

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING
ISEN 101: INTRODUCTION TO INDUSTRIAL ENGINEERING

REQUIRED or ELECTIVE: Required Course

CATALOG DESCRIPTION (1-0) Credit 1

Introduction to industrial engineering; overview of the curriculum; presentations by faculty and industry to familiarize students with the department and the scope of industrial engineering applications.

PREREQUISITES

None

PROFESSIONAL COMPONENT

This course provides an introduction to industrial engineering, the type of problems that industrial engineers solve, provides an exposure to some of the industrial engineering methods and tools, and learn professional development strategies.

COURSE LEARNING OUTCOMES

At the end of the course, students should be familiar with

- some of the practical problems in which industrial and systems engineering tools are used,
- the industrial engineering curriculum, and
- professional development strategies for succeeding in college.

TEXTBOOK

No textbook is required. Class notes are distributed.

TOPICS COVERED

Week Topic

1. Introduction and ISEN Resource
2. Introduction to Design Project and Teamwork
3. Introduction to the MPX Software – Part 1
4. Introduction to the MPX Software – Part 2
5. Lean Production and Waste – Part 1
6. Lean Production and Waste – Part 2
7. Design Project Workshop
8. Design Project Workshop
9. Is Wal-Mart Good For America?
10. Design Project Workshop
11. Research Presentation
12. Research Presentation
13. Design Project Presentations

CLASS AND LAB SCHEDULE

Fifty minutes of lectures per week. No laboratory component.

CONTRIBUTION TO MEETING REQUIREMENTS OF CRITERION 5:

Subject	Semester hrs	Subject	Semester hrs	Subject	Semester hrs
Mathematics		Engineering Science	1	General	
Basic Science		Engineering Design			

RELATIONSHIP OF COURSE TO PROGRAM OUTCOMES:

G. Ability to communicate effectively.

Students engage in discussions in the classroom. Two essays are part of the course.

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