

Course Title	Bachelor Thesis				
Course Code	MANS-490				
Course Type	Required				
Level	1 <sup>st</sup> Cycle				
Year / Semester	4 <sup>th</sup> Year, Spring Semester				
Teacher's Name	Captain. Dr. Andreas Frangos				
ECTS	10	Theory	Laboratory	Simulation	Tutorial
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Course Purpose and Objectives	<p>The main objectives of this course are to:</p> <ul style="list-style-type: none"> <li>• Teach students important research techniques and practices</li> <li>• Introduce students to practical engineering design</li> <li>• Create the foundation where the students will have the opportunity to utilize theoretical knowledge and engineering tools/techniques acquired throughout the years in order to design, build, and test their idea in a laboratory environment</li> <li>• Promote team work and practical experience in a multi-disciplinary environment</li> <li>• Teach students how to write proper reports and how to present their work in front of their colleagues</li> <li>• Ensure that students know how to properly set up appropriate measurement and troubleshooting procedures including proper use of laboratory equipment</li> <li>• Promote engineering ethics and respect to the environment and society</li> <li>• Teach students how to properly plan their activities in order to successfully achieve their design goals and, more importantly, how to meet their own deadlines</li> </ul>				
Learning Outcomes	<p>Upon completion of the course students are expected to:</p> <ul style="list-style-type: none"> <li>• Use research skills on an engineering topic in order to reach a successful design for their project idea</li> <li>• Operate specialized equipment and use computational/simulation tools</li> <li>• Design and construct a working engineering application starting from a basic project idea and a set of constraints/specializations</li> </ul>				

	<ul style="list-style-type: none"> <li>• Write good technical reports and effective presentations</li> <li>• Organize and schedule project activities in order to successfully complete an engineering project</li> <li>• Test and troubleshoot their prototype</li> <li>• Demonstrate team work and collaboration with others toward a successful completion of a project</li> <li>• Identify important principles of ethics in engineering practices</li> </ul>				
Prerequisites	None Senior Standing and Approval by the Department	Required	None		
Course Content	Independent-type of work involving research, design, implementation, testing, and troubleshooting				
Teaching Methodology	Lectures/seminars and project supervision				
Bibliography	<b>Required Textbooks/Reading:</b>				
	<b>Authors</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
	W. Strunk, E. B. White, R. Angell	The Elements of Style	Longman, 4 <sup>th</sup> Edition	1999	978-0205313426
	Frank R. Kschichang	Giving a Talk	University of Toronto	2000	
	<b>Recommended Textbooks/Reading:</b>				
	<b>Authors</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
	As needed				
Assessment	Progress reports, presentation, final report				
Language	English				