



# EEE LUMINAIRE

SAINTGITS COLLEGE OF ENGINEERING

MAY 2017

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## Department of Electrical and Electronics Engineering

The Department of Electrical and Electronics Engineering was established in the year 2002. The Department offers the four-year undergraduate B. Tech. Degree programme and the M.Tech. Degree programme with specialization in Power Systems.

### Department Vision:

Mould globally competent value added professionals in Electrical and Allied Engineering, having the spirit of innovation and research, to support technological and economic development of the nation.

### Department Mission:

- ◆ Expertise the students in theory and practice through high quality teaching learning process.
- ◆ Inculcate the skill of research and innovation by consistent institute industry interaction.
- ◆ Provide opportunity to organize and to take part in technical, cultural and socially relevant programmes in tandem with the curriculum.

# Messages



## Message from Executive Chairman

I am happy to know that the Electrical and Electronics Engineering Department of Saintgits College of Engineering is releasing a newsletter 'EEE Luminaire'.

I congratulate all the faculty and students of the department for bringing out a newsletter of high standard.

**Er. Punnoose George**  
**Executive Chairman & Secretary**  
**Saintgits Group of Institutions**

## Message from Director

I heartily congratulate the Department of Electrical and Electronics Engineering for bringing out its annual newsletter 'EEE Luminaire'.

Let this newsletter set a benchmark for the coming batches to emulate.

**Mr. Thomas T. John**  
**Director**  
**Saintgits Group of Institutions**

## Message from Principal

It gives me great pleasure to know that the staff and students of the Department of Electrical and Electronics Engineering are bringing out the annual newsletter 'EEE Luminaire'.

I congratulate all who contributed to this excellent work.

**Dr. M. C. Philipose**  
**Principal, Saintgits College of Engineering**

## Message from HOD

Congratulations to all the EEE students and staff for bringing out this newsletter which brings to the forefront the activities and achievements of our Department

Best wishes to all of you.

**Dr. Jaimol Thomas**  
**HOD EEE**

## Staff Editor's Column

It is indeed a great moment for the faculty and students of the Electrical and Electronics Engineering Department as we launch our annual newsletter 'EEE Luminaire'.

I sincerely thank the management, the EEE Department staff and students for the encouragement and support extended to the Editorial team.

**Asha Anu Kurian**  
**Assistant Professor, EEE Department**

## Student Editor's Column

I place on record my sincere gratitude to all the staff and students of the Electrical and Electronics Department who persevered in bringing out 'EEE Luminaire.'

Let us all join hands in taking our Department to greater heights!

**Leah Mariam Mathew**  
**S<sub>6</sub> EEE**



## ACCREDITATION BY NBA FOR THREE YEARS

- ◆ As a token of recognition, the Under Graduate Programme in Electrical and Electronics Engineering Department were provisionally accredited for 2 years with effect from 1-7-2016 in Tier II Format. The prequalifier submitted by the department was examined by NBA which led to the extension of accreditation for an additional year as per letter from NBA dated 22-09-2016. The students who graduate during these years will be deemed to have graduated with NBA accredited Degree.

### EXTERNAL TALKS

- ◆ A technical talk on “A simple Awareness on Energy Management and Energy Management System” was conducted by Mr.Sahil M, Deputy Manager (Projects), KMML, Chavara for S<sub>3</sub> and S<sub>5</sub> EEE students on 5-10-2016.
- ◆ A talk and interactive session on “Evolution of Wireless Sensor Network” was organized by Embedded System stream of EEE department on 20-8-16. Dr. Emi Mathews (RF, Embedded System Innovations by TNO, the Netherlands) was the resource person. The talk covered the basics of wireless networks, embedded systems, Cyber Physical system, IoT with useful case studies. The talk was organized for UG and PG Students.
- ◆ A Technical talk on “How to build a satellite” on 14-2-2017 was delivered by Mr. Kannan.S.A, Student program coordinator, System Integration group, ISRO.
- ◆ A technical talk was conducted by Sigmos Training Institute on 21-2-2017 for S<sub>8</sub> EEE .

### IEEE Events

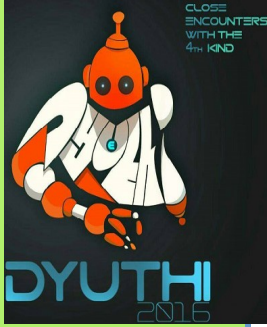
- ◆ IEEE Kochi Hub WIE Congress was hosted by Saintgits IEEE on 1-10-2016 and 2-10-2016. The event involved a participation of 131 students with 119 external participants from 15 Engineering colleges spanning 5 districts of Kochi Hub. The event was inaugurated by Er. Jofin Joseph, Head of India Operations, Full contact. Three parallel workshops on the areas, introduction to MATLAB, PCB Design and fabrication and introduction to AutoCAD .Er.Ancy Sara Varghese(IEEE WIE SB Advisor Saintgits),Er.Abraham George(IEEE Student branch counselor Saintgits) were the organizers.



- ◆ A workshop on Android development was organized by the IEEE SB of Saintgits on 10<sup>th</sup> November 2016 .The session was handled by Er. Gitto Ni clavose (an alumni of EEE).

### ADD ON COURSES

- ◆ An add on course on '**MATLAB-Simulation and Programming**' was conducted for S<sub>5</sub> EEE (2014-2018 batch) students from 18-7-2016 to 22-7-2016. The sessions were handled by Er.Ancy Sara Varghese, Er.Asha Anu Kurian and Er. Polly Thomas.
- ◆ An add on course on '**Electrical Drawing and Introduction to Electrical CAD**' was conducted for S<sub>7</sub> EEE (2013-2017 batch) students from 18-7-2016 to 22-7-16 . The sessions were handled by Er.Jisha James, Er. Fossy Mary Chacko, Er.Emil Ninan Skaria and Mr. Thomas .P. Andrews (Lab staff EEE)
- ◆ An add on course on '**Electric Circuit Analysis**' was conducted from 25-7-2016 to 29-7-2016 for S<sub>3</sub> EEE (2015-2019 batch) students. Classes were engaged by Er.Jancy Varghese, Er.Deepu.E.Koshy and Er.Elizabeth Rajan.
- ◆ An add on course on **Electronic Circuit Analysis** for Third semester B.Tech EEE students (2015-19 batch) from 20-7-2016 to 29-7-2016. Classes were engaged by Dr. K.P.Zacharia, Er.Vinu Koshy,Er.Abraham George and Mr. Santhosh Kumar (Lab Staff EEE)
- ◆ An add-on course on **Computer Programming** was arranged for B.Tech students of 2015-19 batch from 20-7-2016 to 22-7-2016. The classes were handled by Er.Gokulnath, Er.Thomas Joseph and Er.Manu Ratheesh .
- ◆ An add-on course on **Engineering Mechanics and Electronics Circuits** was arranged for S<sub>2</sub>EEE (2016-2020 Batch) from 19-12-2016 to 22-12-2016.The sessions were handled by Er.Vincy Koshy, Er.Vinu Koshy and Er.Abraham George.
- ◆ Half day workshop on " **BCI and Body Area Networks**" was arranged by Er.Smitha S.D under the banner of IEI Saintgits student chapter on 15-10-2016 . Dr. Mahesh R (Lead Engineer, GE, Bangalore) was the resource Person. Students from S<sub>7</sub> and S<sub>5</sub> had actively participated in the workshop.
- ◆ Tutorial hands on session '**Electrical system design**' was conducted for S<sub>8</sub> EEE from 16-7-2016 to 29-7-2016 and from 16-1-2017 to 20-1-2017 .The sessions were handled by Er. Emil Ninan,Er.Polly Thomas and Er.Arun Sebastian.



## DYUTHI 2K16

- ◆ The National Level Technical Fest DYUTHI 2K16 was conducted on 5-8-2016 and 6-8-2016. The fest was inaugurated by Smt.Reena Rajan, Account Delivery Owner, Tata Consultancy Services .
- ◆ “Robolution” was the theme of the tech fest.
- ◆ Er. Arun Sebastian was the staff in charge for this academic year.

### Highlight events of DYUTHI

2K16:

- Best Engineer**
- Paper presentation**
- Quiz**
- Electrohunt**
- Robo Soccer**
- X&O's**
- Circuitrix**
- Magneto Race**
- Online photography**



## EEE Expo 2017

### Department Project Exhibition

- ◆ The Department of Electrical and Electronics Engineering conducted a Project Exhibition featuring the final year projects of the eighth semester students (B.Tech EEE 2013-2017) Batch) namely ‘**EEE Expo 2017**’ on 31-1-2017 at the Electrical Measurements Lab.
- ◆ All the 16 project groups participated in the exhibition and displayed their projects.

### Following were the Prize Winning Projects

1. Feeder inter area fault location identification & service wire back flow protection system for KSEB .Team members:Ajin George Reji , Denil Roy Joshua, Aswin D,Harshed T N .  
Project Guide: Er.Polly Thomas

2. Power generation from deep water

Team Members:AlwinTom, Gison C Andrews, Nirmal V Daniel, Sherry Varghese

Project Guide: Er.Vinu Koshy Abraham

3. Automatic wall painting Robo

Team Members: Ashams Mathew, Arun K Vijayan , Ashish George Varghese , Muhsina N .

Project Guide: Er.Vinu Koshy Abraham

## Farewell to Prof .Amey George



- ◆ Prof.Amey George (former HOD & Dean UG Studies) have been an inspiration to all of us in the EEE for enabling us to strive to be better members of staff by working as a team towards achieving the organizational goals.

- ◆ A farewell was arranged to our dear Amey Miss by EEE family on 23-10-16 at 3.00pm.
- ◆ A farewell was arranged for Prof. Amey George, on 27-10-2016 by the students of EEE and Saintgits IEEE SB Chapter. Gison C Andrews, IEEE SB Chairman, presented a memento to Prof. Amey George in her honor for her commentable guidance and support for bringing EEE department to new heights.

## STUDENT ACHIEVEMENTS

### EXTRA CURRICULAR TALENT ,TECHTOP & INNOVATIONS

- ◆ Alwin Tom of S<sub>8</sub> EEE (2013-17 batch) bagged second prize in State Level APJ Abdul Kalam Memorial Energy Quiz Competition organized by KSEB – Engineers Association & EEE Department of SAINTGITS college of Engineering on 30-9-2016.
- ◆ Leah Mariam Mathew and Manisha M Joshy of S<sub>5</sub> EEE (2013-17) Batch won the third prize in Paper presentation organized by the IE student at Saintgits College of Engineering on 7-10-2016 .
- ◆ Akash K V of S<sub>2</sub>EE secured Gold position in the Rural Games Kerala State Karate & Kickboxing Championship 2016 organised by Rural Games Association Kartae on 1-10-2016.
- ◆ A team of 8 students participated in the National Energy Auditing Competition (NEAC – 2016) conducted by Energy Conservation Society in December 2016 under the guidance of Er. Deepu Jose and Er.Asha Anu Kurian.
- ◆ Alwin Tom and Vineet S (2013-17) Batch won second prize for the Quiz competition for the KTU Tech Fest and KETCON 2017 conducted on 13-1-2017 and 14-1-2017 at Mar Athanasius College of Engineering , Kothamangalam .
- ◆ Chriss John,Vineeth S and Nidhin Madhusudhanan secured second prize in seminar series competition on the topic Power System harmonics causes and mitigation conducted by KSEB EA on 20-1-2017 at district level .
- ◆ Aashik Rasheed Kutty(S<sub>8</sub> EEE) secured third prize in Trailathon in Sanskriti 2017 organized by M.A College Kothamangalam held from 16-3-2017 to 18-3-2017.
- ◆ Jithu Jose of S<sub>6</sub> EEE secured first place in Electromaze in Conjura held from 16-3-2017 to 19-3-2017 at TKM College Kollam .
- ◆ Vibin Biji Varghese and Titto M S bagged 2<sup>nd</sup> prize in Haloween at Ashtra Fest on 22-2-2017 at SJCET, Palai.
- ◆ Titto M S and Edwin Christy secured 1<sup>st</sup> prize in the event 'Flying The Shark ' at Ashtra Fest on 22-2-2017 SJCET, Palai.
- ◆ Joel Baby Samuel and Tomson S Palathra (2015-19Batch) represented the College Football teams which were the runners up of the KTU Zonal Football competition on 13-11-2016.
- ◆ Vineeth S was selected as star of Saintgits for Prathithya 2017 at Saintgits College of Engineering.

◆ **Laya Accamma Paul , Mereena Yesudasan , Nidhin Madhusudanan , Stanley Stephen Samuel got the CERC funding for their project "DC powered smart housing system" on 16-3-2017. The project was guided by Dr.Manju Mathew.**

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- ◆ Ajin George Reji , Denil Roy Joshua,Aswin D , Harshed T N of S<sub>8</sub> EEE (2013-17 Batch) won the Best Electrical Project award and TCS young innovator prize in Srishti 2017 from 12-2-2017 to 13-2-2017,for their project, " Feeder inter area fault location identification & service wire back flow protection system for KSEB " which was guided by Er. Polly Thomas .
- ◆ Ajin George Reji , Denil Roy Joshua,Aswin D , Harshed T N of S<sub>8</sub> EEE (2013-17 Batch) won the Best Electrical Project award (3<sup>rd</sup> prize) at KSCSTE Tech Fest at MA College Kothamangalam for their project, " Feeder inter area fault location identification & service wire back flow protection system for KSEB " on 13-1-2017 and 14-1- 2017 .



- ◆ Alwin Tom,Gison C Andrews , Nirmal V Daniel and Sherry Varghese won the Best Paper award for their project titled "Power Generation from deep water" in the National Conference on Eco-Friendly Technological Innovations for Sustainable Development at Sree Buddha College of Engineering , Pattoor on 6-4-17.
- ◆ Angel James and John Vaidyan of S<sub>8</sub> EEE (2013-17 batch) has won the first place in the event La Brenda in Swastika conducted by MBC Peerumedu from 3-03-2017 to 4-3-2017.
- ◆ John P Mathews Vaidyan and Abijith Kurup secured second position in Rampage at Echoes 2017 ,a National Level Cultural Fest of IIM Kozhikode. The team secured first prize for Divaat in Swasthika 17 held from 16-3-2017 to 18-3-2017 at MA college, Kothamangalam .



## Faculty Development Programmes ,STTP and Workshops Publications



- ◆ Faculty Development Programme on FPGA Based Induction Motor Control & Introduction to ANSYS LF Package and MAXWELL was conducted from 30-01-2017 to 03-02-2017. Dr.Jaimol Thomas (HOD EEE) ,EEE faculty ,external participants and M.Tech students actively participated for the FDP.
- ◆ Er.Abraham George attended STTP on 'Microelectronics from fundamentals to devices' from 11-7-2016 to 16-7-2016 at IIT Madras .
- ◆ Er.Ancy Sara Varghese and Er.Elizabeth Rajan attended STTP on 'Research aspects of power electronics in modern Power System' from 8-8-2016 to 12-8-2016 at RIT Pampady.
- ◆ Er.Deepu Jose and Er.Asha Anu Kurian attended on one day orientation programme on 'Energy auditing' along with 8 students from the batch of students of (2014 – 18 ) Batch participated on 30-8-2016 at SNIT Adoor .
- ◆ Er.Jancy Varghese attended STTP on 'Linear and non linear control application' from 26-9-2016 to 1-10-2016 at RIT Pampady .
- ◆ Er.Arun Sebastian attended two day seminar on 'Nuclear Energy awareness from 30-9-2016 to 1-10-2016.
- ◆ Er. Arun Sebastian along with A batch 10 students of 2014 – 18 batch attended one day training on Energy Auditing in the Smart Energy Program (SEP) of Energy Management Centre (EMC) Kerala on 7-10-2016
- ◆ Er.Rachel Rose attended international seminar on 'Power India' at Energy Management Center TVM on 14-11-2016 and 15-11-2016.
- ◆ Dr.Pinkymol.K.P, Er.Ancy Sara, Er.Amalu Philip and Er.Asha Anu Kurian attended Workshop on Role of VLSI and Embedded Systems in Next Generation Wireless Technologies at Saintgits College of Engineering from 28-11-2016 to 3-12-2016.
- ◆ Two day training on Energy Management and auditing organized by Energy Management centre was attended by Er.Arun Sebastian and Er.Ancy Sara Varghese on 14<sup>th</sup> and 15<sup>th</sup> December 2016.Er.Deepu E Koshy attended Recent advances in Power Electronics at College of Engineering Adoor from 19-12-2016 to 23-12-2016.
- ◆ Er.Deepu Jose attended an FDP on 'Modern Practices in Energy Management and Auditing' at College of Engineering Adoor from 29-11-16 to 3-12-2016.
- ◆ Er.Deepu E Koshy attended an FDP on Recent advances in Power Electronics at College of Engineering Adoor from 19-12-2016 to 23-12-2016.
- ◆ Dr.Manju Mathew,Er.Filmy Francis and Dr.Pinkymol K P attended a two week workshop on 'CMOS, mixed signal and VLSI design' from 26-12-2017 to 4-2-2017 at Saintgits College of Engineering .
- ◆ Er.Daru Anna Thomas, Er.Jancy Varghese and Er.Polly Thomas attended a workshop on 'Industrial automation using PLC and SCADA' from 16-1-2017 to 23-1-2017 at Saintgits College of Engineering
- ◆ Er.Asha Anu Kurian attended an STTP on 'Power Electronics in Grid Connected Renewable Energy Systems ' conducted from 9-1-2017 to 14-1-2017 at RIT Pampady.
- ◆ Dr.Pinkymol K P attended a workshop on Patent rules 'Patent Drafting and IPR Development' on 21-1-2017 at Saintgits College of Engineering .
- ◆ Er.Jisha James attended IUCEE International Engineering Educator Pre-Certification Workshop at Marwadi Education Foundation's Group of Institutions, Rajkot from 08-03-17- 10-03-17.
- ◆ Er.Arun Sebastian attended a three day course on 'Power Electronics interface for Solar PV' from 26-4-2017 to 28-4-2017 at IIT Bombay.
- ◆ Er.Emil Ninan attended FDP on Computer Aided Power System Analysis at CET from 9-1-2017 to 14-1-2017 and One week ISTE sponsored STTP for coordinators on Electric Power System sponsored by MHRD in IIT Kharagpur from 1-5-2017 to 5-5-2017.
- ◆ Nearly 40 publications including international journals came to a reality with combined effort of faculty and students of EEE Department.

## Outreach ,Workshop and Recognition Of achievements

- ◆ A team of 7 faculty members comprising of Er.Jisha James, Er.Pinkymol K P, Er.Deepu E Koshy, Er.Polly Thomas, Er.Arun Sebastian, Er.Jaison Cherian, Er.Emil Ninan Skariah visited Department of EEE at Amrita University Coimbatore to gain an insight on the various research activities and major labs associated with them on 16-2-2017.



- ◆ A group of faculty visited PSG College of Technology, Coimbatore to interact with the faculty members and to study about the Smart Grid Lab.
- ◆ Demonstration of Dspace by Dyna Fusion Technologies Pvt.Ltd (DSPACE ACEMLBX tool kit) for the faculty and PG students on 19-2-2017.

### 'LAUREATE 2017' -Merit Day

- ◆ LAUREATE 2017', the Merit Day of EEE Department was held on 25-4-2017. Students of the department who excelled in curricular and co-curricular activities were recognized during the programme.

### STAFF ACHIEVEMENT

- ◆ Er.Pinky mol K.P has been awarded Ph.D from Nanyang technological University Singapore.She has published "Reference Disposition Modulation Method for non-ideal Dual Z-Source Neutral-Point-Clamped Inverter," in *IET Power Electronics*, vol. 10, no. 2, pp. 222-231, 2-10-2017. (Journal)
- ◆ Dr. Jaimol Thomas ,HOD EEE, published a paper "HVDC Transmission Line Protection based on Transient Power" in Elsevier Science Direct journal.
- ◆ Er. Polly Thomas, Assistant Professor, EEE Department of SAINTGITS has presented paper titled "Sensitivity Assessment on Locational Marginal Price under Deregulated Electricity" in IEEE TENCON 2016 at Singapore.
- ◆ The contributions of Er.Abraham George, Saintgits IEEE SB student branch Counselor, Assistant professor EEE Department towards IEEE was specially recognized by IEEE Kochi Subsection in the Kochi subsection AGM held at Gokulam Park Inn, Kaloore on 7-1-2017.
- ◆ Er. Jaison Cherian received Research Seed Money Rs. 1,20,000/- from CERD for the research proposal titled "BESS based DFIG for real and reactive power control of grids" as per intimation received on 16-3-2017.
- ◆ Er. Jisha James received Research Seed Money Rs. 95,000/- from CERD for the research proposal titled "Full bridge three port converter topology for renewable energy source." as per intimation received on 16-3-2017.

- ◆ The Team members Ajin George Reji , Denil Roy Joshua,Aswin D and Harshed T N of S<sub>8</sub> EEE (2013-17) Batch demonstrates the project "Feeder inter area fault location identification & service wire back flow protection system for KSEB" before the engineers of KSEB at PETARC, Moolamattom, during the training program on 'Safety & Disaster Management'
- ◆ Abel George (M.Tech Student EEE), Dr. Pinkymol K.P and Er. Jaison Cherian won the best paper award at the conference i-PACT-2017 conducted by VIT University and sponsored by IEEE Madras Section on 22-4-2017 for the paper titled "Battery Powered 4-Phase 8/6 Pole SRM Drive For Advanced Electric Vehicle" .

### SAINTGITS ROBOTICS CLUB

- ◆ The official club started in the year 2015.The club was headed by Nithin Thomas Paul and Sooraj Ravi(S<sub>8</sub> EEE ) in 2016.The club consists of 167 team members headed by staff in charges Abraham George and Vinu Koshy Abraham.
- ◆ The club conducted training and competition on Robotics for school students in the year 2017.
- ◆ A two day workshop on Sixth sense Robotics was organized by EEE dept for the whole College. Expert (Amir Hussain) from Robospecies Pvt. Ltd handled the sessions.The work shop was organized by Dr.Manju Mathew and Er.Arun Sebastian on 11-8-2016 and 12-8-2016.

### RANK HOLDERS AND BEST OUTGOING STUDENTS

- ◆ Sreelal N, who secured the first rank in MG University Examination ,was selected as the best outgoing student of MTech Power System (2014-16)Batch.
- ◆ Aswathy Mariam Mohan Secured second rank in M.Tech Power Systems(2014-16)Batch
- ◆ Ankitha M.R bagged the second rank in M.Tech Power Systems(2014-2016).
- ◆ Greeshma Mohan was selected as the best outgoing student in B.Tech EEE(2012-2016)Batch.

### ICE BREAKING SESSION

- ◆ An ice breaking session was organized for S<sub>4</sub>EEE students on 20-3-2017 at Retreat Centre at Manganam.The session was meant to develop the inter personal skills within the students and to strengthen the bond between students and faculty of EEE.



## Placements

- ◆ The following students of B. Tech. EEE 2013-2017 achieved excellent placements.
- ◆ More students are expected to be placed in the upcoming placement drives.

### INFOSYS

Angel James

Alwin Tom

Denil Roy Joshua

Mariamamma Kuriakose

Nidhin Madhusudanan

Nidhin Thomas Paul

Sherry Varghese

Shinto Elias

Vineet S

### FEDERAL BANK

Vineeth S and Denil Roy Joshua

## Inhouse Talk

- ◆ A talk was delivered by Abraham George, Assistant Professor of EEE Department, Saintgits College of Engineering on the topic '**Nano Generators**' on 4-11-2016.

## Best Participation Award

- ◆ EEE Department won the Best Participation Award for Prativity 17 held on 16-2-17.



## INDUSTRIAL VISITS

### Fourth Year

- ◆ A batch of students from Semester 8 visited Wonderla Substation, Cochin on 5-7-2016, JVS Electronics pvt limited on 10-7-2016, Bangalore and Visweswariah museum on 17-7-2016.

### Third Year

- ◆ As a part of Industrial visit, the students visited BHEL Bangalore and Vivekanand Electrical Industries Private on 7-7-2016

### Second Year

- ◆ The students visited Of UniPower Transformers pvt limited Nellad, Muvattupuzha on 19-11-2016.



SAINTGITS COLLEGE OF ENGINEERING

Approved by A. I. C. T. E.

Affiliated to Mahatma Gandhi University

And K.T.U

An ISO 9001-2008 Certified Institution

Kottukulam Hills, Pathamuttom P. O., Kottayam - 686532, Kerala

Phone: +91-481-2436169, 2436170



