

Industrial Welding Technology

Holland code family: Doers

About the Program

The Associate of Applied Science degree in Industrial Welding Technology is designed for students whose goals are to enter the job market as entry-level welders/fabricators. Upon completing the program, students will be qualified to test for certification to the American Welding Society (AWS) D1.1-06 Structural Steel Welding Codes and the AWS D1.3-08 Sheet Steel Welding Code. Students would also be able to test to certify as pipe welders to the American Society of Mechanical Engineers (ASME) Section IX Welding Code, and as Level I Entry Level and Level II Advanced Level Welder by the AWS EG2.0 and 3.0 welder training programs.

Additionally, students will have a good foundation in structural steel layout, pipefitting, and sheet metal pattern development. Students will also be prepared with mathematics and communication skills and be knowledgeable of the human relations skills necessary to become valuable employees in the industrial welding field.

If students intend to transfer to SOU's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information or visit www.sou.edu/degreecompletion.

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. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

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 at www.roguecc.edu/Programs/CareerPathways.

Graduation Requirements

Students must complete all courses in this program with a grade of "C" or better to receive their degrees. 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>.

Prerequisites

Course No.	Course Title	Credits
BT113	Business English I or WR115 Introduction to Expository Writing or higher level composition ¹	3-4
CS___	Approved 3-4 credit computer science class, CS120 or above or documented computer proficiency ^{1,2}	0-4
MEC102	Basic Hand Tools or demonstrated proficiency	0-3
MTH20	Pre-algebra or designated placement test score	0-4
RD90	College Reading/Fundamentals of Composition	<u>0-4</u>

Total Prerequisite Credits 3-19

Required Courses

Course No.	Course Title	Credits
BT114	Business English II or WR121 English Composition I or higher level composition ³	4
GS104	Physical Science with lab or approved program elective	3-4
HE112	Emergency First Aid	1
LIB127	Introduction to Academic Research	1



MET101	Mechanical Drafting	3
MFG116	Metrology	2
MFG121	Manufacturing Processes I	4
MFG122	Manufacturing Processes II	4
MTH63	Applied Algebra I or MTH60 Fundamentals of Algebra I or higher level math	4
PSY101	Psychology of Human Relations or BT101 Human Relations in Organizations	3
WLD104	Blueprint Reading – Mechanical	3
WLD111	Technology of Industrial Welding I	6
WLD112	Technology of Industrial Welding II	6
WLD113	Technology of Industrial Welding III	6
WLD121	Fabrication and Repair Practices I	5
WLD122	Fabrication and Repair Practices II	5
WLD211	Technology of Industrial Welding IV	6
WLD212	Technology of Industrial Welding V	6
WLD213	Technology of Industrial Welding VI	6
WLD220	Machine Tool Maintenance and Repair	3
WLD221	Welding Codes, Procedures and Inspections	3
WLD225	Industrial Metallurgy or MET160 Materials and Metallurgy	3
WLD280	Cooperative Work Experience/Welding or WLD250F Capstone	3
—	Approved program elective	<u>3-6</u>

TOTAL PROGRAM CREDITS 93-97

Approved Program Electives

(minimum of 3-6 credits required)

Course No.	Course Title	Credits
BA109	Ready, Set, Work: Techniques for Landing a Job	2
DS260	Hydraulic Systems for Heavy Equipment w/Lab	4
EET101	Introduction to Electronics	3
MEC103	Industrial Safety	1
MEC124	Hoisting and Rigging I	3
MEC125	Pneumatics I	3
MEC130	Hydraulics I	3
MET121	Computer Aided Drafting I: Mechanical (SolidWorks)	3
MET122	Computer Aided Drafting II: Mechanical (SolidWorks)	3
MET123	Computer Aided Drafting III: Mechanical (SolidWorks)	3
MFG123	Manufacturing Processes III	4
MFG211	Manufacturing Power and Control Electronics	4
MFG232	Electric Motor Control I	3

MFG233	Electric Motor Control II	3
MFG291	Laser Cutting and Engraving Fundamentals	2
WLD160	American Welding Society (AWS) Certification Seminar: Plate	1
WLD250	Selected Topics in Welding	variable
WLD250P	Selected Topics in Welding: CNC Plasma Cutting	3
WLD260	American Welding Society (AWS) Certification Seminar: Pipe	1
—	Any college-level course numbered 100 or above	variable

¹ Required for graduation.

² Successful completion of CS120 or otherwise meeting the proficiency requirement within the last 10 years fulfills this requirement. Contact a computer science advisor to help determine placement.

³ Students must complete either BT113 and BT114 or WR115 and WR121 (or higher level composition classes). Three credits of speech may be substituted for 3-4 credits of writing. Students who have successfully completed the 3-credit versions of BT113 and BT114 will have met this requirement.

For more information contact the Industrial Welding Department:

Grants Pass or Medford 541-245-7809
Toll free in Oregon800-411-6508, Ext. 7809
emailwelding@rogucecc.edu
Web address www.rogucecc.edu/welding
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.rogucecc.edu/nondiscrimination.

