Welding & Fabrication-Certificate (CE) (2020-21 Catalog)

Developmental Education Courses *(if required)*		
☐	ACLS050	Introduction to Academic Literacy
☐	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 student needs by adding more semesters

Choose your courses with your Advisor.

Location: B= BETH, M= MROE, S=SBTH, E= ESTN, D= DIST *subject to change

	complete	Course #	Course Title	Credits	Gen Ed	Fall	Winter	Spring	Summer	Pre-requisites / Co-requisites
Semester 1	☐	COLS101	College Success	1		B, M, D	----	B, M, D	D	
	☐	CISC101	Introduction to Information Technology	3	CL	B, M, D	D	B, M, D	B, M, D	
	☐	EMEC114	Mechanical Skills for the Trades	2		B	---	B	B	
	☐	ENGG117	Technical Drawings & Specifications	3		B	---	B	---	
	☐	MATH103	Technical Mathematics	3	QL	B, D	----	B, M, D	----	
	☐	WELD105	Introduction to Welding Processes	5		B	----	B	B	
	☐	WELD135	Welding Fabrication & Symbols	2		B	----	B		PRE or CO: WELD105
			Total Semester Credits:	19						
Semester 2	☐	ENGL101	English I	3	Comm	B, M, D	----	B, M, D	B, M, D	PRE: ENGL Placement Policy
	☐	OSAH101 or OSAH102	General Industry Outreach Safety Education or Construction Industry Outreach Safety Education	1		B	---	B	---	
	☐	WELD110	Introduction to Pipe Welding Processes	3		B	---	B	---	PRE or CO: WELD123
	☐	WELD123	Advance Plate Welding Processes	5		B	---	B	---	PRE : WELD105
	☐	WELD125	GTAW & Semiautomatic Welding Processes	5		B	---	B	---	PRE: WELD105
			Total Semester Credits:	17						
Semester 3	☐	WELD205	Adv Gas Tungsten & Semiautomatic Welding Processes	4		B	----	----	----	PRE: WELD110 and WELD125
	☐	WELD224	Pipe Welding Processes II	3		B	---	---	---	PRE: WELD110
	☐	WELD230	Welding & Structural Blueprint Reading	4		B	---	---	---	PRE: WELD123
	☐	WELD245	Plasma Arc Cutting	3						
			Total Semester Credits:	14						
			Total Degree Credits	50						

***It is the student's responsibility to be knowledgeable of NCC graduation requirements and to verify transfer requirements with the 4-year institution. Courses listed on the program map are based upon the assumption that prerequisites and courses taken in previous semesters will be successfully completed**

Program Narrative:
Northampton's Welding programs are designed to prepare you to enter a welding profession. The Welding & Fabrication certificate program is designed to prepare you to enter a welding setting in a short time frame or advance your current welding skills to the next level. The program offers career-specific coursework for a student wishing to complete their studies within three full-time semesters.
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 within a welding environment. Strong emphasis on the 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 certificate program can gain employment and then pursue NCC's Welding Technology associate degree program. This program will be of benefit to those who are seeking an entry level position in welding or those who are seeking to change careers. It is also useful for welders in need of updated skills and certification.

Program Learning Outcomes:
-Demonstrate an ability to work independently and collaboratively.
-Analyze and present data in an acceptable and standardized manner.
-Solve most of the 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 certification.