



ENGINEERING STAFF COLLEGE OF INDIA (ESCI)

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Autonomous Organ of the Institution of Engineers (India)

Old Bombay Road, Gachibowli, Hyderabad – 500 032. Telangana, India



Design Prototyping Centre & Mechanical Division (DPC –MD)

Continuing Professional Development Programme on



Engineering Simulation using Solidworks

(With Hands on Experience)

17 - 20 August 2026

INTRODUCTION

Design skill is at the core of mechanical engineer and is essential to any mechanical engineer. However, 'DESIGN' has a broader meaning that needs 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

While all the above aspects involve a certain amount of skill and creativity, these need a systematic approach, which depends on sound understanding of engineering principles. On the other hand, the development of a good concept & design additionally requires a certain amount of ingenuity, which not everyone possesses and is not something that can be easily acquired. An understanding of the physics behind design plays an all important role in the career of the designer. The course aims to enable such capabilities in the Engineers.

OBJECTIVES

The objectives of the programme are:

- To generate awareness on SOLIDWORKS 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 CONTENT

The following topics will be covered during the training programme:

- Engineering Drawing
- Basics of 2D Drafting and Overview
- Solid Works Basics and User Interface
- Introduction to Sketching
- Basic Part Modelling, Symmetry & Draft,
- Patterning
- Revolved Features
- Shelling & Ribs
- Advanced Surfacing, Editing Repairs and
- Editing Design Changes
- Configurations
- Using Drawings
- Assembly Modelling
- Surface Modelling Techniques
- Case Studies

Centre for Promotion of Professional Excellence

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

Dr. N V S S Sagar

Faculty

Design Prototyping Center and Mechanical Division

Engineering Staff College of India

Gachibowli, Hyderabad.

Email: dpc@escihyd.org or mechanical-dpc@escihyd.org,

Contact No.: 7416409119 or 040 - 66304184

PROGRAMME DATES: 17 - 20 August 2026

COURSE FEE: Rs. 24,000/- (Rupees Twenty Four Thousands 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. PAN 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 officer, **Mr. K. Raghuveera Reddy, Mobile No: 9849988930**.

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.