CSE BYTES

A CSE NEWSLETTER

Oct'18 Edition

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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.

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Director's Desk

Mr. Arpit Agrawal
Director, JECRC

Education is the one that drives humanity to achieve new and impossible feats every day. Without having a seed of thought sown in one's mind, one cannot reap the fruits of innovation. JECRC Foundation has been serving this purpose of motivating and making students excel at what they want to pursue. We at JECRC aim at making the campus a full-fledged learning experience for the students, so that no skill they have is left unexplored.

As this newsletter is again making its rounds, I gladly bring it to the notice of each member of the college to this tough job the CSE Department is undertaking. Keeping everyone updated with the happenings in the department is a great initiative to connect with one and all. Seeing both students and faculty members put enormous work behind this humongous task, I feel grateful for such a great team.

Becoming the central hub of all intellectual activities and innovative discussions for young minds, JECRC welcomes all the future innovators and creators to be a part of it. I wish good luck to students for all they aspire to become!

Principal's Desk

Prof.(Dr.) V.K. Chandna
Principal, JECRC

Engineers are the wealth of the nation and their excellence in all the disciplines is the present requirement of the country, for sustained economic expansion to compete globally. It gives me immense pleasure to share that JECRC is contributing to the growth of the nation by providing outcome based education to their students and nurturing them to compete at a global level.

The CSE Department and technical staff members are committed to furnish professional as well as research driven project based learning to the students, and accordingly the teaching-learning process is tuned so as to fulfill their career growth in the prevalent emerging technology. Different programs have resulted in overall growth and penetration of students in varied dimensions, be it research, innovation, entrepreneurs, educationist or even as sports person and bureaucrats etc.

With the support of qualified, dedicated and hardworking faculty of the CSE Department, the institute has achieved enviable ranking in a short span. I have no doubts that with this pace, the institute will unremittingly march ahead of other eminent institutes at the national level.

HoD's Desk

Dr. Bhavna Sharma
Head of Department CSE, JECRC

Being a part of a reputed organization like JECRC gives me immense pride, where students as well as faculty members are dedicated towards growth and a bright future. The faculty members are measuring the progress and competencies of students as they go through a course in each semester in which they are being assessed against pre-defined targets. Students, under the guidance of experienced faculty members, are giving their utmost to reach the zenith of success.

The CSE department is showing remarkable growth in terms of education as well as futuristic projects. Our students have represented the college at various platforms and increased the glory of our college. Students actively participate in Hackathons and TedX- held at different levels and other co curricular activities. There are budding entrepreneurs, researchers, programmers and developers that without a doubt, our institution will reach the heights of triumph in the upcoming few years.

Vision & Mission of JECRC

Vision

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

• 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.

Vision & Mission of Department of CSE

┌Vision──┐

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

┌Mission───────────────────────────────────────┐

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

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and Computer Science & Engineering specialization to the solution of complex Computer Science & Engineering problems.

2. **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.

3. **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.

9. **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

1: 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

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 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

1. Ability to interpret and analyze network specific and cyber security issues in real world environment.

2. Ability to design and develop Mobile and Web-based applications under realistic constraints.

Swachata Drive in JECRC

JECRC Foundation organized cleanliness drive under Swatchh Bharat Swasth Bharat Abhiyan program on Oct 2nd, 2018 to create awareness among students about cleanliness and its benefits.

The Principal, JECRC along with faculty members and students of CSE Department participated in cleaning the college campus and putting trash in its proper place. Thereafter speeches addressing the importance of cleanliness and sanitation were delivered by Principle, JECRC. He also highlighted the vision of Hon'ble Prime Minister of India about Swachh Bharat Mission and explained about Mahatma Gandhiji's dream of clean India. In the end all took pledge of keeping home, locality and city clean to transform the face of our country forever.

Vande Mataram - Voice of Unity 2018

'Vande Mataram' has inculcated patriotic fervor towards our country and it's highlighted during the times when we hear this very patriotic song. To celebrate this unity, JECRC along with 20,000 students from various schools and colleges took part in Voice of Unity (Vande Mataram) patriotic event on Oct 6th, 2018 at Rajasthan College. Students as well as faculty members took pride in singing Vande Mataram together with full patriotism, zeal and enthusiasm. The event witnessed performances from artists of Jaipur gharana, Jodhpur gharana and renowned singers from Mumbai. Our patron Sh. Amit Agrawal, who has been the Chief Convenor of this event for last 4 years, welcomed all the dignitaries, artists & audiences.

Cyber Security Training by Cyberops Infosec

An opportunity to expand the field of expertise of students of JECRC Foundation was presented to them by collaboration with Cyberops Infosec Limited, which is a leading cyber security organization. A basic course for ethical hacking and cyber security was designed which covered all the introductory topics that were primary in order to make the students' curiosity arise about the themes.

The duration of course was 45 days which began in the month of August and continued till October. The expert trainers from Cyberops guided the students about rules of ethical hacking and taught various methodologies and vulnerabilities. This course proved to be a strong foundation for students who wish to build a career in the field of penetration testing.

A special session regarding cyber crime analysis was delivered by Mr. Mukesh Choudhary, CEO and founder of Cyberops Infosec. This session proved to be highly beneficial for students explaining to them the gravity which these cases of cyber crime are investigated with. The whole course aimed at making students well aware about the basics and fundamentals, and introduced them with various vulnerabilities, networking, virtualization, cryptography, network security, android application security, and a lot more that is required to become proficient in the field of cyber security.

A massive participation of 47 students from the CSE department was observed and certification was provided to the students at the end of it.
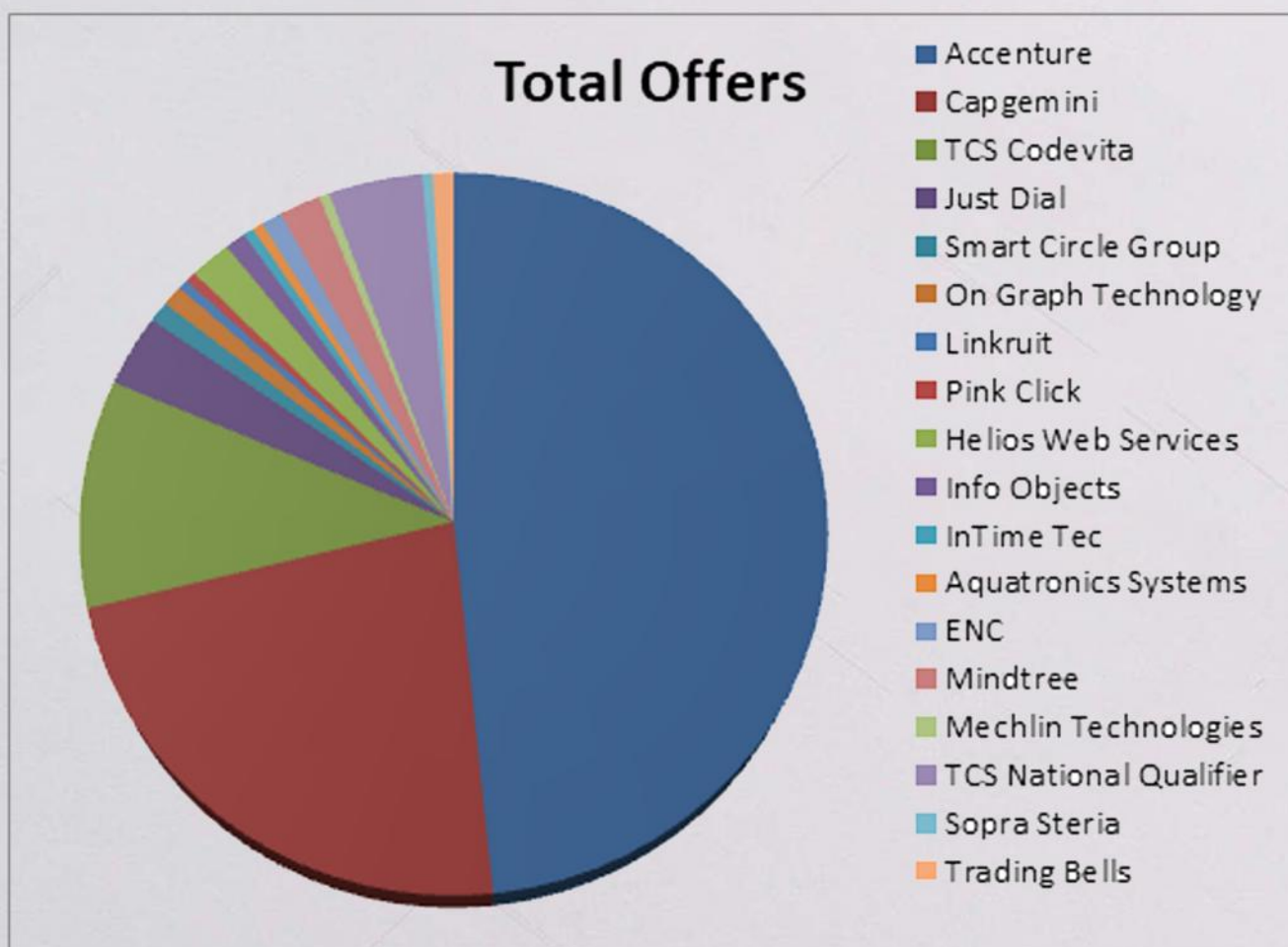
Faculty Achievements

Award of Appreciation

Dr. Nilam Choudhary, Associate Professor, Department of Computer Science and Engineering attended 84th International Research Awards in Engineering Science & Management during Oct. 5th- 6th, 2018 at Bangalore and received Certificate of Achievement as a Women Researcher Award. She also attended International Conference on Engineering, Computers and Natural Sciences (ICECNS-2018) from Oct. 19th-21st, 2018 held at Vivanta by Taj, Panaji, Goa INDIA. In the conference she acts as a Special Session Chair subjected on Internet of Things: Convergence of Sensing, Cloud and Big Data Networking. She also received Awards of appreciation for the same.

Placement Cell

JECRC has once again set the road for the students of Batch 2015-2019 by placing them in many IT giants such as Capgemini, Accenture, TCS, Sopra Steria and many other renowned companies. The placement cell helped the students to prepare for campus placements by providing rigorous trainings. A whopping 216 placements offer are available with the students of Department of Computer Science and Engineering till now out of 233 eligible candidates (unique placements being 173). The placement season is still active to place the remaining students.

Total Offers

Legend:
- Accenture
- Capgemini
- TCS Codevita
- Just Dial
- Smart Circle Group
- On Graph Technology
- Linkruit
- Pink Click
- Helios Web Services
- Info Objects
- InTime Tec
- Aquatronics Systems
- ENC
- Mindtree
- Mechlin Technologies
- TCS National Qualifier
- Sopra Steria
- Trading Bells

Zarurat- Joy of Giving Week

Day 1:- Joy of Giving Week is an annual event celebrated all over India. Zarurat has also been celebrating this event for five years now. As a means of awareness among the students about the old traditions, the first chapter of Joy Of Giving Week is initiated with Postcard Making Activity. Thus, enhancing their creative skills as well as spreading awareness about the former customaries.

Day 2:- The second day activity was the Colombian Dance form "Zumba". Zumba is an exercise fitness program where the dance form came from another country which binds to another world and also creates positive vibes around everyone.

Day 3:- There is a beauty in the discarded things and to make something beautiful out of those is creativity. So, with the same thought, the third chapter of Joy of Giving Week was 'Best out of waste' in which kids were taught to make paper bags using newspaper. Thus, enhancing their creative skills as well as spreading awareness about the environmental issues.

Day 4:- Another fascinating day of Joy of Giving week blended with blossoming waves of laughter the cheerful innocent faces and the beautiful moments. Gathering with little kids and relish in the joy of the "Cultural Programme" helped children to share experiences which overcame their stage fear. Amazement being the part of the beautiful evening and the real happiness was evident in their smile and their performances added cherry in the cake. With the showers of kindness and blessings, fourth chapter of Joy of Giving Week was Cultural Session.

Day 5:- And the fifth chapter of Joy of Giving Week was all about being congenial with the animals around. It was the next phase after the 'Best out of waste' to connect the kids with the environment. So, day 5th was the visit to Nahargarh Biological Park to get the kids back with a bag full of knowledge about the varieties of Flora and Fauna.

Day 6:- The time flies away with lots of activities, and duties of oneself. But day 6th established a step forward with a perception of children's health as eyes are the mirror of the soul, Team ZARURAT organised an "Eye check-up Camp" as the sixth chapter of Joy of Giving Week.

Day 7:- Last day of the week of generosity began with the enormous happiness on the toddler faces with an expression of innocence and excitement. Giving – appears in the world's wisdom tradition, it will be subsequent with the path of altruism. The last activity accomplished with "Goodie Bag Distribution" with the ambition of being environment eco friendly and full of benevolence arisen up with warm wishes.

Suhasini

International Day of Girl Child

"Equality cannot be defined until it is achieved." Promoting this line of thought, Team Suhasini organized a celebration on the occasion of International Day of Girl Child on the theme "Empowering Female Population" on Oct. 11th, 2018

The event began with the lamp lighting ceremony performed by the guest speakers along with JECRC Foundation dignitaries. The guest speakers for the event were Smt. Nitasha Chordia (chairperson FICCI Flo Ladies Organization), Smt. Sumeeti Mittal (Founder Pratham shiksha and Pratham Software), and Poorvi Mittal (Co-Founder PadBank Jaipur).

The guest speakers discussed at length about the prevailing discrimination and why it should be ended. The potential solutions and the common reasons why it still exists in the society were discussed.

Along with these motivational talks, performances depicting the pain of girls were showed. Children from Suhasini's village family, from Badi ka Baas and Goner, showcased their talents. The children were felicitated with some goodies to boost their morale.

The celebration ended on a high spirited note urging everyone to never let any girl child's dream go unfulfilled and take a step towards ending discrimination.

Suhasini

Road Show at Amber Fort

"In unison of voices lies strength that never goes by unheard." With the same thoughts, and a cue to pursue the aim of equality of genders, SUHASINI organized their fifth Road Show on October 21st, 2018 at Amber Fort. Giving work a new dimension, a crowd of around 3500 people addressed at Amber Fort, whose magnificent walls reverberated with the message "Save Girl Child".

The open platform provided by SUHASINI showcased various artists narrating the stories of struggles of women and girls, and sending a staunch word across the crowd. Many performers urged the crowd to come forward and fight against the injustice being dished out to women. Female feticide, infanticide, discriminations and every atrocity that still prevails was brought in light. In pandemonium of society, the voices of females get lost. This was staged by the team in form of a Nukkad Natak that moved the crowd and gave insights about the actual scenarios. It depicted some harsh realities of a woman's life and how right from her birth in this world, to her death, struggles and battles are a constant.

On this occasion, the kindred of Suhasini which they have built in eight villages spread across Jaipur came forward and gave heart wrenching performances to portray the suppressed pain of womankind. It encompassed musical theatres and dance dramas, holding all eyes magnetically towards them. The highlight of the show was the public interaction that was conducted to bring out the prevalent notions in general public of Jaipur city. The children were asked about the dreams they wish to turn to reality. The youth interaction took place and the general ideas about the current status of women empowerment in the country were discussed.

 The event was anchored by RJ Geetanjali Chauhan and supported by VLCC Jaipur, Alphabet Developers LLP, Swet Kamal Travels. "Inspiration inspires change", and Team Suhasini surged as this inspiration for the crowd to work towards equality.

Aashayein

Blood Donation Drive 2018

The simplest acts of kindness are by far more powerful than a thousand heads bowing in a prayer.

Aashayein The Life Saviours, a social student group of JECRC Foundation has been accomplishing the steps towards entailing the very cause of humanity by saving many invaluable breaths with 12,714 units under of blood collected in last 11 years under the umbrella of JECRC.

Continuing this chain, team Aashayein, organized an annual blood donation camp, with a huge devotion. Young motivated enthusiasts participated and lent their hands to such a great cause in huge numbers. On this noble occasion many immense personalities like Mr. Neeraj Sogani (Governor, Rotaryclub), Dr Omprakash (IAS, RASP), Dr B.S. Meena (Head Gynecologist), Mrs. Bharti singh (Founder, Praveenlata Sansthan) were present as guests of honour and they were impressed by the ambience of the blood donation camp.

This year, the team made a standalone record by collecting 1578 units of blood in a single day.

These drops collected today will be the most precious gift to the mankind given by the heroes of life.

Soch

Vastra Samman

The journey for the event Vastra Samman started 2 weeks ago, couldn't have had a better conclusion. The event, VASTRA SAMMAN conducted on Oct 26th, 2018, was a mesmerizing experience for every member of team Soch who collected a staggering 3023 units of clothes and essentials. The count was still on the rise even minutes before, the team of volunteers left for RUHS college for the event. All such contributions and every single donation helped in making VASTRA SAMMAN 2018, a monumental success.

Spiritual Research Cell

Self-Empowerment through Meditation III (third)

After the success of Self-Empowerment through meditation II, third series of the event was conducted during 22nd-30th Oct. 2018. With the help of these sessions students are able to learn the different types of thoughts, ways to improve self-esteem, relationship with the Divine, dos and don'ts for student life etc... Dr. Bhavna Sharma, HoD, CSE motivated the students for attending such sessions in future.

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