

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

M.Tech in Chemical Engineering

About the Program

Chemical engineering occupies a unique position at the interface between molecular sciences and engineering. Intimately linked with the fundamental subjects of chemistry, biology, mathematics, and physics — and in close collaboration with fellow engineering disciplines like materials science, computer science, and mechanical, electrical, and civil engineering — Chemical engineering offers unparalleled opportunities to do great things.

- ➤ Gujarat is the hub for Chemical Engineering with a wide range of Chemical Process Industries: Petrochemicals, Natural Gas, Fertilizers, Textiles, Polymers, Paints Dyes, & Pharmaceuticals, Bio-chemicals, etc.
- > There is always a high demand for an efficient, bright and skilled Chemical Engineers in these industries.
- ➤ The Chemical Engineering at PDPU provides a global platform for the dissemination of knowledge and practice in Chemical Engineering discipline as well as imparting the research insight.

Scope of the programme:-

Master's education is aimed at developing each student's ability to conduct scientific research and perform Chemical Engineering tasks independently. Our Post graduate curriculum provides a sound understanding of engineering fundamentals and industrial practices. Thus, the aim is to make them versatile, productive, and successful in their career. We offer a broad range of research opportunities at PDPU that apply traditional chemical engineering principles and modern science to solve some of today's most challenging problems like Carbon Capture, Clean Water Technology and Energy.

Who is eligible to apply?

B.E./B.Tech. or equivalent in Chemical Engineering / Chemical Technology / Biochemical engineering / Petrochemical and/or Petroleum engineering/Technology with minimum 60% or CPI/CGPA of 6.5 on a 10 point scale as an aggregate of all the semesters.

Pre-requisite:

Students are expected to have good background in Chemistry, Chemical/Petroleum Engineering and Technology. Any software related experience would be an added advantage.

About Curriculum

The curriculum for the course has been designed by referring the curriculum of reputed Indian & Foreign Universities. It is further fine-tuned as per the industry requirement.

The curriculum has been structured in three phases:

- 1. **Core Courses:** The core courses are essential to provide critical understanding of theoretical and practical issues relating to Chemical Engineering sectors.
- 2. **Elective Courses:** While core courses provide the breadth of program, the elective courses of CFD, Molecular simulation, waste management, Carbon Sequestration and clean devices, Nanotechnology and Energy provide the length in the respective domains of the Chemical Engineering.
- 3. **Research Project:** The objective of this course is to affiliate the students from day one towards research in the field of Chemical Engineering and allied research areas with not only theory but practical aspects and helpful towards final year thesis.