



## 2011-2012 Career Planning Guide

### MANUFACTURING/MACHINIST TECHNOLOGY

#### Associate in Applied Arts and Sciences Degree (A.A.A.S.)

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**Shoreline Community College**

16101 Greenwood Avenue North  
Shoreline, Washington 98133

Length of Program: 110-112 credits, 6-7 quarters

Completion Award: A.A.A.S. Degree

**Program Advisors:**

Keith Smith 206-546-6969 Room 2501F

<http://www.shoreline.edu/industrialtech.html>

**Approximate Quarterly Costs**

Check quarterly class schedule for Tuition Table

Parking Fee Per Quarter \$15

Book prices vary widely. Average Quarterly Cost \$200

Additional / Lab Instructional Fees \$300

**Enrollment:** Fall, Winter, Spring, Summer

[ksmith2@shoreline.edu](mailto:ksmith2@shoreline.edu)

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**PROGRAM DESCRIPTION**

This is an intensive program designed to prepare qualified individuals for entry into the job market as a Manufacturing Technician. Instruction covers basic set up and operation of machines, blueprint reading, shop mathematics, machine tool theory, inspection, surface plate techniques, and Statistical Process Control (SPC). Specialist courses include Computer Aided Manufacturing (CAM), Computer Numerical Control Programming (CNC), and Rapid Prototyping. Students will be involved in the production and machining of industry parts. Instruction will also include the use and care of a wide variety of measuring devices used in the machining profession.

**PROGRAM OUTCOMES**

Students who successfully complete this program should be able to:

1. Perform entry-level tasks as a machinist.
2. Use mathematics skills to solve basic manufacturing problems.
3. Program basic machine tools to perform routine machining functions.
4. Safely set-up Mills and Turning tools making tool length and work piece offsets.
5. Applying teamwork, inspection and SPC to manufacturing problems.
6. Utilizing properties of materials, establishing correct speeds and feeds.
7. Interpreting mechanical blueprints .
8. Use current software for computer assisted machining.

**CAREER OPPORTUNITIES**

The demand in the manufacturing sector is excellent for individuals with good math, communication, and problem solving skills. With more and more manufacturing occurring in the Puget Sound Region the demand for machinists should continue to grow.

**POTENTIAL POSITIONS INCLUDE**

Most large manufacturing firms and many small manufacturing firms in the Puget Sound Region hire machining technicians. These firms include aerospace, plastics, molding, and general manufacturing working as machining technicians, and programmers, Salary Range-\$2,312-\$3,763 month. Source: 2005 WOIS Website-*Where Are You Going?* Entry level salaries vary with each employer and individual skill level. For employment outlook, see the U.S. Dept. of Labor Occupational Outlook Handbook at <http://www.bls.gov/OCO/>.

# MANUFACTURING/MACHINIST TECHNOLOGY

Shoreline Community College: A.A.A.S. Degree

## PROGRAM PREREQUISITES

**Certificate of Basic Manufacturing** (See CBM Career Planning Guide).

All students must interview and have approval of the manufacturing instructors before registering for this program. Many classes are variable credit and lab time is arranged with the instructor. Please work closely with instructors or program advisors.

**Courses marked with an \* are the General Education/Related Instruction requirements for this program.**

## PROGRAM REQUIREMENTS

### Suggested course sequence

<u>1st Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	113	CBM	21	___

<u>2nd Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	115	Manufacturing Technology	20	___

<u>3rd Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	120	Manufacturing Tech Apps	20	___

<u>4th Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	196	Mfg Internship	9	___
BUSTC	215	Prof Communications		
<b>or</b>				
ENGL&	101 *	English Composition I	5	___

<u>5<sup>th</sup> Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	215	MfgT Programming	6	___
MFGT	225	Rapid Prototyping	3	___
Human Relations *			3-5	___
See approved list				
Multicultural Education *			5	___
See approved list				

<u>6th Quarter</u>			<u>Cr.</u>	<u>Gr.</u>
MFGT	220	Computer Aided MFG (CAM)	6	___
MFGT	296	CAM Internship	9	___
PE	284 *	First Aid and Safety	3	___

<b>Total Credits Required</b>	<b>110-112</b>
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*Every effort has been made to ensure the accuracy of the information in this publication. However, the information is subject to change without notice, and final career decisions are the responsibility of the reader.*

COMMENTS: \_\_\_\_\_

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STUDENT NAME	
_____	
STUDENT I.D.	
<b>APPROVAL TO GRADUATE</b>	
_____	_____
ADVISOR APPROVAL	DATE
_____	_____
DIVISION CHAIR APPROVAL	DATE
_____	_____
CREDENTIALS APPROVAL	