



WHY Energy Engineering?

Building and maintaining the required infrastructure for generating and distributing energy and providing related services comprises the energy sector which inevitably is poised for growth in order to fuel the expanding economy while addressing the grand challenges of reversing climate change and ensuring the future energy security of the world. The emerging technologies in the industry encompass multiple disciplines of engineering and it is imperative for aspiring engineers from disciplines other than mechanical engineering to have a strong footing in related mechanical engineering topics in order to succeed in energy industry.

ABOUT the Program

Minor program in Mechanical Engineering with Energy Engineering Concentration is offered by the Department of Mechanical Engineering to give a competitive edge to the students from other disciplines of engineering who are interested in pursuing a career in power sector which relies on cross-cutting technologies and has high demand for professionals with multi-disciplinary knowledge and skills. This program is open for students pursuing any engineering major, other than Mechanical Engineering, at MITS.

Starting **September 2020**

Credits **20**

Capacity **60 Students Only**

Eligibility **Students of CE,
ECE, EEE, CSE, CST**

OBJECTIVES of the program

By doing this program students will be able to:

1. Build a career in energy related industry.
2. Design equipment and processes encountered in energy production.
3. Pursue higher education and research in the multi-disciplinary field of energy.

WHAT you will learn?

Curriculum for the program includes fundamental courses on Thermal Engineering, Fluid Mechanics, Heat Transfer and advanced courses on Gas Turbine Design and Computation Fluid Mechanics

STRUCTURE of the Program

Sl. No	Course Code	Course Title	Credits
III Year I Semester			
1	18MDME121	Fluid Mech. and Hydraulic Machinery	3
2	18MDME122	Thermal Engineering	3
III Year II Semester			
3	18MDME123	Heat Transfer	3
4	18MDME124	Computational Fluid Dynamics	3
5	18MDME205	Thermal Engineering Lab	2
IV Year I Semester			
6	18MDME125	Design of Gas Turbine Engines	3
7	18MDME701	Mini Project	3
	Total		20

EMPLOYMENT prospects

The energy sector includes a broad set of industries involved in activities ranging from mining for fuels, refining and processing fuels, renewable sources and power generation. This minor will give an edge to the students seeking following types of roles in energy sector:

- ❖ Graduate Trainee Engineer
- ❖ Project Engineer
- ❖ Design Engineer
- ❖ Energy Analyst



Contact Details

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**Department of Mechanical Engg. is
accredited by NBA – Tier I**