



MASTER COURSE OUTLINE

Prepared By: G Baker/P Ford

Date: December 2016

COURSE TITLE

Independent Project

GENERAL COURSE INFORMATION

Dept.: MCT

Course Num: 129

(Formerly:)

CIP Code: 15.0405

Intent Code: 21

Program Code: 640

Credits: 2-5

Total Contact Hrs Per Qtr.: 22-110

Lecture Hrs:

Lab Hrs: 22-110

Other Hrs:

Distribution Designation: General Elective (GE)

COURSE DESCRIPTION (as it will appear in the catalog)

MCT 129 is an independent study course allowing students to research, design and complete a mechatronics project incorporating the use of Global Position Systems (GPS) as a primary control component. Projects must be approved and supervised by a faculty member.

PREREQUISITES

MCT 120 or Instructor Permission

TEXTBOOK GUIDELINES

To be assigned based upon focus of student efforts

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

- 1) Create a project proposal outlining the application of GPS
- 2) Develop specific learning outcomes for the independent project
- 3) Design, build and test a faculty approved mechatronics project that incorporates GPS
- 4) Demonstrate, through software programming and implementation, a technical understanding of GPS
- 5) Evaluate project data/results and summarize project outcomes

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

Course content outline will be designed by the student and assigned faculty member based upon the student's focus area, learning objectives, and depth of project (2-5 credits) agreed upon.

DEPARTMENTAL GUIDELINES (optional)

The syllabus must contain evaluation/grading guidelines, class environment/expectations/rules, course learning outcomes, and a disability services statement. A schedule must be provided to students that contains content covered (text chapters, topics, etc.) and tentative test dates (to include final date/time).

DIVISION CHAIR APPROVAL

DATE