



One Week Short Term Training Program (STTP)

on

Digital Design, Analysis, and Synthesis of Robot Mechanisms: Learning and Instruction through Online Platforms

20 - 24 July 2020

Organized by:

Center for AI, IoT, and Robotics, Department of Mechanical Engineering

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

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 Human Resource Development, Government of India, to pursue design and manufacturing oriented engineering education and research and to promote the competitive advantage of Indian products in global markets. The institute is presently offering B.Tech. programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, and Smart Manufacturing, five Dual Degree programmes, four M.Tech Degree programmes, and inter-disciplinary Ph.D programmes in core and applied areas of engineering.

AIM & OBJECTIVE

This STTP is being organized by IIITDM Kancheepuram to enable participants to have hands-on experience in the design, analysis, synthesis, and simulation of robot mechanisms using free & open software through online platforms. To expose the participants on the current developments and applications of robotics.

WHO CAN ATTEND

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

TOPICS

- Kinematic analysis and synthesis – Introduction
- Jacobian & trajectory analysis and path generation
- Differential motion analysis
- Motion analysis of spatial mechanisms
- Robot kinematics, dynamics and motion planning
- Screw theory based constraint analysis of kinematic chains
- Design of parallel manipulators and flexible robots-towards new applications
- Design, analysis, and construction of robot manipulators using RoboAnalyzer, MATLAB and other virtual environments
- Innovative teaching and research approaches – Robotics2Rural

REGISTRATION FEE *

- Students & Full time Ph.D. Scholars : Rs. 1,500 + 18% GST
- Faculty / Academic Staff : Rs. 2,000 + 18% GST
- Participants-Industry/R&D Org. : Rs. 2,500 + 18% GST

IMPORTANT DATES

Payment of Fee/Registration (Online)

Beginns - Ends : 01/07/2020 - 17/07/2020

Facilitators



Dr. M. Sreekumar
IIITDM Kancheepuram, Chennai



Prof. T. Asokan
IIT Madras



Prof. S. K. Saha & Team
IIT Delhi



Prof. Ashitava Ghosal
IISc, Bengaluru



Prof. Matteo Zoppi
Univ. of Genoa, Italy

* Applicants are requested to pay the registration fee and submit the registration form along with payment details online through the links provided in the institute website. Registration fee includes course material (soft copy), and participation certificate (*scanned copy by email and hard copy by speed post or courier*).

For further information, submission of registration form and other updates, please visit, www.iiitdm.ac.in

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