

TUEE Transforming Undergraduate Education in Engineering

Phase IV: Views of Faculty and Professional Societies



Session 2: Delphi Part 3

1. Discuss and compare/contrast to Industry KSAs (competencies).
 - Note key differences and similarities
 - suggestions to integrate the two
2. Discuss, revise, refine overall competency map
3. Discuss, refine, refine KSAs included in specific competencies.

Session 2: Final Refinement

- 1.) Delphi vs TUEE I and II comparison (45 min)
- 2.) Overall Competency Map review (30 min)
- 3.) Refine KSAs (45 min)

1.0 Professional Competence

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Phase I and II
TUEE Program
Table 2, pg 18

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
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Session 2 - 1

Similarities

4 - 7

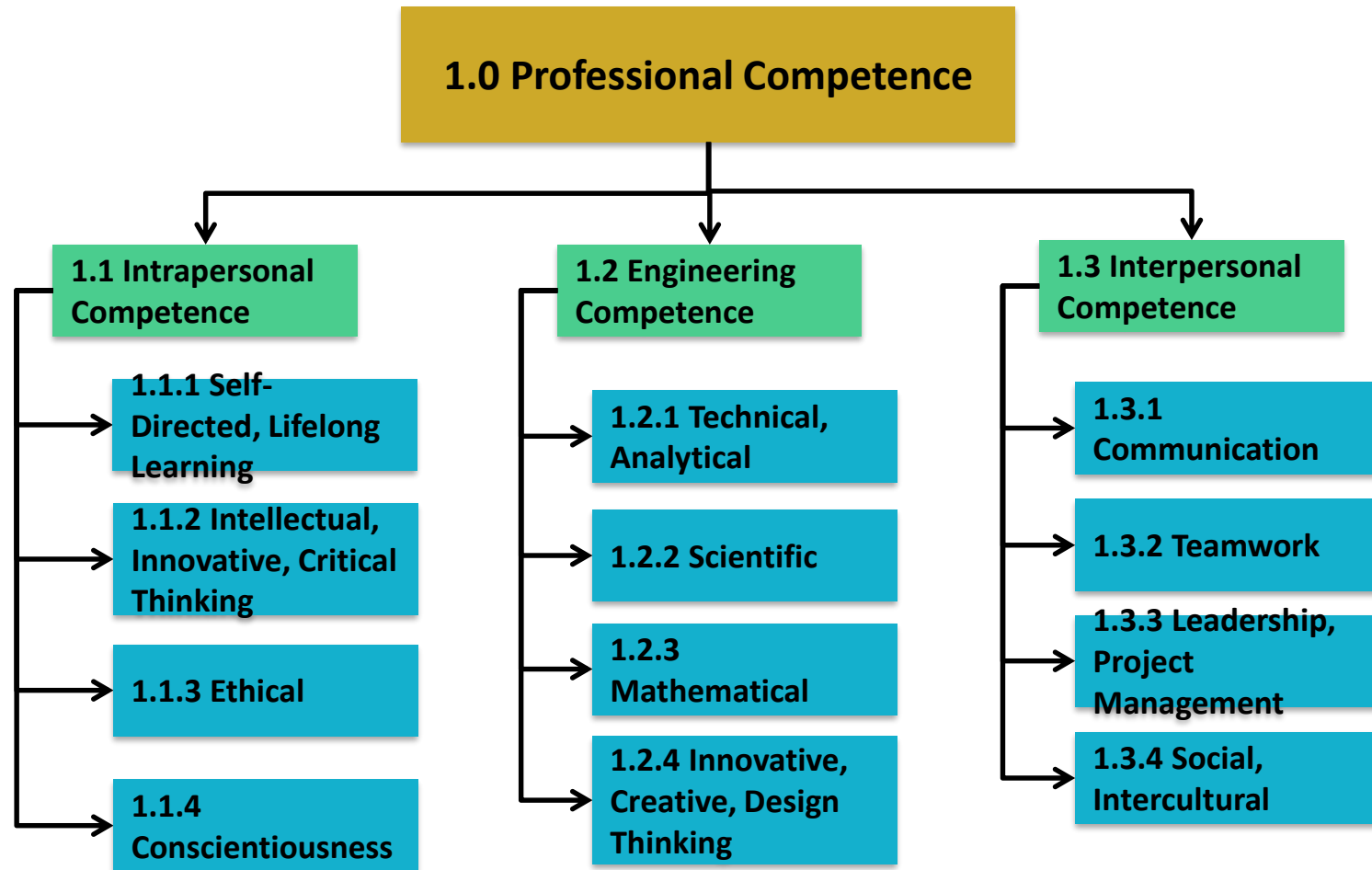
Differences

4 - 7

Integration Suggestions

1 - 2

Session 2 Part 2



OVERALL COMPETENCY MAP
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Session 2 - 2

TUEE IV Workshop Session 2 Worksheet 2

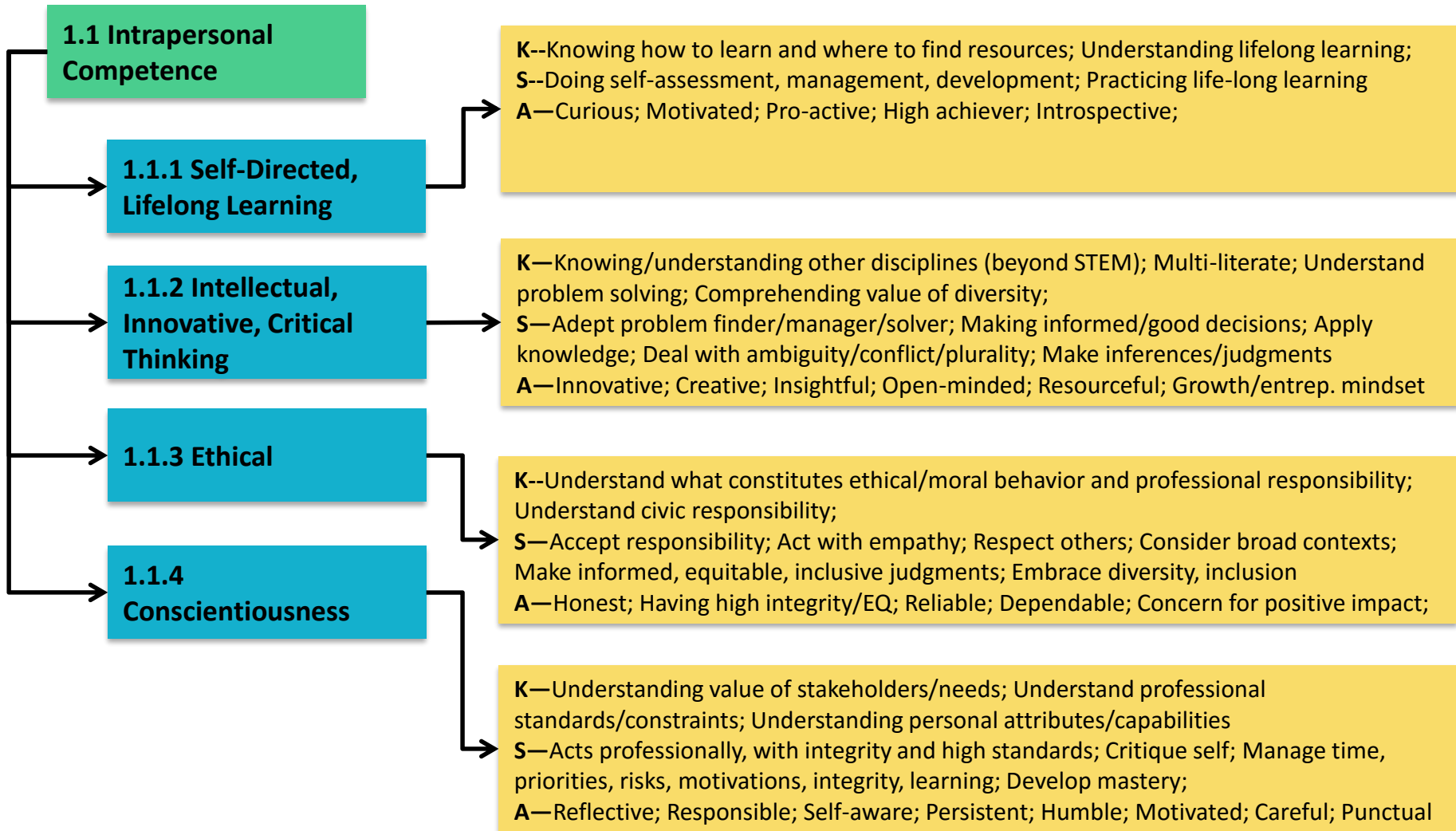
Discuss, revise, refine overall competency map: Write out suggestions below or sketch it out on the back.

Competency	Comments

Session 2 Part 3

KSAs of Intrapersonal Competencies

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Definitions

Merriam-Webster.com

“Can do” competencies

Knowledge—acquaintance with or knowing/understanding something

(See cognitive taxonomies)

Skills—ability to use one’s knowledge effectively, especially in the performance of a task

(See psychomotor skills taxonomies)

“Will do” competencies

Attitude—a feeling or emotion toward something

(See affective taxonomies)

Session 2 - 3

TUEE IV Workshop Session 2 Worksheet 3

Discuss, refine, refine KSAs included in specific competencies. Write out suggestions below.

Competency	KSA (2 - 3 in each)
	Knowledge
	Skills
	Abilities
	Knowledge
	Skills
	Abilities

Session 2 Part 3

KSAs of Intrapersonal Competencies

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