



EC GECR Newsletter

January-2020
Volume 1 Issue 1

Electronics & Communication Department,
Government Engineering College, Rajkot.

Vision

To bring out technically competent, responsible, ethical and environment friendly Electronics & Communication engineers for the society and industries.

Mission

- Developing technical competency in the students of electronics & communication engineering through hands on practice.
- Imparting quality technical education to the students through advanced teaching learning process.
- Creating vibrant atmosphere in the department to imbibe discipline, ethics and social responsibilities in students.
- Facilitating students to work on innovative projects related to electronics & communication engineering.

From the desk of Head of Department

Dear Students and faculties,

I am very happy to share that our institute has received Augmented Reality and Virtual Reality Laboratory grant from the State Government and in near future we will have modern laboratory of this advance technology area. Electronics and Communication Engineering is growing day by day and it is necessary to update faculties and students with latest technology. Electronics and communication engineers must learn about Internet of things, artificial intelligence, machine learning, deep learning, Virtual reality, augmented reality and cognitive radio. Electronics and communication engineering field is becoming too vast that it is not possible to cover everything in the curriculum. Depending on interest of the student, he or she has to select any one topic and study it in depth but for selection of the topic, it is necessary to get introductory knowledge of technological advancements. Student should select such topics to deliver seminar and discuss with each other and faculties. There are MOOC (Massive Open Online Courses) are available for such advance topics. Students should attend any one course during their winter vacation or summer vacation period or even during academic term. Our institute is preparing for getting accreditation from National Board of Accreditation (NBA). NBA focuses on outcome based education (OBE). Outcome based education is student centric. In OBE, at the end of educational experience, students are expected to have outcomes. Every course has course outcomes (COs). At the time of learning course, you must be aware of course outcomes. At the end of graduation, every student will achieve programme outcomes (POs). There are Programme Specific Outcomes defined specifically for our department. It describes what students are expected to be able to do after completion of graduation. Program educational objectives (PEOs) are broad statements that describe what graduates are expected to attain within few years of graduation. We have defined our PEOs and I am happy to share that our alumni has proven it correct by positioning themselves at higher post in different organisations and by becoming entrepreneur. PEOs describe what you will be after five years of your graduation. Vision of our institute and department, Mission of our institute and department, PO, PSO and PEO of our department are available on our website, MOODLE as well as displayed in laboratory, lobbies and classroom. All the students must be familiar with this terminology of outcome based education. We are fortunate that our new principal is from Electronics and communication engineering field and pure academician. He has obtained his M.Tech as well as Ph.D. from IIT Bombay. We faculties and you will be benefited by his knowledge and expertise. We are putting our best efforts to create vibrant atmosphere to motivate you for learning and to make our department and institution as preferred destination for learners. Ethics is very important part for happy and peaceful life. Along with technological advancement, we should not forget moral principles. Engineering has direct and vital impact on quality of life for all people. Engineers must have moral values like honesty, hard and smart work, impartiality, fairness, equity, co-operation, respect for others, compassion, forgiveness mentioned in our Vedas. Students must have five cognitive skills Conscientiousness, Perseverance, Innovativeness, taking Initiatives and Problem Solving. We have grant under student start up and innovation policy (SSIP). Take maximum benefit of it for your innovative projects. Find out real life challenges present in the society and industries and work for the solution. Come up with best idea and submit proposal to get funding from SSIP grant.

Wish you best of luck,
(Dr. C.H. Vithalani)

Summer Boot Camp

The five day summer boot camp was arranged with a view to introduce the students of school about the Student Start up and Innovation. On the inauguration day Prof. C H Vithalani (Principal, GEC Rajkot), Prof. A S Pandya (Principal, AVPTI Rajkot), Prof. P P Kotak (Principal, GP Rajkot), Mr. Rajubhai Parikh (Mahatma Gandhi School, Rajkot) and Prof. G M Tank (GEC, Rajkot) were present as a guest of honor. As a part of boot camp on first day, Prof. D R Bhojani had explained innovative thinking and design methodology to the students and they have learnt preparing product development canvas with important aspects of design methodology. The second day of boot camp was taken by Prof. P A Lathiya on the Skretch software which is a very good tool to initiate students towards programming. Next two days of the boot camp were on the arduino. They have been very well explained the arduino board hardware and software to the students with hands on sessions. On the last day of the boot camp students have prepared some small projects on their own on the arduino board and proven their programming capabilities.





Orientation Function

Continuing the tradition, EC Department GEC Rajkot welcomed the bright - enthusiastic first year students with pleasure. Principal sir and head of department addressed new students and guided them how they can make their engineering journey more fruitful and more efficient.

Prof. Jay Pandya shared information of EC Department mainly about faculties of the department, classroom and laboratories and other facilities provided by department, Previous results, placement record and other achievements of the department. He also shared glimpse of co curricular and extracurricular activities arranged by EC Department.

Alumni Mr. Ravi Kansagara (CEO and Founder of Craftbox Technologiies) shared his journey at GEC Rajkot and beautifully explained some tips to make the journey more worthy.

After the program at auditorium, Students coordinators from 5th and 7th semester with the new admitted students visited college campus to make new students familiar about the college campus and various activities.

Workshop on Implementing Wireless SOHO Network

A workshop on Implementing Wireless SOHO network was organized under post TEQIP activities on 6 July 2019 by Mr. Kalpesh Vyas from netRoute Technologies, Rajkot. Prof. Jay Pandya Coordinated the program.

During the workshop expert explained how technology is getting advanced and how various devices can be connected with each other. Then, the expert gave a brief idea about the OSI layers used in networking and various networking devices. During hands on session, students were given network devices and they learned how to add password, how to block various websites, how to hide name of Wi-Fi, SSID and BSSID etc.

Expert also gave a statement problem of making an office area wireless connected by using routers, switches and access points by designing different possible solutions. At last expert explained the participants about different practical examples that he experienced when he had established some networks during his career.





The Felicitation Ceremony of 2019 Pass Out Batch Students

On 6th July 2019, a Felicitation Ceremony for the toppers of 2019 pass out batches was organized by AAG (Alumni Association of Government Engineering College, Rajkot). The programme was organized under the aegis of the alumni Association. It started with welcome address by the principal. Followed by the exposition by the AAG faculty coordinator, Dr. R. D. Mehta, who puts insights on the role of alumni on bridging the gap between industries and academia. In the felicitation ceremony, the main part of the event, the first three rank holders of each branch of engineering were felicited by the HODs of the respective departments by giving away of token of appreciation.

This was followed by sharing of the feedback by parents and the pass outs. The passouts shared the experiences of their employment end how to get into the industry.

AAG thanked all the faculty coordinators, student volunteers, Alumni Association executive committee members Mr. Ravi Kansagra and Mr. Shanee Parmar. Also, Team AAG is especially thanked to the Principal, Prof. Dr. C. H. Vithalani, for granting permission to use the institute amenities to organize the event on this larger scale.

Idea Competition

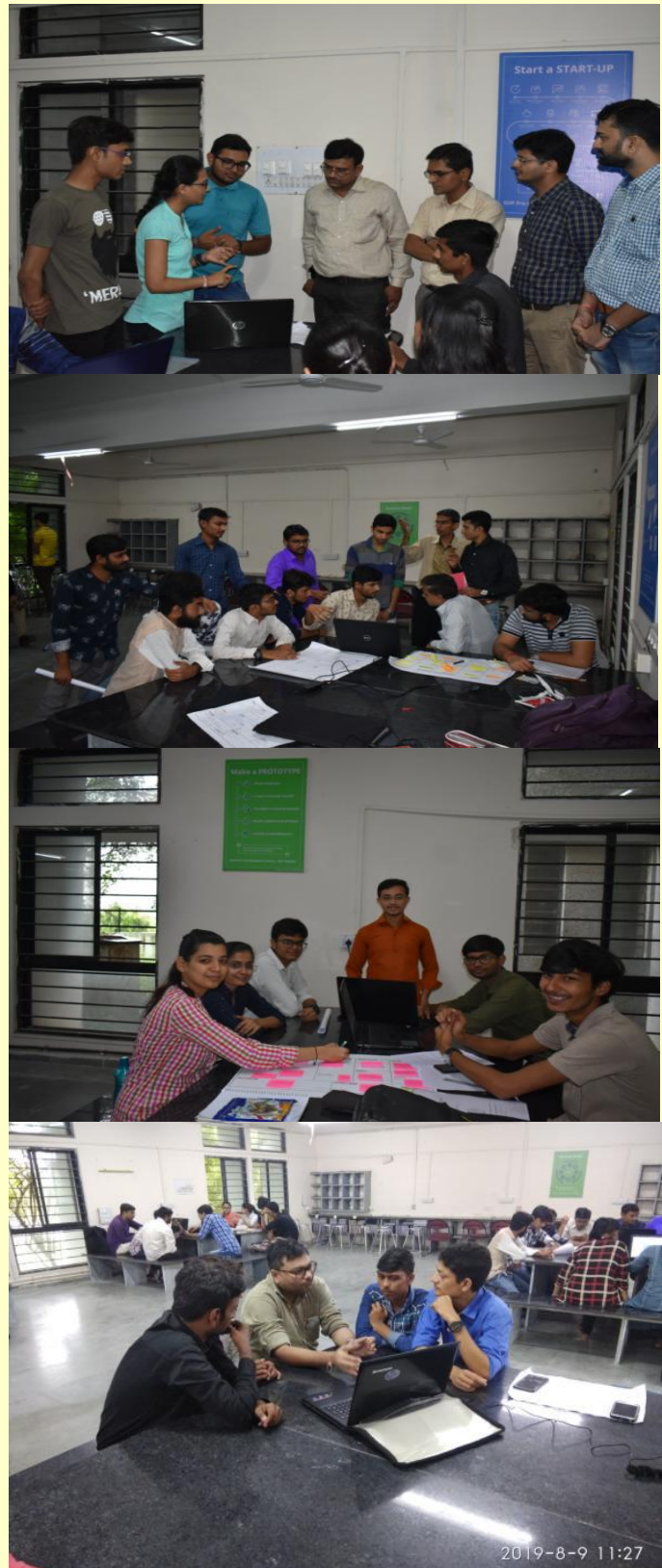
The Idea Competition was organized at the institute on 9th of August, 2019 to identify the innovative ideas from the pre-final and final year students of engineering. Total 122 teams have participated from all the departments of the institute. Out of that 31 projects have been short listed who will be granted from the SSIP PoC fund of the institute.

Under this students group will be allowed to get fund upto 2 lacks for their PoC as well as upto 25000 for the patent filling from the SSIP grant. Prof (Dr.) Dhaval Bhojani Coordinated the event at EC Department.

EC Department Teams : From EC Department , total 31 Teams have participated the event. 5 Teams was awarded the prize.

EC Department Winners:

1. Optical Character Recognizer
2. Smart Flower Solar System
3. Drone Based Medical Facility
4. Automated Waste Segregation
5. ARM Based Button Shorting Machine using Image Processing.





Inauguration: Students Chapter Institute of Engineers

Inauguration of Student's Chapter of Institute of Engineers for Electronics & Communication Department and Mechanical Department.

On 14/10/2019, in the presence of authorities of Institute of engineers (India) and Government engineering college, Rajkot. Prof. K.B.Rathod explained how a students chapter is helpful in the growth of a member. Prof. H.P.Koringa welcomed the chief guest Mr. Jayen Kotecha and also briefed the participant about the planned activities under student chapter of IE at GEC Rajkot.

On the same day, two expert seminars for both EC and Mechanical departments were organized and almost 100 students participated the event. For EC students an expert talk on "Video Standards" was organized and Prof. Jay Pandya was key note speaker.



World Standards Day Celebration

On world standard day 2019(14/10/19) Expert lecture was organized by Student Chapter of Institute of Engineers GEC Rajkot. The theme of talk was "Video Standards Creates a Global Platform".

Dr. Jayen Kotecha founder and CEO Perfext Consulting group was chief guest of the program. He shared very useful information regarding different standards that we use in our daily life. He also explained the importance of standards in industry/company.

Prof. Jay Pandya shared his expertise with students. He shared information regarding different video standards used in analog TV, Digital TV, Multimedia and Video Compression. Almost 50 students attended the talk. All participants were awarded a certificate of participation.



Placements

2019 Batch

Total **59 Students** get Job/Internship/Industrial Training during their graduation.

2020 Batch

Before starting their final semester, total **34 students** get Job/Internship/Industrial Training in different companies. EC Department is appreciating their efforts and wishing them very bright future.



Photo Gallery of Training and Placement Activities



Ms. Mansi Masrani

GECR EC Batch 2009 – 2013

Currently working as SoC Design Engineer at Intel India

Journey with GEC - Rajkot

My journey with GECR is memorable due to the fact that it not only developed technical skills but also provided me the environment for personality development. I got to know about my leadership/management skills here when we first managed tech fest even called Brizingr'12. We went through cultural programs where I could showcase my drawing and singing skills. Professors used to arrange mock interviews/group discussion, where i developed my verbal/networking skills. I found my passion for VLSI while attending 6th semester labs, and I dreamt of working at Intel those days. I wouldn't be working at Intel today if I didn't have all the knowledge and support given by Professors at GECR. Overall GECR was the one place who made me realize my strengths and work towards my passion. I work on CPU design at Intel, manage events at Intel, address Women employees at Intel, train new joiners at Intel for work, participate in family days, visit NGOs, provide social support, and the list is endless. I am where I wanted to be due to GECR



Advisors:

Prof. R.A.Thakkar

Prof. C.H.Vithalani

Faculty Coordinator:

Convener, Editor, Designer

Prof. Jay Pandya