



Department of Electrical and Electronics Engineering

E-Waves

Newsletter – Dec 2016

P.A.C. Ramasamy Raja Polytechnic College, Rajapalayam

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The Department:

The Department of Electrical and Electronics Engineering started functioning from the inception of the institution in 1963. It offers three-year Full-time Diploma Programme in Electrical and Electronics Engineering (Regular & Self-Supporting) with an intake of 120 students.

The faculty in the department are highly committed, motivated and well-equipped to offer the best training to the budding engineers. The department was granted Autonomous status from 1995 - 1996. This department got 3 Times Accredited for 3 years in the year 2001, 2008 and 2012.

Words of Wisdom

"But still try for who knows what is possible"

- Michael Faraday

Editor's Desk

The department brings out the Newsletter for disseminating and sharing the major achievements/activities of the students and faculty members among the peers, academia and industries.

MoU with M/s Keystone Automation Solutions Pvt Ltd, Chennai

Our Electrical and Electronics Engineering department has signed an MoU with M/s Keystone Automation Solutions Pvt Ltd, Chennai for offering Industry Based Elective (IBE) and Internship training on Automation field. A meeting was held on 14.06.2016 at our board room with Mr. P. Ganasa Director, Mr. R. Maseelan and Mr. A. Thariq Ansar, Keystone Automation Solutions Pvt Ltd, Chennai regarding the implementation of Industry Based Elective on "PLC, Drives and HMI based control systems".



Workshop on Design & Fabrication of CNC Machine

A two day workshop on Design & Fabrication of "3 axis CNC Milling machine" was organized at our polytechnic college to III year EEE & Mechanical students from 22.10.2016 to 23.10.2016. The session was handled by Dr. S. R. Pandian, Dean (Planning) & Coordinator, Teaching Learning Centre and Mr. Kamal Prasath Balaji, Trainer, IIITDM, Khanchipuram. At the end of the training, the students fabricated three CNC milling machines.



Guest Lecture

- Dr. V. Saravanan, Associate Professor/EEE, Thiagarajar Engineering College, Madurai delivered a guest lecture for III year EEE students (90 nos.) on the topic "Energy Audit" on 09.07.2016.



- Mr. M. Gurumoorthy, Service Engineer, Jayam Electronics, Chennai delivered a guest lecture for III year EEE students (70 nos.) on the topic "Trouble shooting of Electrical and Electronics Instruments" on 21.11.2016.

Value Added Programme

- ❖ A ten day workshop on "PCB Design Technologies" was organized at our polytechnic from 10.11.2016 to 19.11.2016. The programme was conducted by NIELIT, Chennai. 60 nos. of II year EEE students participated in the workshop. The sessions were handled by Mr. S. Janarthanam, Scientist, Mr. J.R.Suresh Babu, Scientist, Mr. Ananth & Mr. Karthick, PCB Trainer, National Institute of Electronics and Information Technology (NIELIT), Chennai.



In-Plant Training & Internship

- ❖ II Year/III Semester and III Year/V Semester EEE students numbering 263, underwent a one week unpaid in-plant training in 46 industries during the month of Oct/Nov 2016.
- ❖ Two II year EEE students underwent internship training in M/s Keystone Automation Solution Pvt Ltd, Chennai in the area of Programmable Logic Controller.
- ❖ Selvan S. Pandeewaran and Selvan K. Niranjan of III Year/V Semester EEE underwent internship training in IIITDM, Khanchipuram from 23.11.2016 to 27.11.2016 and they fabricated the project titled "Lawn Mower".
- ❖ Selvan S. Rudhrra, of III Year/V Semester EEE underwent internship training to IIITDM, Khanchipuram from 23.11.2016 to 08.12.2016. During the training period he fabricated "Lawn Mower", "Arduino Controlled Vertical Mill", "Arduino Controlled CNC Lathe", "Arduino Controlled PCB Mill & Drill", "Closed Loop Control of Three Link Serial Manipulator using Camera" and "Web Controlled IoT Robots".
- ❖ The Model Making Contest on the topic "Electromagnetism" was organized for II Year/III Semester EEE students from 01.08.2016 to 31.08.2016. 62 nos. of students actively participated and completed 16 projects.

Bright Students Activity

- ❖ Simulation of motor control circuits in Control of Electrical Machine practical was given as additional input to all the III year/V Semester EEE students using ECTS Simulator software by our faculty Dr. V. R. Velmurugan and Mr. M. Kalyanasundaram during the period June 2016 to September 2016.
- ❖ Selvan S. Rudhrra, Selvan S. Pandeewaran and Selvan K. Niranjan, of III Year EEE participated in the programme November 18th, 2016. The introduction and features of "EPLAN", Electrical Software was explained by Mr. Pankaj Dinkar Jadhav, Technical Manger to our students.
- ❖ A student engagement lecture programme was organized under UKIERI project on 22.07.2016. Expert from UK handled the session to 10 nos. of III Year EEE and 10 nos. of III Year Mechanical students.



Industrial Visit

Industrial visits were organized for our students to have industrial exposure in industries. Our staff members Mr. S. Arunsankar, Mr. R. Victor German, Mr. M. Kalyanasundaram, Mr. K. Mohanraj, Mr. S. Sundaram and Mr. G. Ravikumar accompanied our students for Industrial visit in the following industries.

- Two batches of III Year/V Semester EEE students (126 nos.) visited the M/s VVD Oil Mills Ltd, Tuticorin on 17th August & 22nd August 2016.
- One batch of III Year/V Semester EEE students (69 nos.) visited the M/s Ramco Cements Packing Plant, Nagarcoil on 18th August 2016.
- Two batches of III Year/V Semester EEE students (126 nos.) visited the M/s Ramco Windfarms, Aaralvaimozhi, on 18th August & 24th August 2016.
- Two batches of III Year/V Semester EEE students (126 nos.) visited the M/s ISRO Propulsion Complex, Mahendragiri on 19th August & 24th August 2016.
- Two batches of III Year/V Semester EEE students (126 nos.) visited the M/s Koodankulam Nuclear Power Plant, Koodankulam on 15th Sep. & 23rd Sep. 2016.



Placement Training

- Dr. Aathalayur Suryakumar, Student Resource Development Trainer, Madurai delivered a guest lecture for II & III year EEE students on the topic "Selfie with Success" on 26.06.2016.



- 70 nos. of III year EEE students attended the India's largest employability skill test, "WHEEBOX Employability Skill Test" endorsed by Industry and Academia on 28.10.2016.

Teaching Aid Used

- A demo on "Different types of Cable" was given to III Year/V Semester EEE students by Mr. G. Rajagopal on 20.08.2016.



- Construction and working of Fluorescent Tube light was explained to III Year/V Semester EEE students by Mr. G. Rajagopal by giving the demo on "Fluorescent tube light" on 02.09.2016.



- Construction and working of three phase induction motor was explained to III Year/V Semester EEE students by Mr. G. Rajagopal by giving the demo on "three phase induction motor" on 02.08.2016.



- Expotainer- Mobile Exhibition vehicle came to our college on 24.11.2016. It was arranged by Mr. M. Manoharan, Sr.Sales Engineer – Didactic, Festo India Pvt Ltd, Chennai. All EEE students with faculty visited the Expo vehicle.

Programme Organised

A one day awareness programme on 'Industrial Automation' was organised under UKIERI project at our polytechnic college on 09.07.2016. More than 130 students from 30 Polytechnic colleges and Engineering colleges in the southern part of Tamil Nadu participated.

Institution of Engineers (India)

- 17 nos. of III Year EEE students and 13 nos. of II Year EEE students handled seminar on various topics in "Electronic Devices and Circuits" "Electrical Machines I" "Power System I", "Microcontroller", "Electrical Estimation & Energy Auditing" and "Control of Electrical Machines".
- 20 nos. of EEE students participated in the class room level Technical Quiz conducted on the topic "Microcontroller" during the month of August 2016.
- 12 nos. of EEE students participated in the class room level technical quiz conducted on the various topics during the month of June 2016.
- A short film was shown by Mr. A.G. Muthukumar, Assistant Librarian on the topic "We are responsible for 2035" to III year EEE students on 12.07.2016.
- Selvan K. Sriram, Selvan V. Ganeshamoorthi, Selvan G. Selvaganapathy of III year EEE won the first prize in the class room level Quiz programme conducted on 13.07.2016.



- Selvan V. Vishnugopan and Selvan B. Ajithkumar of III year EEE won the second prize in the class room level Quiz programme conducted on 13.07.2016.
- Selvan S. Kavimuthuraja and Selvan S. Arunjunaikarthick of II year EEE won the first prize in the class room level Quiz programme conducted on 04.08.2016.
- Selvan P. Ponmurugan and Selvan G. Pongurusekar of II year EEE won the second prize in the class room level Quiz programme conducted on 04.08.2016.

Parent Teacher Meeting

Parent Teacher meeting was organized on 08.09.2016 and 30.09.2016 for III & II year EEE students respectively.

ISTE Students' Chapter

- Selvan B. Ajithkumar, III Year EEE won the Second prize in the state level paper presentation contest held at K.S.R. Polytechnic College, Tiruchengode on 24.08.2016.
- Selvan B. Ajithkumar, III Year EEE won the First prize in the paper presentation contest held at Arulmigu Senthil Andavar Polytechnic College, Tenkasi on 07.09.2016.
- 15 nos. of EEE students participated in the "Hello FM Kalloori Saalai 2016", cultural event (Stage I) organized by Hello FM 106.4 on 20.09.2016 in our college.
- 14 nos. of EEE students participated in the "Hello FM Kalloori Saalai 2016", cultural event (Stage II) organized by Hello FM 106.4 on 25.10.2016 at Yadhava Arts and Science College, Madurai.

Real Time Project

Selvan V. Vishnugopan and Selvan G. Naveen developed a mini project "Arduino Based Automatic Transfer Switch" to operate one air conditioner during day time and another during night time. This project was guided by Mr. G. Rajagopal.

Induction Programme for I Year Students

An induction programme for first year students was organized at our assembly hall on 04.07.2018. On behalf of EEE department Dr. P. Rajkumar M.E, Ph.D AD/TANGEDCO was invited as one of the guest speakers who shared his experience in the institution.

English Grammar Coaching Class

Under UKIERI scheme, English grammar coaching classes were conducted through Video Conferencing from United Kingdom (UK) by Mr. Sam, Professor of English for 10 numbers of III year EEE students on 05.07.2016.



FDP /Seminar/Workshop/Conference

- Mr. V.R.Velmurugan, Mr. M. Kalyanasundaram, Mrs. M. Seetha, Mr. V. Sureshkumar and Mr. G. Rajagopal attended a ten day workshop on "PCB Design Technologies" organized at our polytechnic college from 10.11.2016 to 19.11.2016. The programme was organized by NIELIT, Chennai.
- A one day programme on "Introduction and features of EPLAN Electrical Software" was attended by Mr. V.R.Velmurugan and Mr. G. Rajagopal organized by ARK Infosolutions Pvt Ltd, Pune on November 18th, 2016. Mr. Pankaj Dinkar Jadhav, Technical Manger explained the software to the participants.



- Our department faculty attended a guest lecture on "Outcome Based Accreditation" given by Dr. Rajakarunakaran, HOD/Mechanical, Ramco Institute of Technology on 25.07.2016 at seminar hall.
- Mr. V.R.Velmurugan and Mr. G. Rajagopal visited the Automation Expo 2016 at World Trade Centre, Mumbai on 23.08.2016 & 24.08.2016.
- Mr.V.R.Velmurugan attended a two week TEQIP, sponsored by AICTE at Alagappa Chettaiar College of Engineering, Karaikudi from 19.09.2016 to 02.10.2016.
- Our Principal Dr. R.Venkatraj, Dr.V.R.Velmurugan and Mr. G. Rajagopal visited the Electrical Drives Lab at PSG College of Technology and TexServices, Coimbatore on 01.11.2016.
- Our Principal Dr. R.Venkatraj, Dr.V.R.Velmurugan and Mr. G. Rajagopal visited the NIELIT, Chennai on 21.11.2016.
- Mr. M. Muthanatham attended the internship on "CNC Machine Design and Fabrication" at IITDM, Khanchipuram from 26.11.2016 to 02.12.2016.



- Mr. S. Arunsankar attended a one week QIP on "Electrical and Electronic Systems in Wind and Solar Energy Applications" sponsored by MHRD at NITTTR, Chennai from 07.11.2016 to 11.11.2016.
- Mr. V.R.Velmurugan published the paper titled "Harmonic Minimization in Seven Level Cascaded Multilevel Inverter using Evolutionary Algorithm" in the Circuits & Systems, Scientific Research Publishing, Vol. 7. No.9. PP. 2309-2322, July 2016.

Class Room Session through Video Conferencing/Guest Lecture Delivered

- Mr. V.R. Velmurugan delivered a lecture through video conferencing on the subject "Control of Electrical Machines" on 19.07.2016 organized by DoTE, Chennai.
- Mr. M. Kalyanasundaram delivered a lecture through video conferencing on the subject "Control of Electrical Machines" on 20.07.2016 organized by DoTE, Chennai.
- Mr. G. Madasamy delivered a Guest Lecture at ANJA Polytechnic College, Sivakasi in the topic "Application of Special Electrical Machines" on 23.07.2016.
- Mr. S. Arunsankar delivered a lecture through video conferencing on the topic "Transformer" on 09.09.2016 organized by DoTE, Chennai.

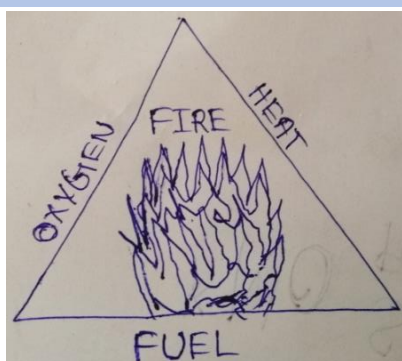
- M. Muthukrishnan delivered a lecture through video conferencing on the topic “Basics of Semiconductor Devices” on 22.07.2016 and “Electronic Devices & Circuits, PN Junction Diode & Its applications” on 09.09.2016 organized by DoTE, Chennai.
- Mr. V. Sureshkumar delivered a lecture through video conferencing on the topic “Power System I (Circuit Breaker)” on 08.09.2016 organized by DoTE, Chennai.
- Mr. K. Mohanraj delivered a lecture through video conferencing on the topic “Microcontroller (8051 Programming)” on 15.09.2016 organized by DoTE, Chennai.
- Mr. K. Karthikeyan delivered a lecture through video conferencing on the topic “Electrical Circuit Theory – DC Circuit Theorem” on 16.09.2016 organized by DoTE, Chennai.

Lab Visit by External Experts & Students

- ❖ A meeting was organized by our Principal Dr. R. Venkatraj with Mr. N. Kanagarajan, Chief Executive, Texservices, Coimbatore, to discuss the Industry Based Elective on “Drives Technology”. Mr. N. Kanagarajan and Er. Ramasubramani, Rajapalayam Mills Ltd, Rajapalayam visited our Electrical Engg. Lab II on 21.10.2016.
- ❖ 4 faculty from VSVN Polytechnic College, Virudhunagar visited our Solar PV system on 15.11.2016. A one day training course was conducted to them on the topic “Solar PV System” by Mr. G.Rajagopal.
- ❖ 47 nos. of EEE students with 4 faculty from Sri Vidya Engineering College, Virudhunagar visited our Industrial Automation Lab and Electrical Engineering Lab I & II on 24.09.2016.
- ❖ 90 nos. of XI standard students along with 3 teachers from Chinmaya Vidyalaya Matriculation Higher Secondary school, Rajapalayam visited the Industrial Automation Lab on 24.09.2016.



Student's Corner



Selvan P. Mariappan, III Year EEE

Safety Slogan

Know Safety, No Pain

No Safety, Know Pain

Selvan G. Naveen, III Year EEE



III Year students on Internship @ IIITDM

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