

# Computer Software Engineering Technology BS

## Ethical Principles And Management Skills

Goal Description:

To develop students’ knowledge of ethical principles, technical skills, and management skills relevant to the field of computer software Engineering Technology.

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Ethical Principles And Management Skills

Learning Objective Description:

Students will develop and demonstrate an understanding of the ethic considerations and management principles relevant to the field of Computer Software Engineering Technology.



RELATED ITEM LEVEL 2

Capstone Project And TASO

Indicator Description:

All undergraduate Computer Software Engineering Technology students must complete COSC 4319 (Software Engineering) and COSC4349 (Professionalism and Ethics) prior to graduation. In addition, COSC4319, as a capstone course, covers the eight Student Outcomes (except the three outcomes (e), (g) and (h)) out of the eleven Student Outcomes and COSC4349 addresses the remaining three outcomes. Therefore, both the courses are selected for assessment. Additionally, TASO (Test for Assessing Student Outcomes) is implemented to quantitatively measure the eleven Student Outcomes.

Attached Files

-  [TASO-assessment\\_S16](#)
-  [output-S16](#)

Criterion Description:

To perform a quantitative assessment, the following rubrics for the two courses are developed: (1) rubric for Project, (2) rubric for presentation evaluation, (3) rubric for group member evaluation, and (4) rubric for ethics topics. For COSC4319, faculty members observe students’ project presentation and directly evaluate students’ performance based upon the rubrics (1)-(3). One the other hand, for COSC4349, students’ performance is indirectly evaluated through the exam questions that address rubric (4). Each category is rated with the following scale values: (1) 1.0 (below expectations or unacceptable), (2) 2.0 (evolving or developing), (3) proficient (or competent), and (4) outstanding (or exemplary). Student’s performance on Student Outcomes is directly evaluated with each specific rubric, while the performance on objectives is indirectly measured by mapping between Student Outcomes and Program Objectives.

Findings Description:

Spring 2016 was the first assessment point for TASO, as the first student cohort containing juniors were in COSC 4349 Ethics. The only data points were for the three Student Learning Objectives associated with assessment in that class. The results will serves as the first baseline point for future assessment.

RELATED ITEM LEVEL 3

Assessment

Action Description:

The Curriculum Committee will review assessment procedures from the Computing Science program to ensure alignment with the assessment requirements for the Computer Software Engineering Technology program.

RELATED ITEM LEVEL 3

Curriculum Planning

Action Description:

The Curriculum Committee will review the Computer Software Engineering Technology program with respect to aligning with ABET Engineering Technology program requirements.

RELATED ITEM LEVEL 2

TASO

Indicator Description:

All undergraduate Computer Software Engineering Technology students must complete COSC4349 (Professionalism and Ethics) prior to graduation. COSC4349 addresses three of the eleven identified student outcomes. . Additionally, TASO (Test for Assessing Student Outcomes) is implemented to quantitatively measure these Student Outcomes.

**Criterion Description:**

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**RELATED ITEM LEVEL 3****Curriculum Planning****Action Description:**

The Curriculum Committee will review the Computer Software Engineering Technology program with respect to aligning with ABET Engineering Technology program requirements.

**RELATED ITEM LEVEL 1****Technical Competence****Learning Objective Description:**

Students will develop and demonstrate knowledge of technical skills, relevant to the field of computer software engineering technology.

**RELATED ITEM LEVEL 2****Capstone Project And TASO****Indicator Description:**

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**Technical Competence**

**Goal Description:**

Students will have a strong technical foundation, i.e., students will develop and demonstrate knowledge of theoretical materials, and computational and technical skills in the areas of Computer Software Engineering Technology.

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

**Technical Competence**

**Learning Objective Description:**

Students will develop and demonstrate knowledge of technical skills, relevant to the field of computer software engineering technology.

RELATED ITEM LEVEL 2

**Capstone Project And TASO**

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**Update to Previous Cycle's Plan for Continuous Improvement**

**Previous Cycle's Plan For Continuous Improvement (Do Not Modify):**

There is no plan for continuous improvement for this assessment cycle. The degree program is scheduled to start in the 2015/16 cycle.

**Update of Progress to the Previous Cycle's PCI:**

The initial assessment data for SLO's E,G and H (descriptions attached in the findings) has been recorded and will be used as a baseline for future assessment cycles.

**Assessment**

**Closing Summary:**

The primary area of concern is ensuring the accreditability of the Computer Software Engineering Technology program. This has two components:

- alignment with ABET Body of Knowledge for Engineering Technology programs
- assessment alignment to satisfy ABET requirements and existing assessment in the Computing Science program.

The Undergraduate Curriculum Committee will work on these two issues in the 2016/17 cycle.