

Welding Technology (Diploma) (D50420)

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 working industry.

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

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.

COURSE REQUIREMENTS

Richmond Community College provides day and evening course sequences for selected programs to enable students to better plan what courses to take to reach their educational goals. However, given the continued increase in the use of technology in instruction and increasing student demand for distance learning courses, the College may offer hybrid, online, web-based and information highway courses in place of traditional courses in any course sequence that is listed. Therefore, students should be aware of this possibility and prepare themselves to successfully function in a hybrid, online, web-based, or information highway course.

	Class	Lab	Work/ Clinical	Credit
A. General Education Courses				
1. Required Courses				
ENG 102 Applied Communications II	3	0	0	3
MAT 110 Math Measurement & Literacy	2	2	0	3
B. Major Courses				
1. Core Courses				
<i>To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.</i>				
WLD 110 Cutting Processes	1	3	0	2
WLD 115 SMAW (Stick) Plate	2	9	0	5
WLD 121 GMAW (MIG) FCAW/Plate	2	6	0	4
WLD 131 GTAW (TIG) Plate	2	6	0	4
WLD 141 Symbols & Specifications	2	2	0	3
2. Other Major Courses				
WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3
WLD 151 Fabrication I	2	6	0	4
or				
WBL 111 Work-Based Learning I	0	0	10	1
and				
WBL 115 Work-Based Learning Seminar I	1	0	0	1
WLD 215 SMAW (Stick) Pipe	1	9	0	4

3. Select one of the following:

ISC 112	Industrial Safety	2	0	0	2
BPR 111	Print Reading	1	2	0	2

C. Other Required

ACA 122	College Transfer Success	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>
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Total Credit Hours

36-38

**SEMESTER SCHEDULE
WELDING TECHNOLOGY (DAY)**

			Class	Lab	Work/ Clinical	Credit
First Year – Fall Semester						
ACA 122	College Transfer Success		0	2	0	1
ENG 102	Applied Communications II		3	0	0	3
MAT 110	Math Measurement & Literacy		2	2	0	3
WLD 110	Cutting Processes		1	3	0	2
WLD 115	SMAW (Stick) Plate		2	9	0	5
WLD 141	Symbols & Specifications		2	2	0	3
			—	—	—	—
			10	18	0	17
First Year – Spring Semester						
ISC 112	Industrial Safety		2	0	0	2
or						
BPR 111	Print Reading		1	2	0	2
WLD 121	GMAW (MIG) FCA W/Plate		2	6	0	4
WLD 131	GTAW (TIG) Plate		2	6	0	4
WLD 215	SMAW (Stick) Pipe		1	9	0	4
			—	—	—	—
			6-7	21-23	0	14
First Year – Summer Semester						
WLD 132	GTAW (TIG) Plate/Pipe		1	6	0	3
WLD 151	Fabrication I		2	6	0	4
or						
WBL 111	Work-Based Learning I		0	0	10	1
and						
WBL 115	Work-Based Learning Seminar I		1	0	0	1
			—	—	—	—
			2-3	6-12	0-10	5-7
Total Credit Hours						36-38

**SEMESTER SCHEDULE
WELDING TECHNOLOGY (EVENING)**

			Class	Lab	Work/ Clinical	Credit
First Year – Fall Semester						
ACA	122	College Transfer Success	0	2	0	1
WLD	110	Cutting Processes	1	3	0	2
WLD	115	SMAW (Stick) Plate	2	9	0	5
WLD	141	Symbols & Specifications	2	2	0	3
			5	16	0	11
First Year – Spring Semester						
WLD	121	GMAW (MIG) FCA W/Plate	2	6	0	4
WLD	131	GTAW (TIG) Plate	2	6	0	4
WLD	215	SMAW (Stick) Pipe	1	9	0	4
			5	21	0	12
First Year – Summer Semester						
WLD	132	GTAW (TIG) Plate/Pipe	1	6	0	3
WLD	151	Fabrication I	2	6	0	4
	or					
WBL	111	Work-Based Learning I	0	0	10	1
	and					
WBL	115	Work-Based Learning Seminar I	1	0	0	1
			2-3	6-12	0-10	5-7
Second Year – Fall Semester						
ENG	102	Applied Communications II	3	0	0	3
ISC	112	Industrial Safety	2	0	0	2
	or					
BPR	111	Print Reading	1	2	0	2
MAT	110	Math Measurement & Literacy	2	2	0	3
			6-7	2-4	0	8
Total Credit Hours						36-38

**SEMESTER SCHEDULE
WELDING TECHNOLOGY (CERTIFICATE) (C50420)**

			Class	Lab	Work/ Clinical	Credit
First Year – Fall Semester						
WLD	110	Cutting Processes	1	3	0	2
WLD	115	SMAW (Stick) Plate	2	9	0	5
WLD	141	Symbols & Specifications	2	2	0	3

			—	—	—	—
			5	14	0	10
		First Year – Spring Semester				
WLD 121	GMAW (MIG) FCAW/Plate		2	6	0	4
WLD 131	GTAW (TIG) Plate		2	6	0	4
			—	—	—	—
			4	12	0	8
	Total Credit Hours				18	

**WELDING PROCESSES 1 (CERTIFICATE) (C50420A)
COURSE REQUIREMENTS**

			Class	Lab	Work/ Clinical	Credit
WLD 115	SMAW (Stick) Plate		2	9	0	5
WLD 121	GMAW (MIG) FCAW/Plate		2	6	0	4
WLD 131	GTAW (TIG) Plate		2	6	0	4
WLD 141	Symbols & Specifications		2	2	0	3
	Total Credit Hours					16