

# **(a)** College of DuPage

#### WELDING

Did you know that more than 50 percent of U.S. products use welding? Welding can be found in the construction and production of everything from bridges, race cars and buildings to cell phones, computers and medical devices. The U.S. Department of Labor lists more than 75 occupational titles, including mechanics, machinists, plumbers, construction and maintenance workers, as well as sculptors and other artisans, that entail some form of welding-related activities. Welding is becoming an increasingly high-tech skill in which welders are being trained to operate robots and other automated systems that use powerful lasers, electron beams and explosives to bond metal. With demand for skilled welders rising and the technology used in welding becoming more advanced, especially where automation and robotics are concerned, students have a unique opportunity to learn a career that can be shaped around their interests.

At College of DuPage, the Welding program is designed for people interested in learning welding or upgrading their skills in the various processes. This is an individualized, competency-based program that will benefit both the novice and advanced welder. This program offers a variety of skill levels in shield metal arc (stick), gas tungsten (TIG), oxyacetylene (gas), gas metal arc (MIG), and plasma welding/cutting processes, using both manual and semi-automatic applications. Coursework in welding theory and blueprint reading is also available.

For a complete list of courses in this program visit: cod.edu/catalog



#### WHY COLLEGE OF DuPAGE IS RIGHT FOR YOU

Whether you are preparing for a career in welding or updating your skills, College of DuPage has the right program for you. We offer:

- Dedicated instructors with years of practical industry experience, certification, and licensing.
- Instruction in top-notch facilities, on cutting-edge equipment.
- Flexible schedules with day, evening, and weekend classes.
- Hands-on experience as well as classroom-based studies.
- Affordable programs that get you on the fast track to success without breaking the bank.
- Partnerships with industry professionals and organizations ensure that the curricula and equipment are on track with the skills required in the field and sought after by employers.

## ASSOCIATE IN APPLIED SCIENCE (A.A.S) DEGREE IN WELDING TECHNOLOGY

The Welding Technology program will provide students with theory and practice in entry-level welding skills. Upon successful completion, students will be prepared for the American Welding Society (AWS) examinations. The Welding Technology degree requires a minimum of 64 credits in program requirements, program electives and general education courses.

#### **CERTIFICATE IN WELDING**

The Certificate in Welding program provides students with an individualized, competency-based method of instruction in the four most common methods of metal joining: shielded metal arc (stick), gas tungsten (TIG), oxyacetylene (gas), and gas metal arc. Additionally, both manual and semi-automatic plasma welding and cutting are included in various courses. Students in this program are required to complete 30 credit hours of coursework in core required welding, industrial design, and technical mathematics classes.

#### **AWS SENSE 1 CERTIFICATE**

This certificate program provides theory and practice in the preparation and welding of steel joints in various positions. It covers safety, electrode selection, inspection, and testing using shielded metal, gas tungsten, flux core, and gas metal arc welding. Skills are developed in producing different position butt and fillet welds. American Welding Society (AWS) testing is emphasized. The AWS Sense 1 certificate requires 17 credits.



### **AVAILABLE SCHOLARSHIPS**

Students who are planning to enroll in the Welding program at College of DuPage may be qualified to receive a financial award through a variety of supported scholarships.

- Edward R. Valintis Technology Scholarship
- College of DuPage Foundation Returning Adult Scholarship
- Magnetrol/Judy G. Stevenson Scholarship
- Praxair Welding Scholarship

Visit **cod.edu/scholarships** for requirements and a full list of available scholarships.



### STATE-OF-THE-ART FACILITIES

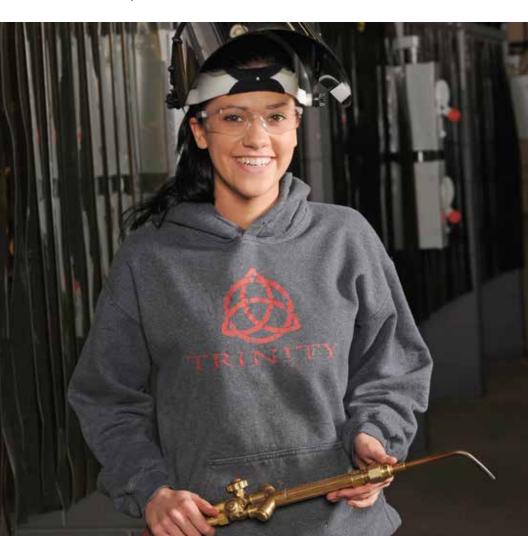
Facilities for the Welding program at College of DuPage are housed in the recently constructed Technical Education Center (TEC). This \$50 million facility is approximately 178,000 square feet and provides training across several disciplines. The TEC includes 31 classrooms, 16 state-of-the-art laboratories to accommodate 1,400 students, as well as space for raw material and vehicular storage. The LEED-certified center was designed with sustainability in mind and features two windmills and four solar panels on its roof.

### **EMPLOYMENT OUTLOOK**

The U.S. Bureau of Labor Statistics reports that the median annual wage for welders, cutters, solderers, and brazers was \$37,420 in 2014, with top earners bringing in \$58,590. Projected growth in this field is expected to expand by 15 percent between 2010 and 2020. Properly skilled workers with up-to-date training will have the most employment opportunity. For more information and employment statistics in the welding industry, visit **www.bls.gov**.

## COMMON CAREERS FOR GRADUATES OF THE WELDING PROGRAM

- Welder/Fabricator: Uses hand welding or flame cutting equipment to weld or join metal components or fill holes, indentations, or seams of metal products.
- Model Makers: Uses machines and hand equipment to make working models of metal or plastic objects.
- **Sheet Metal Worker:** Fabricates, assembles, installs, and repairs sheet metal products and equipment.
- **Solderer/Brazer:** Solders or brazes components to assemble fabricated metal parts.
- Welding Machine Operator: Sets up, operates, or tends welding machines that weld or heat treat metal products, components, or assemblies.





#### **GETTING STARTED**

If you are considering this program as an area of study:

- Visit our website at cod.edu/programs/welding
- Consult with a program coordinator or specialist:

**David Ellis**, Program Faculty Technical Education Center (TEC), ellisd86@cod.edu

**Peter Deeman,** Program Advisor (630) 942-2259

**Bridget McFarland,** Program Support Specialist Technical Education Center (TEC), Room 1008, (630) 942-8419

The College will not discriminate in its programs and activities on the basis of race, color, religion, creed, ancestry, marital status, sexual orientation, arrest record, military status or unfavorable military discharge, citizenship status, or physical or mental handicap or disability.

For ADA accommodations, call (630) 942-2141 (voice) or (630) 858-9692 (TDD). Please call two weeks in advance.

For individuals who need language assistance, please contact Campus Central at (630) 942-2380.



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