DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



CSE BYTES A CSE NEWSLETTER





HAN-FEB 2020

INDEX

	Director's Desk	-
2.	Principal's Desk	5
3.	HoD's Desk	6.
4.	Vision & Mission of JECRC	7
5.	Vision & Mission of Department of CSE	8
6.	Program Outcomes	9
7.	Program Educational Objectives	10
8.	Program Specific Outcomes	10
9.	New Year Celebration	11
10.	External Diagnostic Panel	12
11.	Fitness activity at JECRC	13
12.	National Girl Child Day	13
13.	Launch Event at JECRC	14
4.	SAKSHAM 2020 at JECRC	15
15.	JECRC Hackathon 4.0	16-17
16.	Faculty Achievements	18
17.	Jaipur AU Marathon	19
18.	Team Atrangi Organised Steller 2020	20
19.	Felicitation Day	21
20.	Robotics Process Automation	22
21.	JECRC Remarkable Partnership	23
2.	Behind CSE Bytes	24

ABOUT 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.:

Jaipur Engineering College & Research Centre (JECRC)
JECRC UDML College of Engineering (JECRC UDML)
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.

Development of a unique and creative approach to life and education is the prime focus of JECRC Foundation.

DIRECTOR'S DESK Mr. ARPIT AGRAWAL Director, JECRC



Education acts as a pillar for building an affluent and fortunate future. Keeping this in mind and griping up the importance of good education for grooming children, JECRC Foundation has been serving it's best efforts. We at JECRC aim at making the learning process boundless and bona fide so that students can explore every nook of themselves and can procure best in them.

This noteworthy attempt of bringing in notice the happenings of department and giving the achievements a people's glance is a work of great endeavor and admiration. As this newsletter is again out for its's purpose of connecting with all the members, I appreciate the toil of CSE department for keeping up the initiative and putting enormous efforts behind this strenuous task. I am glad for having this initiative graced with such a great team.

The dedication and commitment of CSE department for making JECRC a central hub of all intellectual activities and acting as an axis to provide a manifesto for innovative discussions among juveniles is remarkable.

Apart from this, enormous students getting placed in distinctive companies fills me with immense pleasure and a feeling of pride.

I have no doubts that with this pace, the institute will unemittingly march ahead of other eminent institutes.

PRINCIPAL'S DESK Prof.(Dr.) V.K. CHANDNA Principal, JECRC



To grow a tree of invention, a seed of innovation needs to be sown. Engineer's mind is the hub of innovative thoughts which when flourished in right direction can ripe into great inventions. We at JECRC ensure that the students are given proper guidance and superintendence to espouse meticulous path for themselves.

The faculty members of CSE department and technical staff members make sure to equip the students with newly emerging technologies, outcome based learnings, research driven projects and various other programs which are structured for assisting the students to grow in diverse dimensions. The teaching technique is such that students are furnished with both professional and technical knowledge along with the enhancement of their management skills.

Within a short span of time, JECRC with the help of supportive faculty members and cooperative staff is achieving eminent progress and will strive towards attaining greater heights in near future as well.

HOD'S DESK Dr. SANJAY GOUR Head of Department CSE, JECRC



'Opportunities don't happen. You create them.'

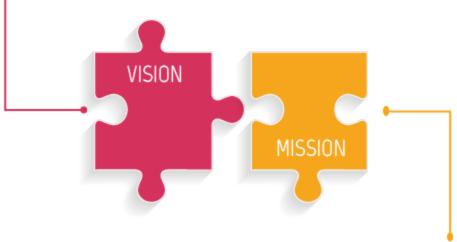
Being a part of an esteemed institution like JECRC, the CS department endeavours to constantly achieve it's aims and objectives. The constructive faculty members are incorporating new plans and innovating new schedules just to meet the criterion of an ideal engineer.

The CSE department is showing remarkable growth in terms of education and futuristic approach. The heightening ambitions of the CS students is a constant source of motivation for the college and faculty, demanding changes at different levels and organising more co-curricular activities. Students have shown keen efforts in start ups thus experiencing innovation at higher altitudes.

The active participations in hackathons, Ted-ex, workshops and sessions are making them a more productive learner. With a thought of triumph in our mind, we are nurturing talent and impelling students to be entrepreneurs, researchers, programmers and developers as well.

Vision & Mission of JECRC

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.



- 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 capa ble and imaginatively gifted leaders can emerge in a range of professions.

Vision & Mission of Department

To become renowned Centre of excellence in computer science and engineering and make competent engineers & professionals with high ethical values prepared for lifelong learning.



- M1. To impart outcome based education for emerging technologies in the field of computer science and engineering.
- M2. To provide opportunities for interaction between academia and industry.
- M3. To provide platform for lifelong learning by accepting the change in technologies.
- M4. To develop aptitude of fulfilling social responsibilities.

Program Outcomes

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and Computer Science & Engineering specialization to the solution of complex Computer Science & Engineering problems.
- Problem analysis: Identify, formulate, research literature, and analyze complex Computer Science and Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 5. Design/development of solutions: Design solutions for complex Computer Science and 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.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of Computer Science and Engineering experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex Computer Science Engineering activities with an understanding of the limitations.
- 6. 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 Computer Science and Engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional Computer Science and Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Computer Science and Engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings in Computer Science and Engineering.
- 10. Communication: Communicate effectively on complex Computer Science and 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.
- 11. Project management and finance: Demonstrate knowledge and understanding of the Computer Science and 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.
- 12. 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 technological change in Computer Science and Engineering.

PROGRAM EDUCATIONAL OBJECTIVES

- To provide students with the fundamentals of Engineering Sciences with more emphasis in Computer Science & Engineering by way of analyzing and exploiting engineering challenges.
- 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 in Computer Science and Engineering
- 5. 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 for Computer Science & Engineering.
- 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 in Computer Science & Engineering.
- 5. To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge in Computer Science & Engineering.



PROGRAM SPECIFIC OUTCOMES

- Ability to interpret and analyze network specific and cyber security issues in real world environment.
- Ability to design and develop Mobile and Web-based applications under realistic constraints.

NEW YEAR CELEBRATION

Each new year offers an exciting opportunity for a fresh start and new beginnings, which is probably why we all look forward to New Year so much. To make a fresh start, JECRC started its journey with lots of laughter, songs of smiles, games for fun and a rollercoaster of memories. All respected dignitaries, faculty members and staff members shared a strangling time with Mr. Amit Agarwal and Mr. Arpit Agarwal, Director-JECRC Foundation.

From head of departments to technical staff, and from faculties to the caretakers of campus, all were filled with immense joy as they bade adieu to the past year and welcomed 2020 with open arms.

With a wide range of sports and fun activities and inspiring participation of Amit Sir and Arpit Sir, JECRC was thrilled to join them in the entire fraternity celebration. Any ounce of doubt about the auspiciousness of the upcoming year was dispelled with the inspiring presence of JECRC directors who urged employees to maintain this energy throughout the year. The grand celebration nurtured the drive for success and perfection among all.



EXTERNAL DIAGNOSTIC PANEL Seed Support Evaluation

An external diagnostic panel for seed support evaluation for StartUps enrolled under the ongoing acceleration program at the JECRC Foundation was held on 18 January 2020 at JECRC. The organisation has committed an initial funding of Rs. 50,000/– along with co-working space to each selected startup. The panel consisted of Sh. Abhishek Soni, Co-Founder, Tax2Win & Sh. Sharad Bansal, CEO, Tinkerly along with Sh. Arpit Agarwal, Vice-Chairman, Sh. Dheemant Agrawal, Director, Digital Strategies and Mr. Dilnawaz Khan, Incubation Advisor at JECRC.



Fitness Activity at JECRC

As an organization carrying out our responsibility towards the idea of a clean and healthy Jaipur, we are proud to be a partner of AUJaipurMarathon. As the curtain raiser of the marathon, a fun and fitness activity was held on campus today with RJ Anirudh and Mr. Shahrukh of Fusion Dance Group keeping JECRCians on their toes as students showed their way to fitness. JECRC Foundation is committed to mark its powerful presence in Marathon on 02.02.2020



National Girl Child Day

On the auspicious occasion of National Girl Child Day, Team Suhasini celebrated it in a very special way with the children of Haldighati, Shri Ram ki Nangal School and Manav Seva Trust. words of Mr. O.P Jain sir (Senior Advisor -JECRC), Prof. Dr. V. K. Chandna sir (Principal - JECRC), Dr. Kamalini Dravid(Program Director -WCD) Mr. Anil Jha (Principal- Badi ka bas school), Mrs. Shweta Chaudhary (PET- Shri ram ki nangal school) on Women Empowerment made the day even more special and unforgettable one with the Austrono-



my Presentation by Mr. Harshul Gupta and Story telling by Tickling Tales. At last the event was summed up with momento distribution.

LAUNCH EVENT AT JECRC

A launch event was organized for 4 Fox, a startup of JECRC, organized by the Rural Technology Business Incubator (RTBI). 4 Fox launched its official logo and revealed that it has generated revenue of over one million in the last year. Mr. Arpit Agarwal, Director JECRC announced that JECRC has been selected by MSME, Govt. of India for a grant of INR 2 Crore. He encouraged the students to build their own start-ups and contribute to the Make in India movement. Experts in the fields of Robotics and Embedded Systems, Augmented and Virtual Reality, PLC and SCADA and Rapid Prototyping were also invited to address the gathering. A cleanliness program was also launched by Soch & Fruitfull JECRC with the mission of plastic free campus in 1000 days.



SAKSHAM 2020 AT JECRC

JECRC, Ministry of Petroleum and Natural Gas, GAIL and PCRA organized an awareness program called SAKSHAM 2020 at the JECRC campus. Debates and activities like GD were organized on the subject of fuel conservation. Shri Deepak Gupta (Dy Director PCRA, Rajasthan), Shri P.K. Dey (GM) and Shri Pankaj K. Srivastava (Dy GM), GAIL were the honored dignitaries of the event. Dr. Vinay Chandna, Principal, JECRC, Dr. M. P. Singh, HOD, Mechanical Department and Drs. Sandeep Vyas, HOD, Department of Electronics and Communication, addressed the gathering on various environmental protection initiatives of JECRC. The dignitaries greatly appreciated the efforts of JECRC and introduced the audience to various government schemes in this direction. He also presented attractive prizes to the winners of debates and GD competitions. The program ended with Vote of Thanks by Dr. Fauzia Siddiqui.





With the experience of facilitating five national hackathons throughout the most

recent three years, we regards to hack– JECRC organised a 18th January 2020. energy of every one of they line up to enroll an interest group in 4.0. As obvious the at its top as groups numbers to battle it



are an expert with athons. with this Hackathon on 17th and **JECRC** the ioins understudies its as themselves as a takina the JECRC Hackathon vitality and devotion is turn up in enormous out for the top spot.

The JECRC Hackathon 4.0 was inaugurated with much fervour and enthusiasm in the esteemed presence of Shri. Manish Johari, Senior Vice President, Lead Angels and Shri. Jagat Shah, Senior Vice President, Lead Angels. The dignitaries highlighted the need of technological solutions for social problems and motivated the participants to become problem solvers. Director, Sh. Arpit Agrawal, underlined the existing culture of startups and hackathons at JECRC and inspired the students to join the league of JECRC Entrepreneurs. Principal, Dr. Vinay Chandna, declared the event open and wished all teams a great stroke of luck.



As the serious coding starts the temperatures sore as each group puts its nerdiest cerebrums and most brilliant mind into finding the best answer for their concern proclamation. The climate is energized with the vitality of youthful personalities as they code their approach to magnificence. The esteemed panel of judges for JECRC Hackathon 4.0 included experts from industry, government and academia. An interactive session for the judges

was scheduled with the JECRC Hackathon 4.0 core team to bring them up to speed with the format of the competition and the judging criteria.

In the primary endeavor to sack the situation of champ at JECRCHackathon 4.0, members put in their absolute best effort in the principal power judgment round. Communicating their thought and advancement to the regarded board of judges, each group has their fingers crossed. Judges experienced each group's one of a kind temperance and evaluated them on all parameters of working and convenience. After the first round of JECRC Hackathon 4.0, out of 90 groups 28 were chosen. Working steadily since 10 hours, and remembering the contributions from tutors, they satisfied the trailblazer necessities.

At JECRC Hackathon 4.0, it's not all work and no play. To invigorate the members and give them rest from unwavering errands, fun midnight exercises were sorted out. These included blaze which energized and filled the members and set them up for the coming deciding round. In the final attempt to bag the position of winner at JECRCHackathon 4.0, participants put their best foot forward in the final power judgment round. Judges went through each team's unique virtue and graded them on all parameters of working and usability.

Finally the results were announced and three teams beat all odds & solved their problem statements, accomodating instructions of their judges & mentors to come out at the very top of this grilling competition. They, along with 4 other teams will now represent JECRC at Smart India Hackathon 2020, Software & Hardware Edition



FACULTY ACHIEVEMENTS

Dr. Sanjay Gaur (Professor and Head of Department, CSE) had chair the session in the FICR International Conference on Rising threats in Expert Application and Solutions from 17th January 2020 to 19th January 2020 at IIS University, Jaipur –India.





Dr. Neelam Chaudhary (Professor, CSE) had chair the session in the FICR International Conference on Rising threats in Expert Application and Solutions from 17th January 2020 to 19th January 2020 at IIS University, Jaipur -India.

Dr. Neelam Choudhary (Professor, CSE) had chair the session in the International conference on sustainable computing in science, technology and management from 20th January 2020 to 22nd January 2020 at Amity University, Jaipur.



AU JAIPUR MARATHON

The AU Bank Jaipur Marathon, condensed as AUBJM is a yearly worldwide marathon held in Jaipur, India, on the Sunday of February consistently. It is one of largest marathon in Asia as well as the largest mass participation sporting event on the continent. As an organisation doing our duty towards the possibility of a clean and healthy Jaipur, JECRCians added to this notable run with the partnership of AUJaipurMarathon organised on 02.02.2020. The JECRC family started the DreamRun under the direction of the initiative group. The most race contenders wore a similar T-Shirt. AU Bank Jaipur Marathon is World Record holder and this time we made history as a Guinness World Record Holder for "the most race competitors wearing a similar t-shirt".



Team Atrangi organised Steller-2020



Team Atrangi of JECRC Foundation in collaboration with Tape a Tale organized a story telling competition STELLER-2020 phase-2 on 20th Feb 2020 in JECRC university. To make the event eminent Amandeep Singh, Kopal Khanna and RJ Kartik were invited as a judge and perform in the event. The auditorium was loaded up with crowd and everybody including jury made some great memories





FELICITATION DAY

On 20th February 2020, Team Aashayein organised 'Felicitation Day' where they all get together to honour these brave hearts who have over the span of last one year changed the fortunes of many families by giving their members the gift of life. The heartfelt blessings portrayed by beneficiaries graced the ambience of the event and marked the significance of our motto, 'Spreading Smiles'. This exceptionally extraordinary occasion was graced by the propitious nearness of Hon'ble Chairman, JECRC Foundation, Sh. O. P. Agrawal, Shri. Ravi Kalra, Founder, The Earth Saviours Foundation and Mr. Sharad Vivek Sagar, CEO & Founder, Dexterity Global. The dignitaries appreciated this noble effort of the students of JECRC and thanked them for being vigilant about their social responsibilities. Felicitation Day of Team Aashayein also witnessed members of the beneficiary families sharing their experiences. The students who donated blood platelets in the last one year were decorated with a memento. This year also witnessed a steep hike in the number of female blood donors and the same were graced by a certificate of appreciation







Robotics Process Automation

JECRC Foundation has become the first educational group in the country to have more than 500 of its students certified in the Robotics Process Automation Essential program. This 15 day training program is the outcome of our collaboration with Automation Anywhere, an established name in the field of Robotics Process Automation with offices in more than 35 countries. Together we have also established Rajasthan's first Bot Laboratory at JECRC University. There are only 70 such bot labs all over the world. As a part of our Future Ready initiative more such beyond curriculum technical skills are being imparted to students to amplify their prospects in upcoming recruitment drives.



JECRC and Accenture shares remarkable partnership

JECRC Foundation is pleased to have Accenture, one of the largest consulting firms in the world as its biggest recruiting partner. With more than 1000+ selections in the most recent three years, Accenture and JECRC share an formidable partnership. Another part to this wonderful history was included by the recently concluded Pool Campus Drive at JECRC University on 22nd February. This was the second campus drive by Accenture for our students in the academic year 2020–21 with 397 selections in August 2019. A much reinforced coding ecosystem with an array of hackathons organised over the year and focused effort on competition based hiring are some of the USPs that have made us a preferred choice of this multinational technology giant. With an energizing pool of industry prepared students entering placement season we are good to go to have Accenture again next semester. We would like to thank Mr. Sudhir Choudhary & Mr. Surendra K. Verma, Vice President Technology, Ms. Anija Robert, Campus Engagement Senior Analyst & Mr. Sam Jaba Singh, HR, Talent Acquisition and their team for their invaluable contribution to the placement drive.



BEHIND CSE BYTES

