

The eMITers gazette

Department of Electronics and Communication Engineering

Maharaja Institute of Technology Mysore

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VISION

" To be recognized by the society at large as offering value based Quality Education to groom the next generation entrepreneurs, leaders and researchers in the field of Electronics and Communication to meet the challenges at the global level".

MISSION

1. To groom the students with strong foundations of Electronics and Communication Engineering and to facilitate them to pursue higher education and research.
2. To educate and prepare the students to competent to face the challenges of the industry/society and/or to become successful entrepreneurs.
3. Provide ethical and value-based education by promoting activities addressing the societal needs.
4. Enable students to develop skills to solve complex technological problems of current times and also provide a framework of promoting collaborative and multidisciplinary activities.

CONTENTS

1. HOD Message

2. Freshers Day Report

3. Quiz Event

4. eSim Report

5. Report on Basic Electronics and PCB design

6. Technical Talk

7. IEEE RAS Student chapter inauguration

8. Best Projects

9. Faculties completed NPTEL courses

10. Department toppers

MESSAGE FROM HOD



Noble Laureate, Mr. Kofi Anann, Secretary General of United Nations said **"Education is an instrument with immense power to transform. On its foundation rest the cornerstones of freedom, democracy and sustainable human development"**.

We at MIT ECE department strive hard to bring that into the focus for our students. It has been a very event full year with lots of activity out of our ECE department and gives me solace that the events are recorded well by this third edition of the news letter of EMITERs is taking shape. Department of ECE, since its inception in 2007 has been constantly striving to better itself and has come a long way with various activities both curricular wise and co-curricular wise. Today department is vibrant with more than 35 staff (teaching and non teaching) and has 5 PhD holders along with more than 10 faculty pursuing PhD's, and two at the cusp of completing their PhD's. Each and every faculty has a minimum of M Tech and are encouraged to pursue their PhD's on their topics of interest. Lots of research papers have been published, encouraging final year students to publish their project work.

The department started the year with the Fresher's day, which has been now become a defacto standard across the college, and are planning an alumni meet. Our department Emitters Utsav was conducted with various activities such as Debates, Quiz, sports, etc and was well represented by the students of all the years. Newsletter committee is working to make this a great success, I wish them all the best. As always, the newsletter will be focused towards bettering the student experience at ECE of MIT.

FRESHERS DAY - 2019



Every year many students join the Electronics & Communication Engineering course and it is necessary for them to be comfortable during their academic stay. Aiming at the same, a freshers day was organized on 16/09/2019. The event was inaugurated by Dr. Mahesh Rao - Head of Dept. of ECE, Dr. Ramanna -Associate Prof. Dr Ravichandran Associate Prof, Dinesh MA -Assistant Prof. by lighting the lamp. Then the event continued with the prize distribution of Quiz. Freshers was greeted by the seniors with token of love by the lovely bands. Then the informal function was conducted with some spot competitions and dance competitions for which the freshers were awarded. Faculties were introduced to the freshers then rules and regulations of the department were discussed along with the curriculum progress. The occasion ended with vote of thanks and refreshment by rendering snacks for all the attendees.

QUIZ EVENT

On the occasion of "**ENGINEERS DAY 2019**" the students of 3rd semester volunteering as a team called '**GRAND CAST**' had organized a quiz event called "**INQUIZZITIVE HOUR VERSION-1**" on 16th of September 2019.

The event was a 2 day program held on 15th & 16th September, it had a total of 4 rounds, among which 2 rounds were pre-selection rounds that was carried out through online written test on 15th September, more than 50+ students had contested in the event out of which top 10 contestants were selected for the preliminary round on 16th of September.

On the day of finals 2 rounds were conducted, round 1 was '**Rapid fire round**', the round was all about general knowledge questions in which top 5 contestants were selected for the final round. Before the beginning of the finals there was audience zone in which all the students and faculties of E&C department actively participated. The final round was '**Who am I ?**' among the top 5, 2 contestants emerged as winners.



The winners are:

1. ANKITHA D.M. -5th SEMESTER
2. ABHISHEK M.V. -5th SEMESTER

The event was successfully organized by the team '**GRAND CAST**'. The event coordinators are Ganesh Prasad B.R, RaviKumar P, Anudeep G.P, Nithin S, Nabila, Dhanyashree N.D, Champak C, Shadab & Tejas M.P.



eSim Report

A report on “One Day workshop” implemented successfully at IIT Bombay, with funding from NMEICT, MHRD Date (21st September 2019)

On 21st September, 2019, one day workshop on eSim implemented successfully at IIT Bombay, sponsored by National Mission on Education through ICT (NMEICT), funded by MHRD was conducted at Maharaja Institute of Technology Mysore.

Maharaja Institute of Technology, Mysore under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Govt. of India organized a one – day Workshop on “eSim” on 21 September 2019. Around 120 Remote Centres participated in this workshop all over India, Maharaja Institute of Technology Mysore being one of them. The workshop coordinator was Dr. Balakrishna K and remote center coordinator for the workshop was Prof. NandaKumar R B. The entire workshop was guided by Dr. Balakrishna K and well assisted by Mr. Rajesh N and Mr. Sandesh N G. In the inaugural function, Prof. Kannan Moudgalya, FOSSEE project, IIT Bombay spoke of the importance of eSim and also talked about the flow of the workshop and the teaching faculty of the workshop, Prof. Pramod Murali explained why hardware has been included. Following this, Ms. Nancy Varkey introduced the Spoken Tutorial Forum. The workshop was solely based on learning eSim using Spoken Tutorial where in participants were introduced to 9 videos on eSim.



The content of videos included getting started with eSim Linux installation, getting started with eSim Windows installation, schematic Creation and Simulation, device Model creation and Simulation, Mapping Components with Footprints, setting Parameters for PCB designing, laying Tracks on PCB, PCB Layout for Astable Multivibrator.

The participants of the workshop were teachers from various colleges in the states such as GEC, Padre Conceição College of Engineering, Shree Rayeshwar Institute of Engineering and Information Technology, Parvatibai Chowgule college, ITI-Cacora, ITI-Canacona & Government Polytechnic Panaji. The participants had to watch each of these videos, follow the instructions and replicate the same. If there were any difficulties then such questions were to be put up on the forum which was then replied to by the organizers. This workshop was entirely based on self-learning so that the participants familiarized themselves to eSim by getting a first-hand experience. For the valedictory function, there was a panel discussion wherein the participants asked difficulties related to eSim in their respective Remote Centres.

REPORT ON BASIC ELECTRONICS AND PCB DESIGN

Department of Electronics and communication engineering conducted two day workshop on "Basic electronics and PCB design" On 20th and 21st September 2019 workshop for students. Prof. Lokesh BS and Prof. Madesh K M coordinated the event.

Workshop is inaugurated by Prof. Mahesh Rao , Head of the department ECE, MITM, the resource person were Mr. Vinayak D, Technical Head, and Mr. Sagar, Technical Consultant, AMSA Embedded solution , Hubli. 60 students attended the workshop from 3rd, 5th and 7th semester of ECE

Workshop concentrated on design skills in analog and digital electronics circuits like Introduction to various DIP and Surface mount Component, PAD stack Designing, Creation of Footprints for DIP and SMD Devices. Building parts and symbols, Creating multi-sheet flat designs, Assigning reference designators, Design checking, Adding part and net properties, Library Development, Printed circuit board(PCB) design considering CAD tool, PCB etchings process, Component identification and example circuit explanations, Component rig up and soldering, Testing of circuit using sensors and output device, Mini exhibition end of the session

In short, a successful training workshop is where trainers shift their orientation and source of confidence in students.



TECHNICAL TALK BY HARSHA KIKKERI ON "HOLOSUIT AND VIRTUAL REALITY"

The Department of ECE had organized a talk by Mr. Harsha Kikkeri, CEO, HoloSuit on "HoloSuit and Virtual Reality " on 27th September, 2019, 9.00 am-10.30 am at MITM Seminar Hall for the benefit of B.E 3rd Semester students. The HOD ECE, Dr. Mahesh Rao welcomed the resource person.

Mr. Harsh Kikkeri has over 18 years of experience in Internet of Things (IoT), augmented/virtual reality and robotics, with expertise in drones, sensor fusion and machine learning. He has earlier worked in the robotics division at tech giant Microsoft. At present he is the CEO of HoloSuit founded by him in 2016.



Talk focused on the following key points:

- HoloSuit- the company's mission and products.
- Virtual reality & Augmented reality and their applications.
- Discussion on Where does Indian technological advancements stand in virtual reality field.
- Virtual reality education at HoloSuit.
- Demonstration of HoloSuit, Robots, Drones and virtual reality products.

Outcomes achieved by the technical talk:

- Students gained the knowledge about the importance of HoloSuit, Virtual Reality, data sciences, IoT, Machine Learning, Enterprise Business, Cyber Security, Automation, Industry 4.0, Networking and Storage.
- Requirements/Needs by the Industry towards recruitment of candidates in Virtual Reality firms.



IEEE RAS STUDENT CHAPTER INAUGURATION



Maharaja institute of technology Mysore, department of Electronics and Communication Engineering, IEEE Robotics & Automation society was inaugurated on 13th November 2019. The chief guest who inaugurated the function was Dr. Ajish.K. Abrahm, Head of AAC department AIISH Mysore.

The chief guest of the function addressed the entire gathering and gave a brief insight on the pioneers who started the group. He also spoke about the advantages of being a member of IEEE student chapter and influenced all the student to join IEEE for the betterment of their carrier.

The student chapter was inaugurated in an innovative way by commanding a ROBOT to shake hand with the chief guest.

In where the structure of student branch was revealed.

- 1.Mr. D Nachiketh is a Chairperson
- 2.Mr. Namith is a vice chairperson,
- 3.Ms. Amruthavarshini I O as secretary,
- 4.Mr. Gokulnath is a joint secretary
- 5.Ms. Ankitha D M is a Treasurer and
- 6.Dr. Ravichandra Kulkarni as a student chapter Mentor and
- 7.Smt. Renuka C as a Faculty Co-ordinator.



Dr. S Murali, President of MET Mysore released the brochure of the next event that will be conducted. Dr. Mahesh Rao HOD of ECE department MIT Mysore , HOD's ,faculty members of the department and other departments were present to make this event a great success.



FACULTIES COMPLETED NPTEL COURSES

Sl. No.	Faculty Name	Online Course	Name of the Course	Duration	Status of Course	If completed Results in	Year
1	Siddhanna Janai	NPTEL	Fundamentals of electronic materials and devices	8 weeks	Completed	90	2018-19
2	Dinesh.M.A.	NPTEL	Introduction to Research	8 weeks	Completed	72	2018-19
3	Veena.S.K.	NPTEL	Introduction to Research	8 weeks	Completed	75	2018-19
4	Suma.R.	NPTEL	Introduction to Research	8 weeks	Completed	73	2018-19
5	Maria Pavithra	NPTEL	Introduction to Research	8 weeks	Completed	65	2018-19
6	Niveditha.H.R.	NPTEL	research methodology	8 weeks	Completed	75	2018-19
7	Veena.S.K.	NPTEL	Machine learning	8 weeks	Completed	65	2018-19
8	Mahadesh.K.M.	NPTEL	Fundamentals of electronic materials and devices	8 weeks	Completed	44	2018-19
9	Anisha.P.S.	NPTEL	Introduction to Research	8 weeks	Completed	65	2018-19

10	Rajesh.N.	NPTEL	Digital CMOS VLSI design	6 weeks	Completed	40	2018-19
11	Nihal Mohammadi	NPTEL	Introduction to Research	8 weeks	Completed	66	2018-19
12	Lavarya.M.	NPTEL	Introduction to Research	8 weeks	Completed	62	2018-19
13	Lethan M N	NPTEL	Introduction to Research	8 weeks	Completed	69	2018-19
14	Priya M S	NPTEL	Sensors and Actuators	12 weeks	Completed	69	2019-20
15	Sidhanna janai	NPTEL	The Joy of computing using Python	12 weeks	Completed	85	2019-20
16	Renuka C	NPTEL	Sensors and Actuators	12 weeks	Completed	52	2019-20
17	Dr. Ravichandra	IIMB-EDX	Organizational Design-Strategizing for Competitive Advantage	16 weeks	Completed	81	2019-20

DEPARTMENT TOPPERS



4th Sem- Swaroop



6th sem - sinchana Krishna



8th Sem - Apoorva H P