

Homework Assignment #1

Reading Assignment:

Read Chapters 1 and 2 in Engineering Fundamentals – An Introduction to Engineering, 3rd Edition by Moaveni.

Assignment:

1) **Paper on an engineering discipline**

It is helpful to investigate any engineering disciplines in which you are interested. Each discipline is diverse and may include many specializations and many potential employment opportunities. Learning more about a discipline will help you in selecting engineering elective course, deciding on possible internships, and in deciding what type of employment to pursue. The textbook and many internet sites have much valuable information on each engineering discipline.

Investigate the engineering discipline of your choice using the following resources:

- a) Chapter 1 of the textbook (it has sections on several disciplines)
- b) Virginia Tech's website (www.eng.vt.edu) - pick the department of your choice and you should find a description of the field (you might need to select the Undergraduate program).
- c) Visit the Discover Engineering website at <http://www.discoverengineering.org/aboutengineers.asp>
- d) Other internet sites of your choice

Write a 1-2 page paper describing the type of work that engineers do in your selected discipline. The paper must be in your own words. Include references at the end of the paper.

2) **Develop a program of study**

For this assignment it is assumed that all students are pursuing a bachelor's degree in engineering or engineering technology. If you haven't yet decided on an engineering discipline to pursue or a university in which to transfer, simply pick a possible choice for now. Develop a program of study, listing exactly which courses you will need to take each semester (including this semester) between now and the time that you graduate with the bachelor's degree. Include both course numbers and titles.

Example:

University selected for transfer: ODU
Engineering discipline: Civil Engineering

Spring 2007 - TCC
EGR 120 – Intro to EGR
MTH 173 – Calc. I
CHM 111 – Chemistry I
HIS 121 – US History

(continued on back)

Summer 2007 - TCC

CHM 112 – Chemistry II

EGR 110 – Engineering Graphics

Fall 2007 – TCC

MTH 174 – Calc II

PHY 241 – Physics I

EGR 140 - Statics

EGR 125 – Intro to EGR Methods

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Fall 2008 – ODU

CEE 304 – CEE Infrastructure Systems

CEE 305 – Civil and Environmental EGR computations

CEE 310 – Structures I

CEE 323 – Soil Mechanics

CEE 335 – Soils & Hydraulics Lab

CEE 340 – Hydraulics and Water Resources

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