

# Precision Machining

## Career Studies Certificate

**Program Coordinator:** Johnnie Keene • MEC 104 • 276-739-2455

**Length:** Two Semesters

**Purpose:** This program is designed to provide individuals with basic machining concepts, blueprint reading and inspection procedures. Upon completion of this program, graduates will be prepared for employment as basic machine tool operators.

**Occupational Objectives:** The Precision Machining Career Studies Certificate provides the basic skills necessary to secure an entry level job as a machinist. Students develop the basic skills necessary to read blueprints, function as a Lathe Operator, Drill Press Operator, and Milling Machine Operator.

**Admission Requirements:** General college curricular admission.

**Program Notes:** Students are strongly encouraged to meet with the program head either before registering for their first semester or early in their first semester of study. Students will be required to furnish clear lens safety glasses, leather work footwear, and proper clothing for working in the lab.

**Program Requirements:** The curriculum will consist of both hands on learning and classroom instruction. The program can be completed in one year and will prepare graduates for entry-level positions.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
<b>First Semester (Fall)</b>				
DRF 161	Blueprint Reading I	1	3	2
MAC 161	Machine Shop Practices I	2	3	3
MAC 121	Numerical Control I	1	2	2
SAF 127	Industrial Safety	2	0	2
MAC 116	Machinist Handbook	2	0	2
MAC 162	Machine Shop Practices II <sup>1</sup>	2	3	3
<b>Total</b>		<b>10</b>	<b>11</b>	<b>14</b>
<b>Second Semester (Spring)</b>				
MAC 122	Numerical Control II <sup>2</sup>	2	3	3
MAC 163	Machine Shop Practices III <sup>3</sup>	2	3	3
MAC 150	Introduction to CAM	2	4	3
MAC 164	Machine Shop Practices IV <sup>4</sup>	2	3	3
<b>Total</b>		<b>8</b>	<b>13</b>	<b>12</b>
<b>Total Minimum Credits Required for Certificate</b>				<b>26</b>

1. Prerequisite or Corequisite of MAC 161
2. Prerequisite of MAC 121
3. Prerequisite of MAC 161, 162
4. Prerequisite or Corequisite of MAC 163