

Editorial Board:

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Inside This Issue

- Workshops/
Seminars Organized
- Student achievements
- Faculty publications and participation
- Industrial Tours and IIPC activities

VISION OF THE INSTITUTE

We develop a globally competitive workforce and entrepreneurs.

MISSION

Dr. Mahalingam College of Engineering and Technology, Pollachi endeavors to impart high quality, competency based technical education in Engineering and Technology to the younger generation with the required skills and abilities to face the challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of infrastructure, state-of-the-art computer facilities and techniques

DEPARTMENT VISION

To develop globally competent instrumentation engineers and entrepreneurs with societal, environmental and human values.

DEPARTMENT MISSION

Supportive Learning Environment: Provide suitable learning environment to the graduates with innovative learning resources and adequate infrastructure.

Engineering Skills: Enhance electronic, instrumentation and automation skills of the engineering graduates to fulfil the industrial requirements.

Sustainable and Eco-Friendly: Create awareness among the graduates for sustainable, eco friendly products and safety standards.

Ethical and Professional Responsibility: Enrich continuous learning, communicative, collaborative and administrative skills of the engineering graduates to become ethical, social responsible engineers and entrepreneurs

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

The graduates will:

PEO1. Technical Knowledge Actively apply technical and professional skills in engineering practices towards the progress of the organization in competitive and dynamic environment.

PEO2. Higher studies and Research Own their professional and personal development by continuous learning and apply the learning at work to create new knowledge

PEO3. Professional and Ethical knowledge Conduct themselves in a responsible, professional and ethical manner supporting sustainable economic development which enhances the quality of life.

PROGRAMME OUTCOME (POs)

PO.1.Engineering Knowledge: Apply the knowledge of Mathematics, Science and engineering to solve problems in the field of Electronics & Instrumentation Engineering.

PO.2.Problem Analysis: Identify, formulate/model, analyse and solve complex problems in the field of Electronics & Instrumentation Engineering.

PO.3.Design and Development: Design an electronic system/component, or process to meet specific purpose with due consideration for economic, environmental, social, political, ethical, health and safety issues.

PO.4.Conduct Investigations: Design and conduct experiment, analyse and interpret data to provide valid conclusions in the field of Electronics and Instrumentation Engineering.

PO.5.Modern Tool Usage: Apply appropriate techniques and modern software tools for design and analysis of Electronic systems with specified constraints.

PO.6.Engineer and Society: Apply contextual knowledge to provide engineering solutions with societal, professional & environmental responsibilities

PO.7.Environment and Sustainability: Provide sustainable solutions within societal and environmental contexts for problems related to Electronics & Instrumentation Engineering.

PO.8.Ethics: Comply with code of conduct and professional ethics in engineering practices

PO.9.Individual and Team work: Perform effectively as a member/leader in multidisciplinary teams.

PO.10.Communication: Communicate effectively to engineering community and society with proper aids and documents.

PO.11.Project Management & Finance: Demonstrate knowledge and understanding of the engineering and management principles to manage projects in multidisciplinary environment.

PO.12.Lifelong Learning: Recognise the need for, and have the ability to engage in independent and lifelong learning.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

(PSO1).Instrument Analysis Analyze and monitor the characteristics of electronic measuring instruments to ensure performance, safety and quality of the processes

(PSO2).Controller Selection Select the suitable instruments, control schemes and controllers as per the requirements

Workshops organized

Workshop on MEMS 12.10.2013

Convener :

Dr.V.Ranganathan

Resource persons :

Prof.ManjunathNayak,
IISc Bangalore

Mr.S.Ramaratnam,
Dy.Director(Rtd),VSSC(ISRO)



The field of MEMS encompasses the process-based technologies used to fabricate tiny integrated devices. Current examples of MEMS devices such as accelerometers, Lab-on-chip and bio sensors were covered. The workshop highlighted on the MEMS Design Methodology and the micro fabrication CMOS&MEMS process simulation based on mechanical, electrical, thermal, BioMEMS, RF MEMS and wet & dry etching micro machining simulations and applications. Various valuable technical contents and information were delivered during by two of the eminent technical stalwarts from IISc, Bangalore and VSSC (ISRO). An Application oriented approach was followed during the entire workshop that paved way for a plausible technical outcome.

Two Days Workshop on 'Special Workshop on Embedded Systems' (SWES'13) | 26.7.2013 & 27.7.2013

The International workshop on "Embedded Systems" concentrates on the recent trends and application of the embedded systems in various industries. Recent scenario in embedded systems is such that it has become an enabling technology like VLSI finding its applications in all walks of life. The creative awareness about embedded system among students, faculty members, researchers will go a long way in equipping them for facing the future technological challenges. Participants will be benefited, as the seminar will provide an opportunity to enrich their knowledge and enhance their capabilities.

Convener:

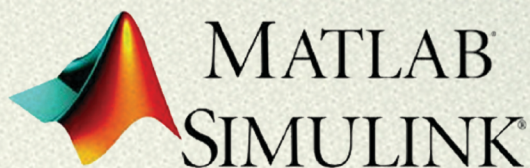
Dr.V.Ranganathan

Resource persons:

Dr. V Lakshminarshiman,
Professor, East Carolina University,
USA



Two Days Workshop on” MATLAB & SIMULINK” 04.07.2013 & 05.07.2013



Convener and Resource person:

Dr.V.Ranganathan

Matlab & Simulink workshop mainly focuses on the faculties eager to learn about Matrix Laboratory which is a high-level language and interactive environment for numerical computation, visualization, and programming. Using MATLAB, one can analyze data, develop algorithms, and create models and applications. The language, tools and built-in math functions provide to explore multiple approaches and reaches to solution faster than with spreadsheets or traditional programming languages. MATLAB can be used for a range of applications including signal processing and communications, image and video processing, control systems, test and measurement.

Two Days workshop on “Patent Reading and Patent Analysis” | 30.08.2013 & 31.08.2013

The department of EIE organized a two Days workshop on “Patent Reading and Patent Analysis” .Faculty members of MCET had been participated in this workshop. Faculties acquired the knowledge about the procedure to file the patent and how to search the patent related to the topic of their Project. Mr. NavaneetBhushan explained the importance of the patent and procedure for filing the patent. He also explained the copyright, trademark and geographical indication also . In the second day he demonstrated the patent search and how to identify and distinguish the problem after patents search related to their current topic/problem definition (IDP/UDP)

Convener:

Dr.V.Ranganathan

Resource person:

Mr.NavaneetBhushan, Founder,
Crafitti consulting,
Bangalore



Inauguration of Department Association “ELINSTA” and Guest Lecture on “Industrial Automation” 24.07.2013

Chief Guest:

Mr.M.S.Santhosh,
Manager, Bosch Rexroth India Ltd.,
Bengaluru



The inaugural function was cordially convened and co-ordinated by Ms.S.Sathya, AP-EIE and the executive members of Elinsta Association. The function was presided by Mr.M.S.Santhosh from Bosch Rexroth India Ltd., and the chief guest also delivered a guest lecture on the function which was proving useful to the students of EIE & ICE augustly gathered. Various technical contents regarding embedded systems, Automation in processing industries and recent trends in automation were all covered. The students also interacted and came up with many queries regarding Automation.

Guest Lecture on “Sensors and Industrial Automation” 18.09.2013

The guest lecture on “Sensors and Industrial Automation” was moderated by the faculty in charge and the executive members of the ELINSTA Association of EIE. The lecture was delivered by Mr.V.Angappa from Megatech Scientific Instruments, Coimbatore. The lecture covered a variety of topics from the need and usage of sensors and their usage in the various Automation industries. The latest sensoric techniques incorporated in the industrial automation sectors were also discussed during the course of the session. The students came up with relevant technological queries that were answered by the honourable chief guest. On the whole, the session was technically enriched and interactive.

Chief Guest:

Mr. V. Angappa,
Proprietor,
Megatech Scientific Instruments,
Coimbatore



VIKTORINA'13

18.11.2013

Cheif Guest:

Dr.V.Ranganathan,
HoD/EIE, MCET



Technical Events like Visual Hunt, Project presentation, Puzzle , Just a minute, Technical Quiz, Picture Story and Situation Task under the name of 'VIKTORINA-2013'. The function wa moderated by Ms.S.Sathya and was headed by Dr.V.Ranganathan. All the students of EIE took part in this event .The event was a platform to bring many of he technical skills and talents into limelight. At the end of the event ,the winners of various contests were rewarded with attractive prizes .

Inauguration Event and Guest Lecture

26.10.2013

The event was formally inaugurated by Mr M Balaji ,Section Advisor, ISA-MCET section.The entire event was witnessed by the student members of EIE and ICE. A Guest lecture on the basics of automotive embedded systems, automotive embedded systems development-Model Based Design, embedded communication, Serial Peripheral Interface (SPI), USART, I2C and the CAN, model based systems design was delivered. The guest lecture was delivered by experts from Robert BOSCH Engineering and Business Solutions .

Cheif Guest:

Er. Naveen Kunnath -and,
Er. ArunSagar Reddy
(System Test Engineer-
Robert Bosch Engineering
and Business Solutions),
Coimbatore



EIE STUDENTS IN NATIONAL AND INTERNATIONAL LEVEL

Gokart Championship



National Go-Kart Championship - 2013 is a national level Go-Kart racing event in which Engineering Students from across the country need to plan and engineer their own Go-Kart vehicle. The event is organized by Indian Society of New Era Engineers. MCET Renn is the vehicle designed and developed by MCET students and participated in final round. We congratulate MuthamilSelvan and his team for achieved BEST INNOVATION award.

Texas Instruments Innovation Challenge India Analog Design Contest 2014 - Smart Solar power conversion

Two projects under the guidance of Dr V Ranganathan got selected for quarterfinals TI Analog Design Contest 2014. The product titled "Smart Solar Power Conversion" were developed by Muthamilselvan, Guruprakash and Dineshkumar by receiving components from Texas Instruments worth of 200\$. The department congratulates Muthamilselvan and his team for their presence in national level event



- M. Praveen, R. Mahenthiran and A. Parthiban of III year EIE students had won second prize in the project presentation contest during 19.09.13 & 20.09.13 at Sri Sairam College of Engineering, Chennai.

- The III year EIE student R. Archana has been selected in the university football team to play state level match

STUDENT ACHIEVEMENTS

Co curricular

| Date | Students Name | Event Details | Venue | Awards |
|----------|------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------|----------|
| 02.08.13 | R.Yoharaj A.Ponkaviarasu P.S. Muthamilselvan | Project presentation | Akshaya college of engineering and technology | I prize |
| 31.08.13 | B. Sakthivel P.S. Muthamilselvan R.Mahenthiran | Project contest | Ranganathan Engineering College | II prize |
| 19.09.13 | R.Mahenthiran A.Parthiban M.Praveen | Project presentation on intelligent drip technology | Sri Sairam Engineering College | II prize |
| 11.10.13 | K.Revathy Priyadharshini | Paper presentation | Mahendra Institute of engineering and technology | I prize |

Extra curricular

| S.No | Students Name | Year & Dept. | Events Details | Date of the Event |
|------|--------------------------------------|--------------|--------------------------------------------------------------------------------------------------|--------------------------------|
| 1 | R. Archana M. B. ShanmugaPriya | III & EIE | Won III prize in Football Inter-Zone Tournament (WOMEN) at PSN Engineering College, Thirunelveli | 13.09.2013 to 15.09.2013 |
| 2 | B. MohanaPriya S. Padmavathi | III & EIE | Participated in Anna University INTER-Zone- Handball WOMEN at Kongu Nadu College of Engineering. | 18.09.2013 &19.09.2013 |

Extra curricular - Intra Departmental

| S.No | Student's Name | Details of event & Prize if any | Organizer and Place of program | Date |
|------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------|------------|
| 1 | HeenaFathima. L Suganya. N Dhivya Lakshmi. S Mahavishnu. S | First Prize in "Article Presentation" Department Association "ELINSTA" event | Mechanical Seminar Hall, MCET | 18.11.2013 |
| 2 | Saranya Devi. M Kavithabharathi. D Karthik. L | Second Prize in "Article Presentation" Department Association "ELINSTA" event | Mechanical Seminar Hall, MCET | 18.11.2013 |
| 3 | Selvakumar. M Pragathy. K Paventhan. G | Third Prize in "Article Presentation" Department Association "ELINSTA" event | Mechanical Seminar Hall, MCET | 18.11.2013 |

Awards

The Department of EIE congratulates the following students who have received scholarship from NIA Educational Institutions on the Campus Day-Awards Day 2014 for their excellence in academics:

- M.Saranya Devi-Final EIE
- K.Menaka-Third EIE
- S.Britha-Second EIE

FACULTY PUBLICATIONS

U.Rajkanna "Induced Draft Cooling Tower control for Power plants using ARM processor" in International Journal of research in Electrical and Electronics Engineering(IASTER), Vol.1,Issue 1, July-Sep 2013

S.Kavitha, "System Identification using PSO" in International Journal of Engineering and Technology Research (IJARSE), pp. 115-123, July-September 2013

FACULTY PARTICIPATION IN FDP/WORKSHOP

| S.No | Name of the faculty | Title of the event | Venue | Date of the event |
|------|-------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------|
| 1 | T.S.Srinivasan | Embedded System Design using ARM Cortex M3 | CDAC,Hyderabad | 04.08.2013 to 09.08.2013 |
| 2 | S.Sathya | Integrated Architectures in Plant Automation | K.S.Rangasamy College of Technology, Thiruchengode | 16.12.2013 & 17.12.2013 |
| 3 | M. Balaji, K. M. Manu, V. Karpagam, | Attended the Mission 10X programme organized by FDC with trainers from Wipro India Ltd. | Dr. Mahalingam College of Engineering and Technology, Pollachi | 26.09.2013 to 28.09.2013 |

IIPC activities

22 Students of third year students undergone for a one week inplant training to the following industries

- Southern Railways, Madurai Division, Madurai
- Vasantha Advanced Systems, Coimbatore
- SPB Paper Mill ,Pallipalayam, Erode
- Steel Authority of India, Salem
- GR Engineering, Coimbatore
- Mettur Thermal Power Station, Mettur Dam
- Flowserve India Controls Private Limited, Coimbatore
- Ojas Automation System, Sundarapuram

Industrial Visit

66 students of third year EIE had visited KUNDHA POWER PLANT , Kundha on 12.09.2013