

Bossier Parish Community College  
Master Syllabus

**Course Prefix and Number:** ENGR 100

**Credit Hours:** 3-3-0

**Course Title:** Engineering Fundamentals I

**Course Prerequisite:** Math 102 or Math 111

**Textbook:** Moaveni, Saeed. Engineering Fundamentals: An Introduction to Engineering, 5<sup>th</sup> edition, Course Technology. ISBN: 9781305084766  
Engineering & Computer Graphics Workbook Using SOLIDWORKS 2018, SDC Publications, ISBN 9781630571429

**Course Description:** A foundation course that outlines the basic principles of engineering, emphasizes problem solving, and computer applications.

**Learning Outcomes:**

At the end of this course, the student will:

- A. recognize the nature of engineers and the engineering profession;
- B. demonstrate skills in setting up and solving problems;
- C. demonstrate research or/and design skills in an engineering related topic; and
- D. demonstrate ability to organize and communicate technical and non-technical information orally.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

1. describe the major requirements for a successful career in engineering; (A, B, C, D)
2. apply knowledge of mathematics, science, and engineering to analyze and solve problems; (A, B, C, D)
3. analyze and interpret data for science and engineering applications; (A, B, C, D) and
4. design, organize, give, and evaluate oral communications. (A, B, C, D)

**Course Requirements:** *(in addition to requirements for face-to-face courses, additional requirements for online and/or hybrid courses should be included, if applicable)*

1. Complete assigned homework and in-class exercises in problem solving and analysis.
2. Complete three exams.
3. Complete a peer-reviewed oral presentation within time limits and design criteria.

**Course Grading Scale:**

- 90 – 100 = A  
80 – 89 = B  
70 – 79 = C  
60 – 69 = D  
0 – 59 = F

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** N/A

**Nondiscrimination Statement:** Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**COORDINATOR FOR SECTION 504 AND ADA**

Angie Cao, Student and Disability Services Specialist

Disability Services, F-254

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6511

Email: [acao@bpcc.edu](mailto:acao@bpcc.edu)

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

**Equity/Compliance Coordinator**

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.