



Course Syllabus

Course Code	Course Title	ECTS Credits
MENG-496	Capstone Design Project II	12
Prerequisites	Department	Semester
Senior Standing and Department Approval	Engineering	Fall, Spring
Type of Course	Field	Language of Instruction
Required	Engineering	English
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Dr Harry Iordanou and a faculty member (as supervisor/co-supervisor)	4 th
Mode of Delivery	Work Placement	Corequisites
Face-to-Face	N/A	None

Course Objectives:

The Capstone Design Project course is taken in the 4th year of studies in two semesters: during the first semester, the course MENG-494 Capstone Design Project I (6 ECTS) and during the second semester, the course MENG-496 Capstone Design Project II (12 ECTS)

The main objectives of this first 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 to design, build, and test their idea in a laboratory environment.
- Promote teamwork and practical experience in a multi-disciplinary environment.
- Teach students how to write proper reports and 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 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 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 to successfully complete an engineering project.
- Test and troubleshoot their prototype.
- Demonstrate teamwork and collaboration with others toward a successful project completion.
- Identify important principles of ethics in engineering practices.

Course Content:

Independent type of work involving research, design, implementation, testing, and troubleshooting

Learning Activities and Teaching Methods:

Lectures/seminars and project supervision

Assessment Methods:

Project design proposal, progress reports, presentation

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
As needed				

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
As needed				