

**United States Naval Academy
Mechanical Engineering Department**

Catalog Description: EM380 Engineering Review

Credit: 0 (0-2-0)

Designation: Elective, engineering majors

A comprehensive review course to prepare students to take the Engineer-In-Training (EIT) or Fundamentals of Engineering (FE) examination. Topics include mathematics, chemistry, computers, electrical engineering, engineering economics, statics, dynamics, thermodynamics, fluid mechanics, and mechanics of materials.

Prerequisites: 1/C engineering major.

Course Director: CAPT Lloyd Brown, USN

Course Content:

Wk	Topic	Hrs.
1	Course introduction, Topic III: Mathematics	2
2	Topic IV: Statics	2
3	Topic V: Dynamics	2
4	Topic VI: Mechanics of Materials	2
5	Topic VII: Fluid Mechanics	2
6	Topic VIII: Thermodynamics	2
7	Topics XI, X: Heat Transfer, Transport Phenomena	2
8	Topics XI, XII: Biology, Chemistry	2
9	Topic XIII: Materials Science/Structure of Matter	2
11	Topic XIV: Electric Circuits	2
12	Topic XV: Computers, Measurement, and Controls	2
13	Topics XVI, XVII: Engineering Economics, Ethics	2

Assessment Methods:

	Method	YES	NO
A	Quizzes	X	
B	Homework		X
C	Exams		X
D	Laboratory Reports		X
E	Oral Presentations		X
F	Design Reports/Notebooks		X
G	Prototypes/Demonstrations		X
H	Projects		X

I	Other	X	
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Because this course was offered for 0 credits, the only assessment tools used were weekly self-guided, zero-credit quizzes and attendance.

Course Outcomes¹

1. Prepare for the Fundamentals of Engineering Exam (A, I).

¹ Letters in parenthesis refer to the assessment methods listed in the previous section.

	Course Outcomes									
Program Outcomes	(1)									
(a)	X									
(b)										
(c)	X									
(d)										
(e)	X									
(f)	X									
(g)										
(h)	X									
(i)										
(j)										
(k)	X									

Date of Latest Revision: 1 JUN 2010, CAPT Lloyd Brown, USN