

EGR 120  
Introduction to Engineering  
File: N120RT1A

## **Test #1 Review**

### **Related Material:**

Homework Assignments 1 – 4  
Media Assignments 1-4  
Textbook chapters 1, 2, 5, and 6

### **Format**

Several formats will probably be included, including multiple-choice, True/False, Fill-in-the-blank, and discussions.

### **Items Provided:**

A copy of the *NSPE Code of Ethics* will be provided with the test.  
A copy of the conversion tables from the inside front and back covers of the text will be provided.

**Topics:** This general list of topics is not meant to exclude any information covered in class.

### **The Engineering Profession**

Engineering disciplines  
Specialization versus generalization in choosing a degree  
Benefits of advanced degrees  
The "Technical Team" concept  
ABET Accreditation  
Engineering Societies – 6 key functions  
Licensing as an engineer  
    The licensing process – 4 steps  
    Why become licensed?  
    Exam information  
Media assignments – some questions might be related to the media assignments

### **Engineering Ethics**

Case studies - discuss how to handle situations involving ethical decisions, including references from the NSPE Code of Ethics.  
Short answer questions (T/F, Multiple Choice, Fill in the blank) on basic ethics issues and on the NSPE Code of Ethics.

### **Engineering Data**

Significant digits  
    Rules & calculations  
    Implied precision  
    Relationship to percent error  
Systems of units  
    Table of SI Base Units  
    Table of SI Prefixes  
(continued)

Rules for prefixes and units

Derived units - built on the base units

$F = ma$

$W = mg$  (the value of  $g$  will be given)

US Base Units

Mass versus force

Slugs, lbf, and lbm

Conversions between units

Dimensional analysis