Pandit Deendayal Petroleum University (PDPU), Gandhinagar
School of Technology
Department of Mechanical Engineering

M. Tech in Thermal Engineering

About the Program

M. Tech. Thermal Engineering is two years postgraduate program divided into 4 semesters, each lasting a period of 6 months. The program involves real-time applications of fluid flow and heat transfer in Thermal Energy Systems, Cryogenic Engineering, Refrigeration & Air Conditioning, Thermal system design and optimization, Renewable energy and its application etc. M. Tech Thermal Engineering program also provides hand on practices with modern equipment in laboratory courses and exposure to various software's (like ANSYS CFD, MATLab, COMSOL Multiphysics, EES, etc.) required in today's Industries environment. The centre of excellences in Biofuels and Solar are providing opportunities for various courses and M. Tech. dissertation work.

Industrial visits and industry expert lectures, research symposium, workshops are part of the M. Tech Thermal program. These activities keeps students updated and aware of current industrial scenario, current and future requirements. M. Tech Thermal Engineering students are members of ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers) student chapter. ISHRAE organizes varies technical events on refrigeration and air conditioning on regular basis which provides students to know the research areas and current scenario of refrigeration and air conditioning industries. ISHRAE also provides research project funds to the students and job opportunities the in the well know refrigeration and air-conditioning industries.

M.Tech Thermal engineering students will have an exposure to "Center of excellence in Bio-Diesel", "Center of excellence in Water", "Center of excellence in automobile" and "Siemen's center of excellence" developed at PDPU during their study.

Our students have carried out their final year project (Dissertation) with reputed research organization and well-known industries like

- Indian Space Research Organisation (ISRO), Ahmedabad
- Institute for Plasma Research (IPR), Ahmedabad
- ITER INDIA, Gandhinagar
- Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar
- L & T Power, Vadodara;
- Special Steels & Heavy Forgings, L&T India, Surat;
- Ingersoll Rand (India) Limited, Ahmedabad.

Our students are placed at various reputed organization which includes

- L & T Power, Vadodara
- Bosch Rexroth, Ahmedabad
- Essar Oil Limited, Jamnagar
- Termex Ltd, Pune

- Ingersoll Rand (India) Limited, Ahmedabad

Above all, our students pursuing fully funded Ph.D. in the top international universities like

- University of Birmingham, UK
- University of Tasmania, Australia

Who is eligible to apply?

B.E. /B. Tech. in Mechanical/Production/Industrial/Mechatronics/Automobile engineering with minimum 60% or CPI/CGPA of 6.5 on a 10 point scale.

About Curriculum

The course curriculum has been designed at par with the curriculum of reputed Indian & Foreign Universities. The curriculum has been structured in three phases:

1. Core Courses: The core courses provides the advanced knowledge of subjects associate with the thermal engineering.

2. Elective Courses: While core courses provide the vertical development of the students, the elective course offer the horizontal development of the student in the area of Thermal Engineering

3. Project and Seminar: The objective of the seminar is to make the student aware about each every minute detail related to one of the area of Thermal Engineering. Project imparts the research attitude, practical knowledge and problem solving skill in the students.