Criteria for Success (Thresholds for Assessment Methods):
Program Objective #1 (technical competence) is evaluated through course grades in core courses, the number of degrees completed, and alumni survey results. The average is computed based on a four-point scale in which Aº 4, B º 3, Cº 2, D º1, and Fº 0. The lowest average value is 3.00. In most cases, the average value well exceeds 3.00, demonstrating that students achieve technical competence on course content.

Results and Analysis:
Table 9. Summary of Average Grade and Average Enrollment in Core CEE MS Courses:

Course	Average Grades (by academic year)					Average number of students
	2017-18	2018-19	2019-20	2020-21	2021-22	
CEE 6300 ς Multiscale Analysis of Concrete	4.00	4.00	4.00	4.00	-	4.75
CEE 6410 ς Traffic Control Systems	-	-	-	-	4.00	3.00
CEE 6470 ς Transportation Demand Analysis	4.00	3.33	4.00	3.00	3.50	2.80
CEE 6520 ς Open-Channel Hydraulics	4.00	4.00	4.00		4.00	4.00
CEE 6610 ς Applied Environmental Chemistry	-	3.57	-	4.00	3.75	6.00
CEE 6800 ς Advanced Soil Mechanics	3.40			3.67		5.50
CEE 6820 ς Seepage and Slope Stability		3.50				6.00
CEE 6930 ς Theory of Elasticity	3.33	3.00	3.00	3.50	3.75	5.80
CEE 6350 ς Finite Element Analysis	3.33	3.14	3.50	3.33	3.57	5.00

Use of Results to Improve Outcomes:
Based on the assessment metrics for AY2022-

Table 11. Assessments of MS Thesis Defense Presentations

Assessed by	Academic Year	Number of Evaluations	Average Score[1]				
			Content	Visual Aids	Presenter Preparation	Presentation Mechanics	Response to Questions and Comments
Committee Members							

Assessment Methods:

Thesis and Oral Defense Rubric: CEE MS students are required to undertake thesis research or a project independently under the direction of a CEE faculty advisor and the student's graduate advisory committee. Students through this experience learn to manage a significant research or project effort, acquire the technical knowledge and skills required for its successful completion, learn to pose the appropriate questions whose answers lead to the advancement of their research or project, and also learn to have meaningful periodic interaction with their advisory committee.

Criteria for Success (Thresholds for Assessment Methods):

The threshold of acceptability is 3.0 for average scores on the following:

- MS Proposal Presentations
  - Visual Aids

Appendix: Curriculum Map

Civil Engineering, MS (Thesis): Mapping of the Graduate Curriculum and Student Learning Objectives

Course	Title	Student Outcomes: SLO 1: Sub-discipline course...	SLO 2: Advanced ...	SLO3: Communi...
Core Sub-Discipline Courses	6-9 credits minimum of sub-discipline ...	X	X	[illegible]
Program of Study Courses	15-18 credits of elective courses approved by student's advisory committee.	[illegible]	[illegible]	X
CEE 6910	Graduate Seminar (1 credit)	[illegible]	[illegible]	[illegible]
CEE 6990	Research and Thesis (6 credits total)	X	X	[illegible]

Civil Engineering, MS (Non-Thesis): Mapping of the Graduate Curriculum and Student Learning Objectives

Course	Title	Student Outcomes: SLO 1: Sub-discipline course...	SLO 2: Advanced ...	SLO3: Communi...
Core Sub-Discipline Courses	6-9 credits minimum of sub-discipline ...	X	X	[illegible]
Program of Study Courses	21 credits of elective courses approved by student's advisory committee.	[illegible]	X	X
CEE 6910	Graduate Seminar (1 credit)	[illegible]	[illegible]	[illegible]
CEE 6980	Directed Studies Project Work (3 credits)	X	X	[illegible]