

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

**Course Prefix and Number:** EGR 121    **Credits:** 2

**Course Title:** Foundations of Engineering

**Course Description:**

Introduces the engineering profession and its impact on society and the environment, including engineering problem solving, the engineering design process, and professional practices. Covers fundamental engineering calculations, descriptive statistics, basic spreadsheet and mathematical scripting language applications, professional ethics, teamwork, and communication. Prerequisite: ENG 111 eligible; MTH 162 or MTH 167, or equivalent; or departmental approval. Lecture 2 hours. Total 2 hour per week. 2 credits

**General Course Purpose**

**Course Objectives:**

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

**Problem Solving**

- Identify and solve problems using engineering methodologies
- Information Literacy
- Find, evaluate, and effectively use technical information, including scholarly literature

**Technology Application**

- Use spreadsheet, word processing and presentation software to collect, organize, analyze and present engineering data

**Communication**

- Effectively communicate engineering work in oral, written, and visual formats, using graphical information as relevant -based engineering work

Intro to Engineering Profession

Demonstrate knowledge of the Engineering profession including engine

professional societies, accreditation, and licensing.

