Department of Telecommunication Engineering

About CMRIT

Established in 2000, the CMR Institute of Technology imparts quality, pragmatic education in engineering and management to help students hone their analytical abilities and develop their creative thinking skills. CMRIT meets the rapidly growing need for technology professionals by nurturing young minds in an innovative and progressive learning environment. Situated in the very heart of South India's IT corridor, the CMRIT campus in Whitefield, Bangalore is centrally located, well connected and easily accessible. At CMRIT, we are dedicated to holding aloft the flame of Sri Chikka Muniyappa Reddy's dreams. Towards this end, we are committed to promoting technical education as a catalyst to the growth and development of the country and society at large. With world-class infrastructure and experienced faculty, CMR Institute of Technology is the preferred destination for technocrats and managers who wish to shape the future.

About TCE Department

With the convergence of electronics, communication and Information Technology, Telecommunications has become a lucrative industry for young hopefuls. The department of Telecommunication Engineering aims to meet the challenges and changing needs of a rapidly growing Telecommunication industry.

Telecommunication students are trained in all aspects of Electronic Engineering, and broad band communication. We have committed faculty specialized in Mobile Communication, Satellite Communication, VLSI and Programming Languages, Digital Signal Processing, Image Processing & Microwave Engineering.

Vision of CMRIT

To be a nationally acclaimed and globally recognized institute of engineering, technology and management, producing competent professionals with appropriate attributes to serve the cause of the nation and of society at large.

Vision of TCE Department

To create an ethical human resource proficient in domains related to Telecommunication Engineering for a successful career in the service of society

Mission of TCE Department

The Mission of the Department of Telecommunication Engineering, CMRIT, is to:

M1. Create a staff team with a mixture of people with industrial and academic exposure capable of inspiring, moulding and training young minds into competent professionals and an ethical resource.

M2. Impart knowledge of domains by equipping laboratories and facilitate experiential learning, experimentation and research based on foundation of science and mathematics.

M3. Ideate and implement interdisciplinary projects and foster continuous learning in association with students and colleagues across disciplines of the institute.

M4. Collaborate with academia, industries, organizations and professional bodies for training, consultancy and research.

Message from HOD

Department of Telecommunication Engineering welcomes you….

Teacher is someone who shapes the society and being a teacher I believe in creating enthusiastic and responsible young generations. With this motive in mind, the faculty of the department practice innovative methods in the teaching-learning-process that transform the students into competent professionals. The strengths of the department are dedicated faculty, necessary technical staff and enthusiastic students.

During their study at the department, the students are encouraged to get practical learning experience in the corporate world through internships and projects with reputed organizations. They are also encouraged to take up mini projects to supplement theoretical knowledge with practical experience.

The department prepares the graduating engineers by conducting GATE equivalent exam and MOOC Exam to pursue a successful professional career. The quality of the graduating students is reflected in good on-campus/off-campus recruitments.

The department also conducts workshop/guest lectures on trending topics to enhance the knowledge of students and faculty.

It gives me immense pleasure in presenting the newsletter of January-May 2019 quarter. I hope it will give a nice outline about our department

Faculty

Mr. Mahesh Kumar Jha
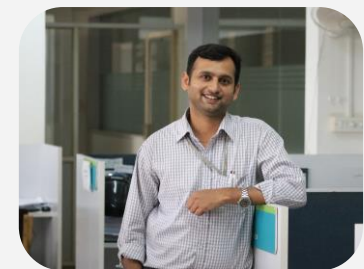Head of Department

Mrs. Sophiya Susan
Asst. Professor

Mrs. Richa Tengshe
Asst. Professor

Mrs. Shruthi M L J
Asst. Professor

Mr. Abhishek Javali
Asst. Professor

Mr. Raveesh Hegde
Asst. Professor

Mrs. Laxmi Sharma
Asst. Professor

Mrs. Anindita Sahoo
Asst. Professor

Ms. Deepa Pradeep
Asst. Professor

Mr. Hemanth Kumar
Asst. Professor

GUEST

LECTURE

The Department has organised guest lectures on various topics related to Telecommunication where guest speakers are invited from industry and other institutions to share their experiences and update students with recent developments in the industry.

The Department has organized a guest lecture on "IOT" on 14-02-2019. This Guest lecture was conducted for Third year Students. The speaker had addressed the students, and discussed about the future scope of "IOT".

Areas of discussion were:

1. Basics of IOT
2. Importance of IOT
3. IOT based Smart city
4. Trends and Characteristics
5. Future development in IOT
6. Enabling technologies for IOT

Every year, many number of students pass out of colleges in India and around the world. Seeing the trend and the fast pace growth in today's world, the industry standards also keeps increasing at the same time. With this, of course comes many numbers of expectations from the up-coming students by the company. To educate the students on the same, The Department of Telecommunication, had organized a guest lecture on 'Opportunities in IT industries 'on 23-02-2019. The guest of honour was Mr. Arkadev and Mr.Vipin, Alumni of CMRIT, working in Ernst & Young, had an interactive session with the students of TCE.

FACULTY TECH TALK

Sessions conducted by the faculty on topics related to their Research Work and Latest Trends in the industry.

MOOC

Every Faculty in the Department have completed one MOOC certification of their interest related to the field of Telecommunication Engineering from NPTEL, Coursera, edX and various online course provider forums.

Over 100 students have taken MOOC courses and successfully completed. This is an initiative taken by the department, for the students to think out of the box.

MINI PROJECTS

With the squeezing exams schedule, day long lectures and labs to attend, working on mini projects for the students is a challenge. And it is a known fact that projects are given the highest weightage in core company placements & higher studies admissions at esteemed universities. The Department faculty have given their full support in guiding the students of 4th and 6th semester for the completion of the mini projects successfully.

TECHNOLIX CLUB

Started in the year 2011.

- ➕ Faculty Council
  Prof. Raveesh Hegde – Faculty Coordinator
- ➕ Student Council
  Richa Sharma – General Secretary
  Vajra – Technical Head
  Dino Raju – Event Coordinator

Under Technolix Club various events and programmes are conducted for students and faculty to enrich technical skills.

Department club has organized an event called cryptography on 22-03-2019 was based on solving cryptic messages and moving to the next round. Participants were given puzzles and solving them would give them the hint to proceed to the next step.

Department club has also organized a workshop on arduino on 29.04.2019. The workshop was conducted by students of 6th semester, Telecommunication Engineering. The event was open to all students of CMRIT and over 30 students participated in the event. The workshop was held in microprocessor lab of TCE from 1.30pm to 4.00pm. The training involved the following topics.

- ➢ Basics of Arduino
- ➢ Introduction to coding with Embedded-C
- ➢ Hands on session with Arduino kit
- ➢ Interfacing Arduino with LCD, Servo Motor, Buzzer, LED
- ➢ Implementing mini projects using Arduino

FDP / WORKSHOP

From home automation to remote health monitoring systems, from autonomous vehicles to smart consumer electronics devices, Internet of Things (IoT) has influenced our lives in a significant manner.

A **two-day workshop on Internet of Things** (IoT) in association with Tequed Labs, Bengaluru was organized by the Department of TCE, CMRIT on 21.02.2019 & 22.02.2019.

Following topics were discussed in the workshop.

- ➢ Introduction to IoT
- ➢ Architecture, Components
- ➢ Software introduction and installation
- ➢ Interfacing sensors and NodeMCU
- ➢ Controlling devices remotely using Blynk App
- ➢ Open cloud platform to upload and analyze data
- ➢ Sending sensor values to cloud

Workshop on Digital Image Processing was conducted for 3 days from the department of TCE, CMRIT from 11-02-2019.

Speakers were :

     1) Shruthi M L J, Asst. Prof., Dept. of TCE, CMRIT.

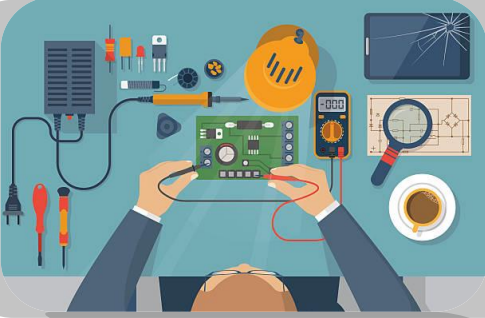   2) Rashmi K V, Asst. Prof., Dept. of ECE, CMRIT.

The objective of this workshop is to give exposure on digital image processing techniques. This workshop will help the participants to get trained in MATLAB based image processing. The workshop is designed to stimulate participant's interest in image processing domain by engaging them in a completely purpose driven learning environment with hands-on activities while fostering a sense of curiosity and accomplishment.

Targeting to provide an intense training to understand the concepts of research, research methodology and scientific writing, **a two-day workshop on 'Research Methodology'** jointly organized by IEEE ComSoc and CMRIT student branch held during April 13-14, 2019 at CMR Institute of Technology, Bengaluru.

Half Day Workshop on optical and wireless communication by CMRIT joint chapter of IEEE ComSoc and photonic society. The event was successfully organized under the guidance of Prof. Mahesh Kumar Jha, Branch advisor and Prof. Chetan H Gowda, Branch counsellor.

Salient Features of TCE Department

Class Rooms with Projectors

24 – Individual Cubicles

104 Desktops

FEKO
Comprehensive Electromagnetic Solutions

10 – User Licences

6 – Laboratories

Digital Electronics Lab

AC+LIC Lab

Embedded Lab

HDL lab

CCN Lab

Microwave & Antennna Lab

GATE MOCK TEST

Department conducted GATE mock test for the students to enhance their knowledge in various competitive exams like GATE, IES and other PSU exams

PLACEMENTS

No. of Students Placed: **24**

COMPANIES VISITED

INDUSTRIAL VISIT

Prof. Raveesh Hegde along with 36 students of TCE visited Regional Telecom Training Centre (RTTC) - BSNL Mysore on 06.05.2019. Students are exposed to following 4 labs during the full day visit.

GSM Lab, Broadband Lab, OFC Lab and Switching Lab

The visit provided a good learning experience with an exposure to several industry standards. It was well appreciated by the participating students. RTTC is a premier resource Centre for telecom and Information technology studies. It is recognized as high end training institute for students, working telecom professionals, and corporate houses and it is equipped with world class state of art facilities, laboratories. It has highly passionate and experienced faculty.