

AUT 114 : WELDING FOR THE AUTOMOTIVE TRADE

Transcript title

Welding for the Auto Trade

Credits

3

Grading mode

Standard letter grades

Total contact hours

90

Lab hours

90

Prerequisites

AUT 101, AUT 106, AUT 107, AUT 110, and AUT 115.

Course Description

Provides a basic understanding of the fundamental principles of automotive fabrication, including safety topics. Topics introduce students to focused areas that are required when replacing vehicle components that include a light level of fabrication. (A scheduled self-paced course).

Course learning outcomes

1. Describe and demonstrate the safe cutting of metal with an Oxygen/Acetylene torch.
2. Describe and demonstrate the safe operation of flame welding sheet metal or tubing with mild steel or brazing rod.
3. Describe and demonstrate the safe operation of welding with a wire feed welder.
4. Describe and demonstrate the safe operation with a stick welder.
5. Demonstrate and identify welds commonly used in the automotive industry.
6. Describe and practice safety procedures while cutting and welding in an automotive shop environment.

Content outline

1. Introduction to Welding
2. Oxy/fuel Gas Process
3. Oxy/fuel Welding Tubing Bench and Overhead
4. Shielded Metal Arc Welding (SMAW)
5. GMAW Gas Metal Arc Welding
6. Gas Metal Arc Welding (GMAW) welding tubing bench and overhead

Required materials

Required textbook, see syllabus for details.