

STP: Certificate Course in CNC Milling

1. Introduction

The aim of this course is:

- To provide hands on training on CNC machining centres and conventional machineries (Lathe, Milling, Drilling etc)
- To understand manufacturing drawing and develop process plan.
- To provide hands –on sessions in CAD/CAM programming systems.
- 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 centers independently.
- Operate conventional machineries (Lathe, Milling, Drilling etc)
- Design the model and generate programs for the same model.
- Handle and use measuring equipments.

3. Who should attend:

PUC/ITI/Diploma 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	STP 101	Introduction to Milling Tools & Equipments	3	12	1		
2	STP 102	Turning Practice using Conventional Lathe	3	12	1		
3	STP 103	Milling Practice using Conventional Milling	3	12	1		
4	STP 104	Designing & Programming using CAD/CAM Software's	5	100	7		
5	STP 105	CNC Milling Programming & Operations on Job Training	3	12	1		
6	STP 106	Machine Diagnostics & Maintenance	3	12	1		
Total Number of Theory hrs.		20	Total Number of (Practical's) hrs.		160	Total course duration hrs.	180

5. Module Resource

Machineries	Equipments	Software's
<ul style="list-style-type: none"> ➤ CNC Vertical Machining Centre ➤ Conventional Lathe ➤ Conventional Milling 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