Manufacturing/Engineering Technology: Computer Numerical Control (CNC) Operator

Career Pathways Certificate

Holland code family: Doers

www.roguecc.edu/Counseling/HollandCodes/test

About the Program

This Career Pathways two-term certificate integrates conventional manufacturing techniques with computer numerical control (CNC) manufacturing skills. This training is the entry point in the Manufacturing Career Pathway leading to the Computer Numerical Control (CNC) Technician program and to a valuable career in the manufacturing engineering technology field. In addition to technical training, students receive a solid foundation in mathematics and computer skills. Graduates typically enter the workforce as computer numerical control (CNC) operators. With additional on-the-job experience and continued education, students can transition into CNC programming and quality control inspection.

The U.S. Department of Education requires disclosure of specific information about career and technical certificate programs to prospective students. Data includes Standard Occupational Classification (SOC) codes, graduation rates, tuition and fees, typical costs for books and supplies, job placement rates for students completing the programs, and median loan debt incurred by students completing the programs. For more information visit http://www.roguecc.edu/GainfulEmployment.

Entry Requirements

Students are required to complete the Placement Process to determine skill level and readiness in math, reading, and writing. As part of their training program, students must begin with the courses within their skill level as determined by the results of their placement assessment. In addition, students may also be required to enroll in classes that would increase their employability and success.

Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Manufacturing and Engineering Technology Department chair's recommendation. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services Office and the Manufacturing/Engineering Technology Department.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor and review the roadmap below and at http://www.roguecc.edu/Programs/CareerPathways.

Computer Numerical Control (CNC) Operator
Career Pathways Certificate of Completion (28-29 credits)
- Machine operator (Multiple machine tool setters, operators, and tenders, metal and plastic [1]
- Computer-controlled machine tool operators (metal and plastic) [1]

Computer Numerical Control (CNC) Technician
Certificate of Completion (51-53 credits)
- Computer Numerical Control (CNC) Technician [1]
- Computer Aided Drafter/Designer (CAD) [1]
- Entry-level machinist [1]

Completion Requirements

Students must complete all courses in this program with a grade of "C" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C" or better grade.
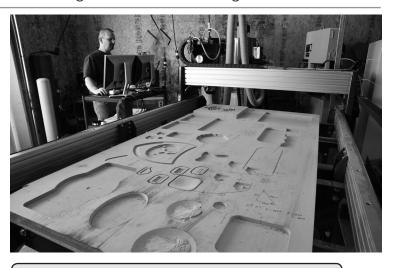
What skills will you learn?

Visit http://go.roguecc.edu/department/program-learning-outcomes.

What are the employment opportunities?

Visit http://www.roguecc.edu/GainfulEmployment.

Manufacturing/ Engineering Technology – Articulated Associate of Science (AS) Degree (105-108 credits), Transfers to Oregon Tech (OT)
- Mechanical engineering technician [1]
- Machinist [1]
- Engineering assistant [1]

Manufacturing/ Engineering Technology – Associate of Applied Science (AAS) Degree (97-108 credits)
- Mechanical engineer [1]
- Manufacturing engineer [1]
- Industrial engineer [1]
- Materials engineer [1]

Articulated with OT's Mechanical Engineering Technology program Bachelor of Science (BS)
- Mechanical engineer [1]
- Manufacturing engineer [1]
- Industrial engineer [1]
- Materials engineer [1]

Management, SOU, Bachelor of Applied Science articulated with RCC's AAS degree
- Supervisor/Manager [1]
- Business owner [1]

Manufacturing Engineering OT's Master of Science
- Engineering manager [1]
- Natural science manager [1]

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[1] For current wage and gainful employment data, see the Jobs & Wages box within the specific program roadmap at www.roguecc.edu/CareerPathways/

Prerequisites

Course No.	Course Title	Credits
MEC102	Basic Hand Tools or demonstrated proficiency	0-3
MTH20	Pre-algebra or designated placement test score	0-4
RD90/WR90	College Reading/Fundamentals of Composition or WR91 Fundamentals of Academic Literacy (WR91 substitutes for both RD90 and WR90) or designated placement test score	0-8
Total Prerequisite Credits		**0-15**

Required Courses

Course No.	Course Title	Credits
First Term		
MET101	Mechanical Drafting	3
MET105	Blueprint Reading - Mechanical	3
MFG116	Metrology	2
MFG121	Manufacturing Processes I	4
MTH63	Applied Algebra I or MTH60 Fundamentals of Algebra I or higher level math	4
		16

Second Term

MET121	Computer Aided Drafting I: Mechanical (SolidWorks)	3
MFG122	Manufacturing Processes II	4
MFG140	CNC Controls	2
WR115	Introduction to Expository Writing or	
	BT113 Business English I or higher level composition	3-4
		12-13

TOTAL PROGRAM CREDITS   **28-29**

For more information contact the Manufacturing and Engineering Technology Department:

Grants Pass or Medford 541-245-7902

Toll free in Oregon . . . . 800-411-6508, Ext. 7902

email . . . . manufacturing@roguecc.edu

Web address . . . . www.roguecc.edu/manufacturing

TTY . . . . Oregon Telecom Relay Service, 711

This advising guide is for advising purposes only. Please see current college catalog for additional information on specific college policies and graduation requirements.

RCC is an open institution and does not discriminate. For RCC's non-discrimination policy and a full list of regulatory specific contact persons visit the following webpage: www.roguecc.edu/nondiscrimination.

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