

Montgomery County Community College  
EGR 102  
Introduction to Engineering  
3-2-2

**COURSE DESCRIPTION:**

This course introduces students to the foundational skills necessary to pursue collegiate study in the field of Engineering. Students learn to work in teams, as well as independently, to research Engineering-related topics and to demonstrate effective math and science-based problem-solving techniques. Students participate in technology-based design projects, investigate foundational applications of Engineering through applied class activities, and share their findings with the class by way of papers, posters, and presentations. The course also introduces professional and societal issues appropriate to engineering. Various forms of technical communication are emphasized.

**REQUISITES:***Previous Course Requirements*

MAT 011 Beginning Algebra or MAT 011B Beginning Algebra  
with Review of Arithmetic

REA 011 Fundamentals of College Reading or REA 017 Vocabulary and Reading  
Comprehensive Development II

*Concurrent Course Requirements*

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Compose clear and concise oral presentations and written synopses about selected topics in engineering.	Lecture Written Assignments Oral Presentations Class Activities	Section Examinations Writing and Presentation Review
2. Conduct research on ethical issues related to engineering; formulate and justify positions on these issues.	Lecture	

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Demonstrate the ability to function on multidisciplinary teams to design a simple system, component or process to meet stated need.	Lecture Team Design Class Activities	Section Examination Team Design Presentation Review
4. Design an Experiment		



7. **Steps to Developing a New Product Idea**

- a. Key to Identifying a Worthwhile Product
- b. Crossing The Chasm
- c. Necessary Elements to Successful Product Launch

8. **Project Management**

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