WELDING TECHNOLOGY, CERTIFICATE COMPETENCY (WLD)

Effective: Spring 2016

The Welding Technology Certificate provides training in the field of industrial welding. This Certificate offers practical training and relevant theory in Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding, Flux cored Arc Welding, Oxy-fuel Welding and Cutting, Plasma Cutting, as well Welding Inspection.

Program Outcomes

Upon successful completion of this program, students should be able to:

- Demonstrate basic competencies in the four primary welding processes used in industry today.
- · Use welding electrodes in four positions.
- · Interpret blueprints and welding symbols.
- · Apply non-destructive testing required in industry.
- · Demonstrate mastery of knowledge of basic metallurgy.
- · Employ occupational safety and health principles and practices.
- Demonstrate knowledge of inspection principles and practices.

Full-Time Academic Plan

The College will award a certificate of competency to students who complete an approved credit-bearing career program that requires less than 30 credits. General education courses may not be required for programs that have less than 30 credits. The student must have a cumulative GPA of 2.0 or higher. At least six credit hours must be in courses that are awarded grade points.

WLD 100 Introduction to Welding WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I Hours Fourth Semester WLD 201 Gas Metal Arc II WLD 203 Advanced Shielded Arc Welding II WLD 205 Gas Tungsten Arc Welding II Hours		Total Hours	29
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I Hours Fourth Semester WLD 201 Gas Metal Arc II WLD 203 Advanced Shielded Arc Welding II		Hours	6
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I Hours Fourth Semester WLD 201 Gas Metal Arc II	WLD 205	Gas Tungsten Arc Welding II	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I Hours Fourth Semester	WLD 203	Advanced Shielded Arc Welding II	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I Hours	WLD 201	Gas Metal Arc II	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I WLD 204 Gas Tungsten Arc Welding I	Fourth Semester		
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I WLD 202 Advanced Shielded Arc Welding I		Hours	6
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester WLD 200 Gas Metal Arc I	WLD 204	Gas Tungsten Arc Welding I	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours Third Semester	WLD 202	Advanced Shielded Arc Welding I	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective Hours	WLD 200	Gas Metal Arc I	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators Welding Elective	Third Semester		
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II WLD 111 Printing Reading and Shop Math for Fabricators		Hours	9
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I WLD 106 Intermediate Shielded Metal Arc Welding II	Welding Elective		2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester WLD 105 Intermediate Shielded Metal Arc Welding I	WLD 111	Printing Reading and Shop Math for Fabricators	3
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours Second Semester	WLD 106	Intermediate Shielded Metal Arc Welding II	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II Hours	WLD 105	Intermediate Shielded Metal Arc Welding I	2
WLD 101 Introduction to Oxy-Fuel Welding and Cutting WLD 103 Shielded Metal Arc Welding I WLD 104 Shielded Metal Arc Welding II	Second Semester	Tious	•
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WLD 101 Introduction to Oxy-Fuel Welding and Cutting		,	2
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First Semester Hou		to have december as her talling in	Hours

Part-Time Academic Plan Part-Time Evening Schedule

The WLD courses are all offered in the evening except for WLD 101 Introduction to Oxy-Fuel Welding and Cutting

Students with advising questions should speak to the Welding coordinator, Patrick Dougherty (pdougherty@dccc.edu) @ 610-359-5114

Code	Title	Hours
First Semester		
WLD 100	Introduction to Welding	2
WLD 103	Shielded Metal Arc Welding I	2
Second Semester		
WLD 104	Shielded Metal Arc Welding II	2
WLD 200	Gas Metal Arc I	2
Third Semester		
WLD 105	Intermediate Shielded Metal Arc Welding I	2
WLD 111	Printing Reading and Shop Math for Fabricators	1 3
Any Semester Co	urse *	
Fourth Semester		
WLD 106	Intermediate Shielded Metal Arc Welding II	2
WLD 201	Gas Metal Arc II	2
Fifth Semester		
WLD 202	Advanced Shielded Arc Welding I	2
WLD 204	Gas Tungsten Arc Welding I	2
Any Semester Co	urse [*]	
Sixth Semester		
WLD 203	Advanced Shielded Arc Welding II	2
WLD 205	Gas Tungsten Arc Welding II	2
Any Semester*		
WLD 101	Introduction to Oxy-Fuel Welding and Cutting ²	2
Welding Electives		2-3
WLD 152	Welding Codes and Specifications	
WLD 154	Welding Metallurgy ¹	
Total Hours		29-30

WLD 111 and WLD 154 are offered in the evenings and late afternoon on an alternating semester rotation.

Career

² WLD 101 may not be offered in the evening. Check schedule.

^{*} Any Semester Course may be taken in any order.