

Machine Tool Design - General Purpose Machine (CNC)

Date: 6 April to 30 May, 2020

Venue : BIEC, 10th Mile, Tumkur Road, Madavara Post, Bangalore

## Last date for registration 30 March 2020

#### INTRODUCTION

The course is structured with an introduction to Design fundamentals and more focused on machine tool design. A complete Design of metal cutting Special Purpose Machines 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 highly interactive and hands-on training session and covers the entire 360° view on machine tool design aspects

## **FOCUS AREAS**

- Engineering Fundamentals
- Drafting standards for Manufacturing drawings
- CAD SOLIDWORKS, PTC-CREO, INVENTOR & AUTOCAD
- Design of Machine elements
- Limits, Fits, Tolerance and GD&T
- Introduction to CNC machine and cutting tools
- Engineering materials and Heat treatment
- Design of CNC-General Purpose Machine
- Engineering calculation for power, torque, stiffness and life
- Hydraulics and Pneumatics
- Electrical & Electronics for Machines
- Hands-on training on Machine assembly
- Design validation through FEA
- Design competition for best performer award
- Industrial Visits

#### **KEY TAKE AWAYS**

- Knowledge in Machine Design Basics

- Hands-on experience in Machine Tool design GPM
- Knowledge in a systematic design approach A Certificate of participation will be issued to participants

## **Facilities**

- Advanced CAD Laboratory & Digital Classroom
- Industry Experienced Faculty
- AUTOCAD, SOLIDWORKS, CREO, E Plan & HyperWorks
- Hands-on Training Session
- Complete Design Project as an exercise
- Hydraulic And Pneumatic Teaching Modules
- IMTMA Certification & Placements
- · Real-time CNC Machine tools for demo
- Industry visit for orientation

## PARTICIPATION FEE

# For Registration Contact

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## Contact Address

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

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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.