

MS Civil Engineering

2016-2017 Assessment Report

- I. The Master of Science of Civil Engineering (MSCE) Program is offered on the Klamath Falls campus in a traditional on-campus instructional mode. The MSCE was approved in 2009 but due to limited instructional faculty staffing, the first students were not admitted to the program until Fall Term 2013. Since 2017, all students in the program are concurrent BS/MS degrees. The

- II. Since the primary mode is the concurrent degrees (BS/MS) program, the mission and objectives of the BS program are integrated within the BS/MS and are as listed below.

The mission of program is to prepare students for professional practice. To be prepared to practice as professionals, engineers must be able to act responsibly and ethically, understand their limits and the limits of the tools they use, communicate effectively, work well in teams, and, amid

- communicate effectively.
- collaborate effectively.

There are two student learning outcomes (SLO) in the MSCE program.

1. Ability to conduct scholarly research commensurate with the graduate level.

2. Attainment of advanced technical knowledge in one or more civil engineering specialty area (geotechnical, structural, transportation, water resources).

The Civil Engineering Industrial Advisory Committee (CE-IAC) provides advice on both the BS and MS degrees. The CE-IAC meets annually to discuss the MSCE program with both faculty and students. The most recent meeting took place Friday May 26, 2017. Each of the fifth year BS/MS students in their first term of study discussed their coursework and projects with the IAC members and received valuable input including technical leads and references for their graduate work.

- III. Due to the small size of the program and the small number of SLOs, each of the two SLOs listed in Part II will be assessed for each student in each year of the three-year assessment cycle. As the program grows in size and/or there are additional SLOs, this concept may be modified.
- IV. Three MSCE graduates in 2016-2017 prepared a graduate project report prepared to standards set by Oregon Tech's Graduate Council. These graduate project reports were prepared over a period of six to nine months under the supervision of a CE Dept. faculty member and also reviewed by a Communication Dept. faculty member. Each student in the MSCE program is required to complete a 3-credit communications course, WRI 521 Writing at the Graduate Level, as a means to provide each student with writing instruction specifically aimed at developing scholarly writing techniques. The COM Dept. review of each graduate report was provided by the WRI 521 instructor. Each graduate project was also reviewed by a CE faculty advisor and the CE Department Chair

Additionally, one MSCE graduate in 2016-2017 completed their MS degree via the course-only option. In this case, the student was required to conduct scholarly research and prepare scholarly writing in the form of a formal report in WRI 521 Writing at the Graduate Level.

Thus SLO #1 Ability to conduct scholarly research commensurate with the graduate level was ensured by requiring three levels of review and approval (CE faculty advisor, COM faculty reviewer, CE dept. chair) of each graduate project report and COM faculty review of students in the course-only option.

Copies of each completed graduate report are archived in electronic form in the Oregon Tech library and paper copies are stored in the assessment filing cabinet in the Civil Engineering Department Chair's office.

To ensure of SLO #2 Attainment of advanced technical knowledge in one or more civil engineering specialty area (geotechnical, structural, transportation, water resources), each MSCE graduate in 2016-17, in addition to WRI 521 Writotam

