68	45	No
Printers	61	56	No
A1 size Color Printers	1	0	No
Legal Application S/W	25	20	No
Legal System S/W	9	3	No
PCs to Student ratio	580	550	No

Library Facilities

Type	Available	Required	Deficiency
Volumes	23568	23000	No
Titles	4572	4490	No
National Journals	40	35	No
Library Management Software	1	1	No
Reading Room Capacity	165	150	No
MultiMediaPC	15	10	No

Instructional Area-Common Facilities

Type	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
Computer Center	181	150	No
Library & Reading Room	599	400	No

Land Area Details

Type	Actual Room Area (Acres)	Expected Room Area (Acres)	Deficiency
Total Area of Land	10.54	2.5	No
Maximum number of Pieces	1	2	No
Minimum per Piece of Area	10.54	2.5	No

ENGINEERING AND TECHNOLOGY / Existing Programme

Type	Level	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
Class Room-Tutorial Room	UNDER GRADUATE	5121	3287	No
Workshops	UG/PG	467	200	No
Drawing Halls	UG/PG	140	152	No
Seminar Hall	UG/PG	412	396	No
Laboratories-All	UG/PG	4525	3960	No

XX- No Rooms Available
DNA- Data Not Available / Insufficient Data
Blank Field-Data Not Entered
* Laboratories required and Actual Number includes Total Number of Laboratories, Research Laboratories, and Additional WS/Labs for UG and PG courses, as applicable
^ Actual Number of Tutorial Rooms for Under Graduate includes the Number of Tutorial Rooms Available for PG, if applicable
** Actual Number of Guest Rooms for Under Graduate includes the Actual Number of Guest Rooms Available for PG, if applicable
*** Actual Number of Kitchen for Under Graduate includes the Actual Number of Kitchen Available for PG, if applicable

सहायक कुलसचिव

The Principal
JECRC, Jaipur

Sub: Budget proposal for the year 2018-2019

Dear Sir,

It is stated that the following expenditure is proposed to be made with regards to purchases of library books for the session 2018-2019

	Amount
Library Books	5,00,000
Journals / E-resources	2,50,000
News Papers & Periodicals	1,00,000
Computer (05) for Multimedia Library	1,50,000
Total	**10,00,000**

Librarian 14/5/18

Approved
Principal

Jaipur Engineering College And Research Centre LIBRARY Jaipur

The Principal
JECRC, Jaipur

Sub: Budget proposal for the year 2017-2018

Dear Sir,

It is stated that the following expenditure is proposed to be made with regards to purchases of library books for the session 2017-2018

	Amount
Library Books	3,50,000
Journals / E-resources	2,50,000
News Papers & Periodicals	1,00,000
Total	**7,00,000**

Principal

Librarian

Jaipur Engineering College And Research Center LIBRARY Jaipur

The Principal
JECRC, Jaipur

Sub: Budget proposal for the year 2016-2017

Dear Sir,

It is stated that the following expenditure is proposed to be made with regards to purchases of library books for the session 2016-2017

	Amount
Library Books	4,50,000
Journals / E-resources	1,50,000
News Papers & Periodicals	1,00,000
Total	**7,00,000**

Anita Jain 7/6/17
Librarian

Jaipur Engineering College And Research Centre LIBRARY Jaipur

V. Pal
Principal

The Principal
JECRC, Jaipur

Sub: Budget proposal for the year 2015-2016

Dear Sir,

It is stated that the following expenditure is proposed to be made with regards to purchases of library books for the session 2015-2016

	Amount
Library Books	4,50,000
Journals / E-resources	1,50,000
News Papers & Periodicals	1,00,000
Total	**7,00,000**

Librarian

Principal

JECRC CENTRAL LIBRARY

LIST OF JOURNALS (JAN. 2018 TO DEC. 2018)

S.No	Journals	Period	Cheques/DD in Favour of	Subscribed Rate	Periodicity
1	Indian Jour. Of Computer Science & Information Technology	1 Yr.	Global Research Pub. New Delhi-	3500/-	Half Yearly
2	Indian Jour. Of Control Science & Engineering	1 Yr.	Global Research Pub. New Delhi-	3500/-	Half Yearly
3	Indian Jour. Of Civil Mechanical Engineering	1 Yr.	Global Research Pub. New Delhi-	3500/-	Half Yearly
4	Indian Jour. Of Engg. & Manufacturing Science	1 Yr.	Global Research Pub. New Delhi-	3500/-	Half Yearly
5	IEEMA Journals	3 Yr.	IEEMA Journals, Mumbai	2400/-	Monthly
6	University News	2 Yr.	Association of India University New Delhi	1700/-	Weekly
7	Digit	1 Yr.	Nine Dot, Nine interactive Pvt. Ltd. Mumbai.	1899/-	Monthly
8	Electronics for You	2 Yr.	Efy Enterprises Pvt. Ltd. New Delhi	1150/-	Monthly
9	Linux for You	2 Yr.	Efy Enterprises Pvt. Ltd. New Delhi	2300/-	Monthly
10	Electronics Bazar	2 Yr.	Efy Enterprises Pvt. Ltd. New Delhi	1900/-	Monthly
11	Corporate India	2 Yr.	Corporate India Pub. Pvt. Ltd. Mumbai	2160/-	Fort-Nightly
12	Emerging Global Technology and Trends	1 Yr.	DELNET New Delhi	3540/-	Half Yearly
13	Indian Jour. Of Engg & Material Science	1 Yr.	NISCAIR, New Delhi	1600/-	Bio-Monthly
14	Indian Jour. Of Chemical Technology	1 Yr.	NISCAIR, New Delhi	1600/-	Bio-Monthly
15	Indian Jour. Of Bio - Chemistry & Bio-Physics	1 Yr.	NISCAIR, New Delhi	1900/-	Bio-Monthly
16	Indian Jour. Of Science and Industrial Research	1 Yr.	NISCAIR, New Delhi	3600/-	Monthly
17	Indian Jour. Chemistry Sec-A	1 Yr.	NISCAIR, New Delhi	4600/-	Monthly
18	Indian Jour. Of Pure & Applied Physics	1 Yr.	NISCAIR, New Delhi	3200/-	Monthly
19	Annual of Library & Information Science Studies	1 Yr.	NISCAIR, New Delhi	1200/-	Quarterly

JECRC LIBRARY

NAME OF JOURNALS (10.10.2015)

S. N	Name of Journals	Period	Cheque/D.D. in Favour of.	Subscribed Rate	Periodicity
1	Indian jour. Of Engg. & Material Science	1 Year	NISCAIR, New Delhi	1600/-	Bi-Monthly
2	Indian Jour. Of Chemical Technology	1 Year	NISCAIR New Delhi	1600/-	Bi-Monthly
3	Indian Jour. Of Bio Chemistry & Bio Physics	1 Year	NISCAIR New Delhi	1900/-	Bi-Monthly
4	Indian Jour. Of Scientific and Industrial Research	1 Year	NISCAIR New Delhi	3600/-	Monthly
5	Indian Jour. Of Chemistry Sec-A	1 Year	NISCAIR New Delhi	4600/-	Monthly
6	Indian Jour. Of Pure & Applied Physics	1 Year	NISCAIR New Delhi	3200/-	Monthly
7	Annual of Library & Information Studies	1 Yr.	NISCAIR New Delhi	1200/-	Quarterly
8	Jour. On Electrical Engg.	1 Year	Subscription Centre, Ahmadabad	2200/-	Quarterly
9	Jour. On Electronics Engg.	1 Year	Subscription Centre, Ahmadabad	2200/-	Quarterly
10	Jour. On Mechanical Engg.	1 Year	Subscription Centre, Ahmadabad	2200/-	Quarterly
11	Jour. On Civil Engg.	1 Year	Subscription Centre, Ahmadabad	2200/-	Quarterly
12	Jour. On Wireless Communication Networks	1 Year	Subscription Centre, Ahmadabad	2200/-	Quarterly
13	Jour. Of Cloud Computing	1 Year	Subscription Centre, Ahmadabad	2200/-	Half Yearly
14	Power Engineer Journals	1 Year	Indian Journals.com New Delhi	900/-	Half Yearly
15	Indian Jour. Of Computer Science & Information Technology	1 Year	Global Research Pub. New Delhi	3500/-	Half Yearly
16	Indian Jour. Of Control Science & Engineering	1 Year	Global Research Pub. New Delhi	3500/-	Half Yearly
17	Indian Jour. Of Civil Mechanical Engg.	1 Year	Global Research Pub. New Delhi	3500/-	Half Yearly
18	Indian Jour. of Adv. Of Fuzzy System	1 Year	Global Research Pub. New Delhi	3500/-	Half Yearly
19	Indian Jour. Of Engg & Manufacturing Science	1 Year	Global Research Pub. New Delhi	3500/-	Half Yearly
20	Int. Jour. Of Computer Science & Engg. Technology	1 Year	Subscription Centre, Ahmadabad	3500/-	Half Yearly
21	Int. Jour. Of Advance in Software Engg.	1 Year	Subscription Centre, Ahmadabad	3500/-	Half Yearly
22	Int. Jour. Of Electrical Engg. & Electronics System Research	1 Year	Subscription Centre, Ahmadabad	3500/-	Half Yearly
23	Int. Jour. Of Mechanical Automobile Engg. & Research	1 Year	Subscription Centre, Ahmadabad	3500/-	Half Yearly
24	Int. Jour. Of VLSI Design	1 Year	Subscription Centre, Ahmadabad	3000/-	Half Yearly
25	Int. Jour. Of Civil & Building Engineering	1 Year	Subscription Centre, Ahmadabad	3500/-	Monthly
26	Digit	1 Yr.	Nine Dot nine Interactive Pvt. Ltd. Mumbai	1699/-	Monthly
27	Granthalaya Vigyan	1Yr.	Sampadak Granthalaya Vigyan Jaipur	375/-	

10.4.1. Quality of learning resources
Relevance of available learning resources including e-resources
Accessibility to students
Support to students for self-learning activities

CENTRAL LIBRARY
BOOKS ISSUE DETAILS
Books Circulation (Issue) Details-2017-2018

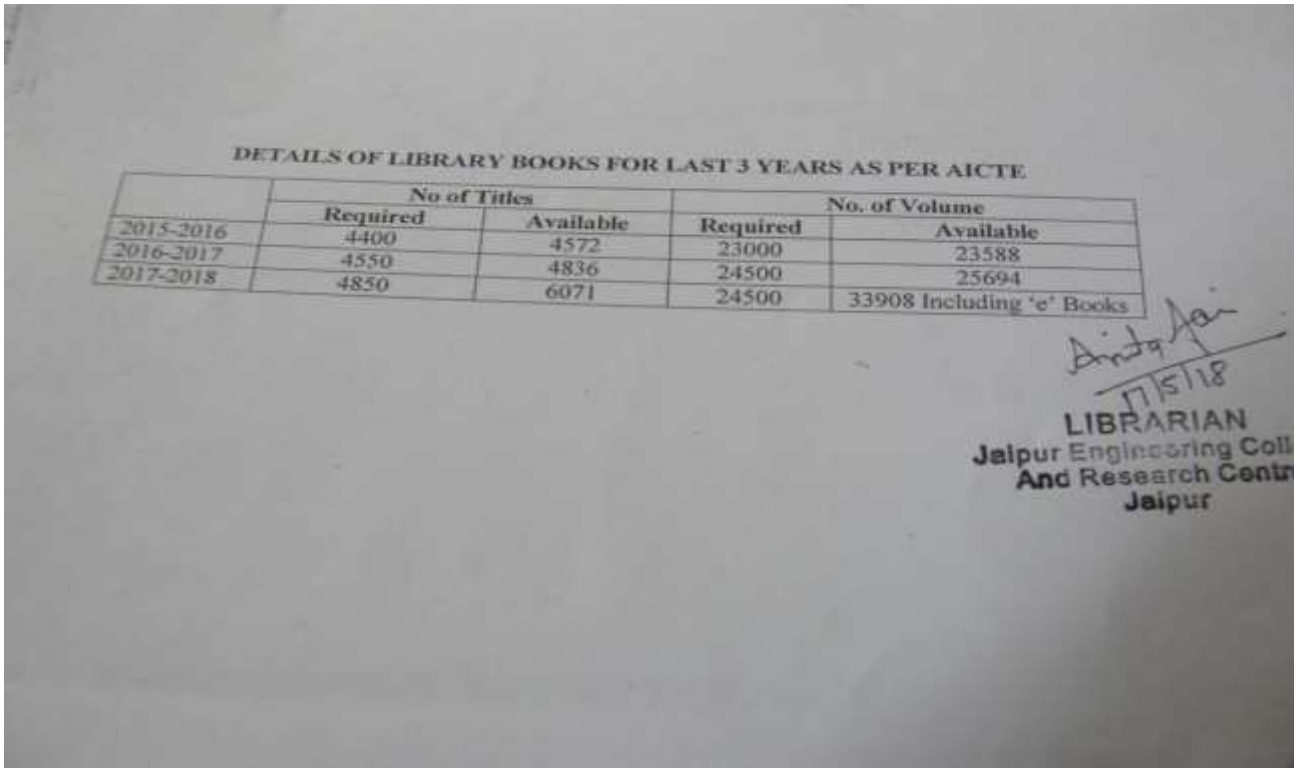
Month	"A" Block Library Issue	"C" Block Library Issue
July-2017	1578	113
August-2017	2892	1042
September-2017	3071	1163
October-2017	1845	603
November-2017	2693	966
December-2017	1431	600
January-2018	1635	507
February-2018	1863	579
March-2018	838	223
April-2018	1745	585
May-2018	1026	478
June-2018	---	---
Total	**20617**	**6859**
Average Per Month Books Issued	**1718**	**571**

CENTRAL LIBRARY
BOOKS ISSUE DETAILS
Books Circulation (Issue) Details-2016-2017

Month	"A" Block Library Issue	"C" Block Library Issue
July-2016	840	72
August-2016	2571	98
September-2016	1806	458
October-2016	1738	469
November-2016	1822	669
December-2016	893	340
January-2017	2547	987
February-2017	2022	630
March-2017	937	237
April-2017	1389	401
May-2017	814	290
June-2017	10	--
Total	**17389**	**4651**
Average Per Month Books Issued	**1449**	**387**

CENTRAL LIBRARY
BOOKS ISSUE DETAILS
Books Circulation (Issue) Details-2015-2016

Month	"A" Block Library Issue	"C" Block Library Issue
July-2015	1438	57
August-2015	2916	145
September-2015	2713	1005
October-2015	2269	650
November-2015	2063	493
December-2015	2041	952
January-2016	2054	568
February-2016	2679	1062
March-2016	1784	595
April-2016	1553	384
May-2016	1634	597
June-2016	762	322
Total	**23906**	**6830**
Average Per Month Books Issued	**1992**	**569**



DETAILS OF LIBRARY BOOKS FOR LAST 3 YEARS AS PER AICTE

	No of Titles		No. of Volume	
	Required	Available	Required	Available
2015-2016	4400	4572	23000	23588
2016-2017	4550	4836	24500	25694
2017-2018	4850	6071	24500	33908 Including 'e' Books

17/5/18

LIBRARIAN
Jaipur Engineering Coll
And Research Centr
Jaipur

E-Books Detail Inbox x

Tovindra Kumar Sahu <tovindra@jecrc.ac.in>
to principal, Bhavna, Bhuvnesh, CS, dhrd, Vijay, Dr.Manish, EE, HoD, HoD, HoD, HoD, HoD, HoD, HoD, HoD, Kamlesh, k May 17

English Esperanto Translate message Turn off for: English

Dear Sir/Madam,

Please find ebooks detail in JECRC:

E Books

S.No.	Department	No. Of Ebooks
1	CSE	2851
2.	IT	1677
3.	ECE	1419
4.	Civil	635
5.	ME	469
6.	EE	554
7.	Phy	500
	Total	8105

Login Detail:

ftp://192.168.100.6

User Name : ebooks

Password : ebooks

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Thanks & Regards

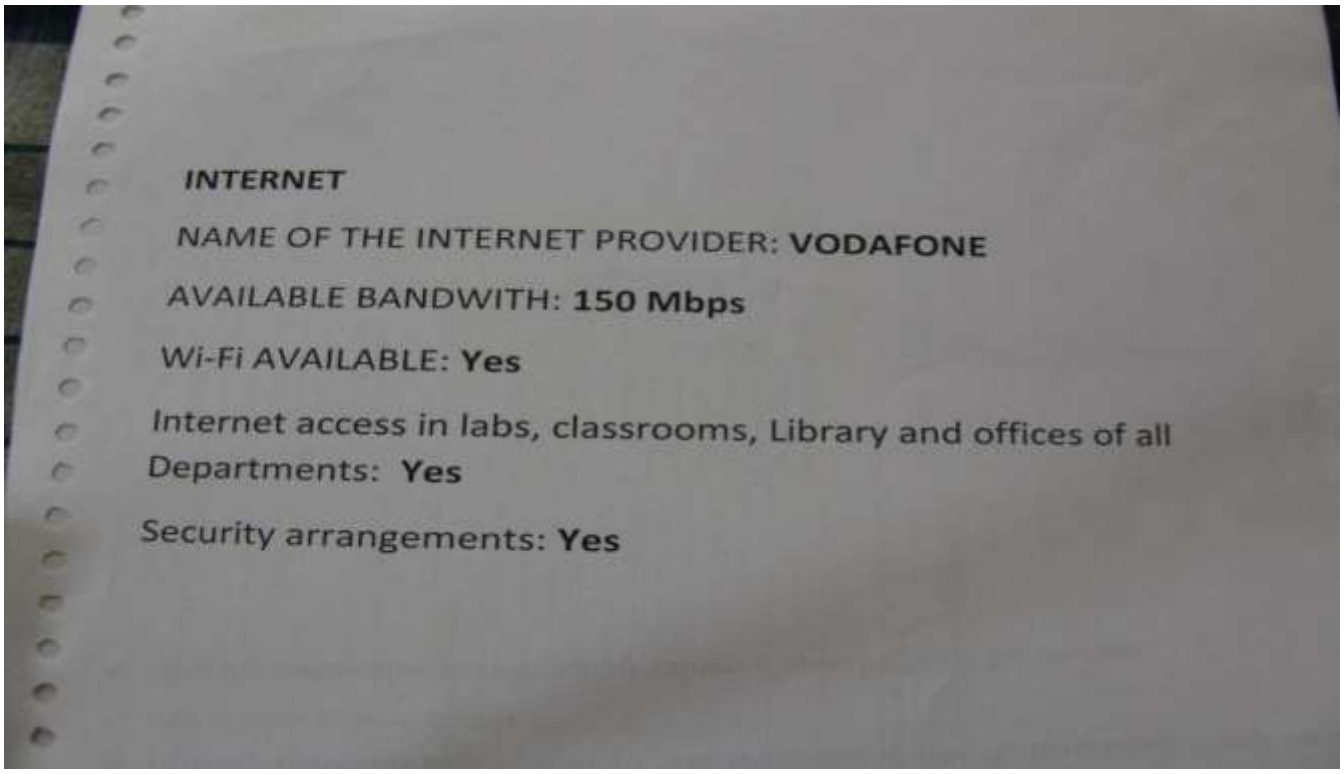
Tovindra Kumar Sahu
Senior Lab Instructor, Jaipur Engineering College & Research Center, Jaipur

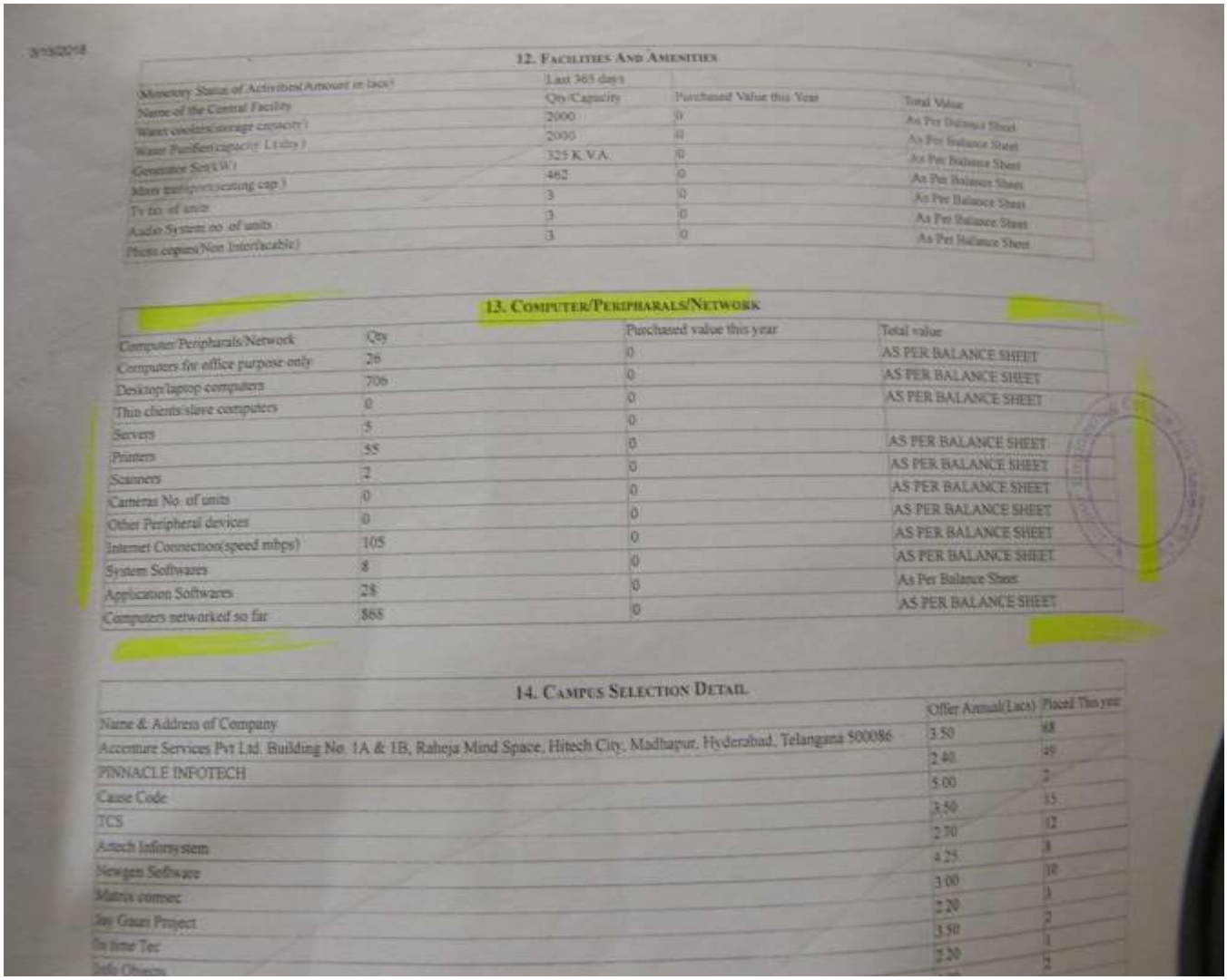
P +91-141-2770232 Ext. 209, 211 M 09983186878, 09214068878

10.4.2. Internet

Name of the Internet provider: VODAFONE
Available bandwidth: 150Mbps

Wi Fi availability: YES
Internet access in labs, classrooms, library and offices of all Departments: YES
Security arrangements: Yes





3/13/2018

12. Facilities And Amenities

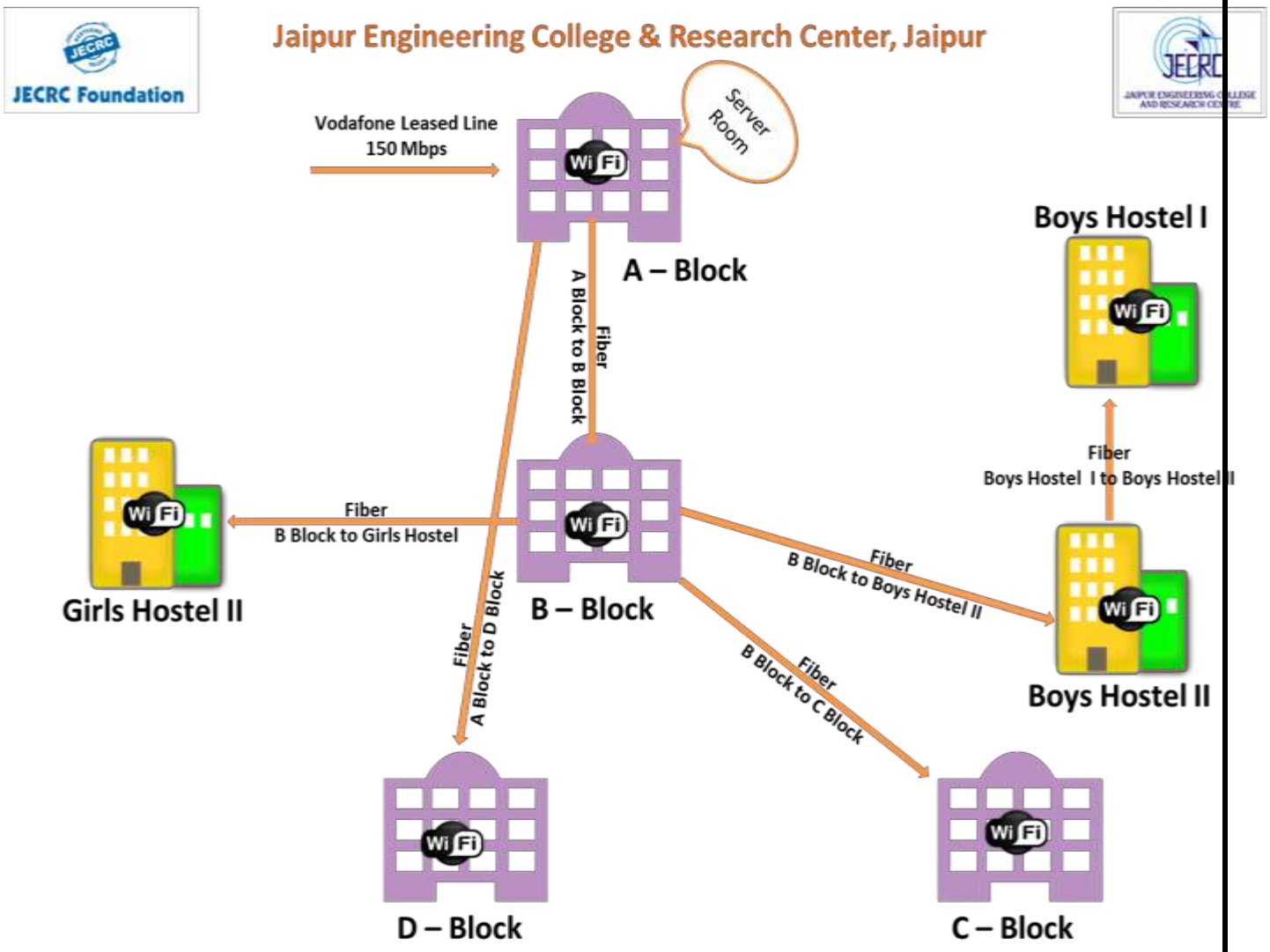
Monetory Status of Activities(Amount in lacs)	Last 365 days Qty/Capacity	Purchased Value this Year	Total Value
Name of the Central Facility	2000	0	As Per Balance Sheet
Water coolers(average capacity)	2000	0	As Per Balance Sheet
Water Purifier(capacity Ltr/day)	325 K.V.A.	0	As Per Balance Sheet
Generator Set(KW)	462	0	As Per Balance Sheet
Xerox machines(seating cap)	3	0	As Per Balance Sheet
Tv no. of units	3	0	As Per Balance Sheet
Audio System no. of units	3	0	As Per Balance Sheet
Photo copies(Non Interfacable)			

13. Computer/Peripharals/Network

Computer/Peripharals/Network	Qty	Purchased value this year	Total value
Computers for office purpose only	26	0	AS PER BALANCE SHEET
Desktop/laptop computers	706	0	AS PER BALANCE SHEET
Thin clients/slave computers	0	0	AS PER BALANCE SHEET
Servers	5	0	
Printers	55	0	AS PER BALANCE SHEET
Scanners	2	0	AS PER BALANCE SHEET
Cameras No. of units	0	0	AS PER BALANCE SHEET
Other Peripheral devices	0	0	AS PER BALANCE SHEET
Internet Connectoon(speed mbps)	105	0	AS PER BALANCE SHEET
System Softwares	8	0	AS PER BALANCE SHEET
Application Softwares	28	0	As Per Balance Sheet
Computers networked so far	868	0	AS PER BALANCE SHEET

14. Campus Selection Detail

Name & Address of Company	Offer Annual(Lacs)	Placed This year
Accenture Services Pvt Ltd. Building No. 1A & 1B, Raheja Mind Space, Hitech City, Madhapur, Hyderabad, Telangana 500086	3.50	68
PINNACLE INFOTECH	2.40	49
Cause Code	5.00	2
TCS	3.50	15
Antech Infosystem	2.70	12
Newgen Software	4.25	8
Matrix comsec	3.00	10
Jay Gauri Project	2.20	3
In time Tec	3.50	2
	2.20	1



Network Diagram

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Ref: JECRC/REG/2018-19/181 Date: 11/09/2018

Declaration

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institute shall fully abide by them.

It is submitted that information provided in this Self-Assessment Report is factually correct. I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA, in case any false statement/information is observed during pre-visit, visit, post visit and subsequent to grant of accreditation.

Date: 11/9/18
Place: Jaipur

Signature & Name
Head of the Institution with seal

ANNEXURE I:

(A) PROGRAM OUTCOMES (POs)

PO1	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and Electronics & Communication Engineering specialization to the solution of complex electronics and communication engineering problems.
PO2	**Problem analysis:** Identify, formulate, research literature, and analyze complex Electronics & Communication Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/development of solutions:** Design solutions for complex Electronics & Communication Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of electronics and communication engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern electronic engineering and IT tools including prediction and modelling to complex Electronics & Communication Engineering activities with an understanding of the limitations.
PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Electronics & Communication Engineering practice.
PO7	**Environment and sustainability:** Understand the impact of the professional Electronics & Communication Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the Electronics & Communication Engineering practice.
PO9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	**Communication:** Communicate effectively on complex Electronics & Communication Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project management and finance:** Demonstrate knowledge and understanding of the Electronics & Communication Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of Electronics & Communication Engineering changes.

(B) PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	Ability to apply the concepts of Embedded Systems and its applications.
PSO2	Ability to apply Field Programmable Gate Array based applications.