

# Minnesota

## Articulated College Credit (ACC) Agreement

[www.CTEcreditMn.com](http://www.CTEcreditMn.com)

### 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 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. In some cases, credit toward electives is also an option.

**Agreement Name** Introduction to AutoCAD  
**Agreement Reviewed/Revised** 2024 – 2025

**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	ENGC 1100 – AutoCAD	<ul style="list-style-type: none"><li>Engineering CAD Technology (A.A.S. – 72 cr.)</li><li>Engineering CAD Technology (Diploma – 64 cr.)</li></ul>	2 of 4 credits

### Course Description

This course consists of setting up a drawing environment, creating geometric shapes, creating text, dimensioning drawings, manipulating and editing displays, plotting drawings, and retrieving entity data. Aspects of file management are also covered. The student will get 'hands-on' instruction using the latest release of AutoCAD.

### Course Learning Outcomes

To complete these requirements, students will:

1. Identify the components of a CAD system
2. Draw basic shapes
3. Set up a drawing environment
4. Organize drawings with layers
5. Manipulate the display of drawings
6. Use plotting options to obtain a scaled print
7. Apply object snaps to drawing elements
8. Create geometric constructions
9. Contrast text creation methods

10. Prepare drawing tables
11. Modify existing drawing geometry
12. Obtain drawing information
13. Compare polylines, multi-lines and splines
14. Create dimensions on a drawing
15. Modify dimension styles
16. Apply cross-hatching to drawings
17. Create drawing symbols (blocks)

### **Assessments**

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

### **Text for Reference:**

Check with the college bookstore for current textbooks.

### **Recommended Industry-Recognized Certifications or Comprehensive Assessments – High School & College**

<b>Certifications/ Assessments</b>	<b>Vendors</b>	<b>Other Information</b>
CAD Mechanical Design II (662)	You Science	<a href="http://www.youscience.com">www.youscience.com</a>
Introduction to Engineering	Project Lead the Way (PLTW)	<a href="http://www.pltw.org">www.pltw.org</a>
AutoCAD Certified User	AutoDesk	<a href="http://www.autodesk.com">www.autodesk.com</a>
AutoCAD Certified Professional	AutoDesk	<a href="http://www.autodesk.com">www.autodesk.com</a>