

**Last date for registration 01 November 2021**

## INTRODUCTION

Our engineers fresh from college are strong on theory, but do not have requisite practical knowledge that is necessary to contribute to the organisations that they join. From interpreting manufacturing drawings to processing parts on CNC machines to measuring them and getting used to factory discipline and working environment, fresh engineers need to acquire these skill sets in the shortest possible time.

Engineers from TVS Motors, Maruti Suzuki, Hero Moto Corp, Sansera Engineering, Wabco India, Leo fasteners, Kar Mobiles, to name a few companies, have undergone this course and achieved Productivity and Quality improvement in their projects by implementing some of the key learnings. This course is tailored for new recruits / trainees as well as fresh engineering graduates in Mechanical engineering and allied branches, aspiring for challenging career in manufacturing industries.

## FOCUS AREAS

- Review of Machining Operations, Engineering Drawing & Metrology
- Limits, Fits and Tolerances, GD&T, Surface Roughness
- Work Materials and their properties
- Cutting Tools - Materials, Nomenclature, Selection procedure
- Measuring Instruments - Theory and hands-on practice
- CNC Programming on Turning and Machining centres
- Hands on Real time Machining on production CNC Turning and Machining centres
- CAM Programming - Creation of geometry, creating tool paths, Simulation and NC code generation
- 5S Concepts, Good manufacturing practices & Introduction to TPM
- Soft skills and Personality development
- Project Work and Weekly evaluation through tests & assignments

## KEY TAKE AWAYS

**After undergoing the programme, the participants will be able to -**

1. Have complete insight in Computer Integrated modern Manufacturing environment
2. Understand Engineering Drawing and develop process plan
3. Develop and optimise NC Programmes for CNC Turning and Machining Centres
4. Do proper selection of tools & cutting parameters for various CNC machining operations
5. Reduce cycle time and improve productivity / quality in CNC machining
6. Handle measuring instruments and equipment for quality control of machined parts

## Training Methodology

- Training in modern Digital Factory Environment
- Class room sessions with Industry Professionals
- Engineering Drawing, Process Assessment & Planning
- Measurement practices on CMM & other instruments
- Simulation using SINUTRAIN / FANUC systems
- Hands-on sessions on CAD/CAM programming
- Hands-on training on CNC Turning Centre
- Hands-on training on CNC Vertical Machining Centre
- Real time machining of components on CNC machines
- Project work Assessment & Certification

## Facilities

**IMTMA Technology Centre at Chinchwad, Pune is equipped with state of the art training facilities viz.**

- CNC Vertical Machining Centre - **Lokesh Machines Ltd**
- CNC Turning Centre - **Batliboi**
- Co-ordinate Measuring Machine(CMM), Vision Measuring Machine & Digital Height Gauge - **Electronica**
- Cutting tools and holders - **Seco, Sandvik**
- PC based CNC simulation softwares & training Kits - **Siemens, FANUC**
- Microboring Kit - **D' Andrea**
- Non contact type tool pre setter - **Elbo Controlli**
- Touch probe for tool set up & work set up - **Blum, Renishaw**
- Measuring Instruments - **Mitutoyo, Baker Gauges, Insize**
- CAD/CAM softwares - **Cadem, Mastercam, Solidworks, CAMWORKS**
- Cutting fluid and accessories - **Trim, Master Fluid**
- Hydraulic kit - **Yuken India**

## PARTICIPATION FEE

**Rs. 45000/-**  
+18% GST

**IMTMA Members/ Micro Companies/  
IMTMA Non Members/ Others**

**Rs. 30000/-**  
+18% GST  
**Individuals**

**USD 1200/-**  
**Overseas Participants**

**Group Concession : 5% for 3 to 5 and 10% for 6 and more delegates being nominated from the same company**

## Participant Profile

- Engineers / supervisors from manufacturing industries, responsible for productivity and quality improvement.
- New recruits / trainees in manufacturing industries.
- Fresh Mechanical Engineers after completion of their Degree / Diploma in Mechanical or allied disciplines.
- Pre final year engineering students from Mechanical or allied disciplines.
- Design engineers willing to have strong foundation thro hands-on training in latest manufacturing practices.

### For Registration Contact

**Nagraj Hamilpure**  
**Programme Coordinator**  
9881616902  
[n.hamilpure@imtma.in](mailto:n.hamilpure@imtma.in)  
**Yuvaraj Patil**  
9834265098  
[Yuvaraj@imtma.in](mailto:Yuvaraj@imtma.in)

### Contact Address

**INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION**  
12/5, D-1 Block, MIDC, Chinchwad,  
Pune-411019  
Board Line : +91 7066030531 / 532



imtmatraining.67038796@hdfcbank

**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.