

## INTRODUCTION

CNC Turning is one of the major manufacturing processes in which cylindrical bars of material are held in a chuck and rotated while a tool is fed to the piece to remove material to create the desired shape. CNC lathes or turning centres have tooling mounted on a turret. Turning Centres perform rotating spindle operations.

CNC machines have become the order of the day in every manufacturing industry. These applications are wide spread in mass production units, batch production as well as tool room industries. Thorough understanding of Programming and Operation of the CNC machines is a must in order to realize the maximum output.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising a 3-days online programme on **“CNC Programming - Turning Centre”**.

## FOCUS AREAS

1. Elements of CNC Turning Centre and different modes in the machine.
  2. G codes and M codes applicable to CNC Turning Centre.
  3. Structure of a CNC Programme for CNC Turning Centre.
  4. Work and tool set up; Measuring tool offsets in X and Z axes.
  5. Programming using canned cycles – OD Turning, Grooving, Threading and Drilling.
  6. ISO system of tool designation.
  7. Dimensional control in CNC Turning Centre, Correction of wear offset for achieving tolerances.
  8. Selection of tools and machining parameters.
  9. Live demo of turning a sample component.

- Part set up
  - Work offset
  - Tool offset
  - Wear offset
  - Dimensional Control

## KEY TAKE AWAYS

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

1. Understand the concept of CNC turning program.
  2. The zero offset.
  3. About turning tools & tool offsets.
  4. Metal cutting on a turning centre.

## FEE PER PARTICIPANT (PER LOGIN)

Rs. 5000/-  
+18% GST

IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

## PARTICIPANT PROFILE

This programme will benefit Practicing engineers/supervisors.

## FACULTY

The programme will be conducted by **Mr Preetham B M** and **Mr M Maheshwaran** – Sr Executive Officer – Training. Mr. Preetham B M has over 20 years of experience in the industry, in the field of manufacturing of precision components for Nuclear, Aerospace & Automation industry. He has acquired expertise in the application and use of GD&T principles in precision manufacturing of components as well as experience in conducting training programs. He has imparted training in CNC, CAD/CAM, CMM & GD&T for more than 1000 engineers. Prior to working at IMTMA, he has worked at Avasarala Technologies Limited, as Assistant Manager, in the field of machining the precision components using CNC machines. At IMTMA, as Senior Executive officer, his role is to impart hands-on training to young engineers making them Industry ready. Mr. Maheswaran M, Senior Executive officer Training, IMTMA Bangalore, has more than 12 years of experience in CNC, Pneumatics, Hydraulics, Robotics. At IMTMA, his role is to impart hands-on training to young engineers to make them industry ready.

### For Registration Contact

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