

Last date for registration 19 July 2021

## INTRODUCTION

The course is structured with an introduction to Design fundamentals and more focused on machine tool design. Complete design of CNC Turning center will be carried out from concept to finish. Pre-process activities like design input, conceptualization, machine specification, 3D modeling of parts, sub-assemblies and final assembly using popular design CAD tools and preparing the final manufacturing drawings in par with industry standards, Design for Accuracy, Design for Manufacturing and Design for Assembly will be addressed during the course. It will be a highly interactive and hands-on training session and covers the entire 360° view on machine tool design aspects.

## FOCUS AREAS

- Machine design fundamentals
- Introduction to CNC machine tools
- Design of metal cutting General Purpose Machine - Project
- Overall design concept, Machine specification
- Training on CAD Tool - Autocad and SolidworksDesign of Spindles & work holding
- Design of CNC Axes & Hydraulic Slides
- Introduction to Electronics and Electrical for Mechanical
- Design of machine structure and analysis
- Design of coolant system and lubrication system
- Hands-on Experience on FEA Tool
- Industry Visits

## KEY TAKE AWAYS

- Knowledge in Machine Design Basics
- Knowledge on the design of machine elements
- Drafting of manufacturing drawing & assembly drawing
- Knowledge in machine design standards
- Hands-on experience in Machine Tool design - GPM
- Knowledge in systematic design approach
- A Certificate of participation will be issued to participants

## Facilities

- Advanced CAD Laboratory & Digital Classroom
- AUTOCAD, INVENTOR, SOLIDWORKS, CREO & ANSYS, Eplan, Camworks
- Hands-on experience for solid modeling, FEA
- Mechanical laboratory for the demo of in-use machine systems
- Complete Design Project as an exercise
- Hydraulic And Pneumatic Teaching Modules
- Real-time CNC Machine tools for demo
- Functional CNC Lathe and Machining Centres for demonstration

## PARTICIPATION FEE

<b>Rs. 55000/-</b> +18% GST <b>IMTMA Members/ Micro Companies</b>	<b>Rs. 40000/-</b> +18% GST <b>Individuals</b>	<b>Rs. 65000/-</b> +18% GST <b>IMTMA Non Members/ Others</b>	<b>USD 2100/-</b> <b>Overseas Participants</b>
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### For Registration Contact

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### Contact Address

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**REGISTRATION :** Prior registration for participation is necessary. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.  
**Important Information :** Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.