

Minnesota Articulated College Credit (ACC) Agreement

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Articulated College Credit (ACC) 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 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.

Agreement Name **Marine, Motorsport, & Outdoor Power Equipment Technology – Introduction to Engine Theory**

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	MMST 1105 Introduction to Engine Theory	<ul style="list-style-type: none"> • Marine, Motorsport & Outdoor Power Equipment (Diploma – 64 cr.) • General Maintenance Technician (Occ. Cert. - 30 cr.) • Motorcycle Technician (Occ. Cert. – 30 cr.) • Outboard Technician (Occ. Cert. – 30 cr.) • Power Equipment (Occ. Cert. – 30 cr.) 	2 of 3 Credits

Course Description

The student will learn the four-cycle and two-cycle engine theory, engine operating theory, and failure analysis. The course covers the characteristics of hazardous wastes and their safe handling, storage, and disposal.

Curriculum Learning Outcomes

To receive two (2) of three (3) college credits, students will master 60% of the learning outcomes. The following outcomes will be addressed in the course.

1. Explain 2 stroke theories
2. Explain 4 stroke theories
3. Identify parts of an engine
4. Explain engine component functions
5. Perform engine disassembly
6. Perform engine reassembly
7. Perform basic measurements
8. Access data from the Internet
9. Accept responsibility
10. Exhibit professionalism
11. Exhibit safe work practices

Reference Textbook

Please go to www.hennepintech.edu for the most recent text.

Course Assessments

Students must obtain a **“B” or 80% grade or better** to earn college credit.

Recommended Comprehensive Assessment – College or High School

Comprehensive Assessment	Vendor	Further Information
Small Engines I (501)	You Science	https://www.youscience.com/minnesota/files/standards-pdfs/(501)ks.pdf
Power Equipment Technology	SkillsUSA Career Essentials	http://www.careeressentials.org/wp-content/uploads/2017/07/PowerEquipmentTech_blueprint.pdf
Vocational Education Resources – E-Power Portal Scan	Briggs & Stratton	http://www.powersourcecanada.ca/BriggsStrattonResourceGuide.pdf
Technician Certification – 4 Stroke	Equipment & Engine Training Council (EETC)	https://www.eetc.org/page/TechCert