



## 2011-2012 Career Planning Guide MANUFACTURING/MACHINIST Certificate of Proficiency

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**Shoreline Community College**  
16101 Greenwood Avenue North  
Shoreline, Washington 98133  
Length of Program: 61 credits, 3 quarters

<b>Approximate Quarterly Costs</b>	
Check quarterly class schedule for Tuition Table	
Parking Fee Per Quarter	\$15
Book prices vary widely. Average Quarterly Cost	\$100
Additional Instructional Fees	\$150

Completion Award: Certificate of Proficiency

**Program Advisors:**

Keith Smith 206-546-6969 Room 2501F  
<http://www.shore.ctc.edu/shoreline/industrialtech.html>

**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 Machinist (Computer Numerical Control). Instruction covers programming and basic set up and operation of machines, blueprint reading, shop mathematics, machine tool theory, inspection, surface plate techniques, and Statistical Process Control (SPC). 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 (CAM).

### 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 machinists. These firms include aerospace, plastics, molding, and general manufacturing working as machinists, 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

Shoreline Community College: Certificate of Proficiency

## 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.

## PROGRAM REQUIREMENTS

### Suggested course sequence

<u>1st Quarter</u>			<u>Cr.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	—

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<b>Total Credits Required</b>	<b>61</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

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STUDENT I.D.

### APPROVAL TO GRADUATE

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ADVISOR APPROVAL

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DATE

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DIVISION DEAN APPROVAL

\_\_\_\_\_  
DATE

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CREDENTIALS APPROVAL