Overview

The graduation project course (CEN492/493) is a key component of the Computer Engineering program which is intended to prepare students for the work field. It aims to provide students with a major engineering design experience applying theoretical and practical skills gained throughput their study in the program. In this course, students must apply engineering design methodology to design, build and integrate computer-based systems to provide solutions for real-world problems. The scope of the project must be related to at least one course in the Computer Engineering program.

Minimum Proposal's Requirements:

1. It must include a major system design with a degree of integration of hardware and software components.
2. It must provide a computer-based solution for an open-ended, real-world problem.
3. It must provide a tangible practical, hands-on experience.
4. It should have an interdisciplinary aspect.
5. Modeling and simulation of existing systems are not accepted unless the simulation is needed to validate the new design which must be the primary focus of the project.
6. Surveys are not accepted unless needed to generate the specification of the new design which must be the primary focus of the project.

Proposal's Submission Guidelines:

1. Submit the project's proposal as a pdf file using the provided CEN template.
2. Provide a brief high-level description of the project without specifying any design choice or implementation approach.
3. Provide a list of customer requirements which are short statements of the high-level needs of the target product (or system) that only express what the product (or system) should do, NOT how it is done.
4. Do not write specific engineering or implementation requirements; these should be developed later by the students in the first phase of the project (CEN492).
5. The project can either be proposed by advisors, a group of students, or an industry sponsor.

Deliverables of Phase 1 (CEN492):

In **Phase 1** of the project (CEN492), the project team is required to work on and develop the following four (4) major items: Problem Statement, Requirements Specification, Design specification and the Project Plan. The report of CEN492 (Phase 1) must contain the following components which are briefly described in Phase 1 report template.

1. Abstract
2. Chapter 1: The Problem Statement
3. Chapter 2: The Requirements Specification
4. Chapter 3: The Design Specification
5. Chapter 4: The Project Plan
6. References

Deliverables of Phase 2 (CEN493):

In **Phase 2** of the project, the project team is required to refine the items from Phase 1 and proceed to the implementation and verification of the proposed system. The final project report must contain the following components which are briefly described in Phase 2 report template.

1. Abstract
2. Chapter 1: The Problem Statement
3. Chapter 2: The Requirements Specification
4. Chapter 3: The Design
5. Chapter 4: Implementation and Verification
6. References
7. Appendix A: The project Plan
8. Appendix B: Program code (if applicable)
9. Appendix C: Data sheets (if applicable)