Phase IV: Views of Faculty and Professional Societies
Session 3: Assessing Competencies

• How do we know students have obtained the desired competencies?

• What is the evidence?
• How are competencies demonstrated?
• What are indicators of competencies?

• Abstract KSAs to concrete examples.
Session 3: Assessment Competencies

• 1. Student focus (45 min)

• 2. Faculty focus (45 min)
Engineering Graduate

• Graduate Seeking Employment
  – Resume
  – Cover letter
  – Interview

• How do these competencies appear?

• How to communicate specific competencies?
Advice to future students

• Resume
  – How would this competence show up on a resume? (What bullet points?)

• Cover letter
  – How would a student describe experiences leading to a specific competence? (How explain in a few sentences)

• Interview
  – “Convince me you are:_____”
  – “Describe a situation in which you applied:______” (What stories should you be able to tell?)
Example: Communication

• Resume
  – Editor of Engineers Without Borders Newsletter

• Cover letter
  – Wrote monthly newsletter and distributed to 200+ members and sponsors. Learned to summarize key facts for a broad audience.

• Interview
  – Invited by Dean to present to Board of Trustees leading to a major donation to the club.
Session 3 Part 1

1.0 Professional Competence

1.1 Intrapersonal Competence
  - 1.1.1 Self-Directed, Lifelong Learning
  - 1.1.2 Intellectual, Innovative, Critical Thinking
  - 1.1.3 Ethical
  - 1.1.4 Conscientiousness

1.2 Engineering Competence
  - 1.2.1 Technical, Analytical
  - 1.2.2 Scientific
  - 1.2.3 Mathematical
  - 1.2.4 Innovative, Creative, Design Thinking

1.3 Interpersonal Competence
  - 1.3.1 Communication
  - 1.3.2 Teamwork
  - 1.3.3 Leadership, Project Management
  - 1.3.4 Social, Intercultural

OVERALL COMPETENCY MAP
Working Draft 16 April 2017
Session 3 Part 2: For Faculty

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Rubrics
Instruments
Concept Inventories
Society Resources

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Design Self-Efficacy Survey: Carberry, Sun, & Ohland,

AACU Oral Communication Rubric

Critical Thinking Assessment Test (CAT)
https://www.tntech.edu/cat/

OVERALL COMPETENCY MAP
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