

**CE 4200 – Professional Engineering Practice Issues****Exercise 1.2***Understanding the ASCE CEBOK3***Purpose**

The purpose of this learning exercise is to help you

- Access to the class website and upload completed exercises as .PDF files.
- Demonstrate comprehension – in both breadth and detail – the relationship between civil engineering skills/ outcomes identified in the ASCE Body of Knowledge Third Edition (CEBOK3) and your program of study represented in the undergraduate civil engineering curriculum at Texas Tech University.

**Exercise**

1. Familiarize yourself with the source materials provided on the class website, Blackboard, and the internet These include:
  - Civil Engineering Degree Program, Texas Tech University (use the most current copy you can find)
  - Course descriptions, current Undergraduate and Graduate Course Catalog
  - ASCE Body of Knowledge, Third Edition
  - This assignment
2. The focus of the assignment is a 1-page form (.xlsx link on Blackboard) entitled “Compare CE Degree Program vs. ASCE Body of Knowledge Outcomes”. This form identifies all courses in the undergraduate civil engineering program (rows) and all 21 outcomes in the CEBOK3 (columns). You will use this form two times.
  - First, identify all CEBOK3 outcomes that you think are associated with each course in the curriculum (comprehensive)
  - Second, identify the primary CEBOK3 outcome associated with each course in the curriculum (select only ONE).
3. Having carefully completed both elements of Part 2, write a one-page narrative wherein you address the following questions:
  - From your comprehensive and selective analysis, state whether you think the CE

curriculum adequately and appropriately covers all CEBOK3 outcomes. Are there are any deficiencies and/or unnecessary duplication? Explain your answer.

- You may have noticed the total credit hours in the curriculum is 129. This number is fixed and cannot change. Do you agree or disagree with 129 hours? Justify your answer.
- Can you do better? Assume the curriculum would benefit from refinement to more fully achieve the CEBOK3 outcomes. Keeping in mind the zero-sum nature of the curriculum; that is, the course credit hour total must remain constant at 129 hours:
  - a) What course(s) if any would you delete and likewise, what would you add in its place?
  - b) What course(s) should be added and likewise, what would you delete to make room?

This part of the assignment should be typed, 12-pt, double space, 1-inch margin. One page maximum

### Deliverables

1. Compare CE Degree Program vs. ASCE Body of Knowledge Outcomes (comprehensive) (submit as PDF)
2. Compare CE Degree Program vs. ASCE Body of Knowledge Outcomes (primary single outcome per course) (submit as PDF)
3. Narrative report addressing questions above **Length:** 250-300 words (roughly 1 pages) (submit as PDF)

### Evaluation Criteria<sup>1</sup>

- Compare CE Degree Program vs. ASCE Body of Knowledge Outcomes (comprehensive) **Completion**
- Compare CE Degree Program vs. ASCE Body of Knowledge Outcomes (primary single outcome per course) **Completion**
- Narrative report **Explicit answers to the questions; suitable grammar to satisfy a computer agent**

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<sup>1</sup>The narrative report will be evaluated by a narrow domain AI agent, with instructions to identify answers to the listed items. The AI agent will also have access to BOK3 as well as a current Dynamic Enrollment Management Plan.

### **Submission Requirements**

- **Format:** Narrative portion, typed, double-spaced, 12-point Times New Roman font, 1-inch margins.
- **Submission:** Upload your contents as a PDF to the course's online portal (Blackboard).