CES595 - MSc THESIS

Course Title	MSc Thesis				
Course Code	CES595				
Course Type	Compulsory				
Level	MSc (Level 2)				
Year / Semester	2nd Year / 1st Semester				
Teacher's Name	Dr. Demetris Nicolaides				
ECTS	23	Lectures / week	1	Laboratories / week	
Course Purpose and Objectives	The purpose of MSc Thesis is to help students understand the links between the components of a complex technical (civil engineering) problem and demonstrate the capacity to understand, analyze and define the specific problem, put it into its broader context and make a plan for its solution. Students, through their MSc Thesis work, are going to work on a technical subject under the supervision of a faculty member, and are expected to communicate and report their research results in proper written technical language.				
Learning Outcomes	By the end of the course, the students should be able to: 1. Identify, formulate and solve civil engineering related problems, using established methods. 2. Review, retrieve, analyse and evaluate information from different sources related to civil engineering applications, select and report important information related to the assigned project. 3. Develop research skills to acquire new knowledge and demonstrate oral and written communication skills. 4. Apply knowledge in practice and use the appropriate tools, methods and opportunities for problem solving. 5. Assess, collect, interpret, order information and employ logical thinking to solve a problem. 6. Formulate a time schedule for the project and plan its execution from start to finish. 7. Conclude the project with a written report and defend the work in an oral presentation in front of peers and faculty.				
Prerequisites	None		Corequisites	None	
Course Content	To satisfy the requirements of the program, students must successfully complete a MSc Thesis (CES595). This is an individual research project which each student must complete with the supervision of a three-member committee headed by the student faculty advisor. Each student is free to				

	choose the topic of their project which has to be relevant to the area of Civil Engineering that the student is interested in. This research project is linked to the work of the MSc Research Project which in essence is the continuation and completion of the work started in CES590.
	With the MSc Thesis (CES595) course, students must implement the objectives specified in their research project proposal in CES590 according to the specified planning. In this second part of the research project the students must perform the bulk of the research work. They have to create the required models, execute the analyses, conduct the necessary experiments, construct any experimental devices and complete the project.
	By the end of the course, the student must submit to the Department of Civil Engineering a report that includes the project objectives and contributions, a literature review on the topic of their project, the methodology used and the results achieved. Finally, the students must present their project work to their supervisory committee, other faculty members and their classmates.
Teaching Methodology	This is an individual study course in consultation with the faculty advisor. The student will have regular meetings with the advisor to report the progress and discuss further actions that are related to the execution of the project. In addition, the student may have to consult/interact with the committee. The student will be asked to give an oral presentation at the end of the semester where the student will present the completed work. In addition the student will submit to the department of Civil Engineering a report with the findings of the research.
Bibliography	"The Elements of Technical Writing (Elements of Series)", Gary Blake and Robert W. Bly, Longman; 1 Edition. Students are expected to reference a number of books, periodicals and other referenced material relevant to their work.
Assessment	Proposal report 70% Oral Presentation 30%
Language	English