



WELDING, D.A.S. - WLD1

At the center of all industrial and construction expansion are technicians skilled in the art of joining metal. The strength and durability of heavy manufactured goods depend on the skills of welders. Students in the four-semester program learn to weld in the four main positions: flat, vertical, horizontal and overhead on both structured steel and pipe.

Before graduation, students are required to meet quality standards through practical weld tests as specified by the American Welding Society and the American Society of Mechanical Engineers Codes and Requirements. These tests ensure that graduates can perform quality work before they go on the job. Practical experience in welding processes, together with a good foundation in blueprint reading and sketching prepares the graduate for employment in a variety of industrial and construction settings.

This diploma provides students with a primary technical specialty. Students completing this credential can, by taking selected general education courses and a secondary technical specialty, have the opportunity to obtain an Associate in Applied Science with a major in General Technology. Students should meet with their advisor(s) to select the proper courses to meet their particular educational goals.

Requirements

Courses	Course Title	Credit Hours
General Education Courses		
ENG 165	Professional Communications	3
MAT 170	Algebra, Geometry and Trigonometry I	3
PSY 103	Human Relations	3
Subtotal		9
Required Core Subject Areas		
WLD 102	Introduction to Welding	2
WLD 103	Print Reading I	1
WLD 105	Print Reading II	1
WLD 142	Maintenance Welding	3
WLD 208	Advanced Pipe Welding	3
WLD 212	Destructive Testing	2
Subtotal		12
Other Courses Required for Graduation		
WLD 113	Arc Welding II	4
WLD 115	Arc Welding III	4
WLD 117	Specialized Arc Welding	4
WLD 132	Inert Gas Welding Ferrous	4
WLD 136	Advanced Inert Gas Welding	2
WLD 154	Pipefitting and Welding	4
Subtotal		22
Total Hours		43

Welding Diploma (D.A.S.) Graduation Plans

Fall Start

Course	Title	Hours
First Year		
Fall Semester		
MAT 170	Algebra, Geometry and Trigonometry I	3
WLD 102	Introduction to Welding	2
WLD 103	Print Reading I	1
WLD 113	Arc Welding II	4
WLD 142	Maintenance Welding	3
Hours		13

Spring Semester

ENG 165	Professional Communications	3
WLD 105	Print Reading II	1
WLD 115	Arc Welding III	4
WLD 117	Specialized Arc Welding	4
Hours		12

Summer Semester

WLD 132	Inert Gas Welding Ferrous	4
WLD 154	Pipefitting and Welding	4
Hours		8

Second Year

Fall Semester

PSY 103	Human Relations	3
WLD 136	Advanced Inert Gas Welding	2
WLD 208	Advanced Pipe Welding	3
WLD 212	Destructive Testing	2
Hours		10

Total Hours 43

Spring Start

Course	Title	Hours
First Year		
Spring Semester		
MAT 170	Algebra, Geometry and Trigonometry I	3
WLD 102	Introduction to Welding	2
WLD 103	Print Reading I	1
WLD 113	Arc Welding II	4
WLD 142	Maintenance Welding	3
Hours		13

Summer Semester

WLD 115	Arc Welding III	4
WLD 117	Specialized Arc Welding	4
Hours		8

Fall Semester

ENG 165	Professional Communications	3
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WLD 105	Print Reading II	1
WLD 132	Inert Gas Welding Ferrous	4
WLD 154	Pipefitting and Welding	4
Hours		12

Second Year

Spring Semester

PSY 103	Human Relations	3
WLD 136	Advanced Inert Gas Welding	2
WLD 208	Advanced Pipe Welding	3
WLD 212	Destructive Testing	2
Hours		10
Total Hours		43

Summer Start

Course	Title	Hours
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First Year

Summer Semester

PSY 103	Human Relations	3
WLD 102	Introduction to Welding	2
WLD 113	Arc Welding II	4
WLD 142	Maintenance Welding	3
Hours		12

Fall Semester

MAT 170	Algebra, Geometry and Trigonometry I	3
WLD 103	Print Reading I	1
WLD 115	Arc Welding III	4
WLD 117	Specialized Arc Welding	4
Hours		12

Spring Semester

ENG 165	Professional Communications	3
WLD 105	Print Reading II	1
WLD 132	Inert Gas Welding Ferrous	4
WLD 154	Pipefitting and Welding	4
Hours		12

Second Year

Summer Semester

WLD 136	Advanced Inert Gas Welding	2
WLD 208	Advanced Pipe Welding	3
WLD 212	Destructive Testing	2
Hours		7
Total Hours		43

Application and Advising

If you are ready to start your education, there are a few simple steps involved in enrolling at Piedmont Technical College.

Get Started Today (<https://www.ptc.edu/admissions/new-students/>)

Advising Information

The following information provides a guide for advisors who are helping students enroll in this program.

Program Notes

Students may begin this program in any semester and may attend part-time or full-time. Classes are offered in Greenwood and Laurens Center of Advanced Manufacturing.

Developmental English and math courses should not conflict with welding courses and do not have to be completed before welding classes are attempted. These classes should be scheduled when other students are taking General Education courses.

WLD courses are offered during days and evenings.

Students who work alternating shifts are encouraged to enroll in the certificate program and to rotate between day and evening classes to fit his/her work schedule.

Graduates can complete an Associate Degree in General Technology with completion of additional coursework.

Students should be prepared to purchase first semester welding supplies costing approximately \$226.60. Supplies for each additional semester of welding will cost approximately \$150.

Notes About Individual Classes

The English required for this program is ENG 165. Students will follow this progression, with their starting point being determined by their placement test scores: ENG 032/012 and/or RDG 032/012 (or RWR 032/012) > ENG 100 and/or RDG 100 (or RWR 100) > ENG 165. ENG 101 can be substituted for ENG 165, and ENG 101 is more likely to transfer to a four-year institution.

The math required for this program is MAT 170. Students will follow this progression, with their starting point being determined by their placement test scores: MAT 032/012 > MAT 170.

Program Student Learning Outcomes

Purpose Statement

The D.A.S., Welding program is dedicated to welding education, technology, and student success. Students in this program will learn various welding techniques and skills needed to successfully enter in a welding career.

Program Student Learning Outcomes

1. Explain and read occupationally specific prints for welders and fabricate from a blueprint.
2. Test to certification standards on all welds.
3. Demonstrate the manipulative skills to perform groove welds.
4. Demonstrate the necessary manipulative skills needed to apply the gas tungsten arc on various joint designs, on plate with both ferrous and non-ferrous metals.

5. Practice safety procedures for all types of welds.