

Master of Science in Software Engineering (MSE) Program

Assessment Plan

[v.2019-02-22]

The MSE Committee

Organization of Assessment

The assessment team (a.k.a. assessment committee) of the Master of Science in Software Engineering (MSE) program consists of at least three faculty members selected among faculties who have been teaching MSE courses. Conventionally all MSE faculties are voluntarily involved in almost all activities for the program including assessment activities.

Assessment activities in the MSE program are planned and implemented by the MSE assessment team, approved by the MSE faculties/committee, and executed continuously by all participating faculty members.

The primary agreement method is consensus by the team (agreement based on enough discussions), however, the majority vote can be used only if consensus does not work.

Assessment data consists of Direct Evidence (evidence collected from components in participating courses, such as exams, homework, projects, and etc.) and Indirect Evidence (evidence collected to support validity of Direct Evidence, such as course exit survey, program exit survey, alumni survey, new student survey, and etc.).

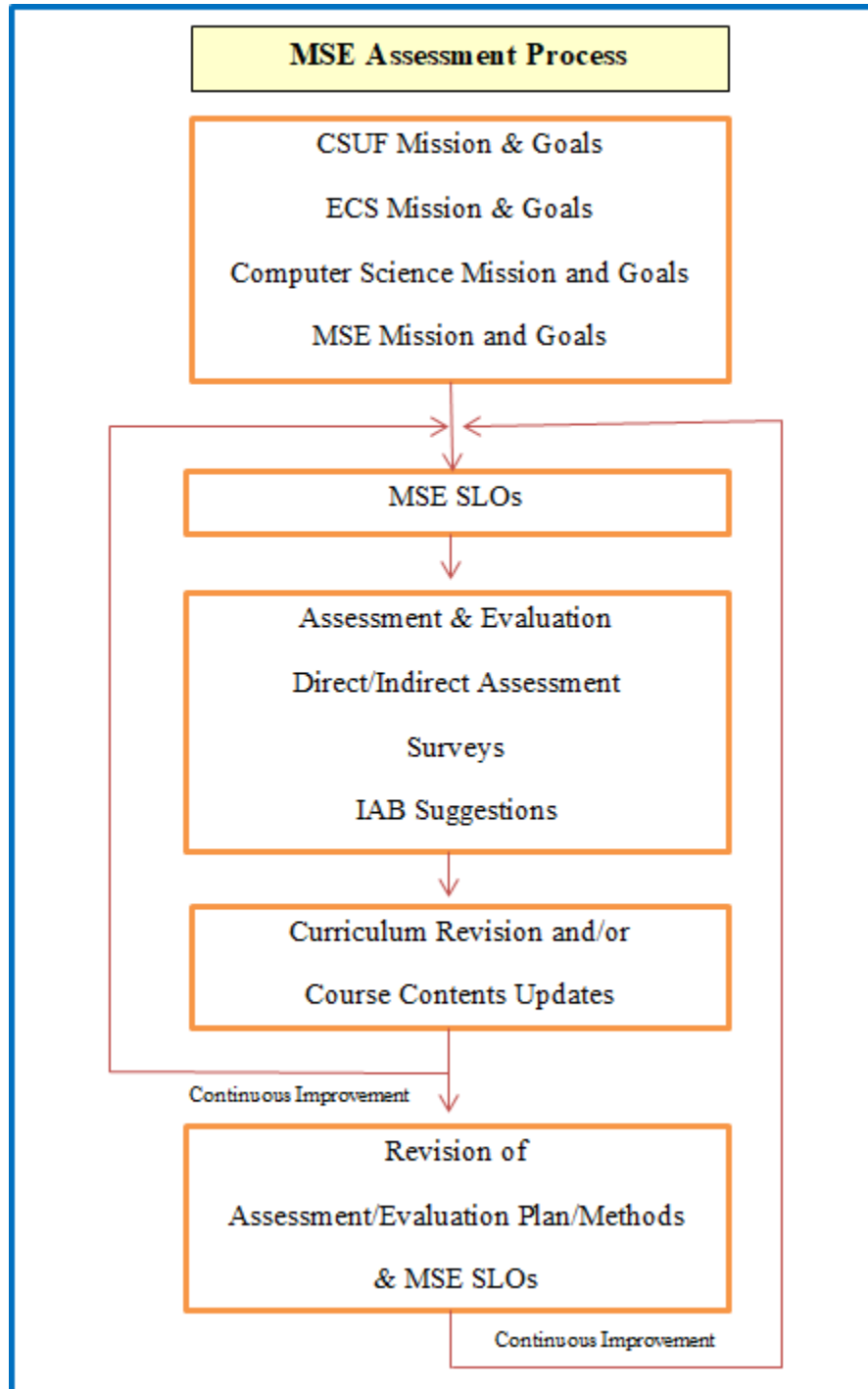
Assessment data (information involved in all activities for assessment, such as data collection, data analysis, action plans, action plan implementation, and so on.) are stored in the MSE asset library (data storage) managed by the MSE Coordinator and the MSE office. The MSE Coordinator facilitates configuration management for assessment and analysis data, so that assessment team can perform their functions properly.

Currently we use Google Drive for assessment data collection, and use Dropbox to save backup data. Authentication and authorization of different access levels are used to keep confidentiality of data. Faculties are given Read/Write access rights (for granting privileges to perform necessary tasks) depending on their roles in the program. Compliant Assist is used to report assessment results to the university yearly.

MSE assessment process, assessment cycle, and assessment plan are shown in the next sections.

Assessment Process

MSE assessment activities are done systematically based on the preplanned process. The following diagram shows the MSE assessment process.



Assessment Cycle

The MSE assessment is done every academic year (as planned in the next section). Every year (before the end of each semester), the MSE Coordinator facilitates assessment data collection methods and data storage, and informs all participating faculties. Every year assessment data is collected by faculties assigned corresponding courses (for Direct/Indirect Evidence) and the MSE Coordinator (for some Indirect Evidence).

Evidence data is analyzed and evaluated by the assessment team. Based on assessment evaluation results, if necessary, improvement action plans are built by corresponding faculties consulting with the assessment team, and action plans are implemented by faculties assigned to the corresponding courses in the following years. The MSE coordinator facilitates proper transferring necessary information between participating courses and their faculties.

If necessary, revision of curriculum and revision of course contents are done based on the assessment evaluation results every year. Revision and adjustment of MSE assessment plan and methods, SLOs, and curriculum mapping are done every 6 year.

The following table shows current/future assessment activities.

Year	Assessment Activities
AY 2015 - 2016	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans
AY 2016 - 2017	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans
AY 2017 - 2018	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans
AY 2018 - 2019	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans
AY 2019 - 2020	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans
AY 2020 - 2021	Assessment of SLO, Analyze Data, Build Action Plans, Implement Action Plans Evaluation and Adjustment of Assessment Plan/Methods, SLOs, Curriculum Mapping

Assessment Plan

The MSE assessment is performed as follows:

SLOs	When to Assess	What Evidence to Collect (Measures & Strategies)	Who Will Collect	How Assessed	How “Closing the Loop” Decision Made	How Assessment Results Will Be Used /Acting on Assessment
SLO-1 Professional Ethics	Yearly when corresponding course offered	Exams, homework, projects	Instructor	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Enforce weak contents
SLO-2 Comprehension and Communication	Yearly when corresponding course offered	Exams, homework, projects	Instructor	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Enforce weak contents
SLO-3 Practices, Process, Assessment and Improvement	Yearly when corresponding course offered	Exams, homework, projects	Instructor	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Enforce weak contents
SLO4 Collaborative Work	Yearly when corresponding course offered	Exams, homework, projects	Instructor	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Enforce weak contents
Course Survey	Yearly when corresponding course offered	Survey	Instructor	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Course contents updates
New Student Survey, Exit Survey, or Alumni Survey	Orientation, midterm workshop, on graduation, or after graduation	Survey	Coordinator	At least 2/3 (66%) satisfactory & developing results	Review by assessment committee and program coordinator	Revision of curriculum, SLO, assessment plan/methods

*For the most up-to-date information, please contact the program.