

Master Syllabus

OPT 1198 - Excel for Engineering Technology

Division: Science, Mathematics and Engineering

Department: Operations Technology

Credit Hour Total: 1.0

Lab Hrs: 2.0

Date Revised: October 2013

Course Description:

Students will gain an understanding of Excel software and how to analyze and solve engineering technology problems, emphasizing the advanced use of spreadsheets, including programming with macros. Two lab hours per week.

General Education Outcomes:

- ▣ Oral Communication Competency
- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Computer Literacy Competency
- ▣ Information Literacy Competency

Course Outcomes:

Spreadsheets

Utilize advanced capabilities of spreadsheets to analyze and display data and solve problems.

Assessment Method: Locally developed exams

Performance Criteria: 70% of students score 70% on exams

Problem solving techniques

Demonstrate the ability to use various quantitative problem solving techniques to specified problem.

Assessment Method: Locally developed exams

Performance Criteria: 70% of students score 70% on exams

Macros

Demonstrate the ability to create macros and to integrate them into a spreadsheet.

Assessment Method: Locally developed exams

Performance Criteria: 70% of students score 70% on exams

Outline:

Introduction to Excel
Formatting
Excel functions
Graphing with Excel
Linear regression
Statistical analysis
Time value of money with Excel and macros