



Self-financed

Short Term Course (Online Mode) on FUNDAMENTALS OF THERMODYNAMICS

17th - 24th May 2024

About the Institute: Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kurnool is an Institute of National Importance under the Ministry of Education, Government of India. It is established in the year 2015 and aimed to become a Centre of Excellence for pursuing Design and Manufacturing Oriented Engineering Education and Research domains. Currently, the Institute is offering 4 B.Tech programmes in Computer Science and Engineering (CSE), Artificial Intelligence and Data Science (AI&DS), Electronics and Communication Engineering (ECE), and Mechanical Engineering (ME), 3 B.Tech Dual Degree programmes in CSE, ECE & ME, and 6 M.Tech programmes. Ph.D. programmes in Science and Engineering Departments are being offered in frontier research areas under the guidance of experienced faculty.

CHIEF PATRON
Prof. DVLN Somayajulu
Director
IIITDM Kurnool

**PATRON
&
COURSE COORDINATOR**
Dr. Muvvala Pullarao
Assistant Professor & HoD
Department of Mechanical
Engineering
IIITDM Kurnool

About the Department: The Department of Mechanical Engineering came into existence in the year 2016. The Department has 10 qualified and dedicated regular faculty members with specializations in various areas of Mechanical Engineering. At present, the Department is offering 1 UG, two PG programmes, and Ph.D. programme in cutting-edge research areas.

Objective of the Short-term Course: Thermodynamics is the very fundamental subject that will be taught in several B.Sc. and B.Tech courses. This subject deals with the conversion of energy from heat to work and vice versa. The concepts of thermodynamics are the building blocks in several energy related equipment. This short-term course (Online Mode) primarily targets teachers and aspiring teachers from Degree and Engineering colleges and universities. So, we welcome the applications from interested student participants (UG/PG/PhD) as well. The primary focus is on a leisurely exploration of fundamental concepts in Thermodynamics and Applications through interactive lectures, with a strong emphasis on solving the questions in competitive exams (GATE, and IES). The short-term program lectures specifically address topics directly relevant to the teachers' classroom teachings.

Registration details and Eligibility:

- ❖ This short-term course is open to all the **Faculty** (Degree and Engineering colleges), **Ph.D. scholars**, **P.G.**, **U.G students**, and **Practicing Engineers**.
- ❖ The Registration Fee (Non-refundable) for attending this program is as follows:

Participant Type	Fee (Rs)
U.G., P.G., Ph.D. students	1,000/-
Faculty (SC/ST/Female)	1,000/-
Faculty (Others)	2,000/-

- ❖ Online payment must be transferred to "IIIT DM Kurnool", payable at ICICI Bank Ltd, C Camp branch, Kurnool (IFSC code: ICICI0007567 and Account No. 756701001024).
- ❖ The participants should fill their details in the google form: <https://docs.google.com/forms/d/1E-81Zr1rvXoKKUEUgOHlyPMY02dFF1m5MdytByj0T7g/edit>. The Registration form along with the proof of Fee payment transaction must be uploaded in this google form.

Important Dates:

- Registration starts: 24-April-2024.
- Last date of the application: 14-May-2024
- Display of the shortlisted applicants: 15-May-2024

Contact Details:

Dr. Muvvala Pullarao, Asst. Professor, IIITDM Kurnool, Kurnool, Andhra Pradesh, India.
Email: muvvala@iiitk.ac.in, itsmemuvvala@gmail.com, Mobile No: 9440651708, Land line: 08518289100 (extn. 205)
Mr. Rambabu Dara, PhD. Scholar, Mobile No: 9492422415.

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(17th - 24th May 2024)

Organized by: Department of Mechanical Engineering, Indian Institute of Information Technology Design and Manufacturing Kurnool, Kurnool-518008, Andhra Pradesh, India

COURSE REGISTRATION FORM

Name of the Participant:

Gender:

Pursuing Degree (For students): (Ph.D. / PG / UG)

Degree (For Faculty/Professionals):

Category: (SC/ST/OBC/Gen)

Department:

Organization Name and Address:

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Mobile Number:

Email:

Payment Transaction Number and Date:

Fee Paid: (Rs)

I agree to abide by the rules and regulations governing the course.

Signature of the Participant

Place:

Date:

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Tentative Schedule

Date	10:00 to 11:30 AM	11:30 to 11:40 AM	11:40 AM to 01:10 PM	01:10 to 02:00 PM	02:00 to 03.30 PM	03.30 to 03.40 PM	03:40 to 05:10 PM
17-05-2024	Inaugural Function & Session 1 Scope of Thermodynamics (Dr. MPR)	Break	Session 2 Basics of Thermodynamics (Dr. MPR)	Break	Session 3 Basics of Thermodynamics continued... (Dr. MPR)	Break	Session 4 Temperature, Zeroth Law (Dr. MPR)
18-05-2024	Session 5 Heat, Work, Energy (Dr. MPR)		Session 6 Heat, Work, Energy continued... (Dr. MPR)		Session 7 First Law of Thermodynamics for cycles (Dr. MPR)		Session 8 First Law of Thermodynamics for closed systems (Dr. MPR)
20-05-2024	Session 9 First Law of Thermodynamics for closed systems continued... (Dr. MPR)		Session 10 First Law of Thermodynamics for Open systems (Dr. AK)		Session 11 First Law of Thermodynamics for Open systems continued... (Dr. AK)		Session 12 Second Law of Thermodynamics (Dr. AK)
21-05-2024	Session 13 Second Law of Thermodynamics continued... (Dr. AK)		Session 14 Second Law of Thermodynamics continued... (Dr. AK)		Session 15 Entropy (Dr. AK)		Session 16 Entropy continued... (Dr. AK)
22-05-2024	Session 17 Ideal and Real Gases (Dr. MPR)		Session 18 Thermodynamic Relations (Dr. MPR)		Session 19 Combustion basics and Gas Mixtures (Dr. MPR)		Session 20 Properties of pure substances (Dr. MPR)

23-05-2024	Session 21 Properties of pure substances continued... (Dr. MPR)		Session 22 Properties of pure substances continued... (Dr. MPR)		Session 23 Air-standard cycles (Dr. NY)		Session 24 Air-standard cycles continued... (Dr. NY)
24-05-2024	Session 25 Vapour cycles (Dr. NY)		Session 26 Refrigeration (Dr. NY)		Session 27 Refrigeration continued... (Dr. NY) & Valedictory		-

Dr. MPR: Dr. Muvvala Pullarao, Assistant Professor, IIITDM Kurnool

Dr. AK: Dr. Anuj Kumar, Assistant Professor, IIITDM Kurnool

Dr. NY: Dr. Naresh Yarramsetty, Assistant Professor, NIT Surat