

Minnesota Articulated College Credit (ACC) Agreement

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Agreement Name **Welding Processes**

Agreement Last Reviewed **Fall 2024**

Next Review Date **Fall 2026**

Credits are valid for two years upon high school graduation.

College Courses

Class	Title	School	Credits	
WELD 1312	Welding Processes	Ridgewater College	1.0	of 2.0
AGME 1930	Ag Welding	South Central College	1.0	of 2.0
MEAG 1500	Facility Maintenance	South Central College	1.0	of 3.0

Curriculum Content Objectives

To receive credit, students will perform 80% of the following content objectives:

1. Identify welding/joining processes
2. Identify advantages and limitations of welding and brazing processes Describe types and effects of welding/cutting flames
3. Describe oxy-acetylene torch components
4. Describe oxy-fuel regulator operation
5. Describe major arc welding methods
6. Explain the relationship of voltage and amperage on welding characteristics
7. Describe SMAW arc welding equipment
8. Explain AC/DC welding power supplies and define direct current straight polarity
9. Explain SMAW equipment controls
10. Select size/type electrode
11. Describe the electrode classification system
12. Record proper pressures of gas needed or proper fuel pressures
13. Describe joint preparation techniques
14. Describe proper welding procedures on different types of material Identify characteristics of weld quality
15. Prepare weld joints
16. Set up and operate arc welding equipment
17. Perform arc welding procedures

Assessments

Students must achieve no less than 80% or B for a final grade in the high school course to receive ACC.

ACC Concept

Through Articulated College Credit (ACC), specific college curriculum content goals 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 course. ACC is awarded if the student meets the college equivalency standards and later enrolls in the college(s) listed requiring the course in a specific program.