



ENGINEERING STAFF COLLEGE OF INDIA (ESCI)

Autonomous Organ of The Institution of Engineers (India)

(IMS [ISO 9001:2015, ISO 14001:2015, ISO 50001:2018, ISO 45001:2018],
ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)
Old Bombay Road, Gachibowli, Hyderabad – 500 032. Telangana, India



Design Prototyping Centre & Mechanical Division (DPC-MD)

Organizing

Continuing Professional Development Programme on Product Design & Development using Solid Works

17 – 20 February, 2025

INTRODUCTION

Design skill is at the core of mechanical engineer and is essential to any mechanical engineer. However, 'DESIGN' has a broader meaning that need to be clarified. Design, to a mechanical Engineer typically includes all the following:

- Research
- Design requirements
- Feasibility
- Conceptualization
- Preliminary design
- Detailed design
- Design for manufacturability
- Production planning

SolidWorks, developed by Dassault Systems, is a premier computer-aided design (CAD) and computer-aided engineering (CAE) software used for creating 3D models, 2D drawings, simulations, and more. Renowned for its intuitive interface and advanced features, it is a preferred tool among engineers, designers, and architects. SolidWorks plays a key role in industries such as mechanical engineering, aerospace, automotive, robotics, and product design, enabling the efficient design, simulation, and analysis of mechanical components and assemblies.

OBJECTIVES

This comprehensive training program on CNC machining and machine tools focuses on programming, lubricant selection and equip participants with the following objectives:

- To have overview on SOLIDWORKS software and significance of Design fundamentals
- To develop and sharpen Technical & Design Aptitude of the participants
- To enable the participants, understand Design for Manufacturing
- To discuss the various issues that the participants face every day in Design and capacitate them with Error Correction and Problem Solving skill

COURSE COVERAGE

The following topics will be deliberated during the training programme:

- Basics of Computer Aided Design & Drafting
- Direct Modelling and Parametric Modelling
- Solid Works Basics and User Interface
- Introduction to Sketching
- Basic Part Modelling
- Feature based Modelling
- Part Modelling
- Advanced Part Modelling
- Sheet Metal Design
- Surface Modelling Techniques
- Top down and Bottom – up Assemblies
- Case Studies & Hands on

METHODOLOGY

Methodology of the programme includes Chalk & Talk sessions /lectures/group discussions/case studies/debates with audio-visual aid, benched marked video shows etc. All the sessions will be interactive demanding active participation from all the member participants.

TARGET PARTICIPANTS

Professionals from Governments, Private and Public Sector Undertakings (from Design, Prototyping, Development, Service & Maintenance Divisions), Scientists working in Research Laboratories& Faculties of various Colleges & Universities, Startups into New product development, Dockyard personnel and repair shop personnel will find the programme useful.

CERTIFICATION

A Certificate of participation will be awarded to all the participants after the successful completion of the training programme.

COURSE DIRECTOR (S)

Dr. N V S S Sagar *M.Tech; Ph.D*

Faculty

Design Prototyping Center and Mechanical Division

Engineering Staff College of India

Gachibowli, Hyderabad.

Email: mechanical-dpc@escihyd.org, Contact No.: 040-66304184

PROGRAMME DATES: 17 – 20 February, 2025

COURSE FEE: Rs. 22,500/- (Rupees Twenty Two Thousand Five Hundred Only) per Participant + **GST@18% Extra**. Fee includes, course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

DISCOUNT:

Additional 10% discount for three or more participants, if sponsored by the same organization. sPAN Card No **AAATT3439Q**; GST No. **36AAATT3439Q1ZV**. H.S. No. 999293 (Under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994).

Programme fee is to be paid in in favor of “**THE INSTITUTION OF ENGINEERS (INDIA) – ENGINEERING STAFF COLLEGE OF INDIA**” in the form of Demand Draft (DD) payable at Hyderabad. Alternatively, the payment may be made by Electronic Fund Transfer (EFT) to ESCI - SB A/c No. **10007111201** with **State Bank of India**, P.B.B / Khairatabad, Rajbhavan Road, Hyderabad-500004 by RTG's/ NIFT / **IFSC Code No: SBIN0004159**. While using EFT method of payment, please ensure to communicate us your company name, our Invoice reference and programme title.

REGISTRATION:

To register, please send your nominations by providing name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to: dpc@escihyd.org/mechanical-dpc@escihyd.org. For more details please contact our program assistant, Ms Sameera, Mobile No: 7416 409 119.

GENERAL INSTRUCTIONS:

- ESCI encourages participants to present case studies from their respective organizations.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 12:00 h) and one day after conclusion (Check-out 12:00 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation).
- Well-developed Information Centre and Internet facilities are available to the participants free of cost.