

## **ABOUT THE PROGRAM**

Welding Technology offers an introduction to the concepts of welding, the application of heat to metals to repair or fabricate structures, machinery or equipment. In this program, students are trained in the use of the oxy-acetylene process which includes metal cutting, welding, brazing and soldering. Various types of arc welding are also explored, such as shielded metal arc welding, gas tungsten arc welding and gas metal arc welding. Students will have the opportunity to learn, understand and practice terminology, safety, set-up and shut-down of all welding equipment and related tools of the trade. They will learn Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW), as well as laying out and fabricating school projects and experiential learning in community. By the end of this program, students have the opportunity to attain AWS 1G certification (pending exam results).

## **STUDENTS WILL**

- Explore welding as a career and participate in academics, vocational, evaluation, technology and social skills required of becoming a welder.
- Have extensive hands-on experience, with a focus on safety, in welding metallurgy, the welding process, heat treating structural designs as well as applicable codes and standards to attain the AWS 1G certification.
- Utilize hands-on opportunities to include not only theory but also practical application and laboratory work.
- Prepare for direct entry into the workforce or postsecondary education to further studies.
- Explore a wide range of job opportunities within the field of welding through internships, field trips, and other interactions with industry professionals.

## **CAREER PATHWAYS**

WELDING, SOLDERING & BRAZING MACHINE SETTERS, OPERATORS & TENDERS // WELDERS, CUTTERS, SOLDERERS & BRAZERS // MATERIAL ENGINEER // INDUSTRIAL MACHINERY MECHANIC // COMMERCIAL DIVER