

Dear Machine Tool Technology student,

This handout has been designed to clarify the path to success. The Certificate of Achievement in this field consists of four semesters of study starting in Fall of any year. You will enter the path in your first semester by taking the "CNC Shop Inspection" class where you learn the basics of measuring instruments. You will also be taking the "Blueprint Reading" class along with "MasterCam Milling" and "Setup and Operation of CNC Milling Machines" classes. You will learn about programming with MasterCAM (Computer-Aided Manufacturing) software and the operational setup of CNC mills. These classes will teach you how to interpret customer basic requirements and how to produce a part.



In your second semester, you will stay the path by continuing to take "MasterCam Advanced" and "Geometric Dimensioning and Tolerancing" classes. In addition, you will also take "Setup and Operation of CNC Lathes" and "Robotics for Computer Numerically Controlled Machines" classes to learn about the operational setup of CNC lathes and robots. You will complete the path through classes and labs taken in your third and fourth semesters; classes such as: "MasterCam Turning", "MasterCam Multi-Axis Milling", and "MasterCam Multi-Axis Turning" as well as the two lab courses "CNC Mill Machining Laboratory" and "CNC Lathe Machining Laboratory" where you will learn Multi-Axis MasterCAM programming and additional hands-on practice with CNC lathes and mills. These classes will build on what you learned and prepare you for entry-level employment.

NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
MTT 51 (3.5 units)	MasterCam Milling [1]	Fall, Spring and Summer
MTT 52 (2.5 units)	Setup and Operation of CNC Milling Machines [1]	Fall and Spring
MTT 56 (2 units)	CNC Shop Inspection [4]	Fall
ENGT 116 (2 units)	Blueprint Reading [1,3,4]	Fall, Spring and Summer
10 Units	4 Classes	

CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
MTT 57 (2.5 units)	Setup and Operation of CNC Lathes [1]	Fall and Spring
MTT 180 (3 units)	Robotics for Computer Numerically Controlled Machines [1]	Spring
MTT 278 (3.5 units)	MasterCam Advanced [1]	Spring
ENGT 117 (2 units)	Geometrical Dimensioning and Tolerancing [4]	Fall and Spring
11 Units	4 Classes	

CONTINUING STUDENTS THIRD SEMESTER (SUMMER)

Course	Course Name	Semester Offered
MTT 59 (2.5 unit)	MasterCam Turning [1]	Summer and Spring
MTT 91L (1 unit)	CNC Mill Machining Laboratory [1]	Fall, Spring, and Summer
3.5 Units	2 Classes	

CONTINUING STUDENTS THIRD SEMESTER (SUMMER)

Course	Course Name	Semester Offered
MTT 71 (2 units)	MasterCam Multi-Axis Milling [1]	Fall
MTT 72 (2 units)	MasterCam Multi-Axis Turning [1]	Fall
MTT 95L (1 unit)	CNC Lathe Machining Laboratory [1]	Fall, Spring and Summer
5 Units	3 Classes	

Notes

1-Classes are usually offered during evening
2-Classes are offered as "Credit By Exam"

3-Classes are usually offered on Saturday's
4-Classes are usually online