

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 three semesters of study starting in Fall of any year. You will enter the path in your first semester by taking introductory classes "Machine Tool Introduction" and "Blueprint Reading." These classes will provide the basic knowledge of blueprint reading and measuring instruments. You will also take a "CNC Shop Inspection" and "Setup and Operation of CNC Milling Machines" classes. These classes will teach you how to interpret customer basic requirements, how to produce a part, the operational setup of a conventional machine, and computerized numerical control (CNC) mills.

In your second semester, you will stay the path by taking the "MasterCam Milling" and "Setup and Operation of CNC Lathes" classes where you will learn about programming with MasterCAM. (Computer-Aided Manufacturing) software and the operational setup of CNC lathes. In addition, you will also be taking a "Fixture Tooling" class where you will learn about planning, design and fabrication methods. You will also be taking a "Computer Assisted Inspection Using Verisurf" class where you will learn how to use the Verisurf software. In your third semester, you will complete the path by taking the two machining lab courses where you will have 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 52 (2.5 units)	Setup and Operation of CNC Milling Machines [1]	Fall and Spring
MTT 56 (2 units)	CNC Shop Inspection [4]	Fall
MTT 100 (2 units)	Machine Tool Introduction [1,3]	Fall, Spring, and Summer
ENGT 116 (2 units)	Blueprint Reading [1,3,4]	Fall, Spring, and Summer
<b>8.5 Units</b>	<b>4 Classes</b>	

### CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
MTT 51 (3.5 units)	MasterCam Milling [1]	Fall, Spring, and Summer
MTT 57 (2.5 units)	Setup and Operation of CNC Lathes [1]	Fall and Spring
MTT 62 (2 units)	Fixture Tooling [4]	Spring
MTT 68 (2 units)	Computer-Assisted Inspection Using Verisurf [2,3]	Fall and Spring
<b>10 Units</b>	<b>4 Classes</b>	

### CONTINUING STUDENTS THIRD SEMESTER (SUMMER)

Course	Course Name	Semester Offered
MTT 91L (1 unit)	CNC Mill Machining Laboratory [1]	Fall, Spring, and Summer
MTT 95L (1 unit)	CNC Lathe Machining Laboratory [1]	Fall, Spring, and Summer
<b>2 Units</b>	<b>2 Classes</b>	

#### 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