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| Course Title | Bachelor Thesis | | | | | | |
| Course Code | MANS-490 | | | | | | |
| Course Type | Elective | | | | | | |
| Level | 1st Cycle | | | | | | |
| Year / Semester | 4th Year, Spring Semester | | | | | | |
| Teacher’s Name |  | | | | | | |
| ECTS | 5 | Theory | | Laboratory | Simulation | | Tutorial |
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| Course Purpose and Objectives | The main objectives of this course are to:   * Teach students important research techniques and practices * Introduce students to practical engineering design * 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 * Promote team work and practical experience in a multi-disciplinary environment * Teach students how to write proper reports and how to present their work in front of their colleagues * Ensure that students know how to properly set up appropriate measurement and troubleshooting procedures including proper use of laboratory equipment * Promote engineering ethics and respect to the environment and society * 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 | | | | | | |
| Learning Outcomes | Upon completion of the course students are expected to:   * Use research skills on an engineering topic in order to reach a successful design for their project idea * Operate specialized equipment and use computational/simulation tools * Design and construct a working engineering application starting from a basic project idea and a set of constraints/specializations * Write good technical reports and effective presentations * Organize and schedule project activities in order to successfully complete an engineering project * Test and troubleshoot their prototype * Demonstrate team work and collaboration with others toward a successful completion of a project * Identify important principles of ethics in engineering practices | | | | | | |
| 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 | Required Textbooks/Reading:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1. Authors | Title | Publisher | Year | ISBN | | W. Strunk, E. B. White, R. Angell | The Elements of Style | Longman,  4th Edition | 1999 | 978-0205313426 | | Frank R. Kschichang | Giving a Talk | University of Toronto | 2000 |  |   Recommended Textbooks/Reading:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Authors | Title | Publisher | Year | ISBN | | As needed |  |  |  |  | | | | | | | |
| Assessment | Progress reports, presentation, final report | | | | | | |
| Language | English | | | | | | |