

Metal Fabrication – Certificate of Achievement

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

Program Description:

The Certificate of Achievement in Metal Fabrication provides theoretical and hands-on skills in the safe and efficient use of industry relevant metal fabrication tools equipment. Coursework includes project design, use of CNC press brake & plasma cutting equipment, manual machining, sheet metal fabrication, tube bending, metal forming/shaping and welding. Program completers are prepared for entry level employment in industries as aerospace, motorsports, petrochemical, and general fabrication.

Program SLO:

Students will be able to demonstrate proficiency in industry recognized principles and practices as they apply to today's welding and metal fabrication industries.

Important Transfer Information: For students interested in earning an Associate's degree and/or transfer, please follow up with the Counseling Office for additional information @ <https://www.canyons.edu/counseling> or (661)362-3288/(661)362-3811.

Major courses are sequenced and **BOLDED** based on recommendations by the [Welding Technology Department](#)

First Semester (2.5-8.5 units minimum)

FA = Fall; WI = Winter; SP = Spring; SU = Summer

| Course | Title | Units | Major |
|--------------------|---|------------------|-----------------------------|
| WELD 100A | Introduction to Metal Fabrication (FA) | 2.5 | Major |
| WELD 132 | Blueprint Reading for Welders and Fabricators | 3 | Highly Recommended Elective |
| WELD 130 | Welding Metallurgy (FA, SP) | 3 | Major |
| Term Total: | | 5.5 - 8.5 | |

Note: WELD 100A is a pre-requisite for WELD 100B; WELD 100A is a co-requisite for WELD 135

Second Semester (9.5-14 units minimum)

| Course | Title | Units | Major |
|--------------------|--|------------|--------------|
| WELD 100B | Intermediate Metal Fabrication (SP) | 2.5 | Major |
| WELD 131 | Non-Destructive Testing (FA, SP) | 3 | Major |
| Term Total: | | 5.5 | |

Note: WELD 100B is a pre-requisite for WELD 100C

Third Semester (15-19.5 units minimum)

| Course | Title | Units | Major |
|--------------------|---|------------|--------------|
| WELD 100C | Advanced Metal Fabrication (FA) | 2.5 | Major |
| WELD 133 | Welding Inspection (FA) | 3 | Major |
| WELD 135 | Fundamentals CNC Plasma Arc Cutting (FA) | 3 | Major |
| Term Total: | | 8.5 | |

Total Units: 19.5+

Counseling Resources

Welding Technology Department: <https://www.canyons.edu/academics/welding/>

Counseling Department: <https://www.canyons.edu/student-services/counseling/>

Campus Alliances - <https://www.canyons.edu/administration/ie2/equity/alliances/index.php>

Petition for Certificate of Achievement: Petitions are due in the fall/spring/summer term you will complete the requirements and may be submitted before your last term or up until the final day of the term. The petition form must be reviewed with a counselor and may be found here:

Updated 11/04/2021- CY 2021/2022

https://www.canyons.edu/_resources/documents/student-services/admissions/Petition_for_Associate_Degree_and_Certificate_of_Achievement.pdf

Career Resources

Welding Career Tree: <https://www.canyons.edu/academics/welding/careertree/index.php>

Careers in Welding: <https://www.careersinwelding.com/>

American Welding Society (AWS): <https://www.aws.org/>

California Career Zone: <https://www.cacareerzone.org/>

O*Net Online: <https://www.onetonline.org/>

Bureau of Labor and Statistics: www.bls.gov

Industry Certifications

LA Department of Building and Safety (LADBS): <https://www.ladbs.org/default>

FANUC Certified Education Robot Training (CERT): <https://www.fanucamerica.com/>

AWS Certified Welder Program (CW): <https://www.aws.org/certification/page/certified-welder-program>

FMA Metal Fabrication Certificate: <https://www.fmamfg.org/training/fundamentals-of-metal-fabrication-certificate-exam>

AWS Certified Robotic Arc Welding Program: <https://www.aws.org/certification/detail/certified-robotic-arc-welding#:~:text=Description,against%20standards%20for%20their%20occupation.>