Course Title: Automation Lab

Submitted By: Robert Stevens

Semester Course Prefix and Number: ECM 2268

Approval Date: 

Old Quarter Course Prefix and Number: 

Revision Date: 9/6/16

Number of Credits: 2

Number of Lecture Credits: 0

Semester(s) Offered: Fall

Number of Lab Credits: 2

Number of Lab Hours: 4

Number of Studio/Demonstration/Internship Credits: 4

Number of Studio/Demonstration/Internship Hours: 4

Class Size: 24

Negotiated by AASC on: (date)
Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

1. Upon completion of this course, the student will be able to:
   Apply teamwork principle in the creation of an automated work cell project.
2. Plan and design the project utilizing flow charts and gnat charts.
3. Evaluate equipment application and specifications.
4. Develop project documentation including written descriptions, equipment lists, and electrical prints of work cell equipment and assemblies.
5. Assemble, wire, and configure an automated work cell

Student Assessment Methods:
Assessment made of lab assignments, worksheets, and papers using rubrics and check lists. Tests and quizzes of technical knowledge to be given at regular intervals during semester.

Use of Instructional Technology: (includes software, interactive video and other instructional technologies):
ECM Laptop Computer Lease with Industrial Software

Additional Special Information: (special fees, directives on hazardous materials, etc.)
Laptop Computer Lease and Required Tool List

Transfer Information: (Please list colleges/majors that accept this course in transfer.)

Affiliated Mesabi Range College Courses and Programs:

Approvals:

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Revised: December 2012