# 2019-2020 TTC Catalog - Machine Tool Technology (MTT)

## MTT 001 - Machine Tool Technology Non-Equivalent

Lec: 0 Lab: 0 Credit: 0

Indicates credit given for machine tool technology course work transferred from another college for which there is no equivalent course at TTC.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

#### MTT 101 - Introduction to Machine Tool

Lec: 0.5 Lab: 4.5 Credit: 2.0

This course covers the basics in measuring tools, layout tools and bench tools; and basic operations of lathes, mills and drill presses.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

## MTT 111 - Machine Tool Theory and Practice I

Lec: 1.0 Lab: 12.0 Credit: 5.0

**Course Offered** 

Fall

This course is an introduction to the basic operation of machine shop equipment.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

## MTT 112 - Machine Tool Theory and Practice II

Lec: 1.0 Lab: 12.0 Credit: 5.0

**Course Offered** 

**Spring** 

This course is a combination of the basic theory and operation of machine shop equipment.

### **Prerequisite**

MTT 111

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

#### MTT 143 - Precision Measurements

Lec: 1.5 Lab: 1.5 Credit: 2.0

**Course Offered** 

Fall Spring

This course is a study of precision measuring instruments.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

# MTT 145 - Machining of Metals

Lec: 3.0 Lab: 0 Credit: 3.0

**Course Offered** 

Spring

This course covers theoretical and practical training in the physical properties of metals, their required stock removal/speeds/feeds and depths of cut, and finish requirements.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

# MTT 250 - Principles of CNC

Lec: 2.0 Lab: 3.0 Credit: 3.0

**Course Offered** 

Summer

This course is an introduction to the coding used in CNC programming.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

## MTT 251 - CNC Operations

**Lec:** 2.5 **Lab:** 1.5 **Credit:** 3.0

**Course Offered** 

Summer

This course is a study of CNC machine controls, setting tools, and machine limits and capabilities.

#### Corequisite

MTT 250

and

MTT 253

or

departmental approval

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

## MTT 253 - CNC Programming and Operations

Lec: 2.0 Lab: 3.0 Credit: 3.0

**Course Offered** 

Summer

This course is a study of the planning, programming, selecting, tooling, determining speeds and feeds, setting, operating and testing of CNC programs on CNC machines.

#### Corequisite

MTT 250

or

advisor approval

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance