



Pandit Deendayal Petroleum University (PDU), Gandhinagar

School of Technology

Department of Chemical Engineering

M.Tech in Energy and Environmental Management

About the Program

Energy and Environmental Management is a multi-disciplinary branch of engineering, which seeks to efficiently use energy and to maintain the environment. Energy and Environment engineers require knowledge across many. Careers include work in the built environment, renewable and traditional energy industries. It seeks to explore cleaner, more efficient ways of using fossil fuels, while investigating and developing systems using renewable and sustainable resources, such as solar, wind and wave energy.

As a Masters in energy and environmental management, you can work nationally and internationally to create energy efficient products and systems. Solid knowledge of environmental engineering, energy processes is necessary to create energy-efficient systems. Your ability to see environmental and energy systems from different perspectives is necessary to develop processes and products that promote sustainable development. Your broad expertise can be used in many different areas of work, and is therefore of great value to many different types of businesses as well as governments and international contacts.

Proposal

The objective of this program is to form project leaders or supervisors capable of managing complex engineering projects in the domain of the environment and energy conversion systems within an international context. It also offers a balanced program of management skills and engineering techniques for environmental and energy projects. The technical part of the course concentrates on technology and process engineering as well as process modelling, simulation, and control.

Who is eligible to apply?

B.E./B.Tech. or equivalent in Chemical Engineering/ Chemical Technology/Biochemical Engineering/ Petrochemical Engineering/ Petroleum Technology/ Mechanical Engineering/Environmental

Engineering/MSC (Chemistry) 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 Chemical/Petroleum/Mechanical Engineering, Chemistry, and Environment. Any engineering based 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 Energy and Environment.
2. **Elective Courses:** While core courses provide the breadth of program, the elective courses of Environmental Audit and Impact Assessment, waste management and Advanced Energy storage System or Instrumentation and Control in Energy Systems provide the length in the respective domains of the Energy and Environment.
3. **Research Project:** The objective of this course is to affiliate the students from day one towards research in the Energy and Environmental management with not only theory but practical aspects and helpful towards final year thesis.