

# WELDING TECHNOLOGY (WLD)

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## **WLD 160 - Introduction to Welding**

Introduces the students to the basic processes in the welding field. Emphasizes welding safety. Introduces the various types of welding equipment, identification and selection of electrodes, types of welds, and the different welding positions. Explores basic metallurgy (weldability), and welding defects and problems.

## **WLD 161 - Advanced Welding: SMAW**

Introduces more advanced welding topics and projects in Oxy-Acetylene cutting, cutting, and Shielded Metal Arc Welding (SMAW). Students will develop skills to weld v-groove, butt joints in the flat, horizontal, vertical up and overhead positions, with root and face U-bend test being performed on the welds made in the vertical position. Students will prepare for and test in the SMAW Qualification and Certification (Hobart #37), American Welding Society D1.1 test, and Structural Steel 3-G and 4-G tests.

## **WLD 165 - Welding Symbols & Blueprint Reading**

Introduces students to interpret various types of prints used in the welding industry. Topics include: print reading, measurements, metallurgy, types of welds and joints, and welding symbols.

## **WLD 172 - Welding Symbols and Blueprint Reading**

Introduces students to interpret various types of prints used in the welding industry. Topics include: print reading, measurements, metallurgy, types of welds and joints, and welding symbols.

## **WLD 174 - Advanced Welding: GMAW**

Focuses on Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and oxyfuel cutting on carbon steel. Students will develop skills to weld groove welds in multiple positions. Students will perform GMAW and FCAW welder performance qualification tests on limited thickness test plates on carbon steel in accordance with American Welding Society D1.1 structural Welding Code.