Course Title	Master Thesis Proposal				
Course Code	MEE530				
Course Type	Compulsory				
Level	Masters (2nd Level)				
Year / Semester	1st year / Spring Semester				
Teacher's Name					
ECTS	10	Lectures / week	2	Laboratories/week	1
Course Purpose	This course aims to provide students with the generic competences required to carry out graduate-level research oriented work. By the end of this course, students will be competent in writing and presenting a successful research proposal, writing a literature review paper, critically reviewing an academic/research paper, writing a research paper for a refereed journal or conference, and writing and successfully defending a graduate-level thesis.				
Learning Outcomes	By the end of the course, students must be able to elaborate the key concepts of Research Methodology such as - Research Problem - Research Design - Sampling Techniques - Research Proposal - Data Collection - Data Analysis - Research Report (Dissertation/Thesis)				
Prerequisites	Completion of 3 compulsory courses			Corequisites	None
Course Content	This course is intended to provide the theoretical and methodological foundation for completing a graduate thesis in the Program of Energy Systems and the Built Environment. By the end of this course students will have produced a solid thesis proposal and have the necessary intellectual foundation to complete their thesis. Over the semester, students will identify and refine their thesis topic, solidify their relationship with a thesis advisor and produce a thesis proposal. Regular sessions will involve discussions of relevant readings and exploration of emergent student work. As a forum for the exchange of work in progress, the seminar will allow students to share their ideas and get feedback on the development of their thesis from their peers, visiting critics and reviewers, and faculty.				

	In terms of this course the thesis will be introduced as a conceptual frame, identified by the key elements that cut across the different types of theses that might be produced by students. It will then address the following issues, among others: - topic and motivation - research methods, - case selection, - the craft of thesis production, - techniques for verbally defending a thesis. The **structure and the content of the final report** should include the following elements: − Cover & Title Page − Table of Contents − List of Figures − List of Tables − Executive Summary − Introduction − Literature survey − Solution methodology − Data collection (if any) − Implementation and evaluation − Discussion and analysis − Acknowledgments − References: Books, papers, lecture notes, … etc Appendices: Relevant information listing all support material
Teaching Methodology	The teaching methodology of this course will be based on lecturing, demonstrating and collaborating. - Lecture notes, comprising of the fundamentals of each module of the course will be prepared and presented in class on a weekly basis. The notes will introduce the major concepts and will focus on specific learning outcomes of the course. - Demonstration activities including the solution of worked examples in class on a weekly basis, as well as laboratorial work will also be employed. For each fundamental concept, at least one worked example will be solved during lectures. The laboratory work will cover

	all major topics of the course, allowing the students to personally relate to the presented knowledge. - Collaborating teaching through classroom discussion and debriefing will also be encouraged during lectures. Besides from the notes taken by students in class, all of the course material will be made available through the class website and also through the eLearning platform. The instructor will also be available to students during office hours or by appointment in order to provide any necessary tutoring.
Bibliography	**Textbook:** Remler, D. K., & Van Ryzin, G. G. (2014). Research methods in practice: Strategies for de-scription and causation. SAGE Publications.
Assessment	The grading will be administered, for each student, by a three (3) - member committee comprising of the student's committee chair plus two other faculty members, from the School of Engineering. All three faculty members must concur for a student to successfully pass this course. The students by the end of the semester should deliver the following documents: 1. Letter of Intent 2. Draft copies of the Final report to the committee members 3. Oral presentation 4. Final report (including corrections/comments from faculty) 5. Soft copy (CD) with all the relevant project information including the log from the student-faculty meetings MSc Thesis Proposal 100%
Language	English