



Welding Technology Certificate – 16 credit hours

This degree map provides a guide to completing a certificate program or degree at Independence Community College. Completion is subject to prerequisite requirements and availability of the programs/courses.

First Semester	Credits	SGE	Completed
OSHA (IND 1301)	1		
Welding Cutting Processes (IND 1333)	3		
Gas Metal Arc Welding (IND 1313)	3		
Semester Total	7		

Second Semester	Credits	SGE	Completed
Shielded Metal Arc Welding (IND 1303)	3		
Gas Tungsten Arc Welding (IND 1323)	3		
Welding Blueprint Reading (IND 1343)	3		
Semester Total	9		
Certificate Total	16		

*Students placing into co-requisite course will also enroll in 2 credit hour supplemental course

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2025-2026 Catalog

Communications Elective Options (SGE 020)	
Course	Credits
Public Speaking (COM 1203)	3
Interpersonal Communication (COM 1233)	3

Mathematics & Statistics Elective Options (SGE 030)	
Course	Credits
College Algebra (MAT 1023)	3
Contemporary Mathematics (MAT 1123)	3
Analytical Geometry & Calculus I (MAT 1055)	5
Calculus II (MAT 2025)	5
Business Calculus (MAT 1153)	3
Plane Trigonometry (MAT 1093)	3
Elementary Statistics (MAT 1103)	3

Natural & Physical Sciences Bucket (SGE 040)	
Course	Credits
General Biology (BIO 1005)	5
Chemistry for Non-Majors (PHS 1015)	5
Descriptive Astronomy (PHS 1085)	5
Physical Science (PHS 1005)	5
Biology I (BIO 1115)	5
Biology II (BIO 2125)	5
Chemistry I for Majors (PHS 1025)	5
Chemistry II for Majors (PHS 1035)	5
College Physics I (PHS 1055)	5
College Physics II (PHS 1065)	5
Anatomy and Physiology (BIO 2045)	5
Anatomy and Physiology II (BIO 2064)	5
Microbiology (BIO 2055)	5
Introduction to Organic Chemistry and Biochemistry (PHS 2075)	5
Organic Chemistry I (PHS 2035)	5
Organic Chemistry II (PHS 2045)	5
Engineering Physics I (PHS 2055)	5
Engineering Physics II (PHS 2065)	5
Environmental Biology (BIO 2035)	5

Social & Behavioral Science Elective Options (SGE 050)	
Course	Credits
World Regional Geography (GEO 2013)	3
Intro to Race & Ethnic Relations (SOC 2113)	3
General Psychology (BEH 1003)	3
Developmental Psychology (BEH 2003)	3
Intro to Sociology (SOC 1003)	3
American Government (POL 1023)	3
Microeconomics (BUS 2023)	3
Macroeconomics (BUS 2033)	3
Social Problems (SOC 2023)	3
Introduction to Political Science (POL 1013)	3
Financial Accounting (ACC 1043)	3
Introduction to Business (BUS 1093)	3
Personal Finance (BUS 1003)	3

Arts & Humanities Elective Options (SGE 060)	
Course	Credits
Art Appreciation (ART 1043)	3
Theatre Appreciation (THR 1023)	3
Music Appreciation (MUE 1303)	3
Ethics (PHI 1073)	3
World History I (HIS 1003)	3
World History II (HIS 1013)	3
U.S. History I (HIS 1023)	3
U.S. History II (HIS 1063)	3
Intro to Philosophy (PHI 2003)	3
Intro to Literature (ENG 1073)	3
Logic and Classical Reasoning (PHI 2073)	3
Ceramics (ART 2023)	3
Painting I (ART 1033)	3
Creative Writing (ENG 2023)	3
Acting I (THR 1023)	3
Stagecraft (THR 1033)	3
Basic Drawing I (ART 1023)	3
Music Theory I (MUE 1093)	3
Intro to Mass Communications (COM 1033)	3
New Testament History (REL 1013)	3

Institutionally Designated Elective Options (070)	
Course	Credits
Personal Finance (BUS 1003)	3
Social Problems (SOC 2023)	3
Intro to Race & Ethnic Relations (SOC 2113)	3
Computer Concepts & Applications (CIT 1003)	3
World Religions (REL 1053)	3
Creative Writing (ENG 2023)	3
African American History (HIS 1163)	3
American Literature I (ENG 1083)	3
American Literature II (ENG 2113)	3
British Literature I (ENG 2123)	3
British Literature II (ENG 2133)	3
Introduction to Leadership (MDM 1303)	3
Introduction to Business (BUS 1093)	3
Anthropology (SOC 1023)	3
Spanish I (FRL 1025)	5
Spanish II (FRL 1035)	5
New Testament History (REL 1013)	3
World Religions (REL 1053)	3
Topics in Literature (ENG 2153)	3
Nutrition (BIO 2053)	3
Personal and Community Health (HPR 1053)	3
Drugs and Behavior (BEH 2043)	3
Introduction to Literature (ENG 1073)	3
Introduction to Dramatic Literature (ENG 2043)	3

Systemwide General Education (SGE) Key

010	English	6 hours
020	Communications	3 hours
030	Math & Statistics	3 hours
040	Natural & Physical Science	4-5 hours
050	Social & Behavioral Sciences	6 hours
060	Arts & Humanities	6 hours
070	ICC Designated	6 hours

Advising Notes

- Students must pass English Composition I with a “C” or better to enter English Composition II
- Students must enroll in the co-requisite class for English Composition I or College Algebra if their test scores and high school GPA indicate the additional support would be beneficial to student success
- To be eligible to graduate students must have a 2.0 cumulative GPA