



SAINTGITS
LEARN.GROW.EXCEL

SAINTGITS

COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRONICS ENGINEERING



LEARNING PROGRAMMES

- Digital Circuits (Mentor: Er. Jyothish Chandran G): 5 students registered, 4 students cleared exam successfully.
- Fabrication Techniques for MEMS-based Sensors: Clinical Perspective: Er. Marie K James successfully completed the 12 week course during July-October 2018.
- Switching Circuits and Logic design: Er. Marie K James successfully completed the 12 week course during July-October 2018.
- Infrared Spectroscopy for Pollution Monitoring: Er. Ajith Ravindran successfully completed the 4 week course during August-September 2018
- Digital Circuits: Er. Jyothish Chanr successfully completed the 12 week course during July-October 2018.

STUDENTS ACHIEVEMENTS

- Project idea entitled "Dot Braille" participated in the final round of IDEA 2018 by Kerala Startup Mission held at Mar Thoma Engineering College, Trivandrum on 14th July, 2018. First Level Screening of the ideas was conducted on 24th March, 2018 at St. Joseph's College of Engineering and Technology, Palai. The project idea was shortlisted in Support category.

R Nair, Dileep Mohan & Joseph J. Gokul Sali, Dana Mariam Jacob, Jerin Joseph, Sain Abraham and Pavithra K P of 2015-2019 Batch under the guidance of Er. Jyothish Chandran G (SCIE ECE Advisor) has successfully completed the development of "LED Digital Notice Board" as marketable product funded by SCIE.

○ As a part of the distribution of the "powered rechargeable emergency LED" at Malakunnam High School flood relief ECE department of SAINTGITS batch & 2016-20 batch student training under the guidance of Er. Jyothish Cheriyan and Er. Jyothish NSS and NCC student Malayala Manorama on 23rd August 2019.

○ Irene Maria Khader and (2015-2018) IEEF

NATIONAL/INTERNATIONAL RECOGNITION

NBA: Department of Electronics & Communication Engineering was accredited by NBA in Tier-II for academic years 2016-17 to 2018-19 whose validity is expiring on 30th June, 2019. An expert team conducted verification of the accredited programs on 2nd March, 2019 and further accredited for another 3 years (Academic years 2019-20 to 2021-22) i.e. upto 30th June, 2022.

TAILOR MADE COURSES

Advisory Board meeting of Tailor Made Course in IC Design was conducted at Bangalore on 14th December, 2018.

○ 2019 for the VISUAL

○ Dr. Robin Joyce delivered expert talks on "Challenges in manufacturing of photolithography device manufacturing" at Centre for Nanotechnology Research, VIT University, Vellore, Tamil Nadu on 29th and 30th March, 2019.

○ Dr. Robin Joyce delivered a technical talk on "Nanotechnology Devices" at Visvajyothi College of Engineering and Technology (VJCET), Vazhakulam on 5th April, 2019.

○ Dr. Robin Joyce delivered an expert talk on "Semiconductor Device Packaging and Nano characterization" organized by Department of ECE at Manipal University, Jaipur on 22nd April, 2019.



CORE SKILLS DEVELOPMENT PROGRAMME (CSDP)

The Programme started on 5th September 2018 to facilitate the growth of students through soft skills (Technology Aptitude Reasoning, Group Discussion Sessions, Interview Rounds) and to enhance their employability quotient by sharpening their technical knowledge towards an elevated application thought process.

ADD-ON COURSES

Add on courses on "ANSYS HFSS", ANSYS Programming and Matlab, "Circuit Analysis and Design and Python Programming" were given for different batches of students during the academic year.

COMPETITIVE EXAMS

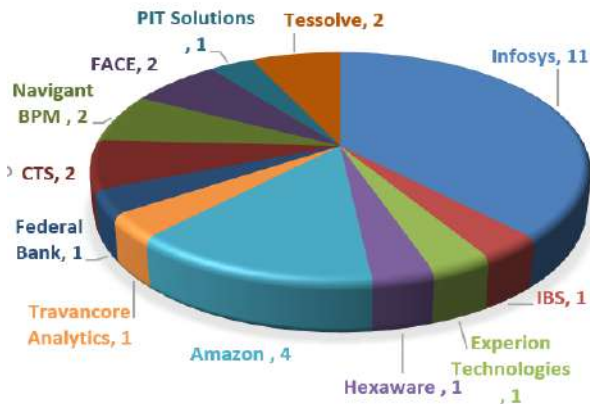
- Pavithra K P of 2015-19 Batch cleared the GATE 2019 exam with a GATE score 423.
- Sruthy Susa Varkey, Dana Mariam Jacob, Athira P Kumar & Malayala Manorama of 2015-2019 Batch qualified for MAT-2019.

Prof. Susan Riboy Cheriyan of the meeting University of SCS Chair, Mr. IEEE India, Dr. University and Mr. Ignitarium.

NEWSLETTER

JUNE 2019

PLACEMENT



SELF-LEARNING PROGRAMMES

NPTEL Courses

- Digital Circuits (Mentor: Er. Jyothish Chandran G): 5 students registered, 4 students cleared exam successfully.
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- Digital Circuits: Er. Jyothish Chandran G successfully completed the 12 week course during July-October 2018.

STUDENTS ACHIEVEMENTS

- Project idea entitled “Dot Braille watch” participated in the final round of IDEA FEST 2018 by Kerala Startup Mission held at Marian Engineering College, Trivandrum on 14th July, 2018. First Level Screening of the ideas was conducted on 24th March, 2018 at St. Joseph's College of Engineering and Technology, Palai, Kottayam. The project idea was shortlisted and selected for Future Lab Support category. Students involved are Athira P Kumar, Devika

R Nair, Dileep Mohan & Joshua Siby of 2015-2019 Batch.

- Gokul Sali, Dana Mariam Jacob, Jerin Joseph, Sain Abraham and Pavithra K P of 2015-2019 Batch under the guidance of Er. Jyothish Chandran G (SCIE ECE Advisor) has successfully completed the development of “LED Digital Notice Board” as marketable product funded by SCIE.
- As a part of the distribution of the "Dual powered rechargeable emergency LED light" at Malakunnam High School flood relief camp, ECE department of SAINTGITS (2015-19 batch & 2016-20 batch students), had given training under the guidance of Dr. Riboy Cheriyan and Er. Jyothish Chandran G to the NSS and NCC students of that School, under Malayala Manorama "Nalla Paadam" scheme on 23rd August 2018.
- Ireena Maria Saju, Jane Susan Jacob, Nejiya Khader and Tincy Merin Thomas of S7 ECE (2015-2019 Batch) got 1st prize in Eureka 2018 - Idea hunting competition conducted by IEEE at Saintgits College of Engineering in April 2018.



- Joel Abraham (S5 EC, 2016-2020 Batch) & Sruthy Susa Varkey (S7 EC, 2015-2019 Batch) are selected in the Gender Championship 2018-2019
- Anpin Mary John of SI ECE (2018-2022 Batch) and team bagged the Runners-up Prize in KTU C Zone Inter Collegiate WOMEN's Handball Tournament 2018.
- Gokul Sali and Pavithra K P of S8 ECE (2015-2019 Batch) secured 2nd prize of Rs 5000/- for the project titled “DIGITAL AUDIO - VISUAL SYSTEM” in Nirman 2019, an

- intercollegiate project competition and exhibition conducted by St. Aloysius' College, Edathua on 15th February, 2019. Guide – Er. Jyothish Chandran G
- Gokul M, Amal P, Nimi Reji, Samson P and Nithin Krishna of S2 ECE (2018-2022 ECE) secured First Prize in “Best Prototype Competition” (First Year B.Tech category), conducted by SCIE in association with Saintgits Innovation and Entrepreneurship Development Centre (IEDC) during SRISHTI 2019 on 18th & 19th February, 2019.
 - Milna M S, Kevin Varghese and Aiswarya Rose of S2 ECE (2018-2022 ECE) secured Second Prize in “Best Prototype Competition” (First Year B.tech category), conducted by SCIE in association with Saintgits Innovation and Entrepreneurship Development Centre (IEDC) during SRISHTI 2019 on 18th & 19th February, 2019.
 - Ansa Miriam Ninan, Ireena Maria Saju, Maria Rose James & Riya Thomas of S8 ECE (2015-2019) has bagged the Runner-up award for the project “Cost Effective Smart Braille Printer” guided by Er. Beena A O in SRISHTI 2019 held on 18th & 19th February, 2019.
 - Sruthy Susa Varkey of S8 ECE (2015-2019 Batch) participated in the National Students' Parliament Kerala 2019 conducted as part of 'Festival of Democracy' from 23rd to 25th February, 2019 at Kerala Legislative Assembly Complex.
 - The paper titled “CPW fed U shaped Loop Monopole Antenna for Dual Band Application” by Reshma V R, Roshni K Rajan, Mithu Mariam Cherian, Dana Mariyam Jacob (S8 ECE) & Dr. Ansal K A had won the second prize in the 2nd National Conference on Emerging Trends in Electronics and Communication - NACETEC'19 held at College of Engineering Perumon, Kollam from 20th to 21st March, 2019, sponsored by TEQIP II.
 - Devika R Nair, Jisa Mariam Thomas, Jyothis Susan John and Athira P Kumar of S8 ECE (2015-2019 Batch) secured first prize in
- IGNITE – Project presentation for the project titled “DOTZA – A watch for the visually impaired” under the guidance of Er. Jyothish Chandran G, held as a part of Summit 2019 from 29th to 31st March, 2019 at College of Engineering, Chengannur and IEDC.
- Department of ECE, SAINTGITS secured 1st rank among all the colleges under KTU in the S7 B.Tech (2015-2019 Batch) university examination.
 - Joel Abraham, Sree Sankar E., Reuben George Mathai and Sandeep Narayanan of S5 ECE (2016-2020 Batch) got third prize in Communication Engineering Project Contest 2018 conducted as a part of Kerala IEEE Technical Exhibition and Symposium (KITES) at Government College of Engineering on 11th November 2018.
 - Sruthy Susa Varkey of 2015-2019 Batch was one among the 46 participants who competed to qualify for the Semi-final of Federal Bank Speak for India – Kerala Edition 2018, an inter-collegiate debate competition in association with Mathrubhumi. She was a winner at the Zonal level round of the competition held at SN College, Kollam on 17th January, 2019 and she bagged the 1st prize in the district level competition.



FACULTY INITIATIVES AND ACHIEVEMENTS

- Dr. Shajimon K John published a book chapter titled “Implementation Challenges and Opportunities of Smart City and Intelligent Transport Systems in India” in the Internet of Things and Big Data Analytics for Smart Generation, Springer Nature Switzerland AG in the month of January 2019.
- Dr. Shajimon K. John, Vice Principal (Academics) has been elevated to the grade of Senior Member of IEEE in the year 2019.
- Er. Chinn Mohanan, Er Nishanth P R and Er. Vinu Koshy Abraham were the Coordinators of Regional level competition of the International championship FIRST LEGO



- League (an alliance between FIRST & the LEGO Group) conducted at SAINTGITS on January 29 and 30, 2019. FLL, the Robotic Championship using Lego Robotic kits is happening first time in Kerala.
- Er. MARIE K JAMES and Dr. ANSAL K A successfully completed IUCEE - International Engineering Education certification programme.
 - KTU has enabled Dr. Ansal K A (KTU-F27367) as Research Supervisor w.e.f. 29th September, 2018.
 - KTU has enabled Dr. K Saravanan (KTU-F35751) as Research Supervisor w.e.f. 6th October, 2018.
 - Er. PREENA PRASAD got SAINTGITS Best Library User Award 2018.

R & D ACTIVITIES

Funded Projects

| FUNDING AGENCY | TITLE | FACULTY | STUDENTS | AMOUNT SANCTIONED | DATE |
|--|---|---|--|-------------------|---------------------------------|
|  | Minimization of Radiation Effects of Mobile Antennas by EBG Structures | Dr. Ansal K A (Principal Investigator), Dr. Riboy Cheriyan (Co-Investigator) | Dana Mariam Jacob, Reshma V R, Roshni K Rajan, Mithu Mariam Cherian of 2015-2019 Batch (Student Investigators) | Rs 32,500/- | 10 th November, 2018 |
| | Smart Braille Printer | Er. Beena A O (Principal Investigator), Er. Roshni Oommen (Co-Investigator) | Riya Thomas, Maria Rose James (2015-2019 Batch)(Student Investigators) | Rs 22,000/- | 10 th November, 2018 |
|  Innovate scheme | Implementation of Locality Sensitive Hashing by Bloom Filter Technique for Cyber Security in Social Network | Dr. Saravanan K (Mentor) | Albin Sanjay, Dileep Mohan, James M Chacko, Joshua Siby (2015-2019 Batch)(Student members) | Rs 14, 000/- | 22 nd January, 2019 |
| | Classroom Automation | Er. Nishanth P R (Mentor) | Chillu Elizabeth Kuriakose, Anitta Dominic, Aswani Boban, Bhagya Rajan K (2015-2019 Batch)(Student members) | Rs 15,000/- | 22 nd January, 2019 |

Funded Programmes

| FUNDING AGENCY | TITLE | FACULTY | AMOUNT SANCTIONED | DATE |
|---|--|---|-------------------|--|
|  | One week AICTE-ISTE Induction/Refresher Programme titled "Refresher Course on Antennas and RF Devices" | Coordinator – Dr. Ansal K A | 3,00,000/- | 11 th June, 2018 to 16 th June, 2018 |
|  | FDP on "Future of Multiprocessor system: Network on Chip" | Coordinator – Er. Aravindhan A, Co-coordinator – Dr. Saravanan K | 2,00,000/- | 17th to 21st June, 2019 (Tentative Date) |

INSTITUTE-INDUSTRY PROGRAMMES

- Er. Ajith Ravindran and Er. Abraham K Thomas attended the second round interview in connection with industrial internship under sabbatical leave in Entuple Technologies Private Limited, Bangalore on 17th July, 2018
- Institute-Industry Interaction Cell conducted a technical talk on "Recent trends in mobile communication/5G" by Er. Basil Mathew, Senior Engineer, Etisalat, UAE for the S3, S5 and S7 students on 24th October, 2018. IIC Coordinator – Dr. Robin Joyce

INSTITUTE-INSTITUTE PROGRAMMES

- Dr. K P Zacharia was the resource person for the 5 days FDP on Circuit Analysis organized by MBC, Peermade from 9th to 13th July, 2018.
- Dr. Riboy Cheriyan – Delivered a speech and chaired a technical session in 2 days National Conference on Energy & Environment (NCEE2019) held in Sree Ayyappa College, Chengannur, Alappuzha

in association with IETE Kochi Centre on 15th February, 2019.

- Er. Nishanth P R delivered a technical talk at Amrita High School, Moolavattom, Kottayam in connection with Sir C V Raman Birthday celebrations on 8th November, 2018.
- Er. Jyothish Chandran G & Er. Chinn Mohanan participated in the Science Exhibition held at Placid Vidhya Vihar, Chethipuzha on 3rd August, 2018. The projects "Digital display of one's weight in nine planets" and "Self Balancing Robot" created had a scintillating effect among the students.
- Er. Jyothish Chandran G guided 4 students of Mar Baselios Public School, Devalokam, Kottayam in designing and prototyping an innovative weighing machine that conveys the weight of a person in all the nine planets for the Mar Baselian Senior Secondary Interschool Fest - MERAKI - 2K18 on 12th November, 2018. The project had conveyed the concept of change in gravity in different planets.
- Dr. Robin Joyce was the member of the panel of evaluators of the National Level

Techfest, BODHI held at Viswajyothi College of Engineering and Technology (VJCET), Vazhakulam on 21st March, 2019. Also served as External Judge for the Circuit Exhibition "Prakalpa" organized by Department of ECE, VJCET on 20th March, 2019 in connection with BODHI 2019.

- Dr. Robin Joyce delivered expert talks on "Challenges in photolithography for manufacturing of RF switches" and "Advanced thin film coating techniques for device manufacturing" at Centre for Nanotechnology Research, VIT University, Vellore, Tamil Nadu on 29th and 30th March, 2019.
- Dr. Robin Joyce delivered a technical talk on "Nanotechnology Devices" at Viswajyothi College of Engineering and Technology(VJCET), Vazhakulam on 5th April, 2019.
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TAILOR MADE COURSES

Advisory Board meeting of Tailor Made Course in IC Design was conducted at Bangalore on 14th December, 2018.

Prof. Susan Abe, Dr. Shajimon K John, Dr. Riboy Cheriyan, Er. Ajith Ravindran attended the meeting with Dr. Jan Vander Spigeal, University of Pennsylvania & former IEEE SSCS Chair, Mr. Harish Mysore, Sr. Director IEEE India, Dr. Rama Komaragiri, Bennett University and Mr. Sujith Mathew Iype, CTO of Ignitarium .



CORE SKILLS DEVELOPMENT PROGRAMME (CSDP)

The Programme started on 5th September, 2018 to facilitate the growth of students through soft skills (Technology Talks, Aptitude Reasoning, Group Discussion Sessions, Interview Rounds) and to enhance their employability quotient by sharpening their technical knowledge towards an elevated application thought process.

ADD-ON COURSES

Add on courses on "ANSYS HFSS", ANSYS HFSS and Matlab, "Circuit Analysis and C Programming" and "Embedded Product Design and Python Programming" were given for different batches of students during the academic year.

COMPETITIVE EXAMS

- Pavithra K P of 2015-19 Batch cleared the GATE 2019 exam with a GATE score 423.
- Sruthy Susa Varkey, Dana Mariam Jacob, Athira P Kumar & Maria Rose of 2015-2019 Batch qualified KMAT 2019 exam.

INDUSTRIAL VISITS

Various batches of students visited KSEB power house (Sabarigiri power house), Moozhiyar; Community Radio Station Mattoli 90.4 FM, Mananthavady; Wayanad Vision Communicators Pvt. Ltd, Kalpetta, Wayanad; Kaynes Technology India Pvt. Ltd and Kerala Feeds Ltd.

INDUSTRY INTERNSHIPS / TRAININGS

Students had attended industrial training sessions at Aakashwani, Keltron; Doordarshan Kendram, Camino Infotech and Glitter Electrical Switchgear Assembly L.L.C., Sharjah.

HOBBY CLUB

As a part of the flood disaster relief activities, 4th year students (supported by 3rd year students) designed a "Dual powered rechargeable LED emergency light". The students worked hard a lot under the guidance of Dr. Riboy Cheriyan and Er. Jyothish Chandran G. The product has been delivered to the camp on 23rd August 2018.



ഇമ്മിത്താൻ, എൻ. സെക്കൻഡറി സ്കൂളിലെ നല്ല പാഠം പ്രവർത്തകർ എൻ.റിയോ ചിറിയൻ തയ്യാറാക്കിയതും.

CONSULTANCY WORK

Token Management System: A consultancy work in connection with management of long queues was completed by the team of members from Department of ECE consisting of Er. Nishanth P R, Er. Chinn Mohanan and Er. Rekha Subash for Government Family Health Center, Panachikkadu Panchayath, Kottayam and the

product was installed in the month of January 2019.



FACULTY DEVELOPMENT PROGRAMMES & WORKSHOPS

Conducted a 5 days ANSYS HFSS training for faculty members by Entuple Technologies, Bengaluru from 17th to 21st July, 2018. Dr. Riboy Cheriyan was the coordinator and Karthikeyan K (Entuple Technologies) was the Resource Person.



PROFESSIONAL SOCIETY & INNOVATION CELL ACTIVITIES

IETE/ IETE students' forum

IETE Coordinator: Dr. Riboy Cheriyan

- Counselling session on the topics "Positive Mental Health and Personality Development" and "How to face difficult situations in student's life" by Dr. Anvar Sadath V, AP, Psychiatric Social Work, IMHANS, Kozhikode for students - 2nd February, 2019. Session was coordinated by Er. Rekha Subash

- Talk on “Importance of Value Education in Technical Education” by Dr. Riboy Cheriyan - 29th September, 2018 (part of the Engineers’ Day Celebration).
- Technical talk on "Digital Camera Challenges: A mobile Perspective" by Er. Sigu Joseph, Senior Staff Manager, Qualcomm, Hyderabad - 11th October, 2018.



- Training program on Arduino for S3 students by S7 students on 27th October, 2018.



- Training program on Raspberry Pi for S5 students (2016-2020 Batch) by Sandeep B Kadam (S3 M. Tech VE (2017-2019 Batch)) on 27th October, 2018.
- Big Idea Competition at Intercollegiate level - 27th November, 2018.



IE (I)/ IE(I) Students’ Chapter

Coordinator: Er. Aravindhan A

- Aptitude test contest - 28th September, 2018. The winner was Sruthy Susa Varkey of S7 ECE
- A technical paper was submitted by Sruthy Susa Varkey of S7 ECE for the IE (I) convention 2018 at Ranchi.
- General aptitude test - 7th February, 2019. The 1st, 2nd and 3rd prizes were bagged by Elcen Ninan, Samanta Cottackal and Ryan C Roy & Anjaly Treesa Varghese respectively.
- Technical film show on “PCB Design and Manufacturing Process” - 8th February, 2019
- Ananthu Krishnan of 2018-2022 Batch got selected for IE (I) scholarship of Rs 8500/-.

ISTE

Coordinator: Dr. Ansal K A

- One week FDP on antennas and RF devices (funded by AICTE and ISTE) - 11th June to 16th June 2018
- Workshop on topic “The Art of Scientific Writing - Document Preparation using Scientific Tools” - 4th August, 2018. Workshop Coordinators were Dr. Ansal K A & Er. Aravindhan A.
- Expert talk on "Opportunities and Challenges in Space Research" Er. Arun Raj, Scientist, VSSC, Trivandrum was the invited speaker - May 3, 2019. Er. Anu Raj coordinated the programme.



IEEE

Coordinator: Er. Ajith Ravindran

- Saintgits IEEE Student Branch organized a Distinguished Lecture Programme (DLP) on the topic “Radiation Detection for International Borders” by Dr. Richard Kouzes, Laboratory fellow, Physical and Computational science, Pacific Northwest National Laboratory, Richland, WA, USA - 24th April, 2019.

ASGEC

In-charge: Er. Anu Raj

- One day Industrial Visit by S8 ECE students accompanied by Er. Jyothish Chandran G & Er. Anu Raj to Kerala Feeds, Karunagappally on 1st February, 2019.
- Counselling session on the topics "Positive Mental Health and Personality Development" and "How to face difficult situations in student's life" by Dr. Anvar Sadath V, AP, Psychiatric Social Work, IMHANS, Kozhikode for students - 2nd February, 2019. Session was coordinated by Er. Rekha Subash

- Talk on "Tips towards Professionalism - Passing the beacon to our juniors" by the final year students of ECE for the fourth semester students on 13th February, 2019
- Invited talk on “ Opportunities and challenges in Space research ” by Er. Arun Raj, Scientist, VSSC- 3rd May, 2019
- Workshop on “Best Practice for Wi-Fi hotspot Design” by Er. Kishor Kumar P.G., Consultant and Trainer, Mikrotik - 5th April, 2019. Coordinator: Er. Beena A O.
- HORIZON 2018: Hosted the annual technical festival, HORIZON 2018, from 13th to 14th August 2018. All the technical events witnessed very large and enthusiastic participation (607) from various colleges



Editor

Er. Nishanth P R
Asst. Prof., Department of ECE
SAINTGITS College of Engineering

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Dr. Riboy Cheriyan
HOD, Department of ECE
SAINTGITS College of Engineering