

Department/Academic Unit: Graduate Program in Civil Engineering

Degree Program: M.Eng.

Degree Level Expectations, Learning Outcomes, Indicators of Achievement and the Program Requirements that Support the Learning Outcomes

Expectations	Learning Outcomes	Indicators of Achievement	Relevant Courses and academic requirements
Depth and breadth of knowledge	To gain further knowledge in one of the four Civil Engineering sub-disciplines (Environmental, Geotechnical, Hydrotechnical, or Structural Engineering) beyond the undergraduate degree	Successful performance in eight (8) graduate level courses in Civil Engineering,	Graduate courses
Research and scholarship	To begin the development of critical evaluation skills to critically review the literature in the area of professional competence. To become aware of the current state of practice in the student’s chosen sub-discipline	Graduate courses	Term projects in graduate courses
Application of Knowledge	Exposure to the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting	Graduate courses	Term projects in graduate courses
Professional capacity/autonomy	To gain an exposure to advanced topics beyond the undergraduate degree The appreciation of the importance of Workplace Health and Safety	Graduate courses	Graduate courses CIVL801 – “Health and Safety in Civil Engineering Research”

Communication Skills	The ability to communicate ideas, issues, and conclusions clearly in both oral and written communication	Successful performance in oral presentations during graduate courses, Successful performance in technical writing, as measured by readability of graduate course term projects	Graduate course presentations and term projects
Awareness of limits of knowledge	A realization that engineering problem solving often involves finding the best adequate solution, rather than perfect solutions.	Simplifications, idealizations, and assumptions used in each sub-discipline are discussed by instructors of each graduate course	Graduate courses