

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Electrical & Industrial Automation Projects
Semester Course Prefix and Number: PAS 1225
Old Quarter Course Prefix and Number:

Submitted By: Scott Norcia
Approval Date:
Revision Date: 11/23/11

Number of Credits: 2 to 8
Semester(s) Offered:
Class Size:
Negotiated by AASC on:
(date)

Number of Lecture Credits:
Number of Lab Credits: Number of Lab Hours:
Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:

- 0 - Developmental Courses
1 - Non-transferable, General Education
X 2 - Technical course related to career programs
3 - College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
4 - Other college course not considered a part of general education (MNTC) (e.g. computer science, health, physical education)
5 - Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
9 - Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course is designed to cover learning related to special assignments, independent study, internships and industrial work experience directly related to the curriculum objectives of the Process Automation Systems program. The course content will be determined on an individual basis dependent on student needs and departmental requirements. The EIAT department, in coordination with the student, will design an individual plan that meets specified objectives.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): Industrial electrical experience, previous electrical related course work
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

Process Automation Systems Diploma
Process Automation Systems AAS

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:

(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer's approval are required.)

- 0. X None
1. Communications
2. Critical Thinking
3. Natural Sciences
4. Mathematical/Logical Reasoning
5. History and the Social and Behavioral Sciences
6. The Humanities and Fine Arts
7. Human Diversity
8. Global Perspectives
9. Ethical and Civic Responsibility
10. People and the Environment

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

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

1. Display critical thinking skills in project type assignments.
2. Demonstrate broadened base of technical knowledge and skills related to electrical control systems.
3. Exhibit improved skills in self-directed learning.
4. Communicate technical concepts and processes

Student Assessment Methods:

Independently determined by project type:.

- Evaluation of project reports.
- Pre-test and post-testing.
- Test-out process for previously obtained skills and knowledge.
- Evaluations by internship proctors.
- Portfolios presentation of accomplished tasks and outcomes
- Demonstration of skills and knowledge
- Matching of project outcomes to required outcomes within the current PAS program.

Use of Instructional Technology: (includes software, interactive video and other instructional technologies):

- Web based research
- Web based tutorials
- On-line coursework

Outline or Statement of Major Course Content:

Outline and content is germane to project assignment:

- Course outline is developed by collaboration between the PAS department, instructor and student.
- Individual outline is developed for each project previous to enrollment in the course.

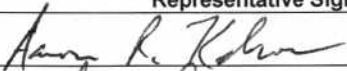
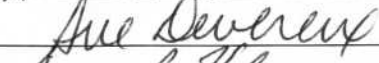

Additional Special Information: (special fees, directives on hazardous materials, etc.)

None

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

None

Approvals:

Body	Representative Signatures	Date
Curriculum Committee		11-29-11
Faculty Association		12-5-11
Academic Affairs Standards Committee		11-29-11
Chief Academic Officer		

Distribution: Original – Administrative Office
Copies: Curriculum Committee Chair, AASC Chair, Transfer Specialist, Originating Faculty Member, Scheduler, Records, Student Services, Learning Center, Library
Revised: October 2006