

Welding Technology (D50420)

Official Program Description registered with the NC Community College System:

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Program Learning Outcomes

Upon completion of the Welding Technology program, students will be able to:

- Demonstrate a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.
- Perform consumable and non-consumable electrode welding and cutting processes which include the following: SMAW (Stick), GMAW (MIG), FCAW, GTAW (TIG), OFW (Oxyacetylene welding), OFC (Oxyacetylene cutting), PAC (plasma arc cutting), Air Carbon Arc Gouging, and SAW (Submerged Arc Welding).
- Demonstrate competency in the basic understanding and practical application of the principles of, Fabrication processes theory and safety, Cutting metal with shear, Chop saw and band saw, Drilling and punching holes, bending metal with box/pan break, Fabricate a metal project.

Diploma Awarded

A Diploma in the Welding Technology program is awarded by the College upon completion of this program.

Note

Students are required to purchase a few specific tools. Costs are available by calling a Welding Technology instructor at (919) 735-5151, ext. 357 or 375.

For More Information

The Welding Technology program is in the Applied Technology Division. For more information, call (919) 735-5151, ext. 357 or 375 or visit us at our web site at <http://www.waynecc.edu>.

Admissions

A placement test in mathematics, and reading is required to determine entry-level courses that match individual needs.

First Step to Enroll:

Call the Admissions and Records Office at (919) 735-5151, ext. 238.

	Contact Hours	Semester Credit Hours
FIRST SEMESTER		
ACA 111 College Student Success.....	1	1
ENG 102 Applied Communication II.....	3	3
WLD 110 Cutting Processes.....	5	2
WLD 112 Basic Welding Processes	4	2
WLD 115 SMAW (Stick) Plate	11	5
WLD 121 GMAW (MIG) FCAW/Plate.....	8	4
		17
SECOND SEMESTER		
MAT 101 Applied Mathematics I	4	3
WLD 116 SMAW (Stick)Plate/Pipe	10	4
WLD 122 GMAW (MIG) Plate/Pipe.....	7	3

WLD 131 GTAW (TIG) Plate.....	8	4
		14
SUMMER TERM		
WLD 132 GTAW (TIG) Plate/Pipe.....	7	3
WLD 141 Symbols and Specifications.....	4	3
		6
Total Credit Hours		37

**Welding Technology (D50420)
Evening Option**

	Contact Hours	Semester Credit Hours
FIRST SEMESTER		
ACA 111 College Student Success.....	1	1
WLD 110 Cutting Processes.....	4	2
WLD 112 Basic Welding Processes	4	2
WLD 115 SMAW (Stick) Plate	11	5
		10
SECOND SEMESTER		
MAT 101 Applied Mathematics I	4	3
WLD 116 SMAW (Stick)Plate/Pipe	10	4
WLD 121 GMAW (MIG) FCAW/Plate.....	8	4
		11
	Contact Hours	Semester Credit Hours
SUMMER TERM		
ENG 102 Applied Communications II	3	3
WLD 131.....GTAW (TIG) Plate		
8 4	WLD	141
Symbols and Specifications.....	4	3
		10
THIRD SEMESTER		
WLD 122 GMAW (MIG) Plate/Pipe.....	7	3
WLD 132 GTAW (TIG) Plate/Pipe.....	7	3
		6
Total Credit Hours		37