



## SAINTGITS COLLEGE OF ENGINEERING

### **Vision:**

To be a model for academic excellence with international outlook in the realm of Electronics & communication Engineering.

### **Mission:**

- Impart analytical & technical skills in young minds to fortify the process of learning.
- Equip them with state of the art technologies to meet growing challenges of the industry & have a successful career upholding ethical values.

### **Programme Educational Objectives:**

Our graduates will

- Learn and adapt to the growing challenges in the Industry.
- Have a successful professional career in Engineering & allied fields.
- Inherit positive attitude to contribute as a professional, individually and in groups to meet societal needs.

### **Programme Outcomes:**

The Programme Outcomes of Undergraduate in Electronics and Communication Engineering are

PO1: Apply the knowledge of mathematics, science, and engineering fundamentals to provide solutions to engineering or related problems.

PO2: Identify, formulate & analyze complex Engineering problems using principles of basic science & Engineering.

PO3: Design & develop solutions for complex engineering problems considering societal and environmental constraints.

PO4: Investigate complex problems, design experimental setup & interpret results to give valid conclusions.

PO5: Select & apply suitable tools for modeling complex engineering activities.

PO6: Provide solutions for contemporary issues of society.

PO7: Offer sustainable solutions to problems considering the environmental & societal factors.

PO8: Understand and practice professional and ethical values adhering to the norms of engineering practices.

PO9: Function effectively as an individual or team in multi-disciplinary activities.

PO10: Communicate effectively with engineering community & society at large on complex engineering activities.

PO11: Demonstrate acquired skills in managing multi-disciplinary projects considering financial constraints.

PO12: Figure out, learn & adapt to the changing technological arena.

### **Programme Specific Outcomes (PSOs):**

Students will be able to

PSO1: Evaluate and formulate assumptions, approaches, procedures and results related to engineering problems.

PSO2 : Design and setup electronic systems as solutions to socio economic problems.

PSO3 : Lead a small team of student engineers to perform laboratory experiments or projects and also function as a contributing member in the team.

PSO4 : Communicate effectively as well as accurately document the project outcomes.

PSO5 : Reflect social commitment in student community.

## STUDENT ACHIEVEMENTS

- Department of ECE secured 1<sup>st</sup> rank among all the colleges under KTU in the S5 (2015-2019 Batch) university examination.
- Sruthy Susa Varkey (2015-2019 Batch) attended the SAINTGITS Startup Bootcamp one day Orientation session on 15<sup>th</sup> August, 2017.
- Sruthy Susa Varkey (S<sub>5</sub>, 2015-2019 Batch) (Saintgits startup Bootcamp member) attended IEDC Summit organized by Kerala Startup Mission (India's largest Entrepreneurs Summit) on 19<sup>th</sup> August, 2017.
- 2 students from ECE Department (Kevin Anil, Justin Eapen(2016-2020 Batch) nominated to SCIE for participation in Young Entrepreneurship Summit (YES) on 12<sup>th</sup> September, 2017 at Le Meridien Convention Centre, Cochin.
- SCIE in association with NSS participated in the DaanUtsav initiative in India. Act to set up Library in Government LP School:- NSS team has collected 254 books and a team of 5 students will be setting up the library for the school on 6<sup>th</sup> October, 2017. The students include Namitha Kuriakose & Anjitha C R (2015-2019 Batch).



- Sruthy Susa Varkey (2015-2019 Batch ECE) and Joel Abraham (2016-2020 Batch ECE) has won the district level of Fourth Season of Federal Bank "Speak for India-Kerala Edition" an intercollegiate debate competition in association with Mathrubhumi held on 17<sup>th</sup> November, 2017.
- Project entitled "Dynamic Road Maintenance & Travel Time Estimation" by Vijith V Rao, Aryamol K M, Novel I J K & Aravind S of 2014-2018 Batch ECE and guided by Dr. Ansal K A has bagged the Best Project Award among the internal final year projects exhibited in Srishti 2018 held at Saintgits

College of Engineering on 26<sup>th</sup> & 27<sup>th</sup> January, 2018.

- Project entitled "Waste to Wealth Bin" by Aiswaryalekshmi B, Akshara Santhosh, Anniena Elizabeth Cherian and Roshna Mathew of 2014-2018 Batch ECE and guided by Er. Jyothish Chandran G has bagged the Runner-up Award among the internal final year projects exhibited in Srishti 2018 held at Saintgits College of Engineering on 26<sup>th</sup> & 27<sup>th</sup> January, 2018.
- Project idea entitled "Dot Braille watch" secured Consolation Prize in the My Big Idea Competition Edition VI conducted for Saintgits students by SCIE in the academic year 2017-18 in connection with SRISHTI 2018 on 26<sup>th</sup> & 27<sup>th</sup> January, 2018. Students involved are Athira P Kumar, Devika R Nair, Dileep Mohan & Joshua Siby of 2015-2019 Batch.

## FACULTY ACHIEVEMENTS

- Prof. Susan Abe was re designated as Dean (ECE, AEI & EEE) w.e.f 10/07/2017.



Dr. Riboy Cherian secured his Ph.D in Communication from Anna University in the month of June 2017

- Dr. Riboy Cherian was promoted and posted as Professor and HOD, ECE w.e.f 10/07/2017.
- The team of four members from Saintgits, including Er. Chinn Mohanan was awarded a certificate for completing all the assigned tasks in Task Based Training (TBT-2017), during 29<sup>th</sup> June, 2017 to 16<sup>th</sup> October, 2017 conducted as a part of Teacher Training through the e-Yantra Lab Setup Initiative (eLSI) by Department of Computer Science and Engineering, IIT Mumbai. The team has

been awarded Class B in the training. They participated in the National Finals of e-Yantra Competitions (eYRC-2017 & eYIC-2018) and Symposium conducted on March 22 to 24, 2018 at IIT Bombay and became one among the top five colleges.



- Er. Roshni Oommen got the certificate of excellence as the Associate Programme officer of NSS unit at Saintgits in recognition of the outstanding contribution in raising a healthy community through the successful implementation of Punarjjani Mini Camp 2017.
- KSCSTE has approved, at its 62<sup>nd</sup> meeting, student project proposal titled "Smart Driving System with Automatic Driver Alert and Braking Mechanism". Amount recommended for a funding of Rs. 6,000/-. Er. Dhanusha P B (Principal Investigator), Er. Sreekala K S (Co-Investigator), 4 student investigators (2014-2018 Batch).
- Er. Nishanth P R successfully completed 6 months industrial internship at Digital Core Technologies Pvt. Ltd. from 3<sup>rd</sup> July, 2017 to 2<sup>nd</sup> January, 2018.
- Er. Anu Raj, Er. Hanna Mathew and Er. Roshni Oommen excelled in the module Electromagnetic Waves of the course Electromagnetic Theory delivered by Deepa Venkitesh, IIT Madras through the QEEE program held in Aug-Nov 2017.
- Er. Marie Kottayil James and Dr. Ansal K A satisfactorily completed IUCEE-EPICS Design Thinking Course from August 2017 – January 2018 (Instructor – Dr. William Oakes, Purdue University, USA).
- A project proposal titled "Design, Development and Characterization of CPW-fed miniaturized antennas and filters for UWB

Application" submitted to CERD under Research Seed Money Scheme sanctioned for a funding of Rs 1,10,000/- on 27<sup>th</sup> October, 2017. (Dr. Ansal K A (Principal Investigator), Dr. RiboyCheriyann (Co-Investigator)).

- 8 faculty members are pursuing PhD under various universities (Part time).
- Er. Chinn Mohanan coordinated the SAINTGITS Robotics Training & Championship (SRTC) under Saintgits Societal Technology Familiarization Programme (SSTFP)
- Er. Marie Kottayil James, Er. Chinn Mohanan, Dr. Lintu Rajan and Dr. Ansal K A participated in the IUCEE International Engineering Educator Certification Program (IIEECP) by Dr. Claire Komives, Prof., San Jose State University, USA from 11<sup>th</sup> to 13<sup>th</sup> January, 2018.
- Er. Ashwin P V secured Second Prize for the idea "Finger Tip Accident Care" in the My Big Idea Competition Edition VI conducted for Saintgits faculty by SCIE in connection with SRISHTI 2018 on 26<sup>th</sup> & 27<sup>th</sup> January, 2018.
- The proposal submitted to conduct a one week AICTE-ISTE Induction/Refresher Programme under AICTE-ISTE MoU titled "Refresher Course on Antennas and RF Devices" has been recommended and selected by the scrutiny committee on 12<sup>th</sup> March, 2018. Total sanctioned budget is Rs 3,00,000/-. Coordinator – Dr. Ansal K A
- Dr. K P Zacharia was one of the resource person for the ISTE sponsored one week FDP "Workshop on Analog Circuits" organized by Department of AEI, Saintgits College of Engineering held from 18<sup>th</sup> to 24<sup>th</sup> April, 2018.

## WORKSHOPS

- KSCSTE funded (Rs 40,000/- ) 2 day workshop on "Research Methodology, Writing Practices, Language and soft skills" to equip Women Researchers (Women in Science) in association with IETE was conducted on 18<sup>th</sup> & 19<sup>th</sup> January, 2018. Workshop Coordinator – Er. Sreekala K S, Co-coordinators – Er. Anu Raj & Er. Preena Prasad.



- "Introduction to IoT using Raspberry Pi" by ISF in association with SaintgitsIoT Club and Department of ECE on 7<sup>th</sup> & 8<sup>th</sup> April, 2018. Coordinator was Er. Abraham K Thomas

### IETE Students Forum (ISF)

- Conducted a workshop on "Fast and Effective Embedded Systems Design" for S5 & S7 on 4<sup>th</sup> November, 2017 from 9.30am to 12.30pm.



- ISF unit at Saintgits got the Prof. M N Namboodiripad endowment award 2017 for the best performing ISF consisting of Rs 10,000/- and a memento. The award distribution was conducted on 5<sup>th</sup> August, 2017 at Hotel BTH Sarovaram, Ernakulam.



- Conducted a Quiz Competition in connection with Engineer's Day Celebration on 13<sup>th</sup> October, 2017 (Prelims) & 27<sup>th</sup> October, 2017 (Finals).
- Conducted higher studies guidance class by IMS Kottayam for S6 students on 5<sup>th</sup> January, 2018.

### EXPERT TALKS

- Department of ECE in association with ASGEC conducted a technical talk on the topic "Trends in Mobile Communication" for S<sub>4</sub> (2016-2020 Batch) and S<sub>6</sub> (2015-2019 Batch) students on 20<sup>th</sup> March, 2018. Talk was delivered by Mr. Arun A T, Sub Divisional Engineer, Network Quality Management, BSNL, Kottayam.



- Dr. K P Zacharia delivered a talk on "Steady State AC Analysis" for the S2 ECE on 7<sup>th</sup> April, 2018.
- Talk on "Ethics & Scruples of a Professional" by Dr. Riboy Cheriyan for the first year students on 8<sup>th</sup> March, 2018.

### ADD-ON COURSES

- "ANSYS HFSS" by Entuple Technologies, Bangalore for students and staff, from 17<sup>th</sup> to 19<sup>th</sup> August, 2017.
- "C Programming and Circuit Analysis" for S<sub>3</sub> ECE from 19<sup>th</sup> to 28<sup>th</sup> July, 2017.

### ALUMNI INTERACTIONS

- "Ways to Core Sectors" by Er. Joval John Mathai (2010-14 Batch), Hardware Engineer, Creston New York on 20<sup>th</sup> September, 2017.
- "How to plan a successful career?" by Er. ElbinEldo Benny (2011-15 Batch), System Engineer, Infosys, Chennai on 17<sup>th</sup> July, 2017.
- "Prospects of Higher Education" by Er. Cris Thomas (2010-14 Batch), PG Scholar, University of Petroleum and Energy, Dehradun on 3<sup>rd</sup> August, 2017.
- Mani KunnathettuRajee and Jillsmon Varghese (2011-15 Batch) interacted with students on 5<sup>th</sup> January, 2018.
- Anjali Rani Alexander (2009-13 Batch) interacted with students on 7<sup>th</sup> November, 2017.

### QEEE Courses

- “Electromagnetic Theory for S<sub>5</sub> ECE on 24<sup>th</sup>, 28<sup>th</sup> & 30<sup>th</sup> August, 2017. Er. Beena A O was the local faculty.
- “MOS Transistor Principle-Digital VLSI” for S<sub>7</sub> ECE from 17<sup>th</sup> October 2017. Er. Ashwin P V was the local faculty.
- “Digital Signaling for Fading Channels” - Wireless Communication for S<sub>8</sub> ECE and S<sub>2</sub> M.Tech from 7<sup>th</sup> to 9<sup>th</sup> February, 2018. Faculty in-charge were Er. Beena A O, Er. Dhanusha P B & Er. Ashly John.

### CAMPUS PRODUCT

- An LED Display Board was designed and developed by ECE department in the academic year 2017-18. The product was developed under the guidance of SCIE advisor Er. Jyothishchandran G



- **Tailor Made Courses:** TMC in Embedded Systems & IC Design started on 20<sup>th</sup> June, 2017.
- **HORIZON 2K17:** The Technical fest of ECE Department, was conducted on 11<sup>th</sup> & 12<sup>th</sup> August, 2017.



- **IEEE SSCS "Distinguished Lecture Programme":** A lecturer cum Interactive session by Dr. Yong Ping Xu, Professor, National University of Singapore (NUS) on

the topic "MEMS Inertial Sensors", at AB Seminar Hall was conducted on 20<sup>th</sup> November, 2017.



- Conducted Aptitude test for the students of S<sub>1</sub>, S<sub>3</sub> & S<sub>5</sub> EC batches in association with IE (I), students' chapter EC division on 10<sup>th</sup> October, 2017.
- Conducted Online Quiz for S<sub>5</sub> utilizing MPMC Virtual Lab and for S<sub>3</sub> utilizing Network Theory Virtual Lab of Amrita Vishwa Vidyapeetham during Oct-Nov 2017.
- Three staff members registered for NPTEL courses during January-April 2018.
- Class on "Introduction to Tutorial Classes" for ECE, EEE & AEI by Dr. K P Zacharia & Prof. Susan Abe was conducted on 4<sup>th</sup> August, 2017.
- **Ice breaking sessions** for the students of S<sub>3</sub> on 25<sup>th</sup> & 26<sup>th</sup> August, 2017 and S<sub>1</sub> EC on 6<sup>th</sup> & 7<sup>th</sup> November, 2017 at MOC, Puthuppally.

**Editor**

**Er. Nishanth P R**

Assistant Professor

Department of ECE

SAINTGITS College of Engineering

**Printed & Published by**

**Dr. RiboyCheriyen**

HOD, Department of ECE

SAINTGITS College of Engineering