

ASTP: CAD/CAM/CNC Milling Programming

1. Introduction

The aim of this course is:

- To provide hands on training sessions on CNC machining centres.
- Selection and optimisation of parameters for productivity improvement.
- To do proper selection of cutting tools and cutting parameters.
- To understand manufacturing drawing and develop process plan.
- To provide Hands –on sessions in CAD/CAM programming software’s.
- To handle measuring instruments and equipments for quality control of machined parts.

2. Learning Outcomes

After completion of this course students will be able to:

- Operate and programme CNC machining or turning centers independently.
- Optimize cutting parameters like speed, feed and doc.
- Understand and read manufacturing drawings.
- Design the model and generate programs for the same model.
- Handle and use measuring equipments.

3. Who should attend:

Diploma/BE candidates any higher qualification (Non Completed candidates are also eligible).

4. Structure of the course

Sl. No.	Module Code	Module Title	Theory (hrs)	Practical's (hrs)	Duration (Wks)		
1	ASTP 131	CAD (Using 2D & 3D Modelling Software)	3	130	9		
2	ASTP 132	CAM (Using Programming Software)	3	20	2		
3	ASTP 133	CNC Programming (On Job Training)	4	20	1		
Total Number of Theory hrs.		10	Total Number of (Practical's) hrs.		170	Total course duration hrs.	180

5. Module Resource

Machineries	Equipments	Software's
<ul style="list-style-type: none"> ➤ CNC Vertical Machining Centre ➤ Conventional Milling Machine ➤ Pillar Drilling Machine 	<ul style="list-style-type: none"> ➤ Vernier Calliper ➤ Micrometer ➤ Height Gauge ➤ Slip Blocks ➤ Bore Gauge ➤ Vernier Depth Gauge ➤ Pitch Gauge 	<ul style="list-style-type: none"> ➤ Auto CAD ➤ UG (Uni-Graphics) <ul style="list-style-type: none"> • Designing • Programming ➤ Caps Mill ➤ Encyclo - Mill