



WELDING TECHNOLOGY – Associate in Applied Science (AAS) (2018-2019 Catalog)

Welding and Fabrication – Certificate (CE); Welding Fundamentals – Specialized Diploma (SD)

Student Name: _____

Advisor Name: _____

Developmental Education Courses (if required)

English Placement			Math Placement		
<input type="checkbox"/>	ACLS025	Academic Reading and Writing Skills I	<input type="checkbox"/>	MATH 020	Pre-Algebra
<input type="checkbox"/>	ACLS026	Academic Reading and Writing Skills II	<input type="checkbox"/>	MATH 022	Elementary Algebra
<input type="checkbox"/>	ACLS050	Introduction to Academic Literacy	<input type="checkbox"/>	MATH 026	Intermediate Algebra
<input type="checkbox"/>	ENGL027	Writing Skills Workshop			

SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion

Plans can be modified to fit the needs of part-time students by adding more semesters

Choose your courses with your Success Navigator or Faculty Advisor.

Complete	Semester 1						
	Course #	Course Title	Credits	Applies to	Gen Ed	Term/Location Offered (Fall, Winter, Spring, Summer) (Bethlehem, Monroe, Fowler, Online)	Pre-requisites / Co-requisites (PRE / CO)
<input type="checkbox"/>	COLS101	College Success	1	AAS, CE, SD		FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>	CISC101	Introduction to Computers	3	AAS, CE	CL	FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>	EMEC118	Hand and Power Tools	1	AAS, CE, SD		FS, SP, SU; BETH	
<input type="checkbox"/>	ENGG117	Technical Drawings and Specifications	3	AAS, CE, SD		F, SP; BETH	
<input type="checkbox"/>	OSAH100	Industry Outreach Safety Education	1	AAS, CE, SD		F, SP; BETH	
<input type="checkbox"/>	MATH103	Applications in Mathematics	3	AAS, CE	QL	F, SP, SU; BETH, DIST	
<input type="checkbox"/>	WELD105	Introduction to Welding Processes	5	AAS, CE, SD		F, SP, SU; BETH	
<input type="checkbox"/>	WELD135	Welding Fabrication and Symbols	2	AAS, CE, SD		F, SP; BETH	PRE or CO: WELD105
	Total Semester Credits:		19				
Complete	Semester 2						
	Course #	Course Title	Credits	Applies to	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	EMEC117	Industrial Rigging	1	AAS, CE, SD		FA, SP, SU; BETH	
<input type="checkbox"/>	ENGL101	English I	3	AAS, CE	Communication	FA, SP, SU; BETH, MROE, DIST	PRE: ENGL Placement Policy
<input type="checkbox"/>	WELD110	Introduction to Pipe Welding Processes	3	AAS, CE, SD		FA, SP; BETH	PRE or CO: WELD123
<input type="checkbox"/>	WELD123	Advanced Plate Welding Processes	5	AAS, CE, SD		FA, SP; BETH	PRE: WELD105
<input type="checkbox"/>	WELD125	GTAW and Semiautomatic Welding Processes	5	AAS, CE, SD		FA, SP; BETH	PRE: WELD105
	Total Semester Credits		17				
Complete	Semester 3						
	Course #	Course Title	Credits	Applies to	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	ENGL151T	English II (Technical Writing)	3	AAS,	Communication	FA, SP, SU; BETH, MROE, DIST	PRE: ENGL101
<input type="checkbox"/>	PHYS152	Physical Science II	3	AAS,	Science	FA, SP, SU; BETH, DIST	
<input type="checkbox"/>	WELD205	Adv Gas Tungsten & Semiautomatic Welding Processes	4	AAS, CE		FA; BETH	PRE: WELD110 and WELD125
<input type="checkbox"/>	WELD224	Pipe Welding Processes II	3	AAS, CE		FA; BETH	PRE: WELD110
<input type="checkbox"/>	WELD230	Welding & Structural Blueprint Reading	4	AAS, CE		FA; BETH	PRE: WELD123
	Total Semester Credits		17				
Complete	Semester 4						
	Course #	Course Title	Credits	Applies to	Gen Ed	Term/Location Offered	Pre-requisites/Co-requisites
<input type="checkbox"/>	CMTH102	Introduction to Communication	3	AAS	Communication	FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>	WELD255G	Introduction to Metallurgy (WI)	3	AAS		SP; BETH	PRE: ENGL151, MATH 103, PHYS152 & WELD205
<input type="checkbox"/>		AH, SIT, or SSHB General Education Elective	3	AAS	AH, SIT, or SSHB	FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>		AH, SIT, or SSHB General Education Elective	3	AAS	AH, SIT, or SSHB	FA, SP, SU; BETH, MROE, DIST	
<input type="checkbox"/>		Elective*	3	AAS		FA, SP, SU; BETH, MROE, DIST	
	Total Semester Credits:		15				
	Total Degree Credits:		68 (AAS)	50 (CE)	Welding and Fabrication Certificate**	15 (SD)	Welding Fundamentals Specialized Diploma

Notes:

- *Suggested Elective: WELD 235 – Welding Inspection or WELD 245 – Plasma Arc Cutting (**WELD245 is required to complete the Welding and Fabrication Certificate)
- 6 Credits from at least two of the following General Education categories: Arts & Humanities (AH), Societies and Institutions over Time (SIT), and Scientific Study of Human Behavior (SSHB). One course should be Diversity and Global Awareness (D)
- Completion of WELD 255G satisfies Writing Intensive (WI) requirement.

Program Narrative:

- Northampton's Welding Technology A.A.S. degree program is designed to prepare you to enter a modern welding setting. The program offers career-specific coursework for a student wishing to complete their studies within four semesters. The program also provides course offerings that prepare you to work as a team player in a specialized manufacturing environment.
- Your studies will include state-of-the-art welding equipment and principles from the American Welding Society. You will learn the marketable skills required to work effectively with other people in a manufacturing environment. We emphasize development of professional attitudes, values, and ethics. As you progress through the program, you'll gain critical thinking, priority setting, and decision-making skills needed in today's quality-oriented business environment.
- Graduates of this AAS degree program may continue on to a Baccalaureate program.

Program Learning Outcomes:

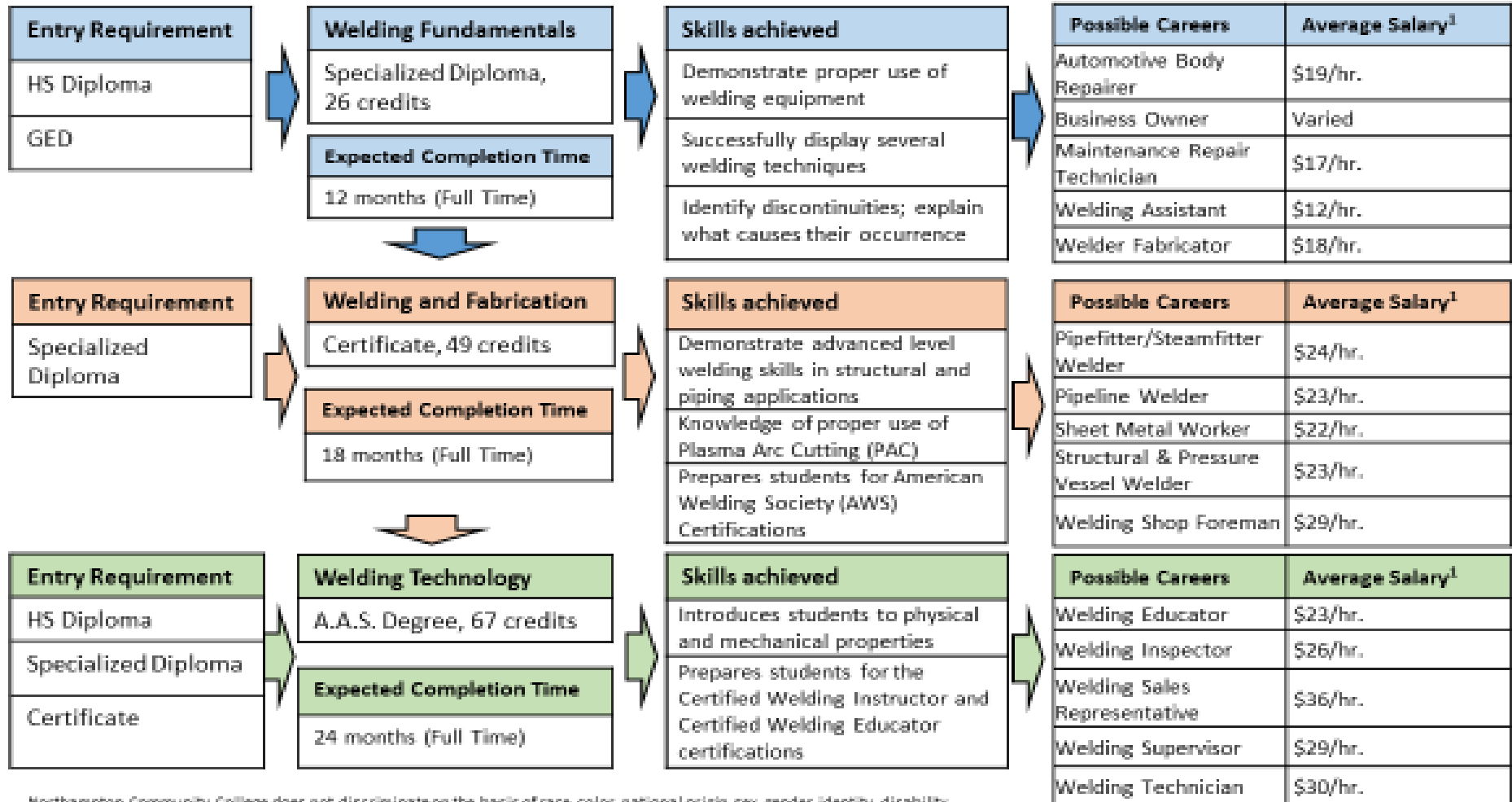
- Demonstrate an ability to work independently and collaboratively.
- Analyze and present data in an acceptable and standardized manner.
- Solve common weldability problems.
- Demonstrate a basic framework of technical vocabulary and graphics interpretation.
- Demonstrate observational, integrative, and synthetic skills.
- Demonstrate the proper use and care of common welding equipment.
- Apply basic defect prevention philosophy and techniques to achieving weld integrity.
- Describe the key process elements and technology commonly found in industrial welding and cutting processes.
- Demonstrate the skills and knowledge needed for the Certified Welding Inspector and Certified Welding Educator certifications.

Transfer Information:

- Bloomsburg University-Bachelor of Applied Science in Technical Leadership. (Articulation)
- Pennsylvania College of Technology Bachelor of Science (Articulation)
- Franklin University Bachelor of Science in Applied Management. (Articulation)

Arts & Humanities (AH) Electives	Societies & Institutions over Time (SIT) Electives	Diversity (D) Electives
ARTA 100 Art and Visual Thinking	CMTH 221 History of Broadcasting	BIOS 126 Environmental Science
ARTA 101 Art History Survey	GEOG 101 World Geography	BIOS 210 Environmental Biology
CMTH 110 Introduction to the Theatre	GEOG 151 Geography of the U.S. and Canada (G-WI)	BUSA 115 Intro to International Business
CMTH 111 Acting I	GLBL 130 Intro to Global Studies	CJST 250 Contemporary Issues in Criminal Justice
CMTH 115 Technical Theatre	GLBL 160 Field Experience & Acad Research in GS	CMTH 126 The Communication Arts
CMTH 117 Stagecraft	GLBL 230 Global Studies Capstone	CMTH 211 Plays: Classical to Contemporary
CMTH 126 The Communication Arts	HIST 103 Ancient and Medieval History	CMTH 215 Intercultural Communication
CMTH 189 Stage Voice and Movement	HIST 113 American History I (G-WI)	DANC 101 Dance History
CMTH 190 Stage Production	HIST 121 The Black Experience (G-WI)	ENGL 151L English II (Literature)
CMTH 206 Directing	HIST 123 African Civilization	ENGL 205 American Literature I
CMTH 211 Plays: Classical to Contemporary (G-WI)	HIST 140 Modern Chinese History	ENGL 211 Plays: Classical to Contemporary
CMTH 212 Acting II	HIST 153 Found of Mod Euro History, 1300-1815 (G-WI)	ENGL 215 Multicultural Adolescent Literature
CMTH 218 Theatre Portfolio	HIST 163 American History II	ENGL 250 Latin American Literature
CMTH 220 Introduction to Film	HIST 165 The American Experience of Warfare	ENGL 251 British Literature II
DANC 101 Dance History	HIST 166 Civil War and Reconstruction (G-WI)	ENGL 253 Creative Writing
DANC 110 Ballet I	HIST 168 History of the Middle East (G-WI)	ENGL 255 American Literature II
DANC 120 Modern Dance I	HIST 173 Mod European History, 1815 to Present (G-WI)	ENGL 256 Modern Poetry
DANC 130 Jazz I	HIST 210 History of Mod Science, 1859 to Present	ENGL 257 20th Century Lit by Women
DANC 210 Ballet II	HIST 211 History of Pennsylvania	ENGL 260 Contemporary Literature
DANC 220 Modern Dance II	INTS 202 The Architecture of the City: Classic to Contemporary	ENGL 264 Irish Literature
DANC 230 Jazz II	POLS 101 Introduction to Political Science	ENGL 265 African-American Literature
ENGL 201 British Literature I (G-WI)	POLS 105 American Constitutional Law (G-WI)	ENGL 267 Poetry Writing
ENGL 203 Shakespeare (G-WI)	POLS 110 American National Government (G-WI)	GEOG 101 World Geography
ENGL 205 American Literature I (G-WI)	POLS 150 Peace Studies & Conflict Resolution (Study Abroad)	GEOG 121 Environmental Sustainability
ENGL 211 Plays: Classical to Contemporary (G-WI)	POLS 170 Politics of Modern Turkey (Study Abroad)	GEOG 151 Geography of the U.S. and Canada
ENGL 215 Multicultural Adolescent Literature (G-WI)	POLS 202 International Relations	GEOG 210 Weather and Climate
ENGL 250 Latin American Literature (G-WI)	POLS 205 Women and Politics (G-WI)	GLBL 130 Intro to Global Studies
ENGL 251 British Literature II (G-WI)	POLS 251 State and Local Government (G-WI)	GLBL 160 Field Experience & Acad Research in GS
ENGL 253 Creative Writing	SOCA 102 Cultural Anthropology (G-WI)	GLBL 230 Global Studies Capstone
ENGL 255 American Literature II (G-WI)	SOCA 105 American Ethnicity	HIST 113 American History I
ENGL 256 Modern Poetry (G-WI)	SOCA 160 Issues in Contemporary Genocide & Mass Violence	HIST 121 The Black Experience
ENGL 257 20th Century Lit by Women (G-WI)		HIST 140 Modern Chinese History
ENGL258 Fiction Writing		HIST 165 The American Experience of Warfare
ENGL 260 Contemporary Literature (G-WI)		HIST 166 Civil War & Reconstruction
ENGL 264 Irish Literature (G-WI)	Scientific Study of Human Behavior (SSHB) Electives	HIST 168 History of the Middle East
ENGL 265 African-American Literature (G-WI)	ECON 201 Macroeconomics	HIST 173 Mod Euro History: 1815-Present
ENGL 267 Poetry Writing	GEOG 121 Environmental Sustainability (G-WI)	HUMA 121 American Work Experience
HUMA 121 The American Work Experience (G-WI)	GEOG 140 Investigating Climate Change	HUMA 140 Intro to Women and Gender Studies
HUMA 140 Intro to Women and Gender Studies (G-WI)	GEOG 271 Intro to Geographic Info Systems	HUMA 150 Nature of the Environment
HUMA210 Creativity and the Origin of Ideas	HUMA 250 Research Methods in Social Sciences (G-WI)	HUMA210 Creativity and The Origin of Ideas
JOUR 101 Journalism and Society	INTS 250 Study Abroad	INTS 201 Implement Sustain Energy Sys in Dev Com
Modern Language - All MDLA Courses	PSYC 103 Introduction to Psychology (G-WI)	Modern Language - All MDLA Courses
MUSC 101 Introduction to Music	PSYC 230 Introduction to Health Psychology	PHIL111 On Death and Dying
PHIL 111 On Death and Dying (G-WI)	PSYC 235 Dev Child Psychopathology	PHIL 121 World Religions
PHIL 121 World Religions	PSYC 245 Cognitive Psychology	PHIL 204 Asian Philosophies
PHIL 201 Introduction to Philosophy	PSYC 255 Abnormal Psychology	POLS 101 Introduction to Political Science
PHIL 202 Ethics and Moral Problems (G-WI)	PSYC 258 Developmental Psychology (G-WI)	POLS 105G American Constitutional Law
PHIL 204 Asian Philosophies	PSYC 265 Psychology of Sex and Gender	POLS 150 Peace Studies & Conflict Resolution (Study Abroad)
PHIL 211 Ancient Philosophy	SOCA 103 Principles of Sociology (G-WI)	POLS 202 International Relations
PHIL 215 Modern Philosophy	SOCA 125 Sociology of Families (G-WI)	POLS205 Women & Politics
PHIL 225 What is Freedom?	SOCA 210 Sociology of Gender	POLS 251 State & Local Government
		PSYC 258 Developmental Psychology
		SOCA 102 Cultural Anthropology
		SOCA103 Principles of Sociology
		SOCA 105 American Ethnicity
		SOCA 150 Deviance
Electives: All courses except: OXX-level courses; EARL 221, EARL 222.		SOCA160 Issues in Cont Genocide & Mass Violence
		SOCA204 Social Problems

Welding Programs



Northampton Community College does not discriminate on the basis of race, color, national origin, sex, gender identity, disability or age in its programs or activities. Auxiliary aids & services are available upon request to individuals with disabilities.

¹ Source: U.S. Department of Labor, Bureau of Labor Statistics (2024 Wage Data)