



ज्ञान-विज्ञान विमुक्तये

Sponsored by
University Grants Commission



Organized by

**UGC – Malaviya Mission Teacher
Training Centre, Jawaharlal Nehru
Technological University Hyderabad,
Kukatpally, Hyderabad, Telangana.**

About UGC-MMTTC, JNTUH:

UGC-Malaviya Mission Teacher Training Centre (Formerly known as UGC-Human Resource Development Centre), Jawaharlal Nehru Technological University Hyderabad was established in the year 2000 and sponsored by University Grants Commission, New Delhi. The Malaviya Mission Teacher Training Centre of JNTUH organizes UGC sanctioned programmes viz., Faculty Induction Programmes, Orientation Programmes, Refresher Courses, Short Term Training Programmes, NEP Orientation & Sensitization Programmes and Workshops and AICTE sponsored STTP programmes and Faculty Development Programmes, Outreach Programmes and other Self-Financing Programmes on thrust areas for in-service teachers and also for newly appointed teaching faculty on a regular basis, to update the knowledge and skills in their respective fields.

During the current academic year a Two Week Online Refresher Course on “**Optimization Tools for Engineering Applications**” is proposed to be organized by UGC-MMTTC, JNTUH during 14-07-2025 to 29-07-2025, through ONLINE.

NO REGISTRASTION FEE

Certificate will be issued to the participants on successful completion of the course.

Major Course Contents:

- Fundamentals of optimization, overview of methods
- Bridging Industry 4.0 to 5.0: Role of Robotics and Optimization in Engineering Transformation.
- Topology Optimization
- From Concept to Performance: ANSYS-Driven Topology Optimization for Engineering Structures.
- Emerging Renewable Technologies and Hybrid Systems: Tools for Optimal Energy Engineering.
- Optimizing Research Integrity through Graphical Tools in Engineering Applications.
- Application of optimization techniques for Robot Kinematics
- Genetic Algorithms for single and multi-objective optimization
- Introduction and demonstration of Particle Swarm Optimization (PSO) Technique
- Case studies: Application of Optimization Techniques to Engineering problems

Two -Week Online Refresher Course on

“Optimization Tools for Engineering Applications”

14-07-2025 to 29-07-2025

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CHIEF PATRON



Prof. T. Kishen Kumar Reddy
Hon'ble Vice-Chancellor
JNTUH, Hyderabad, T.G.

PATRON



Dr. K. Vijaya Kumar Reddy
Rector, JNTUH
Hyderabad, T.G.

PATRON



Dr. K. Venkateswara Rao
Registrar, JNTUH
Hyderabad, T.G.

CONVENER



Dr. M. Sushama
Director (I/c), UGC MMTTC,
JNTUH, Hyderabad, T.G.

COORDINATOR



Dr. M. Indira Rani
Professor of Mechanical Engineering,
JNTUH UCETH,
Hyderabad, T.G.

Eligibility:

- The faculty members from the departments of Mechanical Engineering, Civil Engineering, Metallurgical Engineering, Chemical Engineering, Aeronautical Engineering and related disciplines working in Universities and Colleges.
- The faculty members have to be sponsored by the concerned Principal of the College/Head of the Institution for considering the participation in the Programme.

How to apply:

- The faculty members desirous to participate in the program are requested to register their details through online mode at <https://jntuhhrdc.in/delegate-registration> on or before **10th July 2025**.
- Login to UGC HRDC Portal and register as participant by visiting: <https://jntuhhrdc.in/delegate-registration>
- A filled-in form of application duly signed by the faculty member and forwarded by the Head of the Institution. And letter of forwarding from the Head of the Institution, should be uploaded in HRDC <https://jntuhhrdc.in/delegate-registration> portal on or before the last date.

Confirmation by Participants:

- Confirmation by Participants is a must, as per the date specified overleaf. If the confirmed number of participants is less than 60, the course may be re-scheduled.

Resource Persons:

- Resource persons are drawn from different Universities, Institutions, and R&D establishments.

Selection Criteria:

- Selection will be done based on *first-come-first-serve basis* to a maximum number of 80. The list of selected participants will be intimated through E-mail.

Important Dates:

Last date for the receipt of application through online: **10th July**

Intimation of selection to the participants through e-mail: **11th July**

Course duration: **14-07-2025 to 29-07-2025**

Course Timings: **10.00 AM to 1.15 PM & 2.00 PM to 5.15 PM**

Address for all Correspondence

Dr. M. Sushama

Professor, Dept. of EEE & Director (I/c)

UGC-Malaviya Mission Teacher Training Centre

Jawaharlal Nehru Technological University

Hyderabad, Kukatpally, Hyderabad –

500 085, Telangana.

Please contact: 8008103814

(All working days from 10.30 am to 5.00 pm only)

or directorhrdcjntuh@jntuh.ac.in for more enquiries about the Short Term Course

Web: www.jntuhhrdc.in

Instructions to the Participants for Online Course:

- Filling the registration form is mandatory.
- Attendance for all the sessions, Completion of activities, assignments and online tests given by the Resource Persons are mandatory.
- All sessions will be conducted in Google Meet.
- Link will be provided a day in advance.
- Limited seats are available on a First-Come-First-Serve basis.
- During the course, each teacher-participant will be required to work on a mini Project important topics related to the theme of this course
- There will be an online assessment test in the form of MCQ's. An online certificate will be issued to those who have successfully attended the 12 days programme and qualified the assessment test.