

ME-Newsletter

Session: 2016-17

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:

- Expert Lecture on Calibration and Testing of Industrial Transducers (07-07-16) by Mr. Anil Kumar, Scientist, NPL-CSIR, New Delhi
- Expert Lecture on Next Generation Advanced Composite Materials (11-11-16) Dr. S. N. Pandit, Ex. Professor, NIT, Jalandhar
- Expert Lecture on Destructive and Non-Destructive Testing and Evaluation of Materials (11-11-16) by Mr. Narendra Khullar, Managing Director, Cosmo Analytical Lab, Noida
- Expert Lecture on Packaging and Sustainability (18-04-17) by Mr. H. M. Kansal, Director, Jindal Poly Films Limited, New Delhi.
- Expert Lecture on Emerging Trends Automotive Engineering (23-09-16) by Dr. Chandan Kumar, Professor, NIET, Gr. Noida
- Expert Lecture on Pareto and Multi-Objective Functions Optimization (23-02-17) by Dr. P.K.S. Nain, Professor, Galgotia University Gr. Noida
- Lecture on Construction and Working of Photovoltaic Solar Plants (18-08-16) Mr. D.B. Singh, Asstt. Professor, GCET Gr. Noida
- Lecture on Applications of Control Charts for Defects (30-09-16) by Mr. Sanjay Kumar, Assistant. Professor
- Regular Classes by School of Lifelong Learning (SLL) (26-07-16) by Instructors from SLL
- Conducted one week training on 'CATIA'. (4-10-16 to 7-10-16) by Mr. Sonu Prakash, Program Manager, APTRON Solutions Pvt. Ltd. (A Unit of Netexperts Educational Services)
- Department of Mechanical Engineering, Galgotias College of Engineering and Technology (GCET), Greater Noida conducted a three days training program on Latest Trends in Power Sector Emphasizing on Solar Technologies and Management from 30/01/2017 to 01/02/2017 for Engineering students and Faculty. The aim of this program was to give insight of latest trends in power sector focusing more on Solar Power Technologies and Management.
- Department of Mechanical Engineering, Galgotias College of Engineering and Technology (GCET), Greater Noida conducted a five days faculty development program on Applications of Thermal Engineering from 20/02/2017 to 24/02/2017 to enhance the quality of teaching and research skills of faculty members.



Industrial Interaction of students:

- Lecture on 'Importance of seal, rubber and gaskets at Krishna industries, Greater Noida on dated 17-02-2017.
- Four students visited Cosmo Analytical Lab for Testing and Comparison of Materials for their B.Tech. 4th year project during 17-07-16 to 23-07-16.
- Four students Visited Aroma Mii Technologies, Faridabad on dated 20-04-2016 for fabrication of chassis of a vehicle.



Industrial visits of students:

S. No.	Date of Visit	For Students of	Industry Name
1	19/04/17-20/04/17	VI Semester	WPIL, Ghaziabad
2	21/04/17-21/04/17	VI Semester	Escorts Ltd., Faridabad, Haryana



Major Projects of session 2016-17

- Bio-Design and Fabrication of Bio-Composite Helmet, guided by Mr. Amit Kr. Richharia
- To Develop Experimental Setup of Impulse Turbine and Prove Different Equations Experimentally, guided by Mr. Nagesh Kr. Srivastava
- To Design Fuel Injection Pump using External Gears, guided by Mr. Niranjana Sahoo & Mr. Ashish Dewangan
- Development of Roll Over Supplement Restraint System & Its Testing, guided by Dr. M. K. Lohumi
- Fabrication of a Latent Heat Storage Device, guided by Mr. Gajendra Singh
- Fabrication & Analysis of Solar Refrigerator by Peltier Effect, guided by Mr. Ravi Kant
- Taguchi Design and Response Surface Methodology Based Analysis of Machining Parameters in CNC Turning, guided by Dr. Pawan Kumar Arora

Student Activities:

- The department has GMECH Society which organizes Technical fest, publishes technical magazines and organizes various other events.
- The Galgotias SAE collegiate club organized a SAE orientation program on dated 20-08-2016. Approximately 180 students participated in this event.
- The Galgotias SAE collegiate club organized a training program on Auto Desk software from dated 10-09-2016 to 11-09-2016. 30 students participated in this training program.
- The Galgotias SAE collegiate club conducted the Demonstration of Engine assembly on dated 22-10-2016. 50 students participated in this program.
- The Galgotias SAE collegiate club organized a program on the topic "Design of Suspension System" on dated 22-10-2016. 40 students participated in this program.
- The GMECH society of Mechanical Engineering Department organized a TECH Fest from 04-11-2016 to 05-11-2016. Approximately 400 students participated in various events of it.
- The students participated in "SAENIS Efficycle-2016" organized by LPU, Jalandhar. The students ranked 5th in this competition.
- The students participated in "BAJA SAE event" organized by Prestige Institute of Engineering & Science, Indore. The students secured 40th position out of 492 registered participants.
- The students participated in "BAJA SAE event" organized by BSI, Buddh International Circuit, Greater Noida. The students secured 51st position in this event.
- The students participated in "APOGEE 2017 THE RETROFUTURE" organized by BITS Pilani. The students secured 2nd position in this event.



Faculty Research Publications:

- Abuzeinab, Amal, Mohammed Arif, and Mohammad Asim Qadri. "Barriers to MNEs green business models in the UK construction sector: An ISM analysis." *Journal of Cleaner Production* (2017).
- Abuzeinab, Amal, et al. "Green business models in the construction sector: An analysis of outcomes and benefits." (2017).
- Singh, D. B., and G. N. Tiwari. "Exergoeconomic, enviroeconomic and productivity analyses of basin type solar stills by incorporating N identical PVT compound parabolic concentrator collectors: A comparative study." *Energy Conversion and Management* 135 (2017): 129-147.
- Singh, D. B., and G. N. Tiwari. "Performance analysis of basin type solar stills integrated with N identical photovoltaic thermal (PVT) compound parabolic concentrator (CPC) collectors: A comparative study." *Solar Energy* 142 (2017): 144-158.
- Singh, D. B., and G. N. Tiwari. "Enhancement in energy metrics of double slope solar still by incorporating N identical PVT collectors." *Solar Energy* 143 (2017): 142-161.
- Sandeep, Sudhir Kumar, and Vijay Kumar Dwivedi. "Evaluating thermal performance of a basin type modified active solar still." *DESALINATION AND WATER TREATMENT* 72 (2017): 100-111.
- Tripathi, Rohit, G. N. Tiwari, and V. K. Dwivedi. "Energy matrices evaluation and exergoeconomic analysis of series connected N partially covered (glass to glass PV module) concentrated-photovoltaic thermal collector: At constant flow rate mode." *Energy Conversion and Management* 145 (2017): 353-370.



Campus Placement:

(Session: 2016-17, till April 2017):

S.NO.	NAME	NAME OF EMPLOYER
1	Abhinav Katiyar	Infosys
2	Abhishek Kumar Pandey	Infosys
3	Adarsh Singh	Infosys
4	Dhruv Pathak	Infosys
5	Kunal Goyal	Infosys
6	Rajat Kumar Srivastava	Infosys
7	Shardul Patel	Infosys
8	Abhay Pratap Singh	Wipro Tech
9	Ankit Singh	Wipro Tech
10	Mohammad Mushahid Malik	Wipro Tech
11	Mohit Awasthi	Wipro Tech
12	Rajnish Mishra	Wipro Tech
13	Sanket Srivastava	Wipro Tech
14	Abhishek Kumar Pandey	Cognizant
15	Ankit Singh	Cognizant
16	Arjun Singh Som	Cognizant
17	Dhruv Pathak	Cognizant
18	Kunal Goyal	Cognizant
19	Pankaj Kumar	Cognizant
20	Sanket Srivastava	Cognizant
21	Vartman Tripathi	Cognizant
22	Ashutosh Mishra	Tech Mahindra
23	Varun Sidana	Tech Mahindra
24	Deepak Kumar Choudhary	FACE



GALGOTIAS
EDUCATIONAL INSTITUTIONS

GALGOTIAS COLLEGE OF ENGINEERING AND TECHNOLOGY

1, Knowledge Park, Phase-II, Greater Noida-201306 U.P.

Telefax: +91-120-4513880 Phone: +91-120-4513800