

Reflections

ECE DEPARTMENT

From HOD's Desk



Generally the most popular and widespread teaching method is lecturing, in which the teacher delivers information and the students listen or take notes. Lecturing is a useful way of imparting a great deal of information quickly, but it is passive for students.

Laboratories are wonderful settings for teaching and learning science.

1. They provide students with opportunities to think about, discuss and solve real problems.
2. Experience in observation and manipulation of the materials of science is superior to other methods of developing understanding.
3. Labs serves for better understanding a concept, relationship or process. Laboratories are wonderful settings for teaching and learning science.

Five groups of objectives achieved through the use of the laboratories

- skills - manipulative, inquiry, investigative & organizational.
- concepts - theoretical models
- cognitive abilities - critical thinking, problem solving, application, analysis & synthesis
- understanding the nature of science - interrelationships between science and technology and among the various disciplines of science
- attitudes - curiosity, interest, risk taking, objectivity, precision, confidence, perseverance, satisfaction, responsibility and liking science

GOALS OF LAB COURSES

- Develop intuition and deepen understanding of concepts.
- Apply concepts learned in class to new situations.
- Experience based learning.
- Develop critical, quantitative thinking.
- Develop experimental and data analysis skills.
- Learn to use scientific apparatus.
- Learn to estimate statistical errors and recognize systematic errors.



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TESLA-2015

With an objective to train the lab instructors in the area of Embedded Systems based on PIC, ARM & Raspberry Pi Microcontrollers, so that they can help students in guiding academic projects, the Department of ECE conducted a workshop named TESLA -2015

(Technology Up gradation & Skill Development Programme for Laboratory Instructors).

The objectives of the workshop are:

1. Expose the participating Lab instructors to the technical activities in their colleges.
2. Equip them with technical skills, practical knowledge and competencies for effective initiation of projects and developments for the students.
3. Familiarize the current trends in Embedded System.

The workshop took place from 27 - 29 May 2015 at Mangalam College of Engineering, Ettumanoor and it was lead by a team of experts from **Arvin Technologies**, Kalamassery, Kochi.



WAMPS-2015

The Basic Science Department organized a *two day* Workshop - on *Applied Mathematics And Physical Science for Higher Secondary Teachers and B.Ed Trainees* - "**WAMPS 2015**" on 21st & 22nd May 2015.



The programme was inaugurated by former Vice Chancellor of IGNOU **Dr.V N Rajasekharan Pillai** and on the occasion the presidential address was given by our respected Chairman **Er. Biju Varghese**. Respected Principal Prof. Manoj George delivered the principal's message. Respected HOD of ECE Department and Basic Science **Prof. Asha Panicker** was present on the occasion. She delivered the welcome speech.

The two day workshop had different sessions like Virtual Labs for basic sciences, sessions on fundamental and advanced trends in Chemistry, Physics and Mathematics. The classes were handled by eminent academicians like **Dr. E Krishnan** (Rtd. Prof, University College, TVM), **Dr. V. P. N. Nampoothiri** (Emeritus Professor, International School of Photonics, CUSAT) , **Dr. Joseph T Moolayil** (Associate Professor , S.H. College, Thevara).

Farewell-2015

“Farewell” - a word which has the strength to give a blend of a number of emotions in the life of a student. It can give the excitement of a new world which he will step into. At the same time it can make them sad as they depart from their friends and an unforgettable college life. It gives the thoughts of new challenges which they have to face, expectations of a new life. The word Farewell is a mix of all these emotions. In this sense the farewell turned to be a moment of joy & happiness & it has to be celebrated colourfully. It should remain as a nostalgic feeling deep in the minds of the students. Wherever and whenever they are it should be in their souls. So we should celebrate it colourfully.

Mangalam Campus is going to miss one of its best batches of ECE this year .The farewell to 2011-15 batch had been celebrated colourfully. The 2012-16 batch gave their seniors a beautiful send off on 5th May which can be remembered by everyone. The ceremony was blessed with the presence of Respected HOD of ECE , Prof. Asha Panicker, the class-in-charges of 2015 batch & 2016 batch and faculty members and students. The inaugural ceremony was followed by various cultural activities, games and other colourful events of organized by the young butterflies of tomorrow .



KTU -"KERALA TECHNOLOGICAL UNIVERSITY"

Kerala Technological University - One of the main headlines nowadays in Malayalam dailies. It is the best thing proposed by the government of Kerala for getting quality based technical education. Our government has put forward a new policy to bring all the engineering colleges in Kerala under one umbrella to make them more efficient, quality oriented and outcome based. It means that the engineering students created in our campuses should be an innovator and contributor to the fast growing technology and they should be a perfect professional in the technology market .

Why KTU?

We all know that today in our state itself, a lot of engineering colleges are present that is around 150 in numbers. So a lot of people are getting admitted to various engineering courses. Do they meet the requirements of present fast growing industry? The industries are growing very fast. So we need to put an extra potential in our engineering aspirants to compete in the present day high level technological market, like the growing electronics and computer markets. Considering all these, the Kerala government has come up with a new policy on increasing the quality level of our technical education scenario. That is accomplished with the introduction of KTU (Kerala Technological University).

Kerala Technological University (a state government university) has come into existence on May 21, 2014 with an aim to give leadership to the technology related policy formulation and engineering planning for the state. It also emphasises to improve the academic standards of the graduate, post graduate and research programmes in engineering science, technology and management and regulate the academic standards of all colleges affiliated to the University. The main thrust areas of the University are Research, Development and Innovation. The university is presently head- quartered at CET campus Trivandrum.



Prof. (Dr.) Kuncheria P. Isaac assumed charge as the first Vice Chancellor of Kerala Technological University on 1st September 2014.

Prof. (Dr.) M Abdul Rahiman, an eminent academician and an able administrator, is the Pro Vice chancellor of KTU, since September 2014.

The main objectives of KTU are:

- I. To give leadership to the technology related policy formulation and engineering planning for the state
- II. To improve the academic standards of the graduate, post graduate and research programmes in engineering science, technology and management.
- III. To regulate the academic standards of all colleges affiliated to the University.
- IV. To monitor, regulate and ensure that the academic standards of all institutions not affiliated to the University, but conducting engineering courses in the State, are in accordance with law and in accordance with such guidelines and orders issued by the University.
- V. To advance and disseminate learning and knowledge in engineering sciences and allied fields by fostering and promoting engineering research.
- VI. To design new courses and curricula based on the advances in accordance with the norms, if any, laid down by the AICTE.
- VII. To act as the nodal agency for linkages in the field of engineering sciences, technology and management with other national and international institution
- VIII. To promote interdisciplinary education and research in the field of engineering sciences, technology and management
- IX. To promote acquisition of knowledge in a rapidly developing and changing society and to continually offer opportunities for upgrading knowledge
- X. To impart training with the use of modern communication media and technologies for the development of skills appropriate for a learning society in the context of innovations, research and discovery by establishing educational network related to engineering sciences
- XI. To give thrust for the development of indigenous technologies by encouraging research and other academic activities in the related areas
- XII. To support the establishment of Centres of excellence for multidisciplinary applied research in specific thematic areas
- XIII. To improve the learning skills of the students by constantly and continuously improving and upgrading the academic quality and standards of faculty
- XIV. To introduce and sustain innovative systematic quality improvement programmes in the field of technical education.
- XV. To give assistance for innovation in the field of engineering sciences, technology, management and institution level management programmes in the State
- XVI. To promote community development activities by suitable extension activities
- XVII. Such other purposes as the University may from time to time determine.

This university has got its ideas from the famous technical universities like Anna University of Tamil Nadu, Vishveswaraya Technical University of Karnataka etc.

**Ms. Mrudula K**

She did her M.Tech in Opto electronics and communication from Model Engineering College , Eranakulam. Her area of interest is in signal processing.

**Ms. Krishnapriya V**

She did her M.Tech in Power Electronics from Amrutha Vishva Vidyapeetham, Banagalore. Her area of interest is in Electronic drives.

**Ms. Remya Elizabeth Philip**

She did her M.Tech in Communication engineering from Amrutha Vishva Vidyapeetham, Banagalore. Her area of interest is in microprocessors.

**Mr Nikhil Thomas**

He did his M.Tech in Communication engineering from Coimbatore Institute of Technology, Coimbatore. .His area of interest is in information coding.

**Ms. Ayona Philippose**

She did her M.Tech in Communication engineering from Vellore Institute of Science and Technology, TamilNadu .Her area of interest is in wireless communication.

**Ms. Neethan Elizabeth Abraham**

She did her M.Tech in Communication engineering from Federal Institute of Science and Technology, Eranakulam. Her area of interest is in cryptography.

**Ms. Aswathy K Sharma**

She did her M.Tech in Communication engineering from College of Engineering, Guindy. Her area of interest is in digital communication.

ECE Department welcomes the new members to Mangalam family

Placement Training at Mangalam

The goal of Training & Placement Cell is to provide world class training & employment opportunities to students in leading organizations. The major objective of our campus placement training is to identify the talented and qualified professionals before they complete their education.



The ECE department organized a training program for two weeks. It is our responsibility to make the students equipped on all aspects of career development along with creating a very good impact in them which makes them feel every minute they spend in the placement training session is worth being there and will help them in getting placed in their dream companies.

The sessions included

- Aptitude and English training by PRAGMATIX Solutions & Rise High for 5 days
- Soft Skills training by Dr. Manikandan for 4 days
- Internal Aptitude training by Associate Professor Ajith Joseph for 4 days.



Vishnu Raj (2010-14 batch) who was selected to TGC 119 batch of Indian Army has successfully completed his training at IMA Dehradun and commissioned in the rank of LIEUTENANT.

ECE department salutes Lieutenant Vishnu Raj for his great achievement and dedication.





ADD ON COURSES

MATLAB-Simulation and Programming

The Department of ECE has conducted two day add-on course for each batch on “MATLAB-Simulation and Programming” on 4,5,14,15 of July 2015 by Ms Ayona Philipose, Ms Neethan Elizabeth Abraham, Ms Remya Elizabeth Philip, Mr Nikil Thomas, Ms Aswathy K Sharma, Ms Mridula for seventh semester students.

The main theme of this add-on course is to create awareness and to assist undergraduates with learning the basics of programming in general and programming MATLAB in particular. First session introduces MATLAB for signal processing applications and the second session was on communication field. It helps them to explore and visualize ideas and collaborate across disciplines including signal and image processing, communications, control systems, and computational finance.

SOCIAL SERVICE



The S3 ECE students of Mangalam College Of Engineering had done social service which is a part of their curriculum, at MGM ABHAYA BHAVAN, PAMPADY for 15 days ie from 12/6/15 to 26/6/15. The students were actively involved in cleaning the premises, cooking food and serving food to the inmates. They also interacted with the occupants which gave both the groups, a feeling of happiness and joy.



Beacon-2015

As usual, this year also the Mangalam group conducted the career guidance seminar on trends in engineering as well as in other disciplines – "**Beacon-15**", on 16 May 2015 at Mammen Mappila Hall, Kottayam. The function was inaugurated by Respected Minister **Shri Thiruvanchoor Radhakrishnan**. The presidential address was given by our Respected Chairman **Er.Biju Varghese**. Well known academicians and career gurus made their presence and taken classes on different career prospects. They also cleared doubts of students and their parents about the career trends. Academicians like **Dr.Achuthsanker** , **Dr Venkataraman** led the classes in this mega event. The event came to an end by noon.

