

### **Essential Qualifications for the Welding Technology Program**

The following technical standards address many of the physical, cognitive, communication, and professional abilities essential to this program. Students should meet these technical standards in order to be successful in the program (and future career opportunities). Students with documented disabilities who wish to request reasonable accommodations under the American with Disabilities Act must follow the college's procedure for requesting accommodations. The college reserves the right to reject requests for accommodations that would fundamentally alter the nature of an educational program, lower the academic standards, cause an undue hardship on the college, or endanger the health or safety of a student with a disability, other students, clinic patients, or any other member of the college community.

In the classroom, students will learn the technological information associated with the welding processes and how to apply that information to the practical use on the job.

The essential skills and abilities for these programs are categorized in the following Technical Standards:

## Cognitive

With or without reasonable accommodations, a student for this program must be able to quickly read and comprehend a variety of written materials. Students should be able to concentrate on detailed work for long periods. Students must also be able to recall, evaluate, and apply information and engage in critical thinking, both in the classroom and in the shop environment. In addition, students must be able to accurately complete math functions such as addition, subtraction, division, multiplication, fractions, basic algebraic equations, and the manipulation of numerals in terms of decimal placement, conversion and expression.

#### Communication

With or without reasonable accommodations, a student for this program must be able to effectively use word processing programs. Students must be capable of effectively and professionally communicating and interacting with co-workers, suppliers, and customers to gather and convey information.

#### **Motor Skills**

With or without reasonable accommodations, a student for this program must be able to demonstrate good manual dexterity and mobility, accurate color vision, and excellent hand-eye coordination. Students should be able to concentrate on detailed work for long periods, and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions. Students should have the ability to reach items overhead, and stand for 8-12 hours. Students should be able to spatially discriminate through vision, and determine size/magnitude through touch and sight. Students must have sufficient motor skills to operate necessary tools and equipment properly.



# **Technological**

With or without reasonable accommodations, a student for this program must be able to access and complete online assessments and gather necessary information online. Students must be able to use computer applications and computerized machinery.

#### **Professional**

With or without reasonable accommodations, a student for this program must be able to work independently with limited supervision, and work cooperatively with co-workers. Students must complete responsibilities in a timely manner, and exercise good judgment.

#### **Environmental Tolerance**

With or without reasonable accommodations, a candidate for this program must have sufficient environmental tolerance in order to function safely in a welding environment, which may include extreme noise, sharp tools and materials, electrical equipment, chemicals and toxins, dust, heat, and fumes, machinery with moving parts, moving objects and vehicles, slippery or uneven surfaces, variations in lighting and extreme outdoor or indoor temperatures.