

## *I'BLAZE'19*

### DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING



#### **Department Vision:**

"To develop competent Electronic and Instrumentation Engineers with Societal, Environmental and human values through Quality education, training and research".

#### **Department Mission:**

- To impart technical knowledge and skills to meet the industry needs
- To build self-learning capability among the students to update the recent technology
- To collaborate with the industries and research institution for enhancement of R & D
- To create passion for serving the society with moral and ethical values

#### **The Department:**

The Department of Electronics and Instrumentation Engineering was started in the academic year 1998 with

the AICTE approval for the intake of 60 students under the affiliation of Anna University, Chennai. In the span of 15 years, the department has procured equipments for 11 laboratories and established 7 laboratories. The department has a good record of Ph.D., holders. Five staff members are pursuing doctorates. It has organized various National conferences, Symposia and executed project works from the government as well as private agencies. It has extended an MoU and updated LabVIEW software & hardware equipments with National Instruments, Bangalore during the academic year 2019 – 20.

Activities like training program, competitions, project works, research oriented project, faculty development program are being conducted with National Instruments for both students and faculty members. The department has produced CLAD Certified Engineers and encouraged more students and faculty members to aim for it.

The Department has organized online CLAD examination which was conducted by National Instruments, USA in which 19 faculties and 37 students from the departments of EIE, ECE, EEE, MTRE attended the examination. One faculty from the Department of ECE and seven students from the Departments of EIE (3), ECE (3) & EEE (1) have passed the examination. The department is taking proactive actions to meet the requirements of industries by organizing workshops and training programs through Yokogawa India Ltd., Chennai.

Increase in placement opportunities has been the outcome of these programs. The department is producing university rank holders consistently. It motivates the students to participate both in co-curricular and extra-curricular activities. To promote research the department have purchased equipments like ECG Trainer, Pulse rate trainer, Digital IC Tester, Testing of Electronic Flow meter, Vibration measurement using Piezo electric transducer, Level measurement trainer using ultrasonic level transmitter, Temperature Measurement using RTD trainer, Calibration of ammeter, voltmeter and wattmeter using multifunction calibrator, Muffle Furnace in this year.

#### **Association activities:**

- Guest Lecture on Industrial Automation using PLC on 13-07-18 by Er.J.Arun, Project Engineer – Automation Siemens, Dubai.
- Value added course on “LabVIEW” from 24.7.18-27.7.2018 & 30.7.2018.
- Guest lecture on “Gate Exam Advantages and its preparation” on 4.8.2018 by ICE Academy, Madurai.
- Guest lecture on “Emerging trends in Process Automation with DCS Overview” for III – EIE Students on 11-09-18 by Sreela M.K, Executive-Customer Service Division, Yokogawa Limited.
- ISTE-Hands on Training on “Arduino Programming” on 18.9.18 & 19.9.18 by Future Intech, Kodaikanal.
- Value added course on “LabVIEW” from 24.9.18-27.9.18 by Mr.Rajasekar, Optithought.

- Guest lecture on “How to prepare for Gate Exam” on 3.10.2018 by Gate Academy, Madurai.
- Guest Lecture on “Recent Trends in Instrumentation Engineering & its scope on 12.10.2018 by Dr.G.Palani kumar, Designer Engineer, Alstom Transport India limited, Bangalore.
- National level conference “INSTRUVISION 2k19” on 18.03.2019 and the chief guest is Mr.Kumaran Muthusamy, Managing Director, Unique Industrial Automation Pvt Ltd, Madurai
- Guest Lecture on “Design of Biomedical Systems and Signal Processing” on 26.06.2019 by Mr.M.Sabari Malai Manikandan, Assistant Professor, School of Electrical Engineering, IIT Bhubaneswar.
- Guest Lecture in “Career Guidance” on 17.08.2019 by Mr.Marees, Program Engineer CTS – Chennai
- Guest Lecture on “Role of Embedded System in automation industry” on 29.08.2019 by N.Arul Prakash, Product Engineer, Supreme Scientific Corporation, Madurai.
- Guest Lecture on “ Industrial Automation for Industry 4.O” on 03.07.2019 by Livewire – Madurai
- National Level Technical Symposium – YERAZIG 2K19 on 06.09.2019 and the chief guest is Mr.K.Muthu Kumar, Director of Hi-Tech Fasteners Pvt Ltd & I-Boss Fasteners Pvt Ltd

- Three day workshop on “ Recent trends in industrial automation using PLC integrated with DCS” from 12-09-19 to 14-09-19 by Mr.Jeyakumar . P, Managing Director, IOLogix Automation Solutions – Chennai

#### **Experts Visit to the Department:**

- Dr.G.Palani kumar, Designer Engineer, Alstom Transport India limited, Bangalore.
- Er.J.Arun, Project Engineer – Automation Siemens, Dubai.
- Sreela M.K, Executive- Customer Service Division, Yokogawa Limited.
- Mr.Kumaran Muthusamy, Managing Director, Unique Industrial Automation Pvt Ltd, Madurai
- Mr.Rajasekar, Optithought.
- Mr.M.Sabari Malai Manikandan, Assistant Professor, School of Electrical Engineering, IIT Bhubaneswar.
- Mr.Marees, Program Engineer CTS – Chennai
- Mr. N.Arul Prakash, Product Engineer, Supreme Scientific Corporation, Madurai.
- Mr.K.Muthu Kumar, Director of Hi-Tech Fasteners Pvt Ltd & I-Boss Fasteners Pvt Ltd
- Mr.Jeyakumar . P, Managing Director, IOLogix Automation Solutions – Chennai

#### **Students placed Companies:**

- Data Pattern – Chennai
- Qbitronics
- Naveen Alarm Systems
- Etricals Engineers Pvt.Ltd
- ICTC – Coimbatore
- Manfree Technologies – Coimbatore
- R made Technologies – Chennai
- Frehniq Instruments & Control – Coimbatore
- Aaron Instruments – Chennai
- Just dial

- Aegis Global Limited
- LRB Tech
- Allsec Technologies
- Virtual Instrumentation & Software application
- Livewire
- Sri Mookambigai Solutions



#### **Short term courses attended by the students**

- Programmable Logic Controller (PLC)
- LabVIEW
- PCB Design
- Arduino Programming
- NPTEL certification courses
- IoT on Engineering Application

#### **Different domains in which the students & Faculty have attended workshops**

- Ms. T.Jecintha Caroline of III-EIE have attended Matlab Fusion 360 training program at NIT – Trichy on 16-02-19 & 17-02-19.
- Mrs. R.Santhiya had attended Seminar on Online publishing, plagiarism and research Integrity organized at V.H.N.S.N College, Virudhunagar on 15-02-2019.
- Ms.Poojalakshmi, Shenbagavalli, Faith Slacer, Manju, Priyadharshini, Gayathri have attended IoT 4.O Workshop at Karpagam College of Engineering & Technology – Coimbatore
- Mr.Perumal Gokul ram, Alex Priyan, Anantha Krishna kumar have attended “ PCB Design” workshop from 19-09-19 to 20-09-19 at Kalasalingam college of Engineering.
- Mr.M.Gopinath, A.Vignesh Kumar, Ms.Lalitha, Yogalakshmi have attended “IoT on Engineering application” at Ramco Institute of Technology on 31-08-19.
- Mrs.L.V.Revathi, had attended workshop on “Design of Robots and its applications” at Mepco Schelenk Engineering College from 16.05.19-18.05.19.
- Mr.A.Rajavel , had attended workshop on “Analog Discovery Kit” at BITS, Anna University, Trichy on 07-06-2019.
- Mrs. R.Santhiya had attended FDP on “Robotics and Automation”at Thiagarajar college of Engineering, Madurai from 17.06.19-21.06.19.

- Mrs. J..Uma maheeswari had attended workshop on “Modeling and simulation of stand alone and grid connected solar photovoltaic system” at MepcoSchelenk Engineering College on 03-05- 19 & 04-05-2019
- Mrs.S.Kavitha had attended STTP on “Embedded System based Smart farming with less water and fertilizers via IoT technologies” at Panimalar Institute of Technology from 10.06.19 - 15.06.19
- Mr. S. Ramesh Prabhu had attended FDP on “Process optimization and control” at NIT, Trichy from 03.06.19-07.06.19
- Mr.S.Ramesh Prabhu , had attended workshop on “Induction motor Stethoscope” at Hallmark Business School, Trichy BITS, Anna University, Trichy on 08-06-2019.
- Mr.R.Shivakumar, N.K Dhianeshwaran of III-EIE presented their paper titled “Design of fault identification system for underground pipes” in International Conference ICATEE’19 at Kamaraj College of Engineering & Technology on 05-10-19
- Mrs.J.Umamaheeswari has attended FDP on “Design Thinking-A Primer” organized by NPTEL – AICTE
- Mrs. M. Vigneshwari has attended FDP on “Fundamentals of Electronic Device

Fabrication” organized by NPTEL – AICTE

- 28 EIE Students participated in three day workshop on “Industrial Automation using PLC integrated with DCS” training program from 12-09-19 to 14-09-19
- Dr. S.Jeyadevi has attended FDP on “Smart Grid” organized by NPTEL - AICTE

#### Internships by the students

- Siemenshealthineers, Bangalore
- Unikerz Technologies, Chennai
- Experts Hub

#### Inplant training Undergone Companies:

- Southern Railways
- Aavin, Vilupuram
- Elysium Technologies
- Aanaimalais Toyota
- ITC Paper Mill, Coimbatore
- Unique Technologies, Chennai
- TTPS, Tuticorin
- Design Tech
- PMS Aquafresh

#### Winner in Sports

- Mr. N.K. Dhianeshwaran of III – EIE participated and won second prize at State level Inter Engineering college Cricket Tournament conducted between 12-07-19 to 15-07-19.
- Mr.P.Petchieswaran of III – EIE have participated in State level boxing tournament conducted at Erode from 28-08-19 to 31-08-19.
- Mr. C.Guruprasath of III-EIE have participated in Anna University Zonal level Volley ball tournament at Bharat Nikethan College of Engineering on 17-09-19 & 18-09-19.
- Ms.R.Gowthami have participated in Anna University Zonal walking competition at PSNA College of Engineering On 19-10-19 & 20-10-19.

#### Academic achievements :

- Dr.S.Jeyadevi HoD/EIE have received NPTEL online certification for the course “DC Microgrid” for July – Sep’19 8 week course
- Mrs.J.Umamaheeswari AP/EIE have received NPTEL online Elite Certification for the course “Design Thinking – A Primer” for July – Aug’19 4 Week Course
- Mrs. M.Vigneswari AP/EIE have received NPTEL online Elite Certification for the course “Fundamentals of Electronic Device Fabrication” for July – Aug’19 4 Week Course
- Mr.A.Ajai Joseph of II-EIE got First prize for paper presentation at BIT Campus – Trichy
- Ms. G.Sherin, Ms. P.Rajeshwari of IV-EIE bagged second prize in poster presentation at Instruvision’19 – National level conference organized at Kamaraj College of Engineering & Technology on 18-03-19
- Mr. R.Shivakumar of III - EIE bagged third prize in poster presentation at Instruvision’19 – National level conference organized at Kamaraj College of Engineering & Technology on 18-03-19
- Mr. A.Rajavel AP/EIE has received award from India Innovation Challenge Design Contest- TEXAS for participating the contest.
- Mrs.J.Umamaheeswari & Ms.S.Kavitha have received consultancy project at V.V.V & Sons Edible Oils Limited, Villipathri.

#### Publications by Faculty (Journals/ International Conference)

- Mr.A.Rajavel, S.Anushyaa, S. Keerthana, S.R Syamala has presented paper titled “**Positioning of solid particles in the conveyor belt using Arduino** “ in national level conference on 15-03-2019 at P.S.R.Rengasamy College of Engineering for Women, Sivakasi.
- Mr.A.Rajprabu, V. Haripriya, P.Sri santhiya devi, M.Saranya has presented paper titled “**Power Generation from ceiling fan** “ in national level conference on 15-03-2019 at P.S.R.Rengasamy College of Engineering for Women, Sivakasi
- Mrs.M.Vigneswari , E.Caroline Dolly, P.T Nivetha, N.Sri raja Indhuja has presented paper titled “**Fire Detection and monitoring system using IoT** “ in national level conference on 15-03-2019 at P.S.R.Rengasamy College of Engineering for Women, Sivakasi

- Mr. S.Ramesh Prabhu, M.Prasana Balaji, A.Prithivi Raj, P.Kalyana Sundram has presented paper titled **“Automation belt curing process using PLC”** in national level conference on 22-03-2019 at Nadar Saraswathi college
- Mrs. J.Uma Maheswari, B.Karan Pandian , G.R Praveen , A. Samuel has presented paper titled **“Automatic Immaculation of milk silo”** in national level conference on 22-03-2019 at Nadar Saraswathi college
- Mr.A.Rajavel, K.Chandrika , S.Chithrambiga , S.Sujitha has presented paper titled **“Design of**

**Smart Dustbin for waste collection in smart city using Arduino** “ in International level conference on 15-03-2019 at JCT Engineering College.

- Mrs.L.V.Revathi, M.Ammuthaelakkiya, N. Kavipriya, J.Kayalvizhi, R.Renukadevi has published paper titled **“Transformer health monitoring system using GSM and IoT”** in International Journal of Engineering Science & Computing (IJESC) on 13-03-19.
- Ms.S.Kavitha, M.Palani Kumar, S.Venkata Subbu, J. Arunkumar has published paper titled **“Automatic street light using Arduino”** in International Journal of Engineering Science & Computing (IJESC) on 14-03-19.
- Dr.S.Jeyadevi, P.Andrews , S.Ramasubramanian, R.Thirupathi Senthil Nathan has published paper titled **“Autonomous Pi Car”** in International Journal

of Engineering Science & Computing (IJESC) on 14-03-19.

- Mrs. R.Sandhiya, S.Umar Samsu, S.Ramesh, M.Nithish Karthik has published paper titled **“Moving object Detection and Intersection collision avoidance in Real time Environment”** in International Journal of Engineering Science & Computing (IJESC) on 15-03-19
- Dr,S.Jeyadevi, R.Manikandan, B.Moses, R.Venkatesh has published paper titled **“Automated Electrolysis Reactor for degradation of Industrial Dyes”** in International Journal of Advance research, ideas and Innovations in Technology ( IJARIIIT) on 14-03-2019
- Dr,S.Jeyadevi, Mrs. M.Rajalakshmi has published paper titled **“Computer-Aided Controller Design for a Nonlinear Process Using a Lagrangian-Based State Transition Algorithm”** in International Journal in Circuits, Systems & Signal Processing – Springer Journal.
- Mr.J.Harinarayanan, Mr.S.Ramesh Prabhu has published paper titled **“The neoteric solution for addressing the fire accidents and train collision”** in International Journal of engineering & advanced technology, Blue eyes Intelligence Engineering & Science publication - Scopus Journal..

