

# *ME-Newsletter*

*Session: 2014-15*

## **Vision of the institute:**

To be a leading educational institution recognized for excellence in engineering education & research producing globally competent and socially responsible technocrats.

## **Mission of the institute:**

- To provide state of the art infrastructural facilities that support achieving academic excellence.
- To provide a work environment that is conducive for professional growth of faculty & staff.
- To collaborate with industry for achieving excellence in research, consultancy and entrepreneurship development.

## **Vision of the Department:**

To be recognized as a centre of excellence for mechanical engineering education

## **Mission of the Department:**

- To impart quality education aimed at producing competent professionals capable of applying their knowledge of science & engineering fundamentals creatively in areas related to mechanical engineering.
- To provide necessary support to the aspirants in their goal oriented academic pursuits through mentoring and value added curricular and co-curricular activities.
- To make students conscious of ethical values in pursuing their professions and to inculcate a desire among them to contribute positively to the development of a sustainable environment.

## **Program Educational Objectives (PEOs)**

The educational objectives of undergraduate Mechanical Engineering Program are :

- To transform and develop students into competent professionals capable of solving technical and societal problems.
- To make the students fully aware of the way the mechanical engineering discipline is currently practiced and to inculcate in them a thirst for further knowledge.
- To produce professionals with strong work ethics and high sensitivity to environmental and sustainability issues.

## **PO's (Department of Mechanical Engineering)**

### **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, social, 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. **Lifelong learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

## **Program Specific Outcomes (PSOs)**

1. Conceptualize, design, make / improve physical products, processes and systems using principles of design, manufacturing and Industrial engineering.
2. Design, develop and maintain various thermal engineering systems.

## Department Activities:

- Lecture on Cracks and fundamentals of fracture (01/10/2014) by Dr. M.K.Lohumi
- Lecture on Five Technologies that Make Internal Combustion Engines Better (26/08/2014) by Mr. Rajeev Kumar
- Lecture on Kinematic Synthesis of Mechanisms: Methods and Techniques (04/09/2014) by Dr. Mohd. Asim Qadri
- Lecture on Computational Fluid Dynamics (CFD) (28/10/2014) by Dr. Navneet Kumar
- Lecture on Control Charts for defects 12/09/2014 by Mr. Sanjay Kumar
- Expert Lecture on Genetic Algorithm (10/09/2014) by Dr. P.K S. Nain. Professor, Galgotia Univ., Gr. Noida
- Lecture on Simulated Annealing 17/09/2014 Dr. P.K. Arora
- One day Workshop on “Applications of ZWCAD” (22/09/2014) by Mr. Manohar Singh
- Lecture on Introduction to Cryogenics (02/03/2015) by Mr. A.K. Srivastava
- Lecture on Waste management (24/10/2014) by Mr. A.K. Sethi
- Lecture on Design for environment (04/04/2015) by Ms. Shikha Bisht
- Lecture on Construction and working of Wind, biogas and fuel cell plants (06/04/2015) by Mr. D.B. Singh
- Communication skill regular classes by school of lifelong learning (SLL) (15/07/2014) by Ms. Palumi Ghosh

## Industrial Interaction of students:

- Expert lecture on Industrial applications of Cutting-Force Dynamometers by Mr. Harish Kumar, NPL-CSIR, New Delhi on dated 09.02.2015.
- Expert lecture on Advanced composite materials and their applications by Dr. S. N. Pandit on dated 31.03.2015.
- Expert lecture on Testing of materials by Mr. Narendra Khullar, Cosmo Analytical Lab on dated 22.04.2015.



## Industrial visits of students:

- 18.04.2013 Indian Oil Corporation Limited, R&D Centre, Faridabad
- 20.08.2014 NTPC Faridabad, Haryana
- 21.11.2014 Escorts limited Faridabad, Haryana



## Major Projects of session 2014-15:

- Evaluation of wear behavior of various materials with different heat treatments, guided by Dr. M. N. Desmukh
- Thermal modeling of single slope solar still under natural circulation mode, guided by Dr. M. N. Desmukh
- Thermal modeling of single slope solar still under natural circulation mode, guided by Dr. Vijay Kr Dwivedi
- Productivity improvement using industrial engineering, guided by Dr. Mohd. Asim Qadri
- Design and fabrication of shell and tube heat exchanger, guided by Mr. Rajeev Kumar
- Monte Carlo Simulation of uncertainty measurement of Brinell hardness test, guided by Dr. Pawan Kumar Arora
- Design and analysis of a kinetic energy recovery system (KERS) in a bicycle, guided by Mr. Amit Richhariya
- Design and fabrication of solar water heater, guided by Mr. Sudip Ghatak



## Student Activities:

- The Galgotias SAE collegiate club organized a SAE orientation program on dated 09-08-2014. Approximately 100 students participated in this event.
- The Galgotias ASME chapter organized an ASME Orientation Program on dated 06-09-2014 and 07-09-2014. Approximately 60 students participated in this event.
- The mechanical engineering society, GMECH organized a Technical Quiz on dated 08-11-2014. Approximately 60 students participated in this event.
- The students of Mechanical Engineering Department, Galgotias College of Engineering & Technology participated in “SAE-NIS Efficycle-2014” organized by Zyklus at UIET, Chandigarh. From a total of 250 participants, the Galgotians ranked 4th in north India and ranked 32nd overall.
- The students of Mechanical Engineering Department, Galgotias College of Engineering & Technology participated in “BAJA SAE India-2015” organized by Chassis Z at Prestige Institute of Engineering & Science, Indore. The Galgotians finished among top 20 from a total of 492 participants.



## Faculty Research Publications:

- Sharma, Sudhanshu, V. K. Dwivedi, and S. N. Pandit. "A review of thermoelectric devices for cooling applications." International journal of green energy 11.9 (2014): 899-909.
- Sharma, Sudhanshu, V. K. Dwivedi, and S. N. Pandit. "Exergy analysis of single-stage and multi stage thermoelectric cooler." International Journal of Energy Research 38.2 (2014): 213-222.
- Sharma, Sudhanshu, V. K. Dwivedi, and S. N. Pandit. "Thermoeconomic analysis of multi stage thermoelectric cooler." International Journal of Thermal and Environmental Engineering, 8.2 (2014): 77-82.
- Luthra, Qadri, et al. "Identification of critical success factors to achieve high green supply chain management performances in Indian automobile industry." International Journal of Logistics Systems and Management 1 18.2 (2014): 170-199.
- Qadri, et al. "Analysis of barriers to lean implementation in machine tool sector." International Journal of Lean Thinking, 5.1 (2014): 1-25.
- Arora, et al. "Design of production System Using Genetic Algorithm." Procedia Technol., 14 (2014): 390-396.
- Sethi, A. K., and Vijay Kumar Dwivedi. "Carbon credits earned from a double slope active solar still under forced circulation mode." International Journal of Renewable Energy Technology 5.4 (2014): 363-371.
- Sethi, A. K., and V. K. Dwivedi. "Development and life cycle analysis of double slope active solar still with flat plate collector." Journal of Engineering Science & Technology Review 7.1 (2014).
- Singh, Brijesh, Amar Singh, and R. C. Yadav. "Information Technology Tools: Key to Improve the Performance of Small Manufacturing Sectors of India."
- Singh, Brijesh, Amar Singh, and R. C. Yadav. "Reluctant Workforce May Derail the Adoption of Advance Manufacturing Technology in Micro, Small and Medium Enterprises of India." Global Journal of Enterprise Information System 6.2 (2014): 12-25.
- Singh, Brijesh, Amar Singh, and R. C. Yadav. "Information technology tools: key to improve the performance of small manufacturing sectors of India." International Journal of Mechanical and Manufacturing Technology, 3.1(2014): 196-206.

## Campus Placement: (Session: 2014-15, till April 2015):

S.NO.	NAME	NAME OF EMPLOYER
1	Ayush Gupta	Bygging
2	Chandrakesh Singh	Coca-cola
3	Smita Kumari	Coca-cola
4	Abhishek Bhardwaj	Cognizant
5	Abhishek Gupta	Cognizant
6	Adarsh Kumar	Cognizant
7	Akarsh Gupta	Cognizant
8	Ankit Sharma	Cognizant
9	Anshul Shrivastava	Cognizant
10	Anurag Pathak	Cognizant



S.NO.	NAME	NAME OF EMPLOYER
11	Ashish Dhyani	Cognizant
12	Ashutosh	Cognizant
13	Ayush Gupta	Cognizant
14	Ayush Srivastava	Cognizant
15	Mayank Srivastava	Cognizant
16	Paras Sharma	Cognizant
17	Pawan Rastogi	Cognizant
18	Prachi Gupta	Cognizant
19	Pranjal Srivastava	Cognizant
20	Rakesh Kr Parbat	Cognizant
21	Ratnesh Kr Gupta	Cognizant
22	Rishabh Srivastava	Cognizant
23	Rishi Trivedi	Cognizant
24	Satyartha Singh	Cognizant
25	Shreyanshi Bakhshi	Cognizant
26	Shweta Singh	Cognizant
27	Siddhita Yadav	Cognizant
28	Vikas Yadav	Cognizant
29	Yash Vijay Singh	Cognizant
30	Vishal Srivastava	Hettich India (P) Ltd.
31	Akarsh Gupta	Infosys
32	Ankit Ojha	Infosys
33	Anshul Shrivastava	Infosys
34	Anurag Pathak	Infosys
35	Ashish Dhyani	Infosys
36	Irfan Ahmad	Infosys
37	Prachi Gupta	Infosys
38	Pranjal Srivastava	Infosys
39	Ravi	Infosys
40	Ritika Gupta	Infosys
41	Shubham Kant	Infosys
42	Surendra P S Patel	Infosys
43	Syed Mohd Safdar	Infosys
44	Ankit Ojha	Lava International
45	Anurag Pathak	Lava International
46	Ayush Gupta	Tech Mahindra
47	Rishi Trivedi	Tech Mahindra
48	Shubham Kant	Tech Mahindra
49	Adity	Wipro Technologies
50	Shashank Kumar	Wipro Technologies
51	Syed Mohd Safdar	Wipro Technologies



**GALGOTIAS**  
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