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	111	Writing and Inquiry	3	0	0	3
MAT	143	Quantitative Literacy	2	2	0	3
B. Major Courses						
1. Core Courses						
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.						
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
C. Other Required						

ACA	122	College Transfer Success	0	2	0	1

Total Credit Hours **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	111	Writing and Inquiry	3	0	0	3
MAT	143	Quantitative 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 or	112	Industrial Safety	2	0	0	2
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
			3	12	0	7

Total Credit Hours **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
			3	12	0	7
		Second Year – Fall Semester				
ENG	111	Writing and Inquiry	3	0	0	3
ISC	112	Industrial Safety	2	0	0	2
or						
BPR	111	Print Reading	1	2	0	2
MAT	143	Quantitative Literacy	2	2	0	3
			7	5	0	8
		Total Credit Hours			**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**	

Program Completion Guide

WELDING TECHNOLOGY (DIPLOMA) (D50420)

Student Name: _____ ID #: _____ Date of Enrollment: _____

Section I: Developmental Courses (if needed)

Courses	Scores	Cr.	Prerequisites/ Corequisites	Grade	Notes/Semester
DMA 010 Operations with Integers	<7 on DAP	1	Pre: None		
DMA 020 Fractions and Decimals	<7 on DAP	1	Pre: DMA 010		
DMA 030 Propor/Ratio/Rate/Percent	<7 on DAP	1	Pre: DMA 010-020		
DMA 040 Express/Lin Equat/Inequal	<7 on DAP	1	Pre: DMA 010-030 or MAT 060		
DMA 050 Graphs/Equations of Lines	<7 on DAP	1	Pre: DMA 010-040 or DMA 040 and MAT 060		
DRE 096 Integrated Reading and Writing	104-116	3	Pre: None Co: CIS 070		
DRE 097 Integrated Reading Writing II	117-135	3	Pre: DRE 096 Co: CIS 070		
DRE 098 Integrated Reading Writing III	136-150	3	Pre: DRE 097 Co: CIS 070		

Section II:

A. Welding Technology Certificate (C50420) Course Requirements 18 credit hours: Complete Section I (as required) and Section II, A.

Courses	Cr.	Recommended Semester	Prerequisites/ Corequisites	Semester Registered/ Planned	Semester Completed/ Grade
WLD 110 Cutting Processes*	2	1st year – fall	None		
WLD 115 SMAW (Stick) Plate*	5	1st year – fall	None		
WLD 141 Symbols & Specifications*	3	1st year – fall	None		
WLD 121 GMAW (MIG) FCAW/ Plate*	4	1st year - spring	None		
WLD 131 GTAW (TIG) Plate*	4	1st year - spring	None		

B. Welding Technology Diploma (D50420) Course Requirements 39 credit hours: Complete Section I (as required) and Section II, A and B.

Courses	Cr.	Recommended Semester	Prerequisites/ Corequisites	Semester Registered/ Planned	Semester Completed/ Grade
ACA 122 College Transfer Success	1	1st year – fall	None		
WLD 215 SMAW (Stick) Pipe	4	1st year - spring	Pre: WLD 115		
WLD 132 GTAW (TIG) Plate/Pipe	3	1st year - summer	Pre: WLD 131		
WLD 151 Fabrication I	4	1st year - summer	Pre: WLD 141		
ISC 112 Industrial Safety or BPR 111 Print Reading	2 2	2nd year - fall	None Pre: DMA 010-020		
ENG 111 Writing and Inquiry	3	2nd year - fall	Pre: DRE 098 or ENG 090 and RED 090 Co: ACA 122		
MAT 143 Quantitative Literacy	3	2nd year - fall	Pre: DMA 010-050, DRE 098 Co: ACA 122		

NOTES: ***** All courses must be completed with a grade of "C" or better.
****** See course catalog for prerequisite and/or corequisite requirements.

Students please read the following and sign below.

I understand that as an RCC student, I am ultimately responsible for my schedule. I understand that I must complete each course with a grade of "C" or better and follow the established course sequence or my ability to graduate on time may be affected.

My advisor has information regarding other colleges and transfer opportunities that I can investigate after completing my degree/diploma/certificate, and I understand that if I would like more information I can schedule an appointment with him/her.

Student Name: _____ Student Signature: _____ Date: _____

Advisor Name: _____ Advisor Signature: _____ Date: _____