

Minnesota Articulated College Credit (ACC) Agreement www.CTEcreditMn.com

Agreement Name: **Mechatronics I**

Agreement Last Reviewed: September 2017

Next Review Date: September 2019

Curriculum Content Objectives:

OUTLINE OF MAJOR CONTENT AREAS

1. Apply OHMs law to design circuits.
2. Measure resistance in a circuit.
3. Determine performance specifications of components.
4. Calculate and measure current in a circuit.
5. Calculate power of a circuit.
6. Describe operation of electromechanical components.
7. Design electrical circuits using software.
8. Troubleshoot electrical circuits.
9. Build and operate electrical circuits.

LEARNING OUTCOMES (General)

1. The learner will gain an understanding of various basic AC and DC principles and components.
2. The learner will demonstrate an understanding of various advanced AC principles and components.

Assessments:

Students must achieve no less than 80% or B for a final grade in the high school course to receive ACC.

ACC Concept:

Skills for selected courses required for graduation in programs at the colleges participating in this regional agreement are taught in our schools using the assessments developed collaboratively by secondary and post-secondary staff. High School credit is earned and college credits are earned if the student meets the college achievement.