

# Machine Shop Technology

## Associate in Occupational Technology (AOT)

Available: Phil Campbell and Shoals Campuses  
Advisor: M. Johnson (5247) mpjohnson@nwscce.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

NOTE:

\* Computer competency skills are embedded within one or more courses required in this curriculum.

**Program:** Machine Shop Technology

### Area I: Written Composition

Item #	Title	Credits
	Technical English or Higher	3

### Area II: Humanities and Fine Arts

**Preferred ART 100 or MUS 101.** \*Note SPH107 or foreign language may NOT be the one course designated to fulfill the SACSCOC Core Requirement for Humanities and Fine Arts.  
Please choose from one of the following:

Item #	Title	Credits
	Humanities and Fine Arts Elective	3

### Area III: Natural Sciences and Mathematics

A minimum of 3 hours in MTH 116 or MTH 100 or Higher is required. The additional 3-4 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physical science, physics, environmental technology..

Item #	Title	Credits
	Technical Mathematics or higher	3
	Natural Science Elective	4

## Area IV: Social and Behavioral Sciences

Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.

Please choose from one of the following:

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
	Social and Behavioral Sciences Elective	3

## Area V: Machine Shop Electives

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
MSP 101	Basic Machining Technology	5
MSP 102	Intermediate Machining Technology	5
MSP 103	Advanced Machining Technology	5
MSP 104	Basic Machining Calculations	2
MSP 105	Lathes	3
MSP 107	Milling Machines	3
MSP 115	Advanced Milling Machines	5
MSP 121	Basic Blueprint Reading for Machinists	2
MSP 131	Introduction to Metrology	2
MSP 142	Advanced Machining Calculations	2
MSP 181	Special Topics - Grinding	2
MSP 221	Advance Blueprinting	2
MSP 291	Co-Op in Machine Shop Technology	3
	MSP Elective	2
	MSP Elective	2

## Choose One Minor

### Minor Requirements: Welding (Fall and Spring Semester)

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
WDT 108	SMAW Fillet/OFC	3
WDT 109	SMAW Fillet/Pac/Cac	3
WDT 122	SMAW Fillet/OFC Lab	3
WDT 123	SMAW Fillet/Pac/CAC Lab	3

### Minor Requirements: Welding (Summer Semester)

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
WDT 110	Industrial Blueprint Reading	3
WDT 119	Gas Metal Arc/Flux Cored Arc Welding Theory	3
WDT 124	Gas Metal Arc/Flux Cored Arc Welding Lab	3
WDT 219	Welding Inspection & Testing	3

## MSSC Certified Production Technician

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
ADM 291	MSSC Safety Course	3
ADM 292	MSSC Quality Practices and Measurement Course	3
ADM 293	MSSC Manufacturing Processes and Production Course	3
ADM 294	MSSC Maintenance Awareness Course	3

## Minor Requirements: Air Conditioning/Refrigeration Technology

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
ACR 111	Principles of Refrigeration	3
ACR 112	HVACR Service Procedures	3
ACR 132	Residential Air Conditioning	3
ACR 209	Commercial Air Conditioning Systems	3
<b>Minimum Credit Hours for Graduation:</b>		<b>73</b>