



MECHNOVA

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MECHANICAL DEPARTMENT NEWS LETTER

HOD DESK

Greetings to Dear students, Faculty and Friends!

Let me take this opportunity to congratulate once again our beloved Chairman Rev. Dr. Thomas Melvettath on his Silver Jubilee of priestly ordination. I sincerely wish that his life in God's service always be filled with joy . RARA 2017 was a huge success, Congratulations to the organizers!. "Skilled Engineer Programme is progressing satisfactorily and students have completed their first scheduled assessment.

. As part of modernisation and up-gradation two additional labs viz. Metallurgical testing and Metrology lab are being established. Procurement process of a CNC lathe is in an advanced stage completion. All these additional infrastructure will enable us not only meet academic requirement but also to offer additional skills to our students. I hope coming even semester will give us more technical and intellectual stimulation to do more in the academic arena.

I wish you all " A very Merry Christams and Happy New Year "

Cdr Raju K Kuriakose(retd)

In this Nutshell

HOD Desk

FDP "RARA"

Skilled Engineer

Faculty Achievement

Fab XL

Techz N Trendz



VISION

- To become a center of excellence in Mechanical Engineering, producing innovative and creative mechanical engineers to meet the global challenges

MISSION

- To provide a platform to the students towards attaining quality education in Mechanical Engineering.
- To educate students about professional & ethical responsibilities and train them to build leadership and entrepreneurship qualities for their career development.
- To create opportunities and guide students in acquiring career oriented jobs in the field of Mechanical Engineering.

Jubilee wishes to respected Chairman Rev. Dr. Thomas Melvettath

Program Educational Objectives (PEO'S)

- PEO1:** Graduates will be able to pursue successful professional career in Mechanical Engineering with sound technical and managerial capabilities.
- PEO2:** Graduates will have skills and knowledge to formulate, analyze and solve problems in mechanical engineering to meet global challenges.
- PEO3:** Graduates will be capable of pursuing mechanical engineering profession with good communication skills, leadership qualities, team spirit and professional ethics to meet the needs of the society.
- PEO4:** Graduates will sustain an appetite for continuous learning by pursue higher education and research in the allied areas of science and technology.

Program Specific Outcomes (PSO's)


- PSO1:** An ability to use computer aided modeling and simulation tools to provide solutions to mechanical engineering problems.
- PSO2:** ability to develop and implement a process in a well-planned manner leading to a demonstrable product

“FDP on “Recent Advances in Robotics and Automation” (RARA 2017)”

ME department conducted an FDP on “Recent Advances in Robotics and Automation”(RARA 2017) from 28 - 30 November 2017. The recent changes in the industrial scenario have made industrial automation an emerging field for students, teachers and researchers. The FDP aims to bring together teachers, engineers and re-search scholars to exchange and share their experience about different aspects of recent advances in the field of Automation and Robotics. The eminent faculty members from NIT Calicut & robotic industries handled the sessions Dr. Sudeer (NIT Calicut) handled recent trends in robotics and Automation. Vision based manipulation was topics for Dr. Abhilash. The emerging technologies like the shape memory Alloys, Robotic assistive devices for human locomotion, Fluid power control, Robot Ergonomics were handled by Dr. Jobin K Vargheese, Dr. Sreekanth, Dr.Sekhar & Dr.Vinay Panicker respectively. All the ME faculty members attend the training and gets encouraged



“Skilled Engineer”- A Concurrent Skill Development Program”




DEPARTMENT OF MECHANICAL ENGINEERING
With
INDUSCAN PETROLEUM INSTITUTE
Organising

SKILLED ENGINEER (MECHANICAL CONSTRUCTION AND QUALITY CONTROL)
(A Concurrent Skill Development Programme-2017)

for
FINAL YEAR(2014-18 BATCH) STUDENTS OF
MECHANICAL ENGINEERING

*Classes commences
on*

21 October 2017



Mechanical department started a **Concurrent Skill Development Program**” called “Skilled engineers” in association with Induscan Petroleum Institute Nilambur. The Course contains an integral training module covering **Quality Control, Piping & NDT**. The team offering training classes for Mechanical engineering students at college itself during Sundays, & also at the end of the course. The students passing the exams will be placed in various MNC’s. The classes were started from 21st Oct 2017. **The students from VJEC attend the 'Skilled Engineer' practical classes on 18th and 19th November 2017 at Induscan Petroleum Institute, Nilambur**



Staff Achievements



MR. Jestin C Jose, Asst Professor, has shown exemplary leadership and played a pivotal role in participation of VIMAL JYOTHI SAE TEAM in the “SAE BAJA International competition 2017” held at Illinois, USA from 07-10 June 17

His efforts helped College to be in the international map of SAE and have brought fame and distinction to the College

FACULTY DEVELOPMENT/SKILL PROGRAMMES

- **Mr.Appu Kurian & Hari Prasad attended an FDP on IC Engines at IISC Bangalore from 27th Nov to 1st Dec 2017**
- **Mr. Mithun Mukundan & Johny P Joseph attended an FDP on foundation program on ICT & Pedagogy for online blended teaching learning process on collaboration with IIT Bombay, at Sreebudha College of Engineering**
- **Mr. Jestin C Jose & Mejo Francis attended FDP on Advances in Cryogenic Engineering at CET Trivandrum from 4th to 8th Dec 2017.**
- **Mr.Shaji George attended ASASP skill development program at Trivandrum**



"I think that when we know that we actually do live in uncertainty, then we ought to admit it; it is of great value to realize that we do not know the answers to different questions. This attitude of mind - this attitude of uncertainty - is vital to the scientist, and it is this attitude of mind which the student must first acquire."

Richard P. Feynman

(one of the best-known scientists in the world. In a 1999 poll of 130 leading physicists worldwide by the British journal Physics World he was ranked as one of the ten greatest physicists of all time)

S5 ME Students Vasishak P, Naveen E V, Jishnu T & Jithin Joseph attended "FAB XL" WORKSHOP 'Albertian Institute of Science and Technology, Kalamassery, Kochi' in association with Kerala Startup Mission on 23rd & 24th Oct 2017

Techz n Trendz

Future Trends of Space Cryogenics?

"Ajay George S8 ME B"



- Cryogenics in Space mainly used for Focal Plane Cooling...
- Earth Observation
- There will always be a need for optimized coolers at 40-50K for the big TIR Missions (but one batch every 20 years). For those missions, the next breakthrough will concern exported micro vibrations.
- In the medium term, miniaturized, cheap coolers optimized for 77K to 120K could find a market.
- The convergence Space/Ground Based long lifetime coolers will accelerate (missions are already using such coolers to satisfy specific needs).
- Science
- Needs in this domain are not trends but dictated by specific missions. Potential upcoming missions: Cold Mirror and Continuous 50mK.

Program Outcomes

- PO1: Engineering knowledge
- PO2: Problem analysis
- PO3: Design/development of solutions
- PO4: Conduct investigations of complex problems
- PO5: Modern tool usage
- PO6: The engineer and society

- PO7: Environment and Sustainability
- PO8: Ethics
- PO9: Individual and team work
- PO10: Communication
- PO11: Project management and finance
- PO12: Life-long learning

MERRY CHRISTMAS & HAPPY NEW YEAR



Staff Editors: Mejo M Francis & Hari Prasad

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