



NEWSLETTER

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Department of Mechanical Engineering, KUMARAGURU COLLEGE OF TECHNOLOGY

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Industry Institute Interaction

- This month, the department signed MoU with the following industries with motto of arranging industrial visits, inplant trainings, internships for the students and for giving consultation to the industries.



M/s. Spindraft Industries, SIDCO, Coimbatore on 12.11.2018. This MoU was initiated by Dr. S. Balasubramanian, ASP/ME and was coordinated by Dr. V. R. Muruganantham, ASP/ME.



M/s. KSB Pumps, Coimbatore on 29.11.2018. This MoU was coordinated by Dr. S. Balasubramanian, ASP/ME and Dr. V. R. Muruganantham, ASP/ME.

Programmes Organized

- Department along with Coimbatore Productivity Council, Coimbatore organized a short-term course on "Advance Excel" on 17th November 2018 which was handled by industry personnel from Prof. Dr. S. Murugappan, Professor, Faculty of Management Science, Bannari Amman Institute of Technology, Sathyamangalam.



Mr. M. A. Vinayagamoorthis, AP (II)/ME and Mr. R. S. Mohan Kumar, AP/ME coordinated the event.

Journal Publication

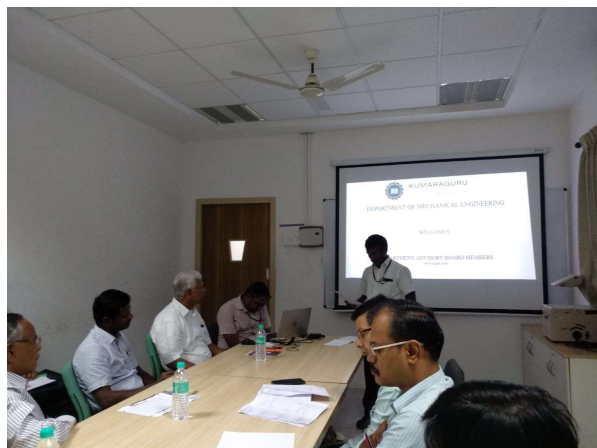
- Mr. B. Jeeva, AP/ME, published a paper entitled "Investigating the Role of Fatty Acid Methyl Ester Composition on Engine Performance and Emission Characteristics" in the International Journal of Vehicle structures and systems, Vol. 10. No. 4, pp. 257-259, doi:10.4273/ijvss.10.4.05

Programmes participated

- Dr. K. M. Senthilkumar, ASP/ME, Dr. B. Senthil Kumar, ASP/ME, Mr. S. Prashanth, AP/ME participated in a two days FDP at M/s. Roots Industries India Limited, Coimbatore on stamping, die casting and injection molding on 12.11.2018 and 13.11.2018.
- Dr. V. R. Muruganantham, ASP/ME and Mr. M. Pradeep, AP/ME participated in I-Mentor conducted by FORGE during 14.11.2018 and 16.11.2018.
- Mr. V. Manivel Muralidharan, AP (II)/ME, Mr. M. A. Vinayagamoorathi, AP(II)/ME Mr. B. N. Sreeharan, AP (II)/ME participated in a One day Research Workshop on Additive Manufacturing and Weldability of Nickel based Superalloys on 24.11.2018 at PSG College of Technology, Coimbatore.

Department Advisory Board Meeting

- Department Advisory Board Meeting was conducted on 24.11.2018.



Bid Farewell



Bid Farewell was given to Mr. S. B. Nithyananth, AP (SRG)/ME, who separated from the department. The Department expressed its appreciations and wishes to him.

NCC - Army Attachment Camp 2018



Our student CDT S. Bala Karthikeyan had attended Army Attachment Camp at Secunderabad. The 15 days camp includes physical training, theory classes, map reading, magnetic compass, HHTI and viewed many rifles and guns. Many games were conducted between the group. Our group backs the first place in marathon and drill competition and runner up in volleyball. The camp ended with cultural and camp fire.

Placements

The following students were placed in M/s. Titan Industries, Hosur.

- Mr. S. Kandharooban
- Mr. Z. Vasif Ahamed
- Mr. M. Gautham Siddharth

The following students were placed in M/s. Indoshell Castings, Coimbatore.

- Mr. T. Mouleeswaran
- Mr. S. Gohul
- Mr. A. Dhina
- Mr. D. Gurumoorthi
- Mr. D. Gokula Krishnan

Mechanical Engineering Association (MEA)

Development of Skills beyond studies is mandatory. In this connection, MEA, coordinated by Dr. V. R. Muruganantham, ASP/ME and by Mr. K. Akilan, President, MEA has planned to conduct Skill development courses for the 1st year mechanical students. The Skill development package consists of four courses:

1. Welding
2. Design
3. Vehicle overhauling
4. Raspberry pi

Intake for each course will be 25 students. These courses aim to give basic knowledge in the respective field. The process of selection will be soon intimate.

Mech Master

The Mechanical Engineering Association further aims to prepare the technical aspirants of the department to face the GATE, IES and more. For the same, an event called "Mech_Master" was introduced by the association. This event was conducted in two different phases. In Phase -1 the technical aspirant tested their technical standard in Engineering Mechanics with Mech_Master and 15 from the phase-1 were selected for phase -2. In Phase-2, they tested their knowledge with Manufacturing Technology.

From the phase-2 two were selected as a winner of the Mech_Master and crowned with the title "Mech_Master".

What's New in SOLIDWORKS 2018

<https://launch.solidworks.com/>

DESIGN TO MANUFACTURE

For years, companies have survived despite having a separation between their design and manufacturing departments, both by organization, and by the tools they use. SOLIDWORKS Design-to-Manufacturing Process Solution provides everything that is needed to bring the ideas to market. Design to final assembly work can now happen concurrently in one seamlessly integrated and managed system

DISTRIBUTED DATA MANAGEMENT

Electronic data within organization needs to be easy to access regardless of the format - from documents and spreadsheets to metadata, processes data, and data from enterprise resource planning. SOLIDWORKS Distributed Data Management (DDM) Process Solution can organize all this data so it is easy to access across many disciplines and departments. It also makes it easy to capture non-electronic data and complex electronic data such as 3D shapes.

DESIGNER TO ANALYST

Great designs are the result of inspiration, perspiration, and hours of hard work. SOLIDWORKS Designer to Analyst Process Solution helps in speeding up the complete design cycle. Engineering and design teams can work together concurrently evolving product designs while validating any changes and reusing previous analysis information.

ELECTRICAL AND IOT

Every day products are becoming more complex. As web and app functionalities are added to everything from cars to sunglasses, many companies are looking for intelligent tools that work together so they can design and build the "smart" products today's markets demand. Recognizing this, one of the easiest and fastest ways to achieve a more efficient process when designing connected devices is to use one single, unified environment.

- Courtesy: B. N. Sreeharan, AP – II/ME

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KUMARAGURU college of technology

COIMBATORE – 641 049

Department of Mechanical Engineering

Vision

To facilitate mechanical engineering education, research and services that contribute to the advancement of scientific knowledge leading to social development.

Mission

The Department is committed to provide quality education and training with emphasis on engineering fundamentals and applications to the students to be competent professionals with ethics. The department executes research and provides engineering services for sustainable development of society.

Programme Educational Objectives (PEO's)

1. Graduates will take up carriers in manufacturing and design related sectors.
2. Graduates will be involved in the execution of mechanical engineering projects.
3. Graduates will take up educational programmes in mastering mechanical engineering science and management.

Program Outcomes (PO's):

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs):

1. Apply the fundamentals of engineering and mathematics to solve complex problems in the field of design and thermal sciences.
2. Apply the concepts of industrial engineering and management in the field of manufacturing engineering.