

Through Articulated College Credit, specific college curriculum learning outcomes and assessments are embedded in participating high school career and technical education (CTE) programs as specified in this agreement. Relevant knowledge, skills, and standards are taught by qualified CTE high school instructor(s) in one or more high school courses. ACC is awarded if the student meets the college equivalency standards and later enrolls in the college(s) listed below requiring the course in a specific program.

These credits are valid for students in grades 9-12 for 5 years from the completion of this course.

College	College Course	College Programs	ACC
Hennepin Technical College	ABCT 1145 – Cutting, Heating, & MIG Welding	<ul style="list-style-type: none"> • Auto Body Technician (A.A.S. 72 cr.) • Auto Body Technician (Diploma - 64 cr.) • Custom Fabrication & Finishing (Occ. Cert. – 19 cr.) • Non-Structural Repair Technician Assistant (Occ. Cert. – 16 cr.) 	2 of 3 credits

Students will learn how to use oxy-acetylene cutting, heating, and metal inert gas (MIG) welding on automotive sheet metal. They will become familiar with the MIG welding processes, the requirements for metal joining processes, and their application to auto collision repair.

Curriculum Learning Outcomes

80% of the curriculum learning outcomes will be covered in the high school course(s) by qualified CTE high school instructor(s).

To receive two (2) of three (3) college credits, the following outcomes will be addressed in the course:

1. Analyze MIG welding
2. Analyze Gas welding
3. Identify procedures for safe handling of high-pressure gas cylinders
4. Apply industry-standard welds
5. Perform proper MIG welding techniques
6. Adjust welders
7. Determine the correct welder type (electrode, wire type, diameter, and gas) to be used in a specific welding situation
8. Explain and demonstrate proper safety procedures when welding on vehicles with electronic modules

Reference Textbook

Please go to www.hennepintech.edu for the most recent text.

Course Assessments

*A score of **80% or better** is required to qualify for Articulated College Credit.

Recommended Industry-Recognized Certifications Or Comprehensive Assessments – College & High School

Certifications/Assessments	Vendor	Further Information
Welding Technician – Entry (595E)	Precision Exams	https://www.precisionexams.com/minnesota/files/standards-pdfs/(595E)ks.pdf
Welding	SkillsUSA Career Essentials	http://www.careeressentials.org/wp-content/uploads/2017/07/Welding_blueprint.pdf