

Assessment: Assessment Plan

Degree Program - ENG - Software Engineering (MS)

CIP Code: 14.0903.00

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Program Purpose Statement: The objective of the MSSE is to give the graduate a firm foundation in the definition, development and maintenance of complex software systems using traditional engineering process methods.

Modality: 100% Online, Face-to-Face

Student Learning Outcome: SLO 1

Students will demonstrate an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

Assessment Methods

Course Level Assessment - Course work in CS 5373 - Software Modeling and Architecture and CS 5378-Software Verification and Validation (Active)

Criterion: 100% of the MSSE students should take these two courses

Thesis - Thesis, Project (Active)

Criterion: 100% of the MSSE students, who do thesis or project need to produce a technical report

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

Student Learning Outcome: SLO 2

Students will demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

Assessment Methods

Field Placement/Internship - Internship (Active)

Criterion: at least 50% of the MSSE students should take internship

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Professional Development Activities - Participate in research (Active)

Criterion: at least 80% of the students should do thesis instead of project

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

Student Learning Outcome: SLO 3

Students will demonstrate an ability to communicate effectively with a range of audiences

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/19/2019

Assessment Methods

Professional Development Activities - Participation in research (Active)

Criterion: Each MSSE student should participate in at least a stipulated number of seminars per year

Field Placement/Internship - Internship (Active)

Criterion: At least 50% of the MSSE students should take an internship position

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

Student Learning Outcome: SLO 4

Students will demonstrate an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

Assessment Methods

Field Placement/Internship - Internship (Active)

Criterion: At least 50% of the MSSE students should take an internship position

Professional Development Activities - Professional Society Membership (Active)

Criterion: At least 80% of the MSSE students should be member of university or professional society

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

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Student Learning Outcome: SLO 5

Students will demonstrate an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

Assessment Methods

Field Placement/Internship - Internship (Active)

Criterion: at least 50% of the MSSE students should take an internship position

Professional Development Activities - Participate in research (Active)

Criterion: at least 80% of the students should do thesis instead of project

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

Student Learning Outcome: SLO 6

Students will demonstrate an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

Assessment Methods

Professional Development Activities - Participate in research (Active)

Criterion: at least 80% of the students should do thesis instead of project

Professional Development Activities - Publications and reports (Active)

Criterion: at least 100% of the students should develop at least a technical report/article before graduation

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question

Student Learning Outcome: SLO 7

Students will demonstrate an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 09/01/2019

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Assessment Methods

Professional Development Activities - Participate in research (Active)

Criterion: at least 80% of the MSSE students should do thesis instead of project

Field Placement/Internship - Internship (Active)

Criterion: at least 50% of the MSSE student should take internship position

Survey - Student - Survey (Active)

Criterion: on the scale of 1 (no confident) to 5 (highly confident), at least XX% of the students have confidence ≥ 3 in solving a sample question