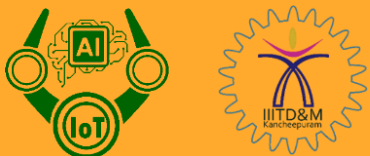


# One Week STTP on “AI, Robotics, and ROS: Transforming Industrial Applications” 23-27 June 2025

**Physical Mode**



**Organized by**

Centre for AI, IoT, and Robotics

Department of Mechanical Engineering

Indian Institute of Information Technology, Design and  
Manufacturing, Kancheepuram, Chennai – 600127

**Key Facilitators**



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IIT Indore



Prof. Pradipta Biswas  
IISc, Bengaluru

## ABOUT THE INSTITUTE

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram (IIITDM Kancheepuram) is an Institute of National Importance established in 2007 by the Ministry of Education, Government of India, to pursue design and manufacturing-oriented engineering education and research and to promote competitive advantage of Indian products in global markets. The institute is presently offering various B.Tech programs in Computer Science and Engg., Electronics and Communication Engg., Mechanical Engg., and Smart Manufacturing, M.Tech & DD programs, and inter-disciplinary Ph.D programs in core and applied areas of engineering. In addition, a new DD program in B.Tech Mechanical Engineering and M.Tech in “**AI and Robotics**” has been launched from the current AY 2024-25.

## ABOUT THE CENTRE

The **Centre for AI, IoT, and Robotics** was established by the Institute and inaugurated by the Hon’ble Finance Minister of India, Smt. Nirmala Sitharaman on 10<sup>th</sup> Sep. 2022. The vision of this interdisciplinary Centre is to enhance the skill sets of researchers, engineers, students and faculties in AI, Robotics & Automation, IoT, and allied areas. The Centre supports various GoI schemes such as Skill India, Make in India, Digital India, Start-up India, Smart City Scheme, and NEP2020.

## ABOUT THE STTP

The curricula of various engineering programs at many universities in India are being updated to meet the challenging demands of industry and society, especially in emerging areas such as Robotics, Drones, AI, Data science, etc. To meet such demands, the faculties/researchers have to continuously upgrade their skills and knowledge which would ultimately support the students to learn and nurture a productive culture. Hence, this STTP aims to upskill the fundamental knowledge required to learn, understand, and teach AI and robotics.

\* > Applicants are requested to pay the registration fee using <https://www.onlinesbi.sbi/sbicollect/icollecthome.htm?corpID=634626> [Payment Category “AI and Robotics June 2025”] and please pay as per the category. Then, submit the online registration form along with payment proof using the following link: <https://forms.gle/7TdCwZ6L2gbxtedw6>.

> Registration fee includes a registration kit, lunch and refreshments on all five days, special dinner on one day, and participation certificates (scanned copy by email and hard copy in person or by speed post).

> For further updates, please visit [www.iiitdm.ac.in](http://www.iiitdm.ac.in)

> Student hostel facilities could be provided on demand, subject to availability and on payment basis.

## TOPICS TO BE COVERED (Tentative)

- ❖ Robot Kinematics & Differential Motion
- ❖ Motion Control of Robotics System – Theory & Practice (MATLAB)
- ❖ Image Processing & Pattern Recognition
- ❖ Computer Vision for Robot Learning
- ❖ ROS Basics - Theory & Practice
- ❖ Robot Programming with ROS
- ❖ Navigation and control of two-wheeled mobile robots
- ❖ Robot Modelling & Simulation (ADAMS)
- ❖ Robot Integrated Image Acquisition
- ❖ Tecnomatix Process Simulate (Siemens)
- ❖ Smart Vision for Autonomous Vehicles
- ❖ Integrating Mobile Robots in Pharmaceutical Workflow
- ❖ Industrial Applications with ROS2
- ❖ Deep Learning for Robotics
- ❖ Yoga, NEP2020

## REGISTRATION FEE \*

Categoryz	Amount (Rs.) #
a) Students & Full time Ph.D. Scholars	3000
b) Faculty/Academic/Research Staff	5000
c) Participants from Industry/R&D Organization	8000

# GST 18 % Extra

## WHO CAN ATTEND

- > Faculties from technical institutions
- > Research scholars / PG & UG students
- > Scientists/Professionals from R&D institutions/industries

## IMPORTANT DATES

Payment of Fee/Registration (Online)

Begin - End : 15/04/2025 - 20/05/2025 10/06/2025



**Payment  
Link**



**Registration  
Form**

**Contact:** Prof M. Sreekumar, Department of Mechanical Engg.,  
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