

---

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 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.

<b>Agreement Name</b>	<b>Engineered Roof Systems</b>
<b>Agreement Reviewed/Revised</b>	<b>2024 – 2025</b>

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

College	College Course	College Program	ACC
Hennepin Technical College	CARP 1141 – Engineered Roof Systems	*Residential Remodeling & Design (A.A.S. – 60 cr.) *Carpentry (Diploma – 36 cr.) *General Construction Laborer (Occ. Cert. – 17 cr.)	1 credit of 3 credits (15 hrs. lecture & lab)

## Agreement Description

This course will introduce the student to some of the engineer-designed products used to support the roof on a house. Students will then use this information to build one or more roofs.

## Curriculum Learning Outcomes

50% of the curriculum learning outcomes will be covered in the high school course(s) by qualified CTE high school instructor(s). The following outcomes will be addressed in the course:

- Discuss roof truss designs
- Identify roof truss parts
- Demonstrate proper handling and storage of roof truss
- Determine installation requirements
- Demonstrate proper bracing
- Analyze sheathing application
- Practice safe construction techniques

## Course Grade

Students who earn a grade of **80% or better** in the course(s) qualify for Articulated College Credit.

### Recommended Industry-Recognized Certification or Comprehensive Assessment – College

Certification/ Assessment	Vendor	Other Information
OSHA 10-Hour Construction Industry Certification	OSHA Education Center	<a href="http://www.oshaeducationcenter.com">www.oshaeducationcenter.com</a>
OSHA 30-Hour Construction Industry Certification	OSHA Education Center	<a href="http://www.oshaeducationcenter.com">www.oshaeducationcenter.com</a>
Construction Trades Foundation	Precision Exams	<a href="http://www.precisionexams.com/minnesota/files/standards-pdfs/(510)ks.pdf">http://www.precisionexams.com/minnesota/files/standards-pdfs/(510)ks.pdf</a>
Basic Principles of Construction – Industry Certification	NOCTI – Home Builders Association	<a href="http://www.nocti.org">www.nocti.org</a>

### Recommended Industry-Recognized Certification or Comprehensive Assessment – High School

Certification/ Assessment	Vendor	Other Information
CareerSafe OSHA 10-Hour Safety Industry Credential	CareerSafe	<a href="https://www.skillsusa.org/programs/careersafe-online-safety-training/">https://www.skillsusa.org/programs/careersafe-online-safety-training/</a>
SP2 Construction Certification	SP2	<a href="https://sp2.org/construction-schools">https://sp2.org/construction-schools</a>
Construction Trades Foundation	Precision Exams	<a href="http://www.precisionexams.com/minnesota/files/standards-pdfs/(510)ks.pdf">http://www.precisionexams.com/minnesota/files/standards-pdfs/(510)ks.pdf</a>