

## 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
<b>A. General Education Courses</b>				
1. Required Courses				
ENG 102 Applied Communications II	3	0	0	3
MAT 110 Math Measurement & Literacy	2	2	0	3
<b>B. Major Courses</b>				
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
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
<b>C. Other Required</b>				

ACA 122	College Transfer Success	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>
<b>Total Credit Hours</b>				<b>38</b>	

**SEMESTER SCHEDULE  
WELDING TECHNOLOGY (DAY)**

			Class	Lab	Work/ Clinical	Credit
<b>First Year – Fall Semester</b>						
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
<b>First Year – Spring Semester</b>						
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
<b>First Year – Summer Semester</b>						
WLD 132	GTAW (TIG) Plate/Pipe		1	6	0	3
WLD 151	Fabrication I		2	6	0	4
			3	12	0	7
<b>Total Credit Hours</b>				<b>38</b>		

**SEMESTER SCHEDULE  
WELDING TECHNOLOGY (EVENING)**

			Class	Lab	Work/ Clinical	Credit
<b>First Year – Fall Semester</b>						
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

<b>First Year – Spring Semester</b>							
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	
<b>First Year – Summer Semester</b>							
WLD	132	GTAW (TIG) Plate/Pipe	1	6	0	3	
WLD	151	Fabrication I	2	6	0	4	
			—	—	—	—	
			3	12	0	7	
<b>Second Year – Fall Semester</b>							
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	
<b>Total Credit Hours</b>						<b>38</b>	

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

				<b>Class</b>	<b>Lab</b>	<b>Work/ Clinical</b>	<b>Credit</b>
<b>First Year – Fall Semester</b>							
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	
<b>First Year – Spring Semester</b>							
WLD	121	GMAW (MIG) FCAW/Plate	2	6	0	4	
WLD	131	GTAW (TIG) Plate	2	6	0	4	
			—	—	—	—	
			4	12	0	8	
<b>Total Credit Hours</b>						<b>18</b>	