

CBE20255: Introduction to Chemical Engineering

Sample homework question:

As engineering students, you are going to be continually assessed and graded on technical pursuits. However, being a good working engineer, you also need to build character traits as well. These are actually the most important aspects of actually working in engineering fields!

- a. Read “Virtues and Engineering, a Primer” for background on virtues as they relate to working as an engineer.
- b. Below are the student outcomes that we **MUST** show evidence of your completion to receive an accredited engineering degree. List which virtues that you think would be most needed to meet each outcome. You can use a table (like below) or just list the Outcome number and related Virtues Needed.

	ABET Outcome	Virtues Needed
1	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and math	
2	An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	
3	An ability to communicate effectively with a range of audiences	
4	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	
5	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	
6	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	
7	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	

- c. Reflecting on parts a and b, select 1-3 virtues (from this list or others) that you feel that you have already built up well (something you'd consider a strength for yourself).

d. Reflecting on parts a and b, select 1-3 virtues (from this list or others) that you would most like to work on improving this semester.