



# PRECISION MACHINING CERTIFICATES

The TAA-Department of Labor funded the development, redesign and adaptation of all machining courses leading to the A.A.S. degree and certificates.

## Machine Shop Fundamentals

Required Courses	Credits
MAC 110 Introduction to Engine Lathe	3
MAC 120 Introduction to Milling Machine	3
<b>Total Credits</b>	<b>6</b>

## Manual Machine Operator

Requirements	Credits
Machine Shop Fundamentals Certificate	6
Required Courses	Credits
MAC 111 Intermediate Engine Lathe	3
MAC 121 Intermediate Milling Machine	3
MAC 250 Advanced Inspection Techniques	3
EGT 205 Geometric Dimensioning and Tolerancing	3
<b>Total Credits</b>	<b>18</b>

## Wire EDM Operator

Required Courses	Credits
MAC 253 Wire EDM Operation	3
MAC 257 Wire EDM Programming	3
<b>Total Credits</b>	<b>6</b>

## CNC Lathe Operator

Required Courses	Credits
MAC 201 Introduction to CNC Turning Operations	3
MAC 202 CNC Turning Operations II	3
MAC 245 CAD/CAM 3D	3
<b>Total Credits</b>	<b>9</b>

## CNC Mill Operator

Required Courses	Credits
MAC 205 Introduction to CNC Milling Operations	3
MAC 206 CNC Milling Operations II	3
MAC 245 CAD/CAM 3D	3
<b>Total Credits</b>	<b>9</b>

## Swiss Screw Machine Operator

Required Courses	Credits
MAC 210 Intro to Swiss Turn Operations	3
MAC 211 Swiss Turn Programming I	3
<b>Total Credits</b>	<b>6</b>

## 5-Axis Milling Operator

Required Courses	Credits
MAC 261 5-Axis Mill Programming	3
MAC 260 5-Axis Mill Operation	3
<b>Total Credits</b>	<b>6</b>

## Metrology/Quality Control

Required Courses	Credits
EGT 205 Geometric Dimensioning and Tolerancing	3
MAC 250 Advanced Inspection Techniques	3
MAC 266 Advanced Inspection Techniques II	3
MAC 267 Metrology Maintenance	3
<b>Total Credits</b>	<b>12</b>



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