

Module: CNC Machining (Milling)

Course Director:

Course Coordinator:

Course Duration: 3 months (60 working days-60 lessons)

Qualification: Diploma level or experienced in this field

Enrolment system: Admission test

Description:

CNC Milling machine is one of the most versatile machine tools with a wide range of metal cutting capability. Many complicated operations such as gear cutting, sprocket, indexing, gang milling etc. can be carried out on a cnc milling machine. This training module is intended to give you a good appreciation on the type of cnc milling machines and the various types of milling processes. Emphasis is placed on its industrial applications, operations, and the selection of appropriate cutting tools. On completion of this module, you will acquire some of these techniques from the training exercises. However, to gain maximum benefit, you are strongly advised to make yourself familiar with the class notes before undertaking the training activities, and to have a good interaction between yourself and the staff in charge of your training.

Objectives:

1. To understand the principle of cnc milling operations.
2. To know how to operate a cnc milling machine.
3. To learn cnc milling basic programming.
4. To know how to reduce machining time.
5. To design particular part and develop in machine.
6. To learn about the basic maintenance of cnc milling machine.

Out Come: (please make it more detail)

After completion this course a student can be able to operate a cnc milling machine independently. Also able to design mechanical parts and produce in machine.

Training Method:

1. Lectures in the classroom
2. Presentation on multimedia projector
3. Practical
4. Group discussion

5. Motivational session
6. Physical training
7. Game
8. Case study
9. Debate

Evaluation:

Out of the total 100 marks, the following assessment will be done.

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|-------|------------------------------|-----|
| 1. | Participation in the session | 10 |
| 2. | Written test | 20 |
| 3. | Practical test | 40 |
| 4. | Thematic presentation | 20 |
| 5. | Speaker evaluation | 10 |
| Total | | 100 |

Reference Books:

Lesson Plan:

Sl. no.	Subject	Lesson no	Number of Sessions	Speaker
01.	General Safety		Theory	
			Practical	
			Feedback	
02.	Introduction of VMC		Theory	
			Practical	
			Feedback	
03.	Operation		Theory	
			Practical	
			Feedback	

04.	Programming		Theory		
			Practical		
			Feedback		
05.	Probing System		Theory		
			Practical		
			Feedback		
06.	G- Codes		Theory		
			Practical		
			Feedback		
07.	M-Codes		Theory		
			Practical		
			Feedback		

Total lesson 60

In each session the speaker will distribute the summary of his speech to the class.