CSE BYTES

A CSE NEWSLETTER

Jul'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

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!

Mr. Arpit Agrawal
Director, JECRC

Principal's Desk

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.

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

HOD's Desk

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.

Dr. Bhavna Sharma
Head of Department CSE, JECRC

"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"
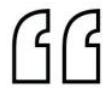
1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

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

3. Design/development of solutions: Design solutions for complex 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 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 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 engineering practice.

7. Environment and sustainability: Understand the impact of the professional 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 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.

10. Communication: Communicate effectively on complex 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 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.

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.

Program Educational Objectives
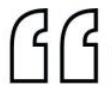
1. To provide students with the fundamentals of Engineering Sciences with more emphasis in Computer Science & Engineering by way of analyzing and exploiting engineering challenges.

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.

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.

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.

5. To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.

" Mentor's Training "

Teaching is the profession that builds all others. The most important responsibility of shaping the future of the next generation is shouldered by the teachers and mentors that guide them. To help mentors dive into the success mantras of this profession, Mentor's training program was organized at JECRC University campus during July 3-5, 2018. This three day training included every aspect a teacher should focus on to deliver the best. The Principal, JECRC inaugurated the training and light hearted sessions broke the ice between different participants. Teaching as an art was a key point focused during the training program. Presentation skills, time management, and all such themes were focused upon. The various in trend topics about which the knowledge of teachers and mentors should be updated were all covered in the program. It was a successful training where interaction between mentors became the strength on which everything thrived.

" Induction For Batch 2017-2021 "

As per the new scheme of AICTE, the B.Tech students must have a certified training and internship program before the commencement of second year of their course curriculum. In support of this and to make the students familiar with advanced concepts of computer languages, the Department conducted a 15 days training and internship program for the students of third semester during July 2nd-14th, 2018. To facilitate this, sessions on soft skills, internet security and android were conducted. Android session was conducted by Mr. Bijendra Kumar, CAI Android Club Instructor to aware the students of application development environment. The session on Internet Security was conducted by Mr. Palash Verma, Information Security Analyst and Mr. Anshul Patidar, Business Manager from Cyberops, a leading organization in the information security. Students also visited the JMRC office for their industrial visit. This initiative of AICTE and the college was appreciated by the students.

"Industrial Visit"

Experience and exposure play very important roles in building proficient engineers for the society, and acting on this fact, CSE Department organized an industrial visit to Jaipur Metro Rail Corporation as a part of the fifteen day Industrial Training program for third semester students on July 9th-10th, 2018 and July 12th, 2018. They were acquainted with the various technologies that drive the Jaipur Metro. The staff at JMRC introduced various sections of the corporation and a brief about every part of the organization that works in collaboration to make it a successful ride every time. The visit ended with a ride in the metro from Mansarovar Metro Station to Chandpole Metro Station helping them get an insight about the working at the station. The organized manner of their working encouraged students to explore and inherit. By seeing the constant efforts being put by the engineers and other staff members, the students felt an urge to appreciate them and work harder for their endeavors.

"Induction For Batch 2018-2022"

Beginnings should be powerful. They should be motivating enough to lead to endings. A better understanding of future work options and opportunities play a major role in shaping career of an individual optimistically. Keeping this in mind, the CSE department welcomed new entrants of B.Tech Programme students with Induction Day on Aug. 4th, 2018 that induced their spirits. The chief guest of the function was our distinguished alumni, Mr. Vimal Daga, Founder & CTO of Linux World. The Director, JECRC, Principal, JECRC, Head of Department Computer Science and honorable alumni welcomed the students with their motivational speeches and inspirational videos. The Induction Day followed by fifteen days induction programme where students get brief of their subjects and introduced with the current and advancing technologies. Getting introduced to the various experiences that await them in the campus, and the plethora of opportunities they can explore; the students felt a sense of belonging. On this occasion Vice Chairman JECRC, Shri M. L. Sharma and Senior Advisor, Shri P. K. Tiwari also addressed the students. It was a great learning experience for the students. Senior Advisor Shri P. K.Tiwari presented a Distinguished Alumni Award to Mr. Vimal Daga, proud alumni of JECRC for carrying an outstanding journey in the field of Linux/Computer Science. The Induction Program was a successful beginning to the journey that lies ahead of these young impressionable minds.

"Rajasthan DigiFest, Bikaner"

Digitalization is the platform that will give the world its eighth and subsequent eighty wonders. To promote the motto of Digital Rajasthan, the government of Rajasthan organized the fourth edition of Rajasthan Digifest. Continuously witnessing massive participation from innovation enthusiasts from all across the nation, Rajasthan has become the hub of technology and its implementation.

This edition was conducted in Bikaner and commenced on 24 July 2018, with the Job Fair. IT Experts from around 50 startups from all over India polled to see the place brim with technocrats. Held at State Polytechnic College and ITI Campus, the event had various attractions for youth of the state and Tecrush, IT Expo, Hackathon and Job Fair were all a part of it.

Targeting youth is not easy as they have become technically sound and aware of their well being. Therefore this initiative by Government of Rajasthan serves as the perfect opportunity for gaining their trust. Presenting them with employment opportunities and providing a platform for showcasing their technical abilities, Rajasthan Digifest never fails to serve as the complete package for students of technology. JECRC's CSE Department did not stay behind, and after receiving the perfect experience of Hackathon at JECRC Hackathon 1.0 and Smart India Hackathon; students headed to conquer Rajasthan Hackathon too. Huge participation was seen from CSE Department as students went on to develop technologies for the betterment of the society at a whole.

The two-day Hackathon event at Rajasthan Digifest was the perfect example of blend of brains with enterprise. Held on 26th-27th July, the students from CSE Department seeked guidance from mentors and developed their applications and prototypes. With the thought of serving the people, students went on to face the competition that included thousands of participants from all over the country. This not only gave them exposure, but also the chance to explore and learn in a unique manner.

"ACHIEVEMENTS"

RSSEP

Rajasthan Student Startup Exposure Program (SSEP) is an initiative of Department of IT, Government of Rajasthan, with the vision to create a pipeline of young entrepreneurs in the state and nurture young entrepreneurs in the state of Rajasthan. It draws upon the vision of Chief Minister Vasundhara Raje to provide opportunities to the youth to set up own startups, and participate in the growth journey of the state, while learning from some of the world's best startup professionals. The SSEP received over 20,000 applications from 7,000 teams and a final selection of 100; comprising 45 girls and 55 boys; was made.

The Top 100 selected students will be taken for an all-expenses paid trip to the US where they will be hosted at Menlo College in Menlo Park, Silicon Valley. Among these 9 students from JECRC Foundation were selected.

Following are the names of selected participants:

Deeksha Bhargava (B.Tech IVth year- JECRC)
Ayush Singh Chauhan (B.Tech IIIrd year- JU)
Apoorva Agarwal (B.Tech IVth year- JECRC)
Mohit Joher (B.Tech IIIrd year- JU)
Aparna Tripathi (B.Tech IVth year- JECRC)
Kavya chaturvedi (B.Tech IVth year- JECRC)
Gagan Goyal (B.Tech IVth year- JECRC)
Aman Vijay (B.Tech IVth year- JECRC)
**Manasvi Srivastava** (B.Tech IVth year- JU)

The selection was done through a rigorous process based on an original proposal submitted to the state government and involved two rounds of interviews, a Skype / video interview, and then after getting shortlisted students were invited for an in-person interview at Manipal University, Jaipur. In the final round, the teams were asked to pitch the start-up idea. The proposal was evaluated on basis of multiple parameters like innovation, feasibility, on how the proposal would benefit people at large and also whether the idea could be converted into a sustainable business model. While giving credence to performance in the interviews, the selection panel was also evaluating aspirations, team capability and the quality of presentation. Over the course of two weeks, the students will be learning various aspects of building a tech product startup from renowned experts in the global startup ecosystem.

The Student Startup Exposure Program is a step towards realising the Chief Minister's vision to ensure world-class facilities and exposure to young entrepreneurs of Rajasthan. It is also a benchmark step for promoting women entrepreneurs.
#TurnIdeasIntoReality

Workshop on VMware

An interactive technical workshop based on VMware - Operationalise your world was held at Hotel Marriott on July 13th, 2018 by Intel where faculty members of the Department Dr. Nilam Choudhary and Ms. Geetika Gautam along with students Namandeep Singh, Yukti Goswami, and Somil Khandelwal of 3rd year participated. The interactive sessions of workshop emphasizes on the basic concepts of VMware defining VMware as an integrated offering that brings together VMware's industry-leading vSphere hypervisor and VMware vRealise Suites Mukti-vendor hybrid cloud management platform.

Student Corner

To imbibe the young college students and the budding entrepreneurs into the startup ecosystem, The Rajasthan government's Department of Information Technology (DoITC) took an initiative wherein the selected students from the colleges of Rajasthan will get a chance to travel to all expense paid trip to the Silicon Valley, US for a two week programme. And I take extreme pride being among the 9 students from JECRC Foundation who made into the list of top 100 selected students. This opportunity will provide us the platform where we'll get to become better at what we do and hone our skills.

I'm from Team PushI/O and we provide our platform or can develop devices according to use case of any IOT based hardware company, even any IOT based existing company can use our device to trigger their services. We provide IOT solutions on Azure and what makes our startup idea stand out is that we overcame three major drawbacks which is usually faced by IOT market- cost effectiveness, response time and data security. Our idea was appreciated by Mr. Venkatesh Sarvasiddhi, Head of the Academic and Student Outreach Initiatives at Microsoft Corporation in India and also by Mr. Dilnawas Khan. Our idea has won LNMIIT Hackathon powered by GitHub, and we were IOT finalist at ABB Hackathon. After passing all screening processes and then the final interview being held at Manipal University, Jaipur we were finally selected.

I bow down to Mr. Arpit Agrawal Sir who is an exemplary and visionary mentor, words can neither qualify nor quantify how helpful your guidance and advice has been and I'm grateful to our teachers who have always groomed us like their kids. Being a student of JECRC always gives me a sense of pride & grandeur. The confident footsteps of mine echo in sanctum in the tune -"#ProudToBeJECRCian".

Deeksha Bhargava
7th Sem CSE

"Suhasini"

Menstrual Health and Hygiene Awareness Campaign

SUHASINI a social initiative by the students of JECRC, Jaipur. The group works towards helping girls from nearby villages to get the future that they have a right to and to not let lack of resources come in the way. The group works to create awareness of the atrocities that are faced by girls everywhere by organizing nukkad nataks, organising awareness campaigns and road shows in the different areas.

Keeping this idea forward Team Suhasini brings **"Story Behind Red..."** an awareness campaign, where different seminars organised with a motive to spread awareness on menstrual health and hygiene for the girls and women of villages. Through this the main aim was to make girls aware about the natural process and how to maintain hygiene during that time. In the first phase through contribution from the girl's hostel, the team was successful in providing 60 girls with kits on July 28th, 2018.

With a vision to have a taboo free society and making girls and women self aware about the appropriate hygiene for them, team suhasini will work towards bringing large number of girls under umbrella of the campaign.

" Behind CSE BYTES "

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