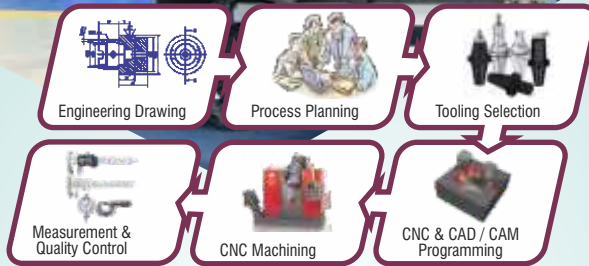




**IMTMA Technology Centre**

Indian Machine Tool Manufacturers' Association  
[www.imtmatraining.com](http://www.imtmatraining.com)



**MAKING ENGINEERS INDUSTRY READY**

# Finishing School in Production Engineering

Hands-on training for Junior Engineers, Supervisors, Industry Recruits & Engineering /Diploma Students from Mechanical and Allied Disciplines



## Need for Finishing School

Today CNC Machines form the core of manufacturing operations right from producing auto parts to mission critical aero space components and CNC machines are deployed aiming at increased productivity, highest accuracy and improved surface finish. However, increased use of CNC machines / CNC automation doesn't result in enhanced productivity directly. Systematic training in best manufacturing practices is of paramount importance and well trained manpower can bring in significant improvement in productivity and quality levels thereby increasing profitability.

### An exclusive "FINISHING SCHOOL IN PRODUCTION

ENGINEERING" is organized with the practical oriented approach for practicing Engineers / Supervisors of manufacturing industries, enabling them to learn and implement best manufacturing practices in CNC machining including CNC Programming, Proper selection of tooling / cutting parameters, cycle time reduction, work holding concepts, etc.

This course is ideal for the fresh engineers in mechanical and allied disciplines coming out of the educational institutions, who most often lack practical skills. It enhances their employability and makes them industry ready by providing hands-on training in production CNC machines and other accessories.



## 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 🐦
- Industry visits & Project work Assessment & Certification 🐦



## Course Contents

- 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.
- Industry visits to major machine tool manufacturing Industries.
- Project Work and Weekly evaluation through tests & assignments.



## Facilities Available at IMTMA Technology Centre AKGEC Skills Foundation, Ghaziabad

- Vertical Machining Centres (MCV-400 & Spark-e) – AMS.
- CNC Turning Centres (LT-16 & Tutor) – AMS.
- Co-ordinate Measuring Machine (CMM) – Carl Zeiss.
- 7 Axis Robotic Milling- KUKA and Grind Master.
- Grinding Machine (Eco-200)- Micrometic Grinding.
- Tapping Machine- Fixto.
- Cutting tools and holders – Widia, Tungloy, Kyosera and Seco.
- PC based CNC simulation softwares – Siemens and FANUC.
- CNC Hardware Simulator- Siemens and Bosch.
- Digimatic Height gauge – Mitutoyo.
- Magnetic Plate – SCHUNK.
- Vision Measuring Machine- Banbros.
- Contour Measuring Machine- Carl Zeiss.
- Surface Roughness Testing Machine- Carl Zeiss.
- 3 D Scanner – Carl Zeiss.
- NX CAD/CAM softwares – Seimens.
- Cutting fluid and accessories – Servo.
- Digital and Manual Measuring instruments – Mitutoyo.
- Hydraulic and Pneumatic Training kits – Bosch Rexroth.
- PLC and Industrial automation training kits - Bosch Rexroth, Mitsubishi Electric and Siemens.
- Digital Class room with computer work stations in complete network with the CNC machines through LAN for seamless data transfer.

## PARTICIPATION DETAILS

- Eligibility : For Junior Engineers, Supervisor and New Recruits in industries & Fresh engineers / Diploma holders aspiring for seeking career in manufacturing sector.
- Course Duration : 4 Weeks (192 hours)
- Timing : 09:00 am to 05:30 pm – Monday to Saturday
- Venue : IMTMA TECHNOLOGY CENTRE, Ajay Kumar Garg Engineering College, NH-24, Ghaziabad
- Course Fee : Rs. 28000/- + 18% GST per participants (for students and private participant)  
Rs. 36000/- + 18% GST per participants (for Industry sponsored participant)  
USD 1200 + 18% GST per participants (for Foreign Nationals)

192 Hours Comprehensive Programme in Modern Production Environment  
Hands-On Sessions on CNC Machines and CNC Accessories Practical-Based,  
Industry-Endorsed Curriculum Experience sharing by Industry experts

Finishing School candidates have been placed in -

Ace Micromatic group | Acumac | BFW | Blaser | Carl Zeiss | Caterpillar | Dimo Casting | Essae  
Festo | Hampson Aerospace | Jyoti CNC | Kennametal | KTTM | Makino | Mahavir Die Casters  
Marposs | Miven Mayfran | Machine Tools India | Motherson Techno Tools | Nagel | Sansera  
Sandhar | Searock Precision Products | Taegutec | UCAM | Vipra | Yuken | Zoller



### Industry Partners



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