



Welding Technology Program

Program Description:

EC3's Basic Certificate in Welding can be completed in one year and prepares students for entry level careers in welding. In EC3's welding program, you will learn oxygen-acetylene cutting (OFC) plasma arc cutting (PAC), shielded metal arc or "stick" welding (SMAW), gas metal arc welding—also known as metal inert gas welding (GMAW/MIG), flux core arc welding (FCAW) and gas tungsten arc welding—also known as tungsten inert gas welding (GTAW/TIG).

Program Learning Outcomes

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

- Identify equipment and safety procedures related to equipment, processes, and materials used in the major welding processes of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW).
- Read and interpret blueprints with basic manufacturing and welding symbology.
- Weld SMAW, GMAW, and GTAW in various positions primarily on steel and aluminum with some exposure to stainless steel - to the standards of the American Welding Society (AWS).

COURSE NUMBER	COURSE TITLE	CREDITS
WEL 101	SMAW I Theory	1
WEL 102	SMAW I - Lab 1a	1
WEL 103	SMAW I - Lab 1b	1
WEL 104	GMAW I - Theory	1
WEL 105	GMAW I - Lab 1a	1
WEL 106	GMAW I - Lab 1b	1
WEL 107	GMAW II – Lab 2a	1
WEL 108	GMAW II – Lab 2b	1
WEL 109	GMAW II – Lab 2c	1.5
WEL 110	GTAW I -Theory	1
WEL 111	GTAW I – Lab 1a	1
WEL 112	GTAW I – Lab 1b	1
IMT 114	Introduction to Print Reading	1
WEL 114	Print Reading for Welders	1
MAT 107	Technical Math	3

TOTAL CREDIT HOURS: 17.5

STEP 1:

Apply Now at: Erie County Community College www.ec3pa.org

STEP 2:

Contact Advising at: advising@ec3pa.org

How Much: Currently, Erie County residents will have tuition covered by the EC3 Empowerment Grant, but that funding will not last forever. While tuition is free, students are still responsible for applicable fees.

STANDARD TUITION

RESIDENCY	TUITION COST	CAPITAL FEE	TOTAL COST PER CREDIT HOUR
Erie County Resident	\$160	\$0	\$160
Out-of-Erie County, In-State of PA	\$320	\$5	\$325
Non-PA Resident	\$480	\$10	\$490

FEES

FEES	COST	COST PER 3-CREDIT COURSE	PROGRAM TOTAL
New Student Fee (on-time)	\$40	\$0	\$40
General Fee	\$15 per credit	\$15	\$262.50
Technology Fee	\$10 per credit	\$10	\$175
Lab Fee	\$100 per lab (Welding)	\$100	\$900

TOTAL FOR PROGRAM: \$1377.50

WELDING CERTIFICATE

WELDING CERTIFICATE TOTAL	TUITION	FEES	TOTAL COST
Erie County Resident	\$2,800	\$1,377.50	\$4,177.50
Out-of-Erie County, In-State of PA	\$5,687.50	\$1,377.50	\$7,065
Non-PA Resident	\$8,858	\$1,377.50	\$10,235.50

Questions? Contact Advising at: cstewart-baker@ec3pa.org

More information can be found here: Welding Technology <https://bit.ly/WeldingTechnology>

