Minnesota
Articulated College Credit (ACC) Agreement
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Articulated College Credit Agreement

Through Articulated College Credit (ACC), 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 course. 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. In some cases, credit toward electives is also an option.

Agreement Name: **Introduction to SOLIDWORKS**
Agreement Reviewed/Revised: **2023 – 2024**

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

College	College Course	College Programs	Articulated College Credit
Hennepin Technical College	ENGC 1250 – SOLIDWORKS I	Engineering CAD Technology (A.A.S. – 72 cr.; Diploma – 64 cr.)	2 credits (2 lecture – 32 hrs.) of 4 total credits (4 lecture)

Course Description

This course is designed to give students hands-on experience using SolidWorks three-dimensional Parametric CAD software. SOLIDWORKS is a mechanical design software that takes advantage of the familiar Microsoft Windows graphical user interface. The students will use the software to create three-dimensional solid parts and assemblies. The students will also create orthographic projections from the solid geometry. Rapid prototyping may be presented in this course.

Course Learning Outcomes

To complete these requirements, students will:

1. Utilize user interface
2. Create document templates
3. Create fully defined sketches
4. Create extruded features
5. Create revolved features
6. Use Hole Wizard
7. Apply engineering features (chamfers, rounds, shells, etc.)
8. Create assemblies
9. Create detail drawings
10. Create assembly drawings with bill of materials
11. Utilize datum features
12. Create sweep features
13. Create loft features
14. Employ bottom-up and top-down assembly methodology
15. Use sheet metal features
16. Create design tables
17. Capture design intent of a project

Assessments

Mastery of **80% or higher of 50% course outcomes listed above** will meet the college credit requirement.

Text for reference:
Check with college bookstore for current textbook

Recommended Industry-Recognized Certification or Comprehensive Assessments – High School & College

Certification/ Assessment	Vendor	Other Information
CAD II	Precision Exams	www.precisionexams.com
CAD III	Precision Exams	www.precisionexams.com
CSW: Certified SOLIDWORKS Associate	SolidWorks	www.solidworks.com