



**PANIPAT INSTITUTE OF  
ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Affiliated to Kurukshetra University, Kurukshetra)

# BACHELOR OF TECHNOLOGY

(Mechanical Engineering)



PIET is awarded with  
**5-Star** rating by  
MHRD Innovation cell  
and AICTE.  
(October' 2020)



Awarded with Best Institute for  
Innovation and Start-up  
Entrepreneurship by Asia Today  
(April' 2021)



PIET is the only Institute  
in Haryana to establish  
AICTE IDEA LAB

# PROGRAM OVERVIEW

“Mechanical engineers make the world move. Mechanical Engineers design and develop all machines with moving parts - anything from vehicles like satellites, cars, trains, aircrafts and ships to plant for generating clean power, medical equipment like pacemaker, macro-scale pumps and machines, such as robots that make other products and more”.

Mechanical engineering is one of the oldest branch in engineering disciplines and it is also known as ‘mother’ branch of engineering. This engineering branch has a wide diversity of opportunities in various applications such as manufacturing and production, designing, thermal engineering robotics and automation. Any ancient innovation in the field of engineering directly and indirectly was related to the mechanical engineering and recently, modernization of technology also related to the mechanics and designing aspect of mechanical engineering.

Various concepts of mechanical engineering are executed for designing of state-of-the-art manufacturing units, different types of motor vehicles, aircraft and aerospace parts and a vast assortment of industrial machinery. Mechanical graduates also contribute in the development of various engines, power plant equipment, heating and cooling systems and other simple and complex machinery.

At PIET, Mechanical Engineering Department provides innovative and conducive environment for the students to learn and execute their knowledge for society as well as for commercial benefits. Mechanical graduates also have several career opportunities such as quality engineers, testing & maintenance engineers etc.



## SCOPE OF EMPLOYMENT

Mechanical engineering is an incredibly broad field, offering a variety of opportunities in nearly every kind of industry and business type, from small start-ups to Fortune 500 companies. The demand for Mechanical Engineers is high in India and Abroad. If you look closely, Mechanical Engineers are required in every industry like Automobile, Thermal Power Plants, Shipping, Electronics Industry, Aerospace, Gas and Petroleum Industry, Refrigeration and Air Conditioning Industry etc.

Mechanical engineers are no longer confined to the traditional industries, but mechanical engineers can also employed extensively in significant emerging areas, like robotics, electrical vehicles, 3-D technology, bio-medical technology and energy systems. Moreover, students at PIET attain valuable skills and are transformed as creative intellectuals and thinkers that can work in a team, which are highly sought skills in core mechanical, consulting and management industry. The job profiles of mechanical engineers can be classified in the following segments.



- Research and Development (R&D): The mechanical engineers role is to do research and design the new machine/technology and their integral parts as per the market needs.
- Design: The role and responsibility of design engineers is to make technical drawings, with the help of computer aided design software's like CATIA.
- Production: Production engineers help and monitor the manufacturing of mechanical components and machines elements.
- Analysis and Testing: Mechanical engineers are responsible for analyzing and testing different machines and machine tool elements. This helps the industries in increasing the reliability of the machines.
- Installation: Professionals who install the machines and its components at the customer end
- Maintenance: The function of maintenance engineer is to ensure the proper working as per specifications.



## PROJECT BASED LEARNING

PIET has taken the initiative to start with Project Based Learning which helps students gain knowledge and skills by working for an extended period to respond to an authentic, engaging and complex question, problem or challenges. The programme is based on key knowledge, understanding and acquiring success skills through the process of solving meaningful problems. It enhances management and technical skills of the young minds. Under this programme, students will be trained at Teesside University, UK Stevens Institute of Technology, US Technical University (Bulgana); University of Arkansas at Little Rock, USA; Athens Information Technology, Greece, Ural Fedral University, Russia and Igor Sikorsky Kyiv Polytechnic Institute, Ukraine.



PIETians at Ural Federal University, Russia



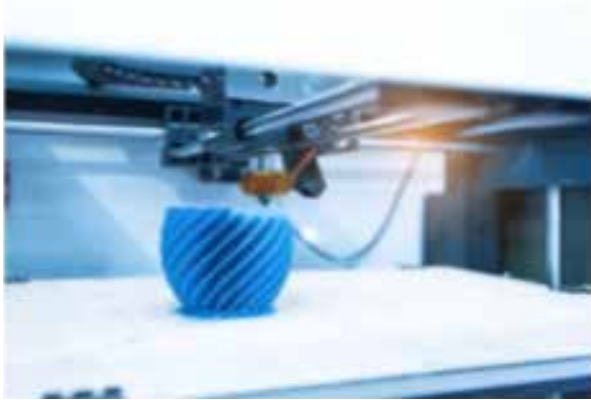
PIETians at Igor Sikorsky Kyiv Polytechnic Institute, Ukraine



A student of mechanical engineering branch can get the big bucks if he is dedicated and hardworking towards his studies. The major recruiters include:

- Bajaj Electricals • Triveni Turbine • Jindal Steel Works • Yamaha • AMW • APPOLO TYRES
- TATA, Larsen and Turbo • Toshiba • Hero Motor Corp • Maruti Suzuki • Havells • Dover

• In addition to these core industries many other big names also visit PIET. Non-Core companies like financial firms and software giants also hire the deserving students for respected posts and positions.



The students of Mechanical Engineering are working on design and fabrication of electrical vehicles, 3-D printing, Robotics and working on latest technologies after first year.



Practical Exposure given to students, "An Engine Overhauling Workshop" organised by Mechanical Engineering Department every semester.



Student Exchange programme with leading institutes in India and abroad



Faculty members are working on latest Design Software, CATIA V5R28. CATIA software is developed by a French software company "Dassault Systemes" which also manufactures Dassault Rafale a fighter plane purchase by India. The design club at PIET helps the students to get additional skills that are required by industry.

## GOVT. SECTOR JOBS


## OTHER GOVT. SECTORS


## PRIVATE SECTOR JOBS


## IT COMPANIES

## PLACEMENT PARTNER

### Students participated in National Competition: SIH- Hardware Edition

