



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MARIAN ENGINEERING COLLEGE

Department Brochure 2020-2021

Vision

"To emerge as a Center of Excellence for quality education and research, to grow in pace with rapidly changing technologies and to create Electronics and Communication Engineers who are abreast with the latest technologies and are capable of accepting new challenges."

Mission

- Impart quality education based on the curriculum, contemporary technologies, value based education that helps students groom into a highly competent Electronics and Communication Engineer.
- Constantly motivate students and faculty members to generate ideas and accept the challenges to provide solution for social needs and to endow competent professionals to undertake research and developmental activities.
- Promote academic growth for students by offering post-graduate and research programs.

Program Educational Objectives

- **PEO I:** Become proficient engineers with mastery on fundamental, contemporary and advanced concepts, problem solving, programming and design capabilities for successful career or higher studies or research.
- **PEO-II:** Function effectively in the world of rapidly changing technologies in the broad context of electronics and communication engineering, to develop new products and technologies in service to mankind, using their skills in ethical and professional manner.
- **PEO- III:** Obtained or made progress for obtaining professional licensure, have good communication skill, practice professional ethics, team- works, made progress towards leadership roles and engage in life-long learning.

Program Specific Outcomes

- PS01:** An ability to apply the principles and basic concepts in Electronics and Communication in the design and implementation of complex systems by conducting Innovative Experiments.
- PS02:** To facilitate industrial exposure, conferences and technical fests to motivate for research activities, competitive examinations and mould successful Entrepreneurs.

About the Department

The Department of Electronics and communication of Marian Engineering College was started in 2001 with 60 as intake. Since its introduction, the Dept. has been successful in training more than about 1000 students to become Electronic Engineers of high capability and credibility and to attain B.Tech degree of Kerala University. Several of them are serving in the capacity of eminent Electronic Engineers all throughout the world. This has become possible due to the sincere efforts of many dedicated staff members of the Department. Majority of them have more than a decade of service as teachers. Sustainability and sincerity of staff members paved the way for attaining good results in the Kerala university examinations, including few high ranks in it. In placements also ECE department excelled and the alumni students are in the top positions of many industries and research institutions. We, the staff members of ECE Department, Marian Engineering College promise that we will continue our sincere efforts and with the blessings of almighty God, will achieve more prosperity and success in the coming years also.

Department Highlights

Experienced Faculty with more than 10 years of experience.

Staff List	Designation	Years of Experience
Dr. M. Sasikumar	Emeritus Professor	45 years
Ms. Vinitha B Elza	HOD	19 years
Ms. Ramola Joy P.	Asso. Professor	16 years
Ms. Subha P S	Asso. Professor	12 years
Dr. M. Manoj	Asso. Professor	5 years
Mr. Evankumar G	Asst. Professor	14 years
Mr. Y. V Glastin	Asst. Professor	13 years
Ms. Simi M S	Asst. Professor	14 years
Ms. Nurul Hidayah	Asst. Professor	16 years
Ms. Dhanya Mathew	Asst. Professor	11 years
Ms. Minnu Jayan C	Asst. Professor	14 years
Ms. Sreena V G	Asst. Professor	11 years
Ms. Sony S	Asst. Professor	11 years
Ms. Ann Mathew	Asst. Professor	11 years
Ms. Hema S. Mahesh	Asst. Professor	10 years
Ms. Mary Sunitha	Asst. Professor	14 years
Ms. Preetha S L	Asst. Professor	13 years

MoU with Accubits Technologies

A Memorandum of Understanding had been signed between Accubits Technologies and Marian Engineering College through Department of Electronics & Communication on 27th Jan, 2021. The Department of ECE, has established a Centre of Excellence in AIML with the objective to provide training, facilitate self-learning and enhance skills of students thereby bridge the gap between Industry and Academia. The In-Charge of Centre of Excellence is Dr.M.Manoj, Prof.,ECE.

State of Art Lab Facilities



DIGITAL SIGNAL PROCESSING LAB

COMMUNICATION ENGINEERING LAB

MICROCONTROLLER LAB



COMMUNICATION ENGINEERING LAB

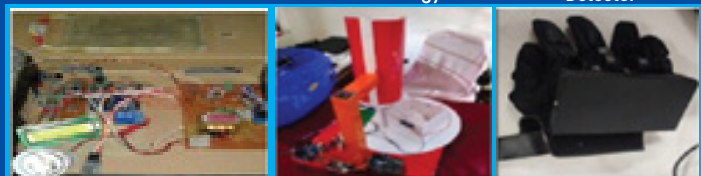
PROJECT - 2020



Security Tag for Infants

Surveillance Drone Technology

Motorcycle Blind Spot Detector



IOT Based Power Generation and Management

Automatic Waste Segregation and Monitoring System

Special Companion for Speech Impaired



In-Walk Care

Neuro Voice

Robotic Leg using Hand Gesture Control



Health Care Monitoring System for Rural Pregnant Women



Electronic Glove for better Prosthetic Hand Experience

ECE Placed Graduates (2015-2019)



Gopika Venugopal
Associate Software Developer
G10X

Gopika Unni
Software Engineer
Quest Global

Roshan Navas S
Systems Engineer
Infosys

Shilpa R
Systems Engineer
Infosys

Alan Mathew
Associate ETL Developer
Guide House

Akhila S S
Software Engineer
In App



Aiswarya Suresh
Software Engineer
IBS Software

Anoop Mathew
Associate Software Developer
UST Global

Sessy Mary Fernandez
Project Manager
Aptara Learning

Syed Ryzwan
Senior Systems Engineer
RM ESI

Archana V
Software Engineer
IBS Software

Aiswarya R B
Software Developer - Entry Level
Pinnacle Software and Services



Gouri Sadish
Systems Engineer
Infosys

Fathima Lal
Systems Engineer
Infosys

Gopika K G
Systems Engineer
Infosys

Feba Mary John
Test Engineer
Infosys

Farzana Ismail
Systems Engineer
IBS Software

K.Srihitha Rao
Systems Engineer
Infosys



Archa Mohan
Systems Engineer
Infosys

Naveen M
Software Engineer
IBS Software

Priya Jose
Associate Software Developer
UST Global

Sree Devi G S
Software Engineer
IBS Software

Kavya S Kumar
Associate Software Developer
UST Global

Jeneesha B
Systems Engineer
Infosys

ECE Placed Graduates (2016-2020)



Sreelekshmi I H
Associate
Ernst & Young

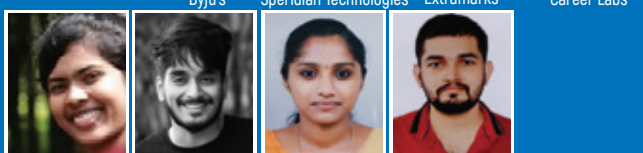
Drowpathy G
Software Engineer
Infosys

Sreejith S
Business Development Associate
Byju's

Aswin S
Trainee Associate Analytics
Speridian Technologies

Kokil M
Business Development Executive
Extramarks

Alana Retnakumar
Business Development Associate
Career Labs



Ophilia Frederick
Coding Instructor
Whitehat Junior

Sanu Shaji
Systems Engineer
Infosys

Alana Retnakumar
Associate Software Developer
UST Global

Vishnu R.Nair
Associate Software Developer
UST Global

ECE Placed Graduates (2017-2021)



Karthik S K
TCS, Infosys

Sruthi Savithri
Infosys

Amritha M R
Infosys

Adithya S Nair
Infosys

Kripa Binoy
Speridian

Sooraj S
Speridian, Ospyn

Gayathri G R
CSS Corp Pvt Ltd

Nikhil Robinson
Evobi Automations

CENTER OF EXCELLENCE IN AI & ML Department of ECE

MARIAN ENGINEERING COLLEGE, KAZHAKUTTOM

OBJECTIVES:

- Provide training, facilitate self-learning and enhance skills of students.
- Bridge the gap between industry and academia.
- Foster the spirit of learn-to-work at the early student-ship.

◀ Centre of Excellence in AI & ML, CEO_AIML was inaugurated on 24th November, 2020 by Mr. ShameerThaha, Global CSE & CEO, Accubits, Middle East/Africa, Building AI Blockchain Tech.

STUDENTS' ACHIEVEMENT OF 20-21

7TH SEMESTER ECE STUDENTS (2017-2021)



ANISH M.V. PRANAV P. NIKHIL ROBINSON



PROTOTYPE OF AGROSPY DEMONSTRATED FOR THE VAIGA AGRI HACK 2021

The team came up with a product "AGROSPY" which was selected as one of the 20 Products all over Kerala for "VAIGA AGRI HACK 2021" at St. Thomas College, Trissur. After 36 hours of challenging technological competition, they were selected for the final round which was out of 10 best products. This product was a stimulus for many Small scale Entrepreneurs and was highly appreciated by the invited guests of the hackathon.

"AGROSPY" is an IoT based system that can be placed along with the agricultural commodities in transit to record environmental parameters along with GPS values for subsequent interpretation using a web UI.

5TH SEMESTER ECE STUDENTS (2018-2022)



MRIDUL JOSHI ROSHAN S.



ANUSREE S. ALEENA NEWTON

The team of 5th semester students of ECE, proposed an idea "Riderzpa", an application which is useful for Riders across India. They won seed money of Rs 2 Lakhs through Idea Grant Scheme of Kerala Start Up Mission, and were Won among 40 finalists teams selected by Government under this scheme.

2020-2021 All Activities

• "TRAIN THE TRAINERS- FDP ON FUNDAMENTALS OF AI & ML Organized on 4th and 5th March, 2021 by the Department of ECE.

• "Online Workshop on Blockchain Technology and Application", with KBAIC (KERALA BLOCKCHAIN ACADEMY INNOVATION CLUB) on 26th Feb, 2021.

• Workshop by Mechatronics Club For S5 ECE students From 18th to 29th January, 2021

• Inaugural Ceremony of Electronics Engineering Association on 26th September, 2020

• On 9TH MAY, 2021 an Expert Talk on "General Awareness on Telecom Industry", was organized for S2 (2020-2024) and S4 (2019-2023) ECE students. The Session was handled by: **Mr. Dilshad S.**, Sub Divisional Engineer, BSNL.

• Expert Talk on Mechatronics For S1 ECE students On 3rd February, 2021 Resource Person-**Mr. Maneesh T.**, (AP, ME), Faculty-In-Charge., Mechatronics Club, **Sneha A.** (Student Coordinator-Mechatronics Club)

• An Expert Talk on "Nurture the Entrepreneur in You" for S1, S3 ECE students, on 29th January, 2021 Resource Person-**Dr. M. Manoj**, IEDC Nodal Officer, Marian Engineering College.

• Expert Talk on "Introduction to Machine Learning" for S3,S5,S7 ECE students on 12th December, 2020 Resource Person- **Ms. Sreena V.G**, Assistant Professor in ECE, Marian Engineering College.

• Tips for Technical Writing and Effective Presentation, an event organized by ECE was handled by **Ms. Sreena V.G** (AP,ECE) and **Ms. Minnu Jayan C** (AP,ECE) on 24th October, 2020.

• Workshop on proteus Design Suit 8.0 on 19th September, 2020. The Resource person was **Ms. Archa Mohan** (Alumnus 2015-2019 ECE), Systems Engineer, Infosys.

On 14th August, the Department of Electronics and Communication, had organized an International Conference through Google Meet, on "Novel Changes in Systematic Electronics"

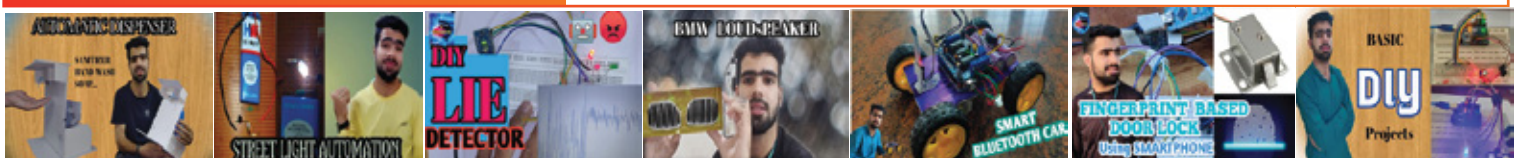


S1 Orientation Program (2020-2024 ECE) on 8th March, 2021

Resource Person : Arun R.K (2005-2009 ECE), Lieutenant Commander, Indian Navy

E INNOVATOR

THE DEPARTMENT E-INNOVATOR ACTIVITIES



AAQIB AMIN MIR, The E-Innovator (2018-2022 ECE)

Youtube Channel Link: <https://youtube.com/channel/UCFISSdIt5thbjPoYxkQZhyw>

State of Art Systems
Where does the industry Stand?

Why is Electronics & Communication Engineering THE RIGHT CHOICE ?

* Electronics and Communication Engineering is a promising growth-driven stream, an adequate knowledge in the field when amalgamated with specific skill set, qualifies the individual for a wide range of entry-level openings.

- Electronics and Communication engineers, expertise in managing large scale research, conceptualizing, designing, developing and testing of the electronic equipment used in latest communication devices and other handy technological equipment, such as smartphones, tablets, processors, smart wrist watches, smart LED TV's, etc.

Core Areas of Competencies Required By the Outside World

Radio Communications

Data Centers

THIS HAS ONLY LED TO THE SURGE IN THE DEMAND OF ELECTRONICS & COMMUNICATION ENGINEER.

- Skills of ECE engineers in planning, executing the testing process, framing of the system layouts, and delivering the end product in an impeccable way enhance their market value.
- This means that as an aspiring student of ECE, candidates need to ensure they select the right course in Electronics & Communication Engineering, in which they have interest and which offers better career options in the future.

Integrals

- Networking
- Solid State Devices
- Electronic Circuits
- Signals and Systems
- Analog Integrated Circuits
- Computer Organization
- Digital Signal Processing
- Electromagnetic Sytems
- Processors and Controllers
- Power Electronics & Instrumentation
- VLSI
- Antenna and Wave Systems
- Embedded Systems
- Microwave and Radar
- Optical Communication
- Control Systems
- Nano Electronics
- Secured Communications

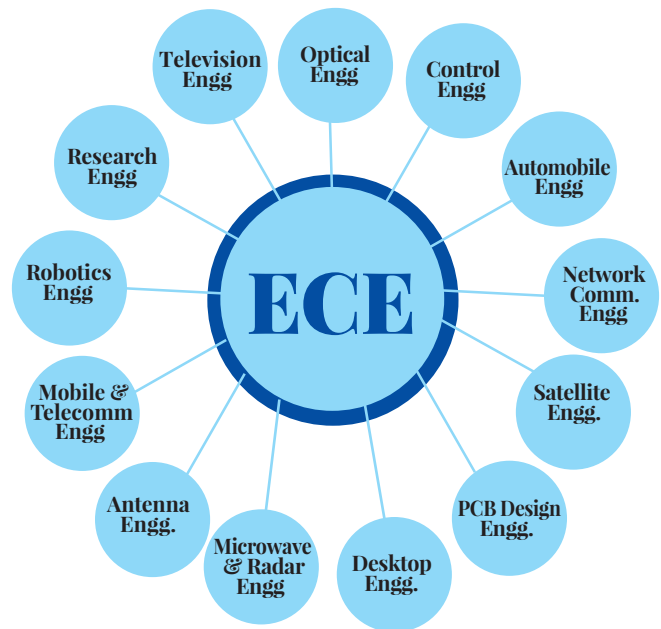
FUTURE SCOPES OF ELECTRONICS & COMMUNICATION ENGINEER

Market Sectors

- Oil & Gas
- District Cooling
- Seaports/Metro
- Airports
- Metals
- Infrastructure & Real Estate

CAREER CHOICES

Some of the important positions that ECE Engineers can serve



GOVERNMENT SECTOR JOBS					
DRDO	ISRO	BEL	BARC	NPCIL	PETROLEUM
BSNL	KSEB	PRASAAR BHARATI	IITRON	ER&DC	MTNL
INDIAN RAILWAYS	AIR	DMRC- DELHI METRO RAIL CORPORATION	PHILIPS ELECTRONICS	BIHARAT HEAVY ELECTRICALS LIMITED	OIL & NATURAL GAS CORPORATION