Assessment: Assessment Plan



Degree Program - ENG - Computer Science (BS)

CIP Code: 11.0101.00

Degree Program Coordinator: Rattikorn Hewett Degree Program Coordinator Email: rattikorn.hewett@ttu.edu

Program Purpose Statement: 1. Education and training: Graduates of the computer science undergraduate program will have the necessary technical knowledge, education, and skills both in breadth and depth, to practice computer science in an industrial environment and/or be ready to persue a graduate program or professional development successfully.

2. Creativity and productivity: Graduates will be capable of conducting research on design and implementation methodologies toward the solution of challenging problems in computer science applications.

3. professional ethics: Graduates will receive the breadth of education necessary to integrate ethical behavior in the work environment and in any other professional activity they persue.

4. Teamwork discipline: Graduates of the computer science program will develop the communication, teamwork, and leadership skills necessary to function productively and professionally.

Modality: Face-to-Face, Off Campus Face-to-Face

Student Learning Outcome: ABET 1

Graduates of the program will have an ability to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Senior Exit Interview - Q5: Your competency in Problem-solving skills.

Q9: Your competency in Ability to apply knowledge of computing and mathematics appropriate to the discipline.

Q10: Your competency in Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution. (Active)

Criterion: Average score greater than or equal to 3.00 for each of the questions Q5, Q9, Q10 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied

Schedule: Every Spring and Fall semesters of each year.

Course Level Assessment - Course-level assessment : CS 1382 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more questons/coursework of a course satisfied the performance metric. For a course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when a majority of students passed 70% or more of the questions.

Schedule: Once every year.

Student Learning Outcome: ABET 2

Graduates of the program will have an ability to design, implement, and evaluate a computing-based solution to meet a given set of

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computing requirements in the context of the program's discipline.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Student Exit Survey - Q11: Your competency in ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

Q14: Your competency in ability to analyze the local and global impact of computing on individuals, organizations, and society. (Active)

Criterion: Average score greater than or equal to 3.00 for each of Q11, Q14 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied.

Schedule: Spring and Fall semester of each year.

Course Level Assessment - Course-level assessment: CS 1411, CS 1412 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more of questons/coursework of a course satisfied the performance metric. For each course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when majority of students passed 70% or more of the questions.

Schedule: Once every year.

Student Learning Outcome: ABET 3

Graduates of the program will have an ability to communicate effectively in a variety of professional contexts.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Senior Exit Interview - Q1: Indicate your competence in writing skills. Q2: Indicate your competence in speaking skills. (Active)

Criterion: Average score greater than or equal to 3.00 for each of Q1, Q2 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied.

Schedule: Spring and Fall semesters of each year.

Course Level Assessment - Course-level assessment: CS 1382 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more of questions/coursework of a course satisfied the performance metric. For each course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when majority of students passed 70% or more of the questions.

Schedule: Once every year.

Student Learning Outcome: ABET 4

Graduates of the program will have an ability to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Senior Exit Interview - Q12: Your competency in understanding of professional, ethical, legal, security and social issues and responsibilities. (Active)

Criterion: Average score greater than or equal to 3.00 for Q12 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied.

Schedule: Spring and Fall semesters of every year.

Course Level Assessment - Course-level assessment: ENGR 2392 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more of questions/coursework of a course satisfied the performance metric. For each course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when majority of students passed 70% or more of the questions.

Schedule: Once every year.

Student Learning Outcome: ABET 5

Graduates of the program will have an ability to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Senior Exit Interview - Q19: Competency in ability to function effectively in a team. (Active)

Criterion: Average score greater than or equal to 3.00 for Q19 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied.

Schedule: Spring and Fall semesters of each year.

Course Level Assessment - Course-level assessment: CS 3365, CS 4366 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more of questions/coursework of a course satisfied the performance metric. For each course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when majority of students passed 70% or more of the questions.

Schedule: Once every year.

Student Learning Outcome: ABET 6

Graduates of the program will have an ability to apply computer science theory and software development fundamentals to produce computing-based solutions.

Outcome Status: Active Outcome Type: Student Learning Start Date: 09/01/2018

Assessment Methods

Senior Exit Interview - Q11: Your competency in ability to analyze a problem, and identify and define the computing

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requirements appropriate to its solution. (Active)

Criterion: Average score greater than or equal to 3.00 for Q11 on a scale from 1 to 5 with 1 indicating very dissatisfied and 5 very satisfied.

Schedule: Spring and Fall semesters of each year.

Course Level Assessment - Course-level assessment: CS 1382, CS 1412 (Active)

Criterion: For each year, each outcome addressed by multiple courses satisfied the performance metric when 70% or more of questions/coursework of a course satisfied the performance metric. For each course, each outcome addressed by multiple evaluation questions in the same course satisfied the performance metric of that course when majority of students passed 70% or more of the questions.

Schedule: Once every year.