Aircraft and automobile sector

Core electronics job

CAT

GRE

ROBOTICS

Private Non Core Sector

Government and bank jobs

Research

Designing

Teaching

UPSC

PSU Jobs

Electronics Newsletter

GATE

IES

Tele communication Industry

GMAT

Softwares

Signal And Processing firm

Core electronics job

Ujjwalam

Department of Electronics and Communication Engineering

Volume 2, Issue 1

MAY 2018

Director's Message

We are currently in the era of technology revolution, spearheaded by recent developments in engineering sciences providing sustainable solutions to various issues in different areas. The Indian engineering programs have a promising future particularly the **Electronics and Communication** sectors are on the threshold of becoming global players by 2020. Fragments of this newsletter will track different event and activities that are taking place in the department. I extend my best wishes to all those who contributed to **Ujjwalam** and I am confident that the interaction will be a source of inspiration to the young talent budding in the college, who would be the educationists, technocrats and researchers of tomorrow. They would shoulder the responsibility of bringing in the desired innovations in their fields, leading to the advancement of the country.

Mr. Arpit Agarwal
Director, JECRC

Principal's Message

Jaipur Engineering College and Research Centre (JECRC), Jaipur is recognised as one of the best technical institutes in 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 platform to students for overall self development that includes ethics, moral values, etc. and develop research aptitude through project base learning.

In the process of implementing outcome based education (OBE) the faculty members are measuring the progress and competency of the student as they go through a course in each semester and are being accessed against pre defined package.

The campus will soon have a video server where video lectures of all under graduate and post graduate programs delivered from the professors of IIT and IISc would be made available to the students 24x7 through a high speed wifi networking. This will create ample opportunities to learn the subject at their own base on their laptops and smart phones.

All the credit goes to outstanding reputation and dedication of the institute for all these years, under the able guidance of visionary Shree Arpit Agarwal Ji, Director of JECRC. Here at JECRC ,Jaipur, we are committed to impart necessary skills and knowledge to our students in best possible manner, in good spirit and in good environment by allowing them to dream big and help them to achieve the same.

Dr. V.K. Chandna,
Principal, JECRC

Mission and Vision of the college

VISION

MISSION

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 capable and imaginatively gifted leaders can emerge in a range of professions

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VISION

To contribute through excellence in scientific and technical education, teaching and research in Electronics and Communication Engineering & to meet the needs of global industry.

MISSION

•To equip the students with a strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution arising in their career path.

•To induce the habit of life-long learning to enhance overall performance.

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

•To make students responsive towards the ethical, social, environmental and economic context for the society.

Newsletter ECE, JECRC Foundation, Vol. 2, Issue 1, MAY 2018

HOD'S Message

The Department of Electronics and Communication Engineering came into existence at the Jaipur Engineering College & Research Center in 2000, by the approval of All India Council for Technical Education (AICTE), to meet the growing requirement of practical design engineers in the country and abroad. The greatest asset of the department is its highly motivated and learned faculty. The available diversity of expertise of the faculty with the support of the other technical staff prepares the students to work in the global multicultural environment. The department not only aims to make our students technically sound and knowledgeable but also to nurture their wisdom and make them a better and responsible human being. The graduates of the Electronics & Communication Stream have been selected by some of the world's leading corporations & as well as by most of the leading Indian counterparts. We hope that we will continue to deliver our best to serve the society and mankind. It is also expected that our students will continue to pass on the skills which they have developed during their stay at this department to the whole of the world for a better society.

- Dr. Lokesh Kumar Bansal

Program Outcomes

PROGRAM OUTCOMES are Graduate Attributes

▪**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.

▪**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. .

▪**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.

▪**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.

Program Outcomes

▪**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.

▪**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.

▪**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.

▪**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.

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

Program Outcomes

▪**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.

▪**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.

▪**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.

Program Specific Outcomes

PSO 1

•An ability to apply the concepts of embedded systems and its applications.

PSO 2

•Ability to apply Field Programmable Gate Array (FPGA) based applications.

PSO 3

•Apply DSP processor system design to real world applications.

Program Educational Outcomes

PEO 1

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

PEO 2

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

PEO 3

•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.

PEO 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 electronics & communication engineering professional career.

Program Educational Outcomes

PEO 5

• 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.

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Editor's Desk

It is with great pleasure that we bring to you the First issue of Volume two , **Ujjwalam,** the newsletter of ECE Department JECRC Jaipur. The name of our newsletter- **Ujjwalam-** signifies **brightness,** With faculty members that consist of bright minds and students who are keen to leave a mark, our future is in safe hands indeed.

The goal of this newsletter is to update you all with the developments at ECE department (JECRC) Jaipur. The current issue will provide the information about the various initiatives of department which are related to academics, research and innovation, student affairs and departmental laboratory / workshop. This newsletter besides reporting on the major events will also report on laurels earned by our faculty members, staff and students.

While acknowledging valuable inputs received from the faculty members, staff and students, we also welcome suggestions from them to help us develop the newsletter further.
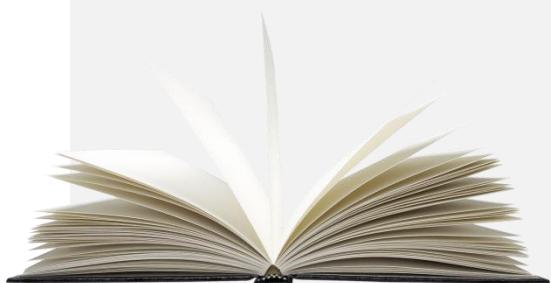
The First issue ,Volume 2 is in your hands.
Happy reading!!

Ms. Shivam Upadhyay

Inside This Issue!!

Department of Electronics and Communication Engineering

Introduction to Newsletter

The aim of the newsletter is to keep each member of ECE family of JECRC connected and updated. Notable achievements of our students, alumni and faculty members will be highlighted along with some articles on latest technologies, and campus life. We wish that all who contribute to the growth and achievements of the department get acknowledged. We welcome your inputs for future newsletters and urge you to stay connected with us.

Industrial Visit-1
At
Genus Power Infrastructures Ltd., Ramchandrapura, Sitapura, Jaipur

Department of Electronics and Communication Engineering organized an industrial visit to Genus Power Infrastructures Ltd., Ramchandrapura, Sitapura, Jaipur on 15th Feb., 2018 for ECE second year students. The industrial visit is coordinated by Mr. Ashutosh Sharma and Mr. Ashish Sharma.

Attendees: 50 Students of ECE second year along with 2 Faculty Members.

Objective:
The objective of Industrial Visit is to make aware the students about concepts and working of latest digital and smart electricity meters such as multi-functional single phase and three phase, Pre-Payment Meters etc. They will also be made aware of technologies used in developing equipments for power projects such as Sub-Station erection , Laying up of transmission & distribution lines, Rural Electrification, Switchyard, Network Refurbishment etc.

About Genus:

Genus Power Infrastructures Limited, an ISO 9001 & 14001 certified company is an integral part of the US $400 million Kailash Group. Genus has two business divisions offering highly innovative and sustainable solutions to the power sector.The Metering Solution Division provides a complete range of Electricity Meters such as Multi-Functional SinglePhase and Three Phase Meters, CT Operated Meters, ABT & Grid Meters, DT Meters, Pre-Payment Meters, SmartMeters, Net Meters, AMI, MDAS etc.

The Engineering Construction and Contracts Division undertakes Turnkey power projects such as Sub-Station erection upto 420kV, Laying up of transmission & distribution lines, Rural Electrification, Switchyard, Network Refurbishment etc.Equipped with avant-grade manufacturing facilities, complete forward and backward integration from plastic parts to final products, automated SMT lines, Lean Assembly techniques and a team of highly qualified and experienced engineers, Genus is committed to develop innovative and customized solution at an affordable price. Our top-notch R&D Center, recognised by the Ministry of Science and Technology, Govt. of India, has enabled the company to dominate the power infrastructure and be at the forefront of new technology.

Topics Covered during visit:

• Electricity- Residential, Commercial and Industrial
•Payment Solutions
•Distribution Transformers
•Calibration Equipments
•Smart Meters
•Smart City
•Renewable Energy Management
•Telecom Tower Management Solutions

Outcome:

•Student interacted with real application of Engineering
 especially in Smart Energy meters.
•Student learned about various Techniques of Power Generation
 and Distribution.

Industrial Visit-2
At
Tesca Technologies Pvt. Ltd., Ramchandrapura, Sitapura, Jaipur

Department of Electronics and Communication Engineering organized an industrial visit to Tesca Technologies Pvt. Ltd., Ramchandrapura, Sitapura, Jaipur on 17th Jan. 2018 for ECE Third year students. The industrial visit is coordinated by Mr. Anil Jain and Mr.Veni madhav Sharma .

Attendees: 27 Students of ECE Third Year along with 2 Faculty Members.

Objective:
•To give an concepts and working of latest Analog and Digital Test, Measuring Equipments
• They will also be made aware of technologies used in developing Robotics
•To enhance awareness of the students on Power Electronics equipments and Power Supplies.

About TESCA:

Tesca Technologies Pvt. Ltd. is World's Leading ISO Certified Manufacturer & Exporter of Test, Measuring & Technical Education Equipment. We are Member for Electronics & Computer Software Export Promotion Council, New Delhi, India having sales in more than 60 Countries Worldwide. Tesca's operations are spread out in 23000 Square Feet encompassing more then 2000 manufactured Innovative Products and Turnkey Project Capabilities for International Tenders. Tesca is an Export House established in December 2009 with our Registered & Corporate Office both set up at Jaipur. We are actively doing business in Middle East, CIS, South East Asia, Africa as well as South America Countries. We do have our representatives in almost all Countries. Please be noted that we are doing projects meant for School Education, Vocational Training, Laboratory, Health Center, Hospital Equipment, Agricultural Modernization, Industrial Modernization, Rural Water Supply as well as Small Scale Enterprises funded by Ministry of Education, World Bank, Asian / African Development Bank as well as GOI LOC.

Topics Covered during visit:

• Overview of electronic components and educational training kits of engineering
•Test and measurement of instruments
•Give information about AC/DC power supplies
•Fiber-Optic Communication Technology
•Give knowledge about microwave kits
•Antenna, satellite, GPS, RADAR, RF trainers
•Communication trainers
•PCB lab
•Job opportunities in electronics core companies

Visits to Live Systems:

•Visit to Electronics equipment trainer kit manufacturing lab
•Visit to PCB and transformer manufacturing section

Outcome:
• Single Sourcing Partner for all your Educational/Didactic Solutions.
•Student interacted with real application of Engineering especially in electronics Engineering

Industrial Visit-3
At
PHILIPS LIGHTING: Light beyond Illumination

Department of Electronics and Communication Engineering organized an industrial visit to Philips Lighting Technologies Pvt. Ltd., Chandigarh on 23rd march 2018 for ECE second year &third year students. The industrial visit is coordinated Ms. Aapurva Kaul, Mr. Ashish Sharma, Mr. Bhoopesh Kumawat , Ms. Preeti Barot, Ms. Shivam Upadhyay.

Industry: PHILIPS LIGHTING: Light beyond Illumination
No. of Students Visited: 51
Date: 23/03/2018.

Objective:

Philips is taking lighting beyond illumination with connected lighting innovations for the home, retail environments, offices, cities, and more. Philips pioneered the development of high-quality, energy-efficient LED lighting. Philips is now taking lighting into a fully digital world that connects people, places, and devices.

About CFL: A **compact fluorescent lamp** (**CFL**), also known as a **compact fluorescent light** or **energy saving light**, is a type of fluorescent lamp. Most CFLs are designed to replace incandescent lamps and fit into most existing light fixtures. There are two main parts in a CFL: the gas-filled tube and the magnetic or electronic ballast. An electrical current from the ballast flows through the gas (mercury vapor), causing it to emit ultraviolet light. The ultraviolet light then excites a phosphor coating on the inside of the tube. This coating emits visible light.

Industrial Visit-4
At
TALENTPULL: Service Excellence

Department of Electronics and Communication Engineering organized an industrial visit to Talent Pull Pvt. Ltd., Chandigarh , on 23rd March 2018 for ECE ,second & third year students. The industrial visit is coordinated by Ms. Aapurva Kaul, Mr. Ashish Sharma, Mr. Bhoopesh Kumawat , Ms. Preeti Barot, Ms. Shivam Upadhyay.

Industry: TALENTPULL: Service Excellence
No. of Students Visited: 51
 Date: 23/03/2018.

Objective:

Talent Pull was established in the field of manpower outsourcing, recruitment & Project Management work. They are providing requisite manpower requirement of various Companies in India to their entire satisfaction. It is a one-source multi-resources organization. They had provided their services to all type of Industries Telecom, FMCG, Real Estate, Finance, manufacturing, IT etc.

Their strength is well trained/experienced staff who are specialized in Payroll and talent hunt i.e. identifying and sourcing candidates from the exact companies in India who are engaged in similar business related to their clients.

Working Areas in Telecom Sector

The company provides Network Services to Telecom Operators/Tower Companies through following services:
•Wi-Fi Network Services
•Video Surveillance Services
•Installation & Commissioning
•Operation & Maintenance (24x7)
•Offshore Service Delivery
•Consulting Services
•In-Building Solution
•Microwave Engineering
•RF Optimization
•Benchmarking Services
•RF Planning & Design

Training Program-1
On
Embedded System & Robotics

TechieNest Pvt. Ltd. were provided industrial training on the topic of Embedded System & Robotics to ECE students. This training module was completed in two slots with the duration of 90 hours each slots. The training was started from 22nd January 2018 (First slot) , 12th Feb 2018 (Second Slot). Total 56 students were successfully completed this training module. After this training, students will be evaluated based on theory and practical examinations certified by TechieNest, (An ISO 9001:2008 Certified Company).

Training Program-2
On
SakRobotix

- On January 19,2018, Department of Electronics & Communication had signed the MOU with SaKRobotix.
- Under this SakRobotix conducted 28 hours training from 19th January to 22th January 2018 on the topic of embedded and robotics . There were 66 participants.
- 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.

Workshop-1
On
CCNA Networking
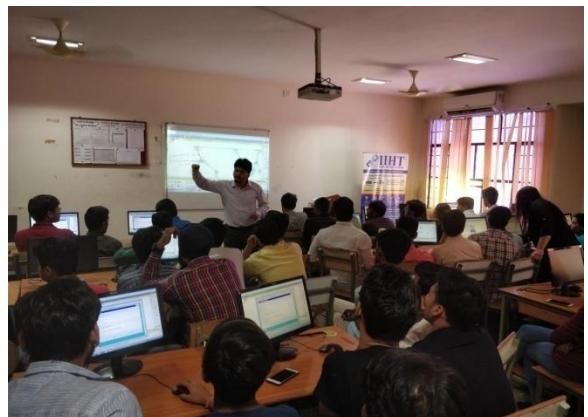
Title: "CCNA Networking" for Second Year Students.
Duration: 1 day. (20/04/2018)
No. of students attended: 58

Projects Covered:

The Department of Electronics & Communication Engineering was successfully conducted one day workshop on CCNA networking by IIHT, (Indian institute of hardware technology). Mr. Neeraj panwar from IIHT is the trainer of this workshop. The training program would help students to enhance technical knowledge in the field of networking. This also would help in placement and interviews.

Seminar
by
Aptron

Speakers from Aptron India, Noida:

Mr. Chetan Prakash, Trainer
Duration: 1 day, (09/02/2017)
No. of students attended: 75

Agenda
 Domain Awareness About
•Embedded Systems
•Microcontrollers
•IOT
•Programming Boards

Expert Talk
by
Dr. Rajiv Gupta

Speakers from **Rajasthan Technical University, Kota**
Dr. Rajiv Gupta
Date:-17/02/2018
No. of students attended: 45

Prof. Rajeev Gupta, Pro. Vice Chancellor, Rajasthan Technical University, Kota, gave an invited talk on dated 17th Feb., 2018, Saturday. The topic was "Society and Control System" in this they discussed about today's scenarios of the society, they told that how we apply control systems in real life to improve the human behavior. Several characteristics of control systems were linked to human behavior. He was also connected the fundamental concepts of control systems with nature and told that it is not necessarily peculiar to engineering. He discussed the examples of human social, political, leader and other societies who may change their behavior by the application of control systems in their life.

Conferences: International &National

A 2nd International Conference
"Recent Technological Developments in Electronics and Electrical Engineering-2018 (RTDEEE-2018)"
April 6-7, 2018

The 2nd International Conference "RTDEEE-2018" is organized with a vision to address the various issues to promote the creation of intelligent solutions in future. It is expected that researchers will bring new prospects for collaboration across disciplines and gain ideas facilitating novel concepts.

The theme of this conference will motivate the researchers to adopt the outcome for implementation. RTDEEE-2018 is a premier conference, organized by the Department of Electronics & Communication Engg. and the Department of Electrical Engineering during April 6-7, 2018 at JECRC.

The status of the participants and number of papers are as under.

Total Number of papers received	257
Total papers shortlisted	87
Outsiders (Research Scholars)	24
Outsiders (Academicians)	6
Internal (Faculty Members)	43
JECRC Students as participant	11

Department of Electronics and Communication Engineering

Conferences: International &National

Recent Advancements in Science and Technology"-2018 (RAST-2018)
March 27-28, 2018

• The National Conference "RAST-2018" is organized with a vision to address the various issues to promote the creation of intelligent solutions in future.

• In RAST-2018 students and research scholars were made aware about the recent trends in the field of electronics and electrical engineering.

• Students knew about the benefits of such conferences so that they may get an insight into the field of research which is an essential factor for the advancement of their career.

The status of the participants and number of papers are as under.

Total Number of papers received	42
Total papers shortlisted	28
Outsiders	11
Internal	17

FDPs: Faculty Development Program
ON
EMBEDDED SYSTEMS(ICT51) DURING

•Mr. Shyamsunder Manaktala successfully coordinate faculty development program on the topic of 'Embedded Systems'
In association of NITTTR Chandigarh.

Objectives:

•   The objective of the STC is to make the participants understanding the concepts of embedded systems.

•   The hands on training using an industry standard tool will help the participant to learn the architecture of a processor.

Date: 19/03/18 to 23/03/18

Attendes:
•**Mr. Shyam Sunder Manaktala**
•**Dr. Vinita Mathur**
• **Ms. Parul**
• **Mr. Rajesh Bhathija**
•**Ms. Neha Singh**
•**Mr. Rakesh Kardam**
• **Mr. Mangi Lal**
• **Mr. Sandeep Dotya**
• **Mr. Deepak Shankla**
• **Mr. Devesh Gupta**
•**Mr. Rajkumar Jain**
• **Mr. Atul Kulshrestha**

एम्बेडेड सिस्टम पर वर्कशॉप

जयपुर। जेईसीआरसी और नेशनल टेक्निकल टीचर्स ट्रेनिंग एंड रिसर्च की ओर से सोमवार को एम्बेडेड सिस्टम पर पांच दिवसीय तकनीकी कार्यशाला की शुरुआत हुई। वर्चुअल वर्कशॉप का संचालन वेब कास्टिंग के जरिए किया गया। प्राचार्य डॉ. वी.के. चंदना ने शुरुआत की। वरिष्ठ शिक्षक लोकेश बंसल ने वैज्ञानिक दृष्टिकोण की बात कही। पांच दिवसीय वर्कशॉप में एम्बेडेड डिजाइन की उपयोगिता, आधुनिक परिवर्तन एवम नए आयामों के बारे में विस्तृत जानकारी दी जाएगी।

Technical Events
Quizolic

A technical quiz with 4 rounds of increasing difficulty.

Round 1 had 20 questions with minimum 40% needed to qualify round 2. In round 2, the quickest response to randomly drawn chits progressed to next round. Round 3 was the visual round in which pictures were displayed on the screen and final round was the Buzzer round in which the team that pressed the buzzer first was given chance to answer the question. The team which gave more answers was declared as the winner.

This highly competitive event had 60 teams in total. The judge, Mr. Siddharth Sir Techienest,**Ms. Kriti Manish Sharda** declared the team of winners.

Teacher Coordinators
Ms. Ritu Vyas
Ms. Shivam Upadhyay
Student Coordinators
Arushi Khandelwal
Akshansha singhal
Aman khandelwal
Anubhav khandelwal
Avi goyal
Ayush jain

Techinobuzz

It encouraged the students to not just think about new technologies but also how to present their ideas. Their ideas were beautifully presented on A-2 Sheets.

While round one judged their creativity and attractiveness of the poster round 2 judged their verbal presentation. Participants stated the applications and the Future aspects of the technology along with the challenges in it's development.

The final round was a rebuttal round in which the judge, **Mr. Rajesh Bhatija** cross-questioned each student. The event concluded with the Team of Raveena Sharma, Rohit Verma and Prachi Khandelwal, Rishabh Raj coming out as the winners.

Teacher Coordinators
Ms. Ritu Vyas
Ms. Shivam Upadhyay

Student Coordinators
Vipul pareta
Ayushi johari
Bhavit Mathur
Devansh dadhich
Ashish Gupta

Renovator

Renovator It has not only provided a great opportunity to the students of electronics stream to showcase their practical skills but also created a healthy competitive and learning environment. There was immensely enthusiastic participation in the event, that mainly revolved around the electronic circuits studied throughout the entire E&C course. It helped the students to gain practical knowledge by designing various circuits. This event taught students, various techniques and practices that are involved in the real-world application of the concepts and is a great opportunity for the ones who wish for a career in circuitry. Judgment was done by Professor **Mr Arun Chopra,** B.E., M.B.A., M. Tech., PhD (p), who has over 26 years of experience in Teaching, Training and Management.

Teacher Coordinators
Mr. Deepak Sankhla
Mr. Veni Madhav Sharma
Student Coordinators
 Anchal khandelwal
Ambuz shukla
Anchal Agarwal
Harshit Khandewal
Abhay Goyal
Lovey Agarwal
Aman Bansal
 Devant kumar

TECH TAMBOLA

Combine your luck and your skills, solve basic mathematical equations and circuits and play Tambola. Improve your skills, solve time based questions and win exciting prizes.

Date: **25th March, 2018**

Student Coordinators
Ms. Peehu Choudhary-
Mr. Parth Sharma-
Ms. Shivali Purwar-
Mr. Ramakant Rajput-
 Ms. Priya Bhargava-

Teacher Coordinators

Mr. Ashish Sharma
Mrs. Deepmala

Robowar

For all those who have passion in Robotics or Sports, RENAISSANCE'18 presents Robo-war. This competition is to show how long robot of yours can withstand in the arena fighting the other robot. Teams must build a manually controlled machine which can withstand the other robot in the arena. Two teams competed among themselves. This event with three rounds attracted a huge audience. During the event, many robots got destroyed.

Student Coordinators
Harish Sharma
Chirag maheshwari
Gourav goyal
Chaitanya
Rishabh jain
Raghuveer

Teacher Coordinator
Mr. Vikas Sharma
Mr. Devesh Gupta

Judges
Mr. Chandra Prakash Sharma
Mr. Manish Jain(Mech).

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ROBO SOCCER

For all those who have passion in Robotics or Sports, RENAISSANCE'18 presents robo-soccer. This competition is to show how good and swift robot of yours can be by playing soccer using it and scoring more goals.Two teams again competed with each other and each team had two robot cars, one Defender and one striker. In the first round, teams had to throw the balls of one's area into the others area using their bots. In the second round the defender robot had to defend the ball from entering the goal post and striker robot had to do the goals. The event was very interesting because of the enthusiasm and competitive spirit of the participants.

Student Coordinators

Mr. Hardik Rathi
Ms. Juhi Garg
Mr. Anuj Goyal
Ms. Bharti
Mr. Vishal
Mr. Ankit

Teacher Coordinator

Mr. Vikas Mishra
Ms. Deepmala Kulshrestha

Judges

Mr. Mohit Bajapi
Mr. Katru Anand.

FORMULA ZERO

For all those who have passion in Robotic so far Sports, RENAISSANCE'18 presents Formula zero. This competition is to show how good and swift robot of yours can be,by crossing the hurdles using it and scoring more points. In this event, robots were made to cross many hurdles and complete the race in minimum time. The team which crossed all the hurdles in minimum time with maximum points and efficiency was announced as the winner.

Student Coordinators
Gaurav gupta
Jaya mittal
 Anshul Dhaka
 Anant
 Sandeep
 Naman

Teacher Coordinator
Mr. Ankur Gangwar
Mr. Neha Singh

Judges
Mr. Manish Jain
Mr. Vikash Mishra.

Line Follower

For all those who have passion in Robotics or Sports, RENAISSANCE'18 presents Line follower. This competition is to show how good and swift robot of yours can be by following a line using it and scoring more points. In this event, the compact infrared light robot was made to move on white strips on blackboards using detector. There were 5 checkpoints on the LFR track from which a team could skip maximum 2 checkpoints. The team which completed the track in the minimum time with maximum points was announced as the winner.

Student Coordinators
Mithlesh Yadav
Nandita Jain
Dhairya Gupta

Teacher Coordinator

Dr. Vinita Mathur
Ms. Parul Tyagi

Judges
Dr. Manisha Gupta
Ms. Teena Sharma.

TECHNOPHILIA

This event is to develop research aptitude among engineering students. Future of education belongs to research. Students who want to pursue higher studies in india or abroad are very much inquisitive about developing research aptitude . Technophilia will provide them a solid platform to begin. The event was a blend of your technical and presentation skills. It was organised to test the research skills of students. In round 1 participants were provided with a research paper for which they had to write a titled abstract. In final round participants presented a power point presentation of 7 minutes on the same research paper given to them.

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Teacher Coordinator

Mr. Rajesh Bhataija
Mr. S.S. Manaktala

Student Coordinators
Shipra Goyal
Radhey Shyam

Phoenix

"CASH THE ASH", In this event students have to develop a working model from the available components of a non working or discarded device according their innovative idea. Creating is not finding of a thing but making something out of it after it is found so get your mind work to create something innovative from the ASH.

Teacher Coordinator

Mr. Ashish Kulshrestha
Mr. Rajkumar Jain

Student Coordinators

Mr. Maneet
 Mr. Giriraj
Mr. Kailsh

Game of Drones

Build your Drone to travel from source to destination crossing various interruptions, hurdles, etc., along the path of journey. This is an open event for all (but should not be from any industry or a professional).

In this event, participants were asked to build a drone to travel from source to destination by crossing various interruptions, hurdles, etc., along with the path of the journey. Various teams from different colleges came to participate in it.

Teacher coordinator
Mr. Siddharth Chturvedi
Mr. Naresh kumar
Mr.Ashish Sharma
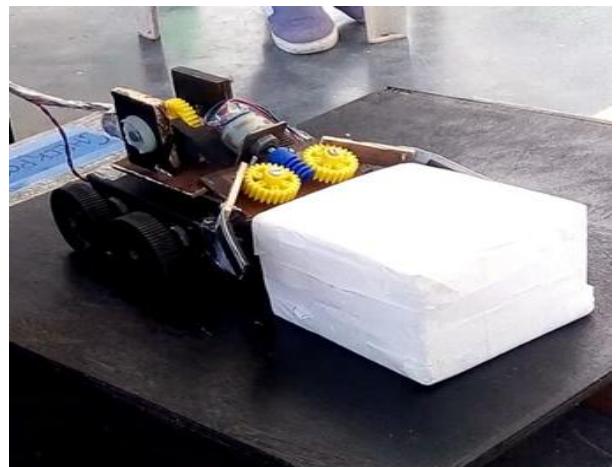
Judges
Mr. Manoj Khandelwal
(Asst. Director, BSNL)
Mr. Rajat Vijay

Student Achievements

Xananoids

In this race of just coming first and not grasping any knowledge, Xananoids took its initial step in inculcating the knowledge among the students of the first year with the basic of robotics. The seminar took place in three sessions. It was great to see such overwhelming enthusiasm of the young buds. We wish that this zeal and curiosity learn more and more stays forever.

The members of the Xananoids club go to various technical fests in a different event.
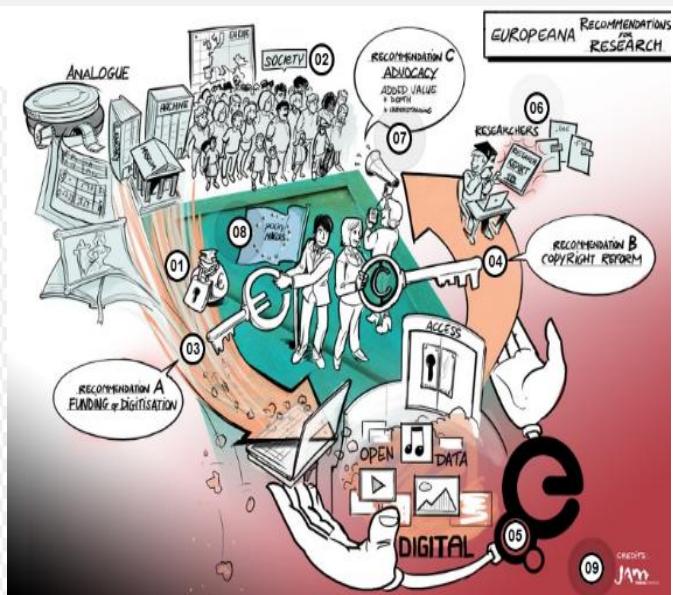
Student Achievements

Xananoids

Our students Mithlesh Yadav, Rishabh Anand, Anshul Dhaka,Chirag Maheshwari, Gourav Goyal, Hardik Rathi, Jaya Mittal, Juhi Garg team of Xananoids win the folloeing 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.

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 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.

Sports News

Football:

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).

Congratulation To the Batch Toppers

We congratulate students for their achievements. We would also like to congratulate the program coordinators and faculty members to support the students for achieving their position.

III Semester (2017-2018)- Ms. Niharika

V Semester (2017-2018)- Ms. Somyaa

VII Semester (2017-2018)- Ms. Manmeet Kaur

Ms. Mahak Ahuja(Session 2017-2018) secured **10th Position** in Merit list of Rajasthan Technical University, Kota with 84.66%.
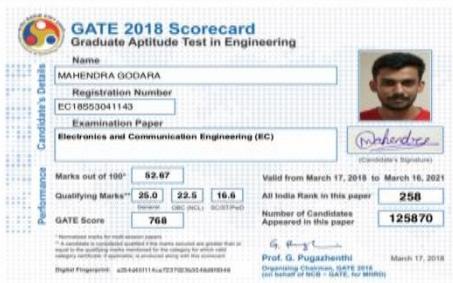
The roots of education are bitter but the fruit is sweet.
- Aristotle

Congratulation To GATE Qualified Students

GATE 2018 Qualifiers:

- Mahendra Godara (258 All India Rank), 52.67 Marks
- Surbhi Singh, 28.67 Marks
- Kritika Singh,25.67 Marks
- Himanshu Bakoliya ,17 Marks

*

Cut off Marks in GATE 2018 were General 25; OBC 22 and SC/ST/PH 16

Congratulations

Ms. Vinita Mathur is Awarded PhD degree from JECRC University, in electronics and communication in Jan 2018 and she has five research paper publications in 2017 in journals having international repute.

Mr. Veni Madhav Sharma was awarded by the degree of Master of Technology in January 2018.

Ms. Preeti Barot has received Gold medal for her Master's degree from Poornima Institute of technology Jaipur in February 2018.
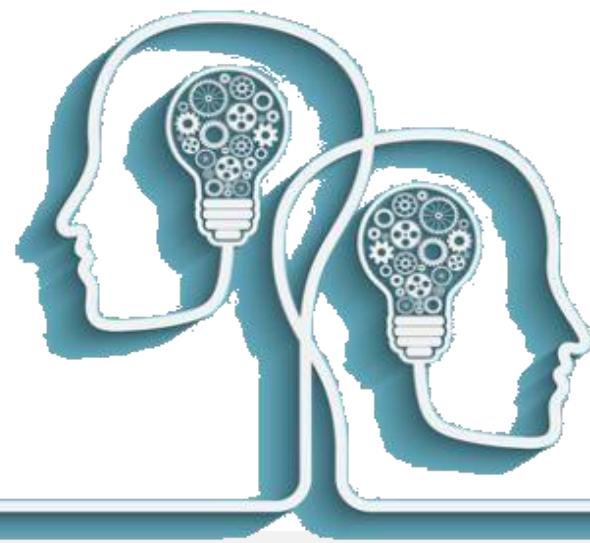
Mr. Ashutosh Sharma and Mr. Lokesh Sharma from ECE Department attended a conference on cyber security on 14th March, 2018 held at Constitution Club of India, New Delhi.

Achievements of Faculty Members

FDPs

Teena Sharma attended an academy training program on "Advances in Communication Technology (AOT-2018) " organized by Electronics & ICT Academy MNIT, Jaipur during 09/02/18 to 14/02/18.
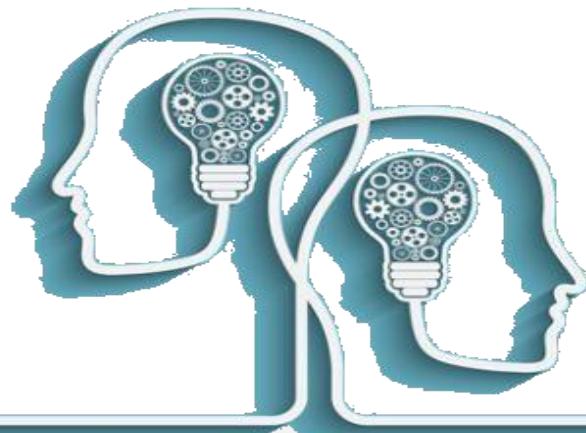
Achievements of Faculty Members

Publications

Ms. Parul Tyagi has published a paper entitled, "Performance Analysis and Implementation of Proposed Mechanism for Detection and Prevention of Security Attacks in Routing Protocols of Vehicular Ad-hoc Network (VANET)" in Egyptian Informatics Journal-Elesvier international journal, ISSN:1110-8665, 18(2),2017.

Ms. Kriti Manish Sharda has presented a paper entitled, "WATER DISINFECTION USING NANOTECHNOLOGY FOR SAFER IRRIGATION" in a National conference on DIGITAL TECHNOLOGY ENABLING MODERNIZATION ON RURAL INDIA ,2017.

Training & Placement

The goal of the Training & Placement Cell of the ECE Department is to provide employment opportunities and world class training to students in leading organizations/Industry. The Training & Placement Cell further provides ample opportunities to the students to develop their personality by conducting programs regularly on communication skills and other soft skills. This Cell makes the students Industry-friendly and Industry ready candidates. Under the guidance of **Mr. Siddharth Chaturvedi**, a hard working team arranges training for students in Industries for two to four weeks at the end of the session.

TRAINING & PLACEMENT

Congratulation To Accenture Placed Students

AARUSHI SINGH	Accenture
AISHWARYA SHARMA	Accenture
HARSH JHA	Accenture
KANIKA SAINI	Accenture
KANISHKA KUKREJA	Accenture
MANSI SHARMA	Accenture
MONIKA GWALANI	Accenture
PRACHI KHANDELWAL	Accenture
SALONI SHARMA	Accenture
SURBHI SHRIVASTAVA	Accenture
MEHAK PANDITA	Accenture/ ByJus
SAURABH AGRAWAL	Accenture/ Mindtree
SURABHI SONI	Accenture/TCS through Codevita
YASH CHATURVEDI	Air Interview
ANUBHAV SAXENA	APPEAL
DIVYANSH BHARGAVA	APPEAL
NIKHIL GOYAL	APPEAL
SANIDHYA MOHOVIA	APPEAL
MAYUR GUPTA	APPEAL/ TCS
ARCHANA VISWANATH	Artech
SIMRAN BHATIA	ARtech
DEEPAK KUMAR	**Capital Trust**
NIHAR JAIN	Capital Trust
PUSHPENDRA SINGH NARUKA	Capital Trust
YASH DOSI	Capital Trust
YASH KUMAR JEPH	Capital Trust
SHIVAM SUKHWAL	Capital Trust
SUWARNA SANT	CAREER POINT (Offcampus)
KARUNA KOUL	DevTechnosys
PRATEEK MAHESHWARI	FACE
SAURABH RAHEJA	FACE
JANHAVI AGRAWAL	FEV
RISHABH RAJ	FEV
CHHAYA GAUTAM	GKMIT/ Internship at TCS
ANJALI YADAV	GuruKripa
NEHA JADOUN	GuruKripa

Congratulation To Placed Students

ABHINANDAN KUMAR	Just Dial
DEEPAK RANKAWAT	Just Dial
GAURAV SHARMA	Just Dial
HARSHIL JAIN	Just Dial
NANDAN KUMAR RAY	Just Dial
NIKHIL SARASWAT	Just Dial
AYUSHI JAIN	Marketing Mindz
ISHA JAIN	Marketing Mindz
KAJAL KHANDELWAL	Marketing Mindz
HARSHIT SHARMA	Marketing Mindz
MANMEET KAUR	Marketing Mindz
ADITYA GAUTAM	Matrix
GARVIT CHUGH	Matrix
OSCEAN RAINA	Matrix
PARUL SIPPY	matrix
ROHIT VERMA	Matrix
DIPANSHU SHARMA	MetaCube
ARPIT AGRAWAL	MindIt
HARSHITA SHARMA	Mindtree
ANKIT KUMAR	PAL IT
PRIYANKA MITTAL	SimplyForce
ABHISHEK KUMAR	Talent Pull
ARPIT KUMAR	Talent Pull
HIMANSHU PRAJAPATI	Talent Pull
MANVENDRA KUMAR	Talent Pull
NISAR AHMAD	Talent Pull
MOHIT CHAUHAN	TCS
MOHIT GAURAV SONI	TCS
Neha Kumari	TCS
VIDUSHI CHAPLOT	TCS

Department of Electronics and Communication Engineering

The Sixth Sense Technology

The sixth sense technology is a beginning of new era; An era where the need for hardware is minimized. This technology was developed by Steve Mann. It is a blend of many exquisite technologies which include hand gesture recognition, image capturing and manipulation. The sixth sense prototype is made using very common and easily available equipments like projectors, colored markers, camera etc. Being an easily accessible technology, it holds wide scope in future and opens gate for further development in this field.

 -Ajay Agarwal
   III Year

Memristor

It is a microscopic component that can remember electrical states even when turned off. Memristor potents include applications in programmable logic signal processing neutral networks, control system, reconfigurable computing, brain computer interfaces and RFID. Memristive devices are potentially used for stateful logic implication, allowing a replacement for CMOS – based logic computation.
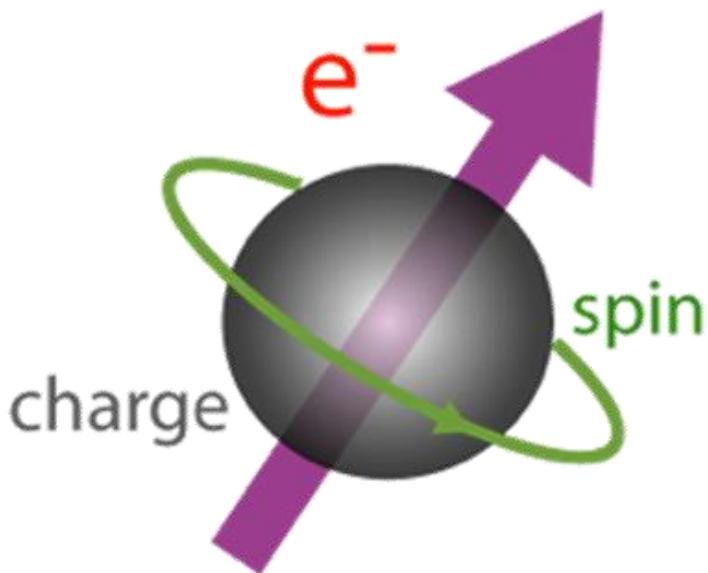
-Arpit Singhal
  II IYear

Spintronics

Spintronics investigates control and manipulation of the electron spin in metals and semiconductor applications using spin-polarized electrical injection have shown threshold current reduction and controllable circuit only polarized coherent light output. Examples include semiconductor laser. Future applications may include a spin based transistor having advantages over MOSFET DEVICES such as steeper sub-thresh hold slope.

-Ashish Agarwal
 III Year
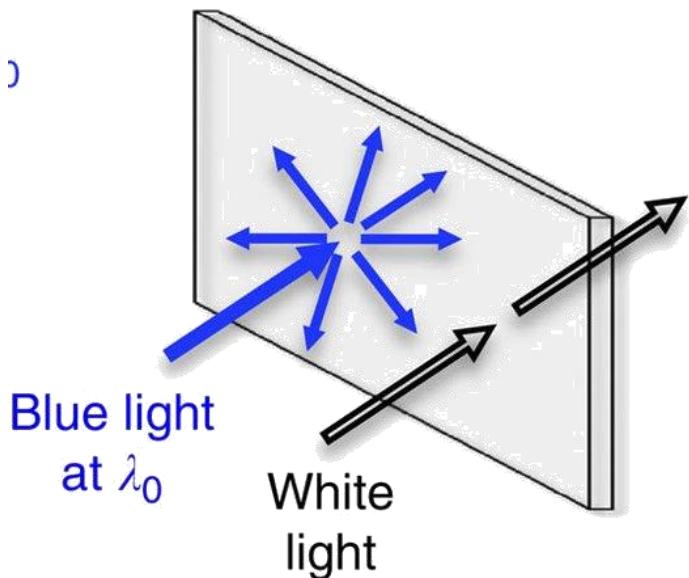
Silvernano-particle: Transparency

Silver nano-particles are embedded in the transparent particles, these tiny particles can be tuned to scatter only certain wavelength. Visible light does not belong in this spectrum hence the scattering allows the projected image to be seen in much the same way as smoke in the air reveals the presence of laser beam passing through it. Which means that the glass remains transparent enough to see colors and shapes clearly through it while single color display is clearly visible on the glass.

-Ankit Sankhla
   III Year

Blue light at λ_0

White light

Interesting Facts

1. **Black-market radio-** During World War II, the radios used by the forces were heavy and erratic, and not designed for jungle warfare. Kilby wanted to improve the situation and travelled to Kolkata, India, for a truckload of black-market radio parts. Soon, he succeeded in building smaller, more reliable radios for the troops. His invention of integrated circuit stems from this attitude, "If something does not meet your requirements, rebuild."

2. **Monophobia** means NO-MOBILE-PHONE- PHOBIA.

3. If you put a lit match in your microwave and turn it on you van create a plasma ball or balled lightning.

4. There are fake Apple Stores in China. Some of them are so convincing, even the staff thinks they are working for Apple.

5. 95% of people feel uncomfortable if the TV volume is an odd number.

6. Hard Disk are so sensitive to vibration that even screaming at them diminishes there performance.

To be continued….