

Hands-on Training on

"DESIGN AND MANUFACTURING OF
SPECIAL PURPOSE MACHINE"

Making Women Engineers Industry Ready

Course Fee: Nil



18 November 2024 - 15 January 2025



IMTMA Technology Centre, Pune

Introduction

Design engineering is a key function of manufacturing. Machine designers encounter various challenges while visualizing and designing the product such as understanding the need, configuring kinematics, system motions, selection of critical elements, material, ensuring high reliability, ease of manufacturing and assembly at low cost. A successful designer, needs to have a complete knowledge on manufacturing activities from design to dispatch.

Skilled women work force are finding opportunities in manufacturing industry. To encourage and enable women to perceive their careers IMTMA is conducting the training programmes as part of women empowerment initiative which is a primary objective of the Association and it's member companies.

Programme objectives & benefits

- Enhancing the design and manufacturing skills for women mechanical engineers and making them industry ready
- Making women self-reliant for better career growth
- Contributing to industry with dedicated, trained and talented women work force
- Creating a gender balance within the manufacturing industry



Candidates Selection criteria

- Women Graduate / Diploma Engineer from Mechanical and allied disciplines, passed out from Year 2022, 2023 & 2024 from across India
- Aggregate score preferably above 60% in Engineering
- Final selection based on performance in written test* and personal interview conducted by IMTMA

* Minimum score 60% in written test

Programme Focus Areas

Training @ IMTMA Technology Centre, Pune

- Strength of Materials, Engineering Mechanics and Machine Kinematics
- SOLIDWORKS Hands-on CAD Training
- CAD Modelling and creating Manufacturing drawings
- Geometric Dimensioning & Tolerancing (GD&T)
- Conceptual design of a Special Purpose Machine
- Calculations for Force, Torque & Power
- Design of Milling Spindle for SPM
- Design of linear CNC Axis
- Selection of LM Guides ways & Ball Screws
- Design of Fixture
- Introduction to Hydraulics and Pneumatics
- Electric Motors: Application, Selection & Sizing
- Finite Element Methods FEM What, Why, and How?
- Introduction to CNC machines and part programming
- Machining of sample components on CNC Machine
- Dimensional Metrology and Measuring Instruments
- Soft Skills for working environment homogeneity
- Speaking, writing, and presentation skills To be a Smart Employee

Faculty

Industry Experts















Unique Programme Features

- Experiential learning from Design and Manufacturing experts
- Hands-on training on machines and equipment at IMTMA Technology Centre
- Developing work culture and skill competency matching industry standards
- Placement support



Evaluation and Certification criteria

- Periodical test and assignments
- Performance evaluation
- Record of attendance
- Presentation Skills and Team Work

Important Information to participants

- Training programme is non-residential
- Participants will bear the expenses of travel and stay during the entire duration (2 months) of training at their own cost
- Maintain 100% attendance during the period of training
- Attend all the tests and assignments
- Adhere to the designated dress code and safety norms of IMTMA
- Maintain work discipline during the entire training
- Abide by all instructions of faculty and IMTMA
- Post training, open to work anywhere in India without geographical barrier
- Shall not misuse/ mishandle/damage the equipment, machineries, computers, CAD software during training



Post training Support

- After successful completion of training, each participant will be awarded with a certificate based on their performance
- IMTMA and it's member companies will provide assistance for placement in manufacturing industries

Participation Fee and caution deposit

- No participation fee for shortlisted candidates
- Fee will be fully sponsored by IMTMA member companies, including delegate kit, course material, lunch and tea / coffee, etc
- Refundable caution deposit of Rs.5000/ participant, shall be paid to IMTMA by all selected candidates before the commencement of the programme
- The caution deposit will be refunded to participants on successful completion of the programme
- If any participant discontinues, for any reason, the caution deposit will not be refunded



Organised by



An IMTMA initiative

For more details and registration, contact:

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