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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
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| 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
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| 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:

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| --- | --- | --- | --- | --- |
| 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:

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| Authors | Title | Publisher | Year | ISBN |
| As needed |  |  |  |  |

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| Assessment | Progress reports, presentation, final report |
| Language | English  |