

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** EGR 216

**Credits:** 3

**Course Title:** Computer Methods in Engineering and Technology

**Course Description:**

Provides advanced level experience in using a computer as a tool for solving technical problems and performing office functions. Includes computer hardware and operating system usage, structured programming in a selected high level language, use of word processing software, computer graphics, and spreadsheets. Focuses on the analysis and solution of problems in engineering and technology. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**General Course Purpose**

Computer course for AAS Engineering Technology majors.

**Course Pre/Corequisites:**

Prerequisites or corequisites: ENG 111, MTH 115, ITE 115, CSC 155, or passing score on the computer competency exam

**Course Objectives**

Upon completing the course, the student will be able to:

- a. use windows in setting up files and file storage.
- b. write technical programs using MATLAB.
- c. write technical papers using Word.
- d. solve technical problems using Excel.
- e. input graphics into technical reports.

**Major Topics to be Included**

- a. programming (MATLAB)
- b. word-processing (Word)
- c. spreadsheet (Excel)
- d. graphics (Excel and MATLAB)

**Effective Date of Course Content Summary:** August 2008