

Manufacturing/Engineering Technology – Transfer to Oregon Tech

Holland code family: Doers

Associate of Science Degree

www.roguecc.edu/Counseling/HollandCodes/test

About the Program

Based on a signed articulation agreement, Rogue Community College and Oregon Tech offer an Associate of Science degree for students who want to pursue a bachelor's degree in manufacturing. This degree was developed as a cooperative venture between Oregon Tech and RCC and offers knowledge and application components drawn from curriculum at both institutions.

The Associate of Science degree transfers directly into the bachelor's degree program at Oregon Tech in Manufacturing/Engineering Technology and graduates are guaranteed junior standing in the program.

Students must work closely with their advisors to ensure transferability of this program. If students transfer before completing this degree or transfer in a major not covered by prior agreements, their courses will be evaluated individually toward the transfer requirements of the college of their choice. Students are advised to obtain written approval from Oregon Tech to guarantee their catalog of transfer for three years.

Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for manufacturing programs are:

Operate, set up, and program manual and CNC mills and lathes to print specifications.

Interpret and create mechanical blueprints to industry standards.

Follow, develop, and troubleshoot manufacturing processes and procedures.

Demonstrate the ability to adhere to personal and industry safety standards to protect personnel and equipment.

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 through the Placement Process. In addition, students may also be required to enroll in classes that would increase their employability and success.

Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C" or better. 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.

Prerequisites

Course No.	Course Title	Credits
CS/CIS	Approved 3-4 credit Computer Science or Computer Information Science class, CS120/CIS120 or above, or documented computer proficiency within the past ten years.	0-4
MTH95	Intermediate Algebra or designated placement test score	0-4
WR115	Introduction to Expository Writing or designated placement test score	0-3

Total Prerequisite Credits **0-11**

First Year Required Courses

Course No.	Course Title	Credits
First Term		
MFG101	Introduction to Manufacturing	3
MFG121	Manufacturing Processes I	4
—	Approved humanities electives 1	6-8
		13-15

Second Term

LIB127	Introduction to Academic Research	1
MET121	Computer Aided Drafting I: Mechanical (SolidWorks)	3
MET160	Materials and Metallurgy	3



MTH111	College Algebra	4
WR121	English Composition I	4
		15

Third Term

MET122	Computer Aided Drafting II: Mechanical (SolidWorks)	3
MFG241	Computer Numerical Control Programming – Mill	4
MTH112	Elementary Functions	4
WR122	English Composition II	4
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Fourth Term

CS125SS/CIS125SS	Spreadsheet Applications or BA285 Advanced Business Applications: Excel	4
MTH243	Probability and Statistics	4
WLD101	Welding Fundamentals I	3
—	Social science elective ²	3-4
		14-15

Total First Year Credits **57-60**

Second Year Required Courses

Course No.	Course Title	Credits
Fifth Term		
MFG242	Computer Aided Manufacturing I: Mastercam	4
MTH244	Inferential Statistics	4
MTH251	Calculus I (Differential)	5
PH211	General Physics (Calculus Based) I with lab and recitation or PH201 General Physics I with lab and recitation	5
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Sixth Term		
MFG230	Statistics and Quality Control	3
MFG243	Computer Aided Manufacturing II: Mastercam	4
MTH252	Calculus II (Integral)	5
PH212	General Physics (Calculus Based) II with lab and recitation or PH202 General Physics II with lab and recitation	5
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Seventh Term

CHEM104	Introductory Chemistry with lab and recitation or CHEM221 General Chemistry I with lab and recitation	5
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SP111	Fundamentals of Public Speaking	4
WR227	Technical Writing	4
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Total Second Year Credits 48
TOTAL PROGRAM CREDITS 105-108

1 Approved Humanities Electives

(Complete at least two courses from the following list, 6-8 credits. A maximum of three performance or studio-based credits indicated by asterisk are allowed.)

Course No.	Course Title	Credits
ART115,116*	Basic Design (Composition)/Basic Design (Color Theory)	3-3
ART131,132,133*	Introduction to Drawing	3-3-3
ART204,205,206	History of Art I, II, III	4-4-4
ART234,235,236*	Figure Drawing I, II, III	3-3-3
ART237,238,239*	Illustration	3-3-3
ART281,282,283*	Painting I, II, III	3-3-3
ENG104,105,106	Introduction to Literature	4-4-4
ENG107,108,109	World Literature	4-4-4
ENG201,202	Shakespeare I, II	4-4
ENG204,205,206	Survey of English Literature	4-4-4
ENG253,254,255	Survey of American Literature	4-4-4
ENG257	African American Literature	4
ENG260	Introduction to Women Writers	4
ENG275	The Bible as Literature	4
HUM101,102,103	Introduction to Humanities	4-4-4
HUM215,216,217,218,219	Native American Arts and Cultures	4-4-4-4-4
MUS101	Music Fundamentals	3
MUS105	Music Appreciation	3
MUS108	Music in World Cultures	4
MUS111,112,113	Music Theory and Aural Skills I, II, III	4-4-4
MUS201	Introduction to Western Music	4
MUS205	History of Jazz	3
MUS206	Introduction to Rock Music	3
MUS208	Film Music	3
MUS211,212,213	Music Theory and Aural Skills IV, V, VI	4-4-4
MUS261,262,263	History of Western Music I, II, III	4-4-4
MUS264,265,266	History of Rock I, II, III	3-3-3
PHL101,102,103	Philosophical Problems/Ethics/Critical Reasoning	4-4-4
REL201	World Religions	4
REL243	Nature, Religion and Ecology	4
SPAN201,202,203	Second Year Spanish I, II, III	4-4-4

2 Approved Social Science Electives

(Complete at least one course from the following list, 3-4 credits.)

Course No.	Course Title	Credits
ANTH110,150	Introduction to Cultural Anthropology/Archaeology	4-4
CJ100	Foundations and Ethics in Criminal Justice	4
CJ101/SOC244	Introduction to Criminology	4
CJ110	Introduction to Law Enforcement	4
CJ120	Introduction to the Judicial Process	4
CJ130	Introduction to Corrections	4
CJ201/SOC221	Juvenile Delinquency	4
CJ214	Crime, Justice and Diversity	4
CJ243/SOC243	Drugs, Crime and Addiction	4
ECON201,202	Principles of Microeconomics/Macroeconomics	4-4
GEOG110	Introduction to Cultural and Human Geography	3
GEOG120	World Regional Geography	3
HST104	World Civilizations: Prehistory - Middle Ages	4
HST105	World Civilizations: Byzantium - Present	4
HST201	U.S. History through Reconstruction	4
HST202	U.S. History: Post-Reconstruction - Present	4
IS111	Introduction to International Studies II	3
PS201,202,203	U. S. Government I, II, III	3-3-3

PSY101	Psychology of Human Relations	3
PSY119	Psychology of Personal Growth	4
PSY201,202	General Psychology I, II	4-4
PSY219	Introduction to Abnormal Psychology	4
PSY231	Human Sexuality	3
SOC204,205	Introduction to Sociology, American Society	4-4
SOC211	Social Deviance and Social Control	3
SOC213	Race and Ethnicity in the U.S.	4
SOC218	Sociology of Gender	4
SOC225	Social Problems and Solutions	4
SOC228	Environment and Society	4
SOC230	Introduction to Gerontology	4

For more information contact the Manufacturing/Engineering Technology Department:

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

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