## **College of Engineering**





CE 596 Thesis Proposal			
Credit and Contact hours	1/1 (Lectures), 0 (Tutorials), 0 (Laboratory)		
Required, or Elective	Mandatory for a MSCE degree		
Course Description	This course is open to students developing Master's thesis students who wish to develop a dissertation or independent research proposal in a structured setting.		
Prerequisites or Co-requisites	Students must finish 50% of master courses in relevant field		
Course Learning Outcomes	Students completing this course successfully will be able to		
	Course Learning Outcomes	Related Program Outcomes	
	CLO1: Acquire new knowledge about selected research topics in the relevant field	K1	
	CLO2: Recognize theoretical and experimental methods related to the study field and to develop research questions and hypotheses.	K1	
	CLO3: Read, comprehend, and review the results of scientific papers related to MSc thesis topic.	C1 100%	
	CLO4: Review and evaluate the state-of-the- art analysis and design for advanced applications to identify the research gaps.	C1 100%	
	CLO5: Propose research design, and choose rigorous and practical research methods to address a problem focused research question(s)	S1 50% S2 50%	
	CLO6: Produce Scientific-writing research reports on selected topics and defend MSc Thesis proposal	C1 100%	
Student Outcomes related to this Course	K1. Recognize advanced engineering knowledge, concepts and techniques to identify, interpret and analyze complex and real-life engineering problems.		

	<ul> <li>S1. Provide solution for complex and real-life engineering problems through critical thinking and using modern engineering tools and identify its impact on social and ethical issues.</li> <li>S2. Investigate scientific research problems independently or through a team work using critical thinking, appropriate techniques, advanced tools, and management principles.</li> <li>C1 Criticize and discuss scientific research reports /papers related to Civil Engineering issues with high level of ethics and proficiency, independently, or as a team work.</li> </ul>		
<b>Topics Covered</b>	List of Tasks	Related CLOs	
	1. Initiating research and your proposal	CLO1	
	2. Developing a working title and planning the research	CLO2	
	3. Summarize the results of scientific papers related to MSc thesis	CLO3	
	4. Choice of research paradigm, methodology and methods of data collection	CLO5	
	5. Design of research methodology	CLO5	
	6. Generic skills and practices for proposal development	CLO4	
	7. Writing the dissertation proposal	CLO6	
	8. Defend thesis proposal	CLO6	
Textbook(s) and Other Required Material	Online scientific resources		
<b>Grading System</b>	Pass and Fail system		
Instructors	All faculty involved in teaching and supervise graduate students		
Date of Review	March, 2021		