MARIAN
MOMENTS

An Annual Bulletin of Marian Engineering College, Kazhakuttom

A Trivandrum Latin Archdiocesan Institution

Engg. College Code **MCE**

Arch. College Code **MCR**

ISO 9001:2008 Certified

August 2020

VISION OF THE INSTITUTE

To be an institution offering quality technical education and promoting research with strong ethical values for public good

MISSION OF THE INSTITUTE

To mould the young men and women into technologically up to date, socially conscious and morally sound individuals by providing an inspiring environment of learning for the welfare of the society

FROM THE MANAGERS DESK

Famous British writer C S Lewis once said, **"You can't go back and change the beginning , but you can start where you are and change the ending."**
I would love to share this quote to all my dear students. Do not dwell in the past but look what's ahead of you and plan systematically. Success will always be at your door step.Along with the happiness given by the 2020 passouts, I warmly welcome the 2020-2024 batch of students to our Marian family.
I also take this opportunity to congratulate the Computer Science and Mechanical Departments for getting NBA accredited. Hardwork always pace off. May God bless us in all our future endeavours.

Very Rev. Msgr. Wilfred E

MARIAN WELCOMES

Dr. Samson A
Our new Director (Academics)

Dr. Samson A , retired from College of Engineering, Trivandrum as Head of Department of Mechanical Engineering . He has 26 years of teaching experience in College of Engineering Trivandrum and 4 years in Government Engineering College Thrissur.
He served as the placement officer at College of Engineering ,Trivandrum for 14 years and has bought many laurels to the instituition. We cordially welcome him to Marian Family.

Dr. Samson A

NATIONAL SERVICE SCHEME
MARIAN ENGINEERING COLLEGE

STAY HOME STAY SAFE

WE ARE · ALL IN · THIS · As One
FAMILY · FIGHTING · AGAINST · COVID-19
STAY · HOME · STAY · Safe
SAVE · THE · WORLD · BE POSITIVE
BE STRONG · BREAK · THE · CHAIN

Ms. Ansi Kabeer (2014-2018 ECE) crowned as Miss Kerala 2k19.

Mr. Akash R Nair (2016-20 ME) received a provisional patent for the invention "Walker for uneven plain"

FIGHT THE VIRUS

ശാരീരിക അകലം സാമൂഹിക ഒരുമ

Break the chain

Marian Career Guidance And Placement Cell (CGPU)

PLACED 2020 PASS OUTS

Sl No	Student Name	Branch	Company	Sl No2	Student Name3	Branch4	Company5
1	Farzana N	Civil Engineering	IBM	41	Shailesh Kumar S R	Computer Science	Infosys, TCS
2	Anusree A G	Civil Engineering	Infosys	42	Sruthi JB	Computer Science	Neoito
3	Eva Jane	Civil Engineering	Infosys	43	Ananthu Mohan	Computer Science	Neoito, Wipro
4	FathimaSulfikar	Civil Engineering	Infosys	44	Anupama Mathew	Computer Science	Quest Global
5	Ghanashyam S	Civil Engineering	Infosys	45	Chris Thomas Antony	Computer Science	Quest Global
6	Jwala Raj	Civil Engineering	Infosys	46	P Gautham Krishna	Computer Science	Quest Global
7	M Meenakshi	Civil Engineering	Infosys	47	Riya Richard	Computer Science	Quest Global
8	M B Sidharth .	Civil Engineering	Infosys	48	Angela	Computer Science	TCS
9	Manjunathan Potty S	Civil Engineering	Infosys	49	Aravind	Computer Science	TCS
10	Naisha K P	Civil Engineering	Infosys	50	Abin Ashok	Computer Science	TCS
11	Sharu Maria Pereira	Civil Engineering	Infosys	51	Aswany R P	Computer Science	UST Global
12	VaishnaviChandran	Civil Engineering	Infosys	52	Archana V A	Computer Science	Polus Software Pvt. Ltd
13	J Nandu Mohan	Civil Engineering	TCS	53	Arya A S	Computer Science	Polus Software Pvt. Ltd
14	ShehinSalim	Civil Engineering	DXC Technologies	54	Resmi John	Computer Science	DXC Technologies
15	Arunima Das	Computer Science	E&Y	55	AkhilaPrem	Computer Science	DXC Technologies
16	KENNETH PETER	Computer Science	E&Y	56	Joel Alex	Computer Science	Speridian Technologies
17	Sherin Stephen	Computer Science	E&Y	57	Aromal Anil	Computer Science	Speridian Technologies
18	SREELAKSHMI I H	Computer Science	E&Y	58	Drowpathy G	ECE	Infosys
19	Anagha	Computer Science	Evobi Automation	59	Nihitha	ECE	Quest Global
20	Janamahima	Computer Science	Evobi Automation	60	Anish A Kumar	EEE	Infosys
21	Arpita S	Computer Science	H&R block	61	Jayakrishnan G S	EEE	Infosys
22	SruthiGopakumar	Computer Science	Inapp Software	62	Alana Retnakumar	ECE	Byju's, CareerLabs
23	AjmalMuhammed	Computer Science	Infosys	63	Sreejith S	ECE	Byju's
24	AnnmaryAushine	Computer Science	Infosys	64	HerbinHeriboy	Mechanical Engineering	CareStack
25	Arjun A	Computer Science	Infosys	65	Surya V	Mechanical Engineering	Evobi Automation
26	Dorothy Elizabeth Wilson	Computer Science	Infosys	66	Niyas N	Mechanical Engineering	IBS
27	George ChalakuzhyMammen	Computer Science	Infosys	67	AbinAsok	Mechanical Engineering	Infosys
28	Gokul Raj R	Computer Science	Infosys	68	Akash R Nair	Mechanical Engineering	Infosys
29	J Vijay Raj	Computer Science	Infosys	69	Akhil A A	Mechanical Engineering	Infosys
30	Mary Neha John Gomez	Computer Science	Infosys	70	Anand M A	Mechanical Engineering	Infosys
31	Neeraja A S	Computer Science	Infosys	71	ArjunBabu M K	Mechanical Engineering	Infosys
32	Reshma V J	Computer Science	Infosys	72	Gokul Krishnan C U	Mechanical Engineering	Infosys
33	Rithu Krishnan	Computer Science	Infosys	73	Kiran S B	Mechanical Engineering	Infosys
34	S Muzzammila	Computer Science	Infosys	74	M Abhimanyu	Mechanical Engineering	Infosys
35	ShreyasGopan	Computer Science	Infosys	75	M ArjunVasudev	Mechanical Engineering	Infosys
36	Sona L S	Computer Science	Infosys	76	Nebin Mahesh	Mechanical Engineering	Infosys
37	Venkatesh A	Computer Science	Infosys	77	Sachin R Subramanian	Mechanical Engineering	Infosys
38	Vipinraj B S	Computer Science	Infosys	78	GayathriDevan B	Mechanical Engineering	Infosys, Quest Global
39	Aathira Suresh	Computer Science	Infosys	79	Sudhin Xavier	Mechanical Engineering	Infosys, Quest Global
40	BincyBabu	Computer Science	Infosys	80	Nandana K Jith	Mechanical Engineering	Infosys, TCS

ACTIVITIES OF 2019-20

Infosys Team on interaction with students

IBM Team on Pre-Placement Presentation

IBS Team at Marian

E & Y Team with Marian CGPU Team

H &R Block Team with Pre-Placement Presentation

Quest Global Team with Pre-Placement Presentation

Polus Software Team on Pre-Placement Presentation

Students attending Speridian Pre-Placement Talk

Marian IEDC collaborated with **Kerala Agro Machinery Corporation Ltd** for developing agro related products. Two products, **Jackfruit Cutting Machine** and **Automatic Coconut Plucker** will be developed through collaborated research. The MoU was signed between Managing Director, KAMCO and Manager Marian Engineering College.

RECOGNITIONS ACHIEVED BY STUDENTS

Dhanusree. U, Civil Engineering Department bagged first place in RIDe category of RISC 2019 organized by NIRD, Hyderabad.

Marian IEDC team submitted 9 proposal for **YUVA MASTERMIND** contest. One team was selected in the final 25 list.

25 project proposals submitted under student project Scheme of KSCSTE and 12 were selected for funding.

One project **(Water Pillow)** was selected for funding under **INNOVATE scheme of KSCSTE.**

One project (Desalination of sea water) was selected for funding under **CERD scheme of KTU**.

SEMINARS AND INTERACTIVE SESSIONS

A series of sessions were organized by IEDC for ensuring that students are in the ecosystem of entrepreneurship and innovation.

Start Culture – Do's & Don'ts A group of 60 students were selected for attending the session. Mr. Prasanth Raj, Manager, DERBI Business Incubator addressed the gathering on 5th July 2020. He pointed out the usual mistakes made by student start Up's and guided them to move ahead with minimal mistakes.

Idea to Product The session was conducted on 8th August 2019. Mr. Rajesh Reghu, NEST, handled the session. The session addressed the topic "Idea to Product" and focused on points to be kept in mind while designing a scalable product. 80 students addressed the session.

IPR – Best Practices The program was conducted by the support of IPR cell of college. Nodal officer handled the session on 29th August 2019.

Cutting Edge Technology to Start Up's The program was meant for providing an idea to potential student entrepreneurs about the possible usage of modern FabLabs in their journey. The session was handled by Besnson Gipson and Harikrishnan, the founders of TRYASRA TECH SOLUTIONS, the start up company in Marian Business Incubator. The event was conducted on 16th September 2019.

Funding Schemes for Student entrepreneurs The session was handled by Mr. Goutham Yogeeswar, District Industries center, Govt. of Kerala. The session dealt with various funding schemes available to students from Govt. sector. The event was conducted on 30th September 2019.

Workshop on effective idea pitching The session was conducted in association with Ms. Jithu, Sreebudha College of Engineeirng. 40 students attended the session. The topic "How to pitch an idea" was conducted. The event was hosted on 15th October 2019

Start Up Opportunities in Civil Engineering The program was organized by the Civil Wing of Marian IEDC. Session was conducted in association with the Institution of Engineers, Trivandrum on 5-11-19

STARTUP AND PATENT FILED THROUGH IEDC

Two patents were filed this year through IEDC.
Akash. R. Nair -Walker for Uneven Planes
Godwin - Collar Line flip for Shoes
One Start Up Company was registered through IEDC this year.
Drona Dynamics Rahul(S8 ME) Customized Lathe and CNC machine

Department of
COMPUTER SCIENCE AND ENGINEERING

The B Tech Program offered by the department has got accreditation from National Board of Accreditation (NBA) one of the major bodies responsible for accreditation of Higher Education Institutions in India, with a period of validity of 3 academic years 2019-20 to 2021-22. It will help to promote and recognize excellence in technical education and also students studying in the department can be assured to receive education which is a balance between academic quality and professional relevance

Welcome
New Head of the Department

Dr. P.Jayaprakash B.Tech (TKM) M.Tech (CUSAT) , Ph.D (CUSAT)

FACULTY ACHIEVEMENTS

A letter of appreciation is awarded to **Ms.Keerthi Krishnan** by NPTEL for her efforts in disseminating and supporting the learners of the Swayam NPTEL Local Chapter MARIAN ENGINEERING COLLEGE, as a Single Point of Contact (SPOC) during the Jan-Apr 2020 semester. The support provided by the SPOC was critical in ensuring a smooth completion of the various academic activities in the COVID-19 impacted semester

STUDENT ACHIEVEMENTS

A project named **"Eco Friendly Power Generation Using Plastic Waste"** done by Anagha P S & Aleena Nair of S8 R1 is selected for KCSTE. An amount of Rs. 10,000 was sanctioned as funding for this project.

Ms.Anjana Prakash of S8 R1 has participated in fashion show competition and won second prize in Intercollegiate Techno Cultural Fest ASTHRA 2020 held on 5th, 6th & 7th of March 2020.

Ms. Angela saji, Mr. Ananthu Mohan M S and Gokul Raj R of S7 R1 attended an internship on **"Natural Language Processing"** in polus Software from 16/07/2020 to 26/07/2019.

Mr. Sooraj S B, Mr. Suraj V Thomas, Mr. Amal J S, Mr. Karun Somasundar M, Mr. Marvin Clement, Mr. Akhil Mohammed, Mr. Gautam Krishnan, Mr. Arjun BijiliGopakumar, Mr. Vishnu Jayakumar and Mr. Al Shifan S H of S5 R1 attended an **Internship on Linux Kernel Programming** by CDAC from 22/07/19 to 26/07/19.

Mr. Arjun Bijili Gopakumar of S6 R1 attended **Virtual Internship at Microsoft Corporation** from 27/06/2020 to 03/07/2020 & he also attended Internship on **My Captian by Climber knowledge and Careers Pvt Ltd** from 02/07/2020 to 02/08/2020 and he also attended Data Analytics Consulting Virtual Internship at KPMG International from 19/07/2020 to 25/07/2020.

Mr.Jith of S6 R2 Qualified 1st Round of CodeVita 2020conducted by Tata Consultancy Services and got chance to attend the interview directly and he also qualified 1st Round of HackWithInfy 2020 conducted by Infosys.

Mr.Jith and Mr. Akshay Mohan of S6 R2 were the finalists of TECHATHLON 2020 Grand Finale organized by ICT Academy of Kerala in partnership with Govt of Kerala .

Mr. Jith , Mr. Akshay Mohan and Sabin Biju Seema of S6 R2 has also Participated in the Professional Student Summit 2K20.

In an effort to support the fight against COVID-19 four students from S6 **Mr. Akshay Mohan , Mr. Melwin Ebenezer, Mr. Sambu S S and Mr.Aswin S** of Computer Science and Engineering department have developed a mobile application **" Break the Chain Diary"** for noting down the daily commute which is available in.

Mr. Vaishnav G of S6 R2 got first place in C code challenge conducted by Mechatronics club of MEC, He has also participated in Reboot Kerala Hackathon 2020 at FISAT.

Mr. Sabin Biju Seema of S6 R2 got selected as an intern for E&Y Company. Mr. Sooraj S B of S7 R1 completed the course on **"Cryptography and Network Security"** (MOOC) by NPTEL from January 2020 to April 2020.

Ms. R S Devika & Mr. Adarsh S Anil of S6 R2 completed the course on **" Introduction to internet of things "** (MOOC) by NPTEL from January 2020 to April 2020.

Ms.Sneha A S&Ms. Sandra Sivaprasad of S6 R2 completed the course on **"Programming, Data Structures And Algorithms Using Python"**(MOOC) by NPTEL from January 2020 to April 2020.

FACULTY DEVELOPMENT PROGRAMMES

A Two Week AICTE Sponsored Faculty Development Programme on **"Role of Machine Learning in Internet of Things Applications"** was held at the Department from 9th - 20th December 2019. The major focus of the FDP is on upgrading the teaching, training, and research skills for the development of faculty members.

Department conducted a Training Program on **"Moodle LMS"** for the teachers on 24/06/2020. The resource person was Mr. Arun from IIITMK, Trivandrum.

Department in association with **International Centre for Free and Open Source Software (ICFOSS)**, an autonomous institution under the Government of Kerala create a FOSS Cell to promote the free open source software Applications

RESEARCH ACTIVITIES

Ms. Jinu Celine, Dr.Sheeja Agustin presented a paper **"Face Recognition in CCTV Systems"** in 2019 International Conference on Smart Systems and Inventive Technology Thirunelveli, India conducted from 27/11/2019 to 29/11/2019 and published in IEEE Explore Digital Library. Ms. Mercelin Francis, Dr. C. Deisy, published **"Mathematical and Visual Understanding of a Deep Learning Model Towards m-Agriculture for Disease Diagnosis"**, Archives of Computational Methods in Engineering, 1-17, February 2020.

Ms. Swapna H&Ms. Nisha J R started doing Ph,D under APJ Abdul Kalam Kerala Technological University and **Mr. Sangeeth N** started doing Ph.D under NIT, Trichy.

STUDENTS ACHIEVEMENTS

A funding of Rs.10,000/- was procured from **Malayala Manorama** and Amal Jyothi College of Engineering by **Sreehari G.M, Milan Dileepkumar, Rahul Ajith and Sanjay J Kumar** of VI semester for their student project '**An Idea of Pocket sized Total Station** 'on 21st October 2019. and the same is selected to '**Malayala Manorama Yuva Mastermind Expo 2020**' held at Rajiv Gandhi Indoor Stadium on 17th - 18th January 2020.

Maria Mita Joseph, Abhirami S Krishna and Sreelekshmi R of II semester secured 98% in **DCSMAT Quizzing Festival-Quiz** I organized by the MBA Department, DC School of Mangement and Technology, Trivandrum on 1st June 2020.

Kessia Justin Dcruz and Swathy Sunilkumar of II semester secured 95% in Technical quiz on Concrete Technology organized by St. Joseph Institute of Technology, Chennai on 12th June 2020.

Rohan Reghuraj of II semester became second runner up in the Inter College 7-A-Side **Football Tournament** organized by Providence College of Engineering, Chengannur on 27 -31 January 2020.

Harunson Newton J of V semester secured I prize in **Art Marathon in 'tathva'19'** organized by NIT Calicut on 18th -20th October 2019.

Kirtana S Nair and Anu Alex of VI semester secured II prize in **Fashion show** organised by Musaliar College of Engineering on 6th March 2019.

Jayakrishna Jayapal of VI semester won the title '**Mr. Hestia 2020**' in persona competition organized by TKM College of Engineering on 5th - 8th March 2020.

Students of VII semester, **Aleena Stany, Lekshmi Vijayan, Eva Jane & Anandhu A.S** secured II prize in Fashion show held at Musaliar College of Engineering on 6th March 2019.

Gopika A.M of VII semester secured **gold in junior section and bronze for senior section** in District Classic Power Lifting Championship held on 18th August 2019, bronze in junior section in State Classic Power Lifting Championship held on 15th September 2019.

Gopika A.M of VII semester secured **II place in Shotput** in the College Girls category of Reliance Foundation School Athletics 2019-20 held on 10th October 2019.

Gopika A.M of VII semester secured gold for Inter College Power Lifting Championship and got selection in **All India Inter University Power lifting on 28th December 2019**.

Gopika A.M of VIII semester secured II place in **Women Discuss Throw** in the KTU Intercollegiate Athletics Championship held on 7th February 2020.

BHOOMITHRA SENA CLUB

ONE STUDENT ONE TREE" Bhoomithra Sena Club initiative to plant trees in college premises was inaugurated by Dr. S Narayanan (HOD, Department of Civil Engineering) on 30th August 2019.

DEPARTMENT ACTIVITIES

An expert talk on **"Career Opportunities"** by Er.Shaji Jacob, Institute of Engineers, Kochi Centre for CE and ME VIII semester students was organized on 27th February 2020.

The Department organized a **Mix Design Workshop** for fourth semester students by Mr. Shelly Fernandez, Managing Director, Qcrete Ready-mix (India) Pvt Ltd on 26th February 2020.

An expert talk on **"Basics of Making Quality Concrete and Introduction to Green Concrete Concept"** by Mr. Shyam Kumar Syama Prasad (CEO & Director, CETARC Pvt. Ltd.) was organized on 4th Feb 2020.

An expert session on **"Professional Excellence"** was organized on 28th January 2020. The session was handled by Er. Sreekanth APV, Executive Director, Arcadis Asia.

The Department organized expert talks by **Mr. Unni Bhaskar (Managing director, UNO Technologies)** and **Dr. Ajith G Nair, Professor, RIT Kottayam** on 7th November 2019.

MoU was signed with **BIMLABS and EICL** on 31st January 2020. **UNO Technology Private Limited** and Qcrete Ready-mix (INDIA) Pvt. Ltd. on 9th January 2020.

IEI (INSTITUTION OF INDIA) STUDENTS CHAPTER

Mr. Gopalakrishnan Nair, Chairman, State Centre of IEI inaugurated the Civil Engineering student chapter of IEI [Institution of Engineers (India)] on 27th January 2020. The inaugural session was followed by a technical talk on **"Planning Design and Construction management of Signature Bridge, Delhi"** by Er. Jose Kurian (Senior Advisor,KIIFB).

INDUSTRIAL VISITS

An industrial visit for VI semester students to Neyyar Dam on 15th February 2020 and Nellai Concrete, Product & Construction Company (P) Ltd., Gangaikondan, Tamilnadu (Sleeper Manufacturing Unit) on 4th March 2020. The student members of Bhoomitra Sena Club visited an exhibition organised by Haritha Kerala Mission in association with Suchithwa Mission on 21st January 2020.

Department of
ELECTRICAL ENGINEERING

STUDENT ACHIEVEMENTS

Mohammed Akshay and Cindrella of S5 has become the college toppers in fourth semester KTU examinations with a sgpa of 9.52/10 and 9.42 /10 .

Anish Anil Kumar and Sandra AS of second year won second and third prize respectively in 'RE- EDIT 2020' conducted by IEEE SB, Marian Engineering College

Devika Balachandran and Sam Issac of Seventh Semester got second prize in Independence Day Online Quiz Competition conducted by NSS unit Marian Engineering College

Er. Jacob Thomas Puthukeril , Business Development Manager Automation ABB QCS - CT, Publication & Project Guidence Team IEEE PES Young Professional Kerala & Former Chairman of IEEE PES Student Branch Chapter of Marian Engineering College, Alumnus of (2015 - 2019) EEE batch for being awarded the "New Talent's Grant for Communication and Infrastructure Support" the Virtual IEEE Power Africa 2020 Conference and IEEE Smart Village Meeting Series

IEEE PES SB chairman **Mr Anish(S8)** presented the Annual report on IEEE PES activities for the academic year 2019 during the IEEE PES Annual General Body AGM Meeting held on 12/1/ 2020

Anooj, of S4 , member of Marian Engineering College- **Go Kart team participated in 'Go Kart'race held at Coimbatore.**

Abhijith Sekhar and Austin of S5 EEE won the Reliance Football Championship in Trivandrum district

RESEARCH ACTIVITIES

KCSTE project applied for   the topic **" INDEPENDENT PULLING SYSTEM FOR WHEELCHAIR "** by s7 students under the guidance of Ms Geena .S, on11th November and got approved on 9th December

WEBINAR ORGANIZED

Webinar Series was conducted from 26th -30th April 2020.Covered various topics like, **Effects of COVID 19 in Digital Marketing, IoT in Real World Applications, Energy as a Tool for Sustainable Development, Partial Shading In Solar Arrays, Wind Power Development in Kerala**. Resource Persons were: Er. Chaltu Martha - IEEE Young Professional, Er. Pratheesh V Nair Founder –Tachlog Pvt Ltd, Er. Mercy Chelangat -IEEE PES women in Power Representative East Africa, Dr. Vijayalekshmy S and Er. Ajith Gopi-Head program Officer (ANERT)

Organised an online Short Term Training Program on **'Computer Aided Design of Electrical System after the Meter'** Program from 26/6/20 to 29/6/20. The resource person for the event was Er AG Hareendralal, Life Senior Member of IEEE, ,Chairman of IEEE Intersociety Activities Committee Kerala Section and Director of Anantha Gangah Institute of Engineers, Thiruvananthapuram.

Conducted a Webinar on **" World of Engineering Opportunities and Possibilities"** was conducted for Plus Two students on 13th August . Resource person was Er. Shaji Jacob ,Chartered Engineer and Chief Academic Coordinator, The Institution of Engineers (India), Kochi Local Centre.

Organised Webinar on **"Role of a Commissioning Engineer in Oil and Gas Pipeline"** was conducted on 24th August 2020 , The Resource Person was David P Allen Senior Project Engineer – ABB Limited.,TANAP- PAGA Commissioning Scope Owner.

ASSOCIATION ACTIVITIES

Dr. Nisha G K .Asso. HoD , MBCET has given a talk on **Career in Electrical And Electronics** for first year students on 7-08-2019.

Inaugral ceremony of Vidhyut 2019, was organized on 22/08/2019. TheChief Guest was Shri. Suhair A K, Chairman of IEEE PES Kerala Chapter and Chairman of Vaikom Moulavi FoundationTrust, Thiruvananthapuram. Toppers of the university exams from   different semesters were honored at the event.

Students had a hands on session on **'Web creation and design'** on 27/1/2020. Resource person was Dr Clement Lopez and the class was well applauded by the students.

As part of Public Outreach, in association with IEEE PES (Institute of Electrical and Electronics Engineers - Power and Energy Society) Students Chapter organized a full day session for students at St. Joseph School, Our Public School,Govt Boys Model School, GHS Sreekariyam, St.Joseph's Boys HSS. The students of EEE department of hosted the energy conservation outreach program Public outreach program URJJA 2020 for students of various prominent schools in the district on 01-02-2020

Students of Electrical and Electronics Department took the initiative in setting up a garden in front of Electrical and Electronics Department as a part of **Go-Green initiative** on 28th January

Gate awareness program was conducted for sixth semester students by ACE academy

An awareness program on **industrial automation** By IPCS Automation was on 7/2/2020 for sixth semester students.

Training on the **'Basics of Electrical CAD'** was given to final year students in the Department of Electrical and Electronics on 20/2/2020.

Mr. Gokul Ramanan, Alumni of Department of Electrical and Electronics Engineering (2013-2017 batch) pursuing MBA at IIM, Kashipur interacting with third and final year students. Gokul gave an overview of CAT exam, admission criteria of various IIMs, life at IIM and other career options after MBA.

Students attended a workshop on **"Efficient use of Energy and Electrical Safety at residence"** which was jointly organised by Energy Management Centre and NIICA on 6/12/2020.

MOU DETAILS

Department of Electrical and Electronics, Marian Engineering College signed MoU with **'Wattsun Academy and Research Centre'** on 31/1/2020. The main objectives of MoU are training, internship, research assistance and placement to students

Department of
ELECTRONICS AND COMMUNICATION

MoU WITH NISH

A Memorandum of Understanding had been signed between **NISH (Dr.K.G.SatheeshKumar,Director)** and Marian Engineering College through Department of Electronics & Communication on 27th June 2019. With regard to MoU Signed ,few students of Department of ECE are guided to NISH once in two weeks to take –up some assignments and projects, by understanding the requirements of user-end ,closely.

PROJECT FUND SANCTIONED BY KCSTE 2019

Projects accepted by KTU under the Department of Electronics :
o **Blind Spot Detection in motorcycles** –by Mr.Evan Kumar G (AP,ECE) and team- amount Rs 9220/-
o **Special Companion for speech impaired** – by Ms.HemaS.Mahesh (AP,ECE) and team – amount Rs 10,000/-
o **Automatic Uplifting of pedestrian crossing platform on roads**- by Ms.Sreena V.G (AP,ECE) and team – amount Rs 10,000/-

EXPERT TALK AND WORKSHOPS FOR STUDENTS

The department organized a Bridge Course on **"Programming in C'**, by Ms. Jyothi Johnson (AP,CSE) for the first year EC students on 9th and 10th January, 2020.
Expert talk **On Communication** By Shri. RadhakrishnaPillai (In charge of IT cell and social media of Doordarshan) On 31st Jan, 2020 from 9:30 to 12:30 , for the S4 and S6 students.
Expert talk on F**undamentals of Artificial Intelligence** by Ms.Reema Mammen Elizabeth (Researcher in AI, Curve Logistics) was held on 3rd February, 2020 for the S6 and interested S8 students.
15 hour workshop on **'Real time sensors with Microcontrollers'**, with a very useful hands-on session was given to the S5 ECE (2017-2021) batch students from 2nd November to 4th November , 2019 at DSP Lab, Department of ECE.
The Department had organized an Expert talk session on **Optical Communication** on 21st November, 2019 for the S7 students (2016-2020). The Resource person, Mr.Harikumar gave a very explicit class from an Industrial point of view.

As part of Qurio'19, held on 25th November, 2019 the Department had organized 3 events Technopic, Ignis and Collage.

DEPARTMENT ACHIEVEMENTS

Paper **'Vocal Optimized Integrator Consumable Electricity'** by Ms. Sreena V.G (AP,ECE) , Arjun P.R, Biby Thomas and Bhavya S.(2015-2019 ECE) was published in Conference Proceedings IEEE on 12th December, 2019. The same paper was presented at IEEE Region 10 International Conference TENCON 19, on 19th October 2019.
Ms. AnsiKabeer (2014-2018 ECE) was crowned as Miss Kerala 2k19.
Mr.Jayasooryan K.V (Head of Product,Carestack), 2001-2005 Batch Alumni of ECE was honoured by the Department on 25th October 2019 ,for his company 'Carestack', which was invested with Rs 200 crore in the year 2019.
As part of IEEE Outreach program, the students of Electronics and Communication visited Govt. Model Boys High School, Govt. Girls School Pattom, Jyotinilayam and St.Josephs Boys High School to provide hands-on-session for the students of 11th standard on various electronics circuits. Marian team which includes students of ECE also, has acquired 2nd prize for Fashion Show at Musaliar College ,Chirayinkeezhu on 6th March, 2020

FDP ORGANIZED BY THE DEPARTMENT

FDP for Technical Staff : On 23rd and 24th June, 2020 the Teaching Faculty of Department of Electronics & Communication, had organized FDP for the technical staff.
The Sessions handled were:
MATLAB: Hands –On- Session, Resource Persons: Prof. Sreena V.G, Prof. ,Hema S. Mahesh **MICROCONTROLLERS**, Resource Persons: Prof. Nurul Hidaya , Prof. Simi M.S **Simulation Software's**, Resource Persons: Prof. Minnu Jayan C. , Prof. Preetha S.L **Internet of Things (IoT)**, Resource Persons: Prof. Glastin Y.V , **VLSI & Embedded Systems**, Resource Persons: Prof. Sony S. , Prof. Ann Mathew.
The Department have organized an FDP on **Block Chain and Applications in IOT** from 6th to 7th January 2020. The resourse person was Mr.Sreeraj S (Director of BlockChain, NetObjex)

Department of
MECHANICAL ENGINEERING

The Department became NBA accredited. The status is for three years.

MILESTONES

THE TEAM CAVELLO is the first Go-kart team from Marian Engineering College to participate in these National level events. The main objective of the project is to design and manufacture a Go-kart from the ground up and pass all the tests set for the Kart to qualify for racing and to participate in racing competition within the same category karts from all over the nation. The team participated in two such competitions/Events:

4th Indian Kart Racing (IKR) held at Bhopal from 21st to 25th of January 2020.

7th Go-kart Design Competition (GKDC) held at Kari Motors, Coimbatore from 10th to 14th of February 2020.

ISHRAE (Indian Society for Heating Refrigeration and Air –Conditioning Engineers) student chapter – "MARIANISH" was digitally launched on 13th August, 2020 .Mr. Richie Mittal, ISHARE National President and Dr. Ruby Abraham, Principal, Marian Engineering College were the chief guests.

FACULTY ACHIEVEMENTS

Prof. Rajaneesh R Chandran bagged second best project award as a part of the International FDP and Workshop on **"Robotics and Artificial Intelligence"** conducted at NIT Calicut between 2nd - 8th February, 2020.
Prof. Arun J achieved first rank in the two days online workshop on **"Fuzzy Logic and Neural Network Approaches for Engineering Solutions"** organized by Journal of Advanced Research " from 1st May to 2nd May 2020

FUNDED PROJECTS

1. KSCSTE funding of Rs.10000/- for "Angle Guide for Portable Drill", by **Akash R Nair, Amala Shankar, Gokul Krishnan C U**
2. KSCSTE funding of Rs. 10000/- for "Electric Power Hazard Solution" by **Gayathri Devan B, Ashwin S, Sudhin Xavier, Swathish**
3. KSCSTE funding of Rs.10000/- for "Convective Heat Transfer Study of Metal Oxide Nanofluid Enhanced in a radiator" by C**risty Jose, Anandhu Salim Kumar, Abhijith R, Akash M Nair**

FACULTY PUBLICATIONS

S. S. Raj, P. Pradeep, D. J. Edwin Raja and D. Gladson, "Optimization of Fabrication Parameters on Hybrid Fibre Reinforced Polymer Composite by ANN Design," 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, India, 2019, pp. 1-4, doi: 10.1109/i-PACT44901.2019.8960244.

Sonia S Raj, J Edwin Raja Dhas, and CP Jesuthanam. **"Challenges on Machining Characteristics of Natural Fiber-Reinforced Composites – A Review."** Journal of Reinforced Plastics and Composites,(July2020) *https://doi.org/10.1177/0731684420940773.*

Manu Mohan, Shijo Thomas, C B Sobhan, 2020, "Convective Heat Transfer Studies in Dilute Alumina and Silica Nanofluids Flowing Through a Channel Using Mach-Zehnder Interferometry", Heat and Mass Transfer, Springer. *https://doi.org/10.1007/s00231-019-02792-x*

WORKSHOP CONDUCTED

Mr. Maneesh T. and Dr. Vishnu B. R. conducted a short term training program from 22nd – 24th June, 2020, on "CAD Modelling Using SolidWorks" for the Technical Staffs of Marian Engineering College

ASSOCIATION ACTIVITIES

Department Association, MAGMA was inaugurated on 5th November 2019. The chief guest for the day was Mr. C R Thomas, Former Deputy Director of VSSC.

On 22nd November 2019, a talk on the future scope of MEP and its opportunities on various countries were conducted with assistance from Mr. Nithin, who is a staff of Capitol Group, which specializes in providing professional training for students such as in MEP, NEBOSH, and HVAC etc.

On 26th November 2019, QURIO 2019 was hosted by Marian Engineering College with about 20 events solely developed to pique up interest of the future generation, such as high school students, so that the curiosity in them takes a new turn for the better. MAGMA contributed to this unique event by hosting ' KINETIC CONTRAPTION ', an auto-quiz for the high school students.