

Minnesota Articulated College Credit (ACC) Agreement

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Agreement Name: **Shielded Metal Arc Welding**

Agreement Last Reviewed **Fall 2024**

Next Review Date **Fall 2026**

College Courses

Class	Title	School	Credits
WELD 1316	Shielded Metal Arc Shop I	Ridgewater College	1.0 of 2.0

Curriculum Content Objectives

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

- Using the Shielded Metal Arc Welding process:
 - Weld stringer beads with 7014 or 7018 electrode
 - Weld stringer pad with 7014 or 7018 electrode
 - Weld tee joints with 7014 or 7018 electrode
 - Weld lap joints with 7014 or 7018 electrode
 - Weld corner joint with 7014 or 7018 electrode
 - Weld stringer bead with 6010 electrode
 - Weld stringer pad with 6010 electrode
 - Weld tee joints with 6010 electrode
 - Weld lap joints with 6010 electrode
 - Weld corner joint with 6010 electrode
 - Weld stringer beads with 6013 electrode
- Weld using 1/8" 7014 electrodes:
 - 2F Three pass lap
 - 2F Three pass tee
 - 1G Three pass corner
- Weld using 3/32" 6013 electrodes on thin gauge materials:
 - 3F Lap
 - 3F Tee
 - 3F Corner
 - 3F Sq. groove
- Weld using 3/32-1/8" 7018 electrodes:
 - 2F Three pass lap
 - 2F Three pass tee
 - 1G Three pass corner
- Weld using 3/32-1/8" 6010 electrodes:
 - 2F three pass lap
 - 2F Three pass tee

- 1G Three pass corner with full pen.
- 1G single vee 6010 root/7018 cover
- 1G single bevel 6010 root/7018 cover

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 courses. 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.