

>>> Chapter 2 Quiz for *Foundations of Engineering* <<<

Name _____ SSN _____

This is a short answer quiz. Please put your answers in the designated answer areas. The quiz questions for the quizzes in the three sections of *Foundations* that I teach are largely different. I will “norm” the quiz scores at the end of the semester to account for any differences between the sections. The questions from this quiz come from the lecture and the book (chapter 2). Each problem is worth 12 points (4 points are for free).

This quiz is open notes, but not open book. Your notes may not contain photocopies (or scans or anything similar) of anything. That is, the notes must be handwritten. You have 15 minutes. Later quizzes will be more difficult and longer than this one!

1) Answer “what is engineering” in one sentence **“Engineering is the application of science to the common purpose of life” (Count Rumsford)**

2) In the engineering process before the IMPLEMENT steps comes the **EVALUATE DESIGNS** step.

3) What is the number one achievement of the top-twenty 20th century greatest engineering achievements?

Electrification

4) List the five “classic” engineering disciplines **Civil, Mechanical, Electrical, Chemical, and Industrial**

5) Which of the engineering disciplines is the oldest? **Civil**

6) List three specialties of Electrical Engineering **Power, Communications, and Electronics (also Controls, Instrumentation, and Computers)**

7) If Mechanical Engineering is lightly stated as “Anything that moves or gets hot”, then Civil Engineering is “Anything you can **stand** in or on”.

8) Give an argument for a specialized (and not generalized) engineering education **A specialized education can prepare you to be very competitive and competent for a given field and thus beat-out other less-specialized and thus less competent competitors.**