

## **Tool and Die Maker**

(Certificate of Achievement - 20 Units)

Dear Machine Tool Technology student,

This handout has been designed to <u>clarify the path</u> to success. The Certificate of Achievement in this field consists of three semesters of study starting in Fall of any year. You will <u>enter the path</u> 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 "CNC Shop Inspection" and "Computer Assisted Inspection Using Verisurf" classes. These classes will teach you how to interpret customer basic requirements, how to produce a part, and how to use the Verisurf software.

In your second semester, you will stay the path by taking "Geometrical Dimensioning and Tolerancing" and "Fixture Tooling" classes where you will learn about datums, modifiers, planning, design, and fabrication methods. You will also take a "Tooling and Materials for New Product Development" class where you will learn about metallic and non-metallic materials used in the design of tooling. In addition, you will also be taking "Manual Machining Laboratory" class to have additional hands-on practice with conventional lathes, mills, and associated cutting tools. In your third semester, you will complete the path by taking "SolidWorks Introduction" where you will use Computer-Aided Design (CAD) software and learn how to create solid models and make blueprints. These classes will build on what you learned and prepare you for entry-level employment.



# ASSOCIATE OF ARTS DEGREE IS ALSO AVAILABLE NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
MTT 56 (2 Units)	CNC Shop Inspection [4]	Fall
MTT 68 (2 Units)	Computer-Assisted Inspection Using Verisurf [2,3]	Fall and Spring
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
8 Units	4 Classes	

#### **CONTINUING STUDENTS SECOND SEMESTER (SPRING)**

Course	Course Name	Semester Offered
MTT 62 (2 Units)	Fixture Tooling [4]	Spring
MTT 94L (1 Unit)	Manual Machining Laboratory [1]	Fall, Spring, and Summer
NPD 103 (3 Units)	Tooling and Materials for New Product Development [1,4]	Spring
ENGT 117 (2 Units)	Geometrical Dimensioning and Tolerancing [4]	Fall and Spring
8 Units	4 Classes	

#### **CONTINUING STUDENTS THIRD SEMESTER (SUMMER)**

Course	Course Name	Semester Offered
ENGT 259 (4 Units)	SolidWorks Introduction [1,2,4]	Fall, Spring, and Summer
4 Units	1 Class	

Notes: 1-Classes are usually offered during evening

3-Classes are usually offered on Saturdays

2-Classes are offered as "Credit By Exam" 4-Classes are usually online



### **Machine Tool Technology**