**Instructor CNC Machining Center (Theory )**

**Instructor Profile**

Name: Muhammad Saeed Mian

**Education:**

**Academic:** Graduate

**Technical :** One Year Apprentice Certificate In Machine Shop Practice

**Certifications:**

* CNC Machining Center
* AutoCAD ( Mechanical )

**Work Experience:**

Working as Mechanical Technician in PITAC Since 1989 To Till (2024).

**Teaching Experience:** Teaching as CNC MC Coding Class of short course since 2014 to till.

**Syllabus of the Course.**

1. Introduction To CNC Machines ( History & Types)
2. Introduction & Practice of Coordinate Systems.
3. Introduction To CNC Programming / Coding.
4. Linear Programming .
5. Programming with Arc using R,
6. Programming with Arc using I,J concepts.
7. Work Coordinate System Setting and Tool Height Compensation .
8. Introduction and practice of Sub Programming with Loop Counter.
9. Face Mill Programming.
10. Introduction to Tool Radius offset.
11. Side Milling Program using sub program and loop counter method
12. Introduction and practice of Drilling Cycle/ Canned Cycle .
13. Introduction to DNC
14. Selection of Tool & Cutting Conditions.
15. Exercises of all topic and Final Written Test .

**Objectives of the Course.**

* Understanding Basic CNC Programming through Manual Data input (MDI).
* Programming Skill using G-Codes and M-Codes.
* Set up of work piece and tool setting .
* Hand- on Experience Providing Practical Exercise and work projects .
* Quality Control.