



Course Descriptor CVEN491 Capstone Design Project I

Proposed Academic Year	2019-2020	Last Reviewed Academic Year	2020-2021
Course Code	CVEN491	Course Title	Capstone Design Project I
Credit hours	3	Level of study	Undergraduate
College / Centre	College of Engineering	Department	Civil & Environmental Engineering
Co-requisites		Pre-requisites	

1. COURSE OUTLINE

[This course deals with a design project of a civil engineering system that involves more than one civil specialization. Students work in groups under close supervision of faculty members. The course involves planning, design, production of construction drawings and presentation

2. AIMS

[The aim of this course is to prepare the student for professional civil engineering work.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
Upon successful completion of this course, students will be able to:		
1. Accomplish a comprehensive open-ended design project through application of concepts and skills learned throughout the curriculum	Team work	Report
2. Function on a design team, identify client's needs, plan and execute the design	Team work	Report
3. Use techniques, skills, and modern engineering tools	Team work	Report
4. Present oral summary report	Team work	Presentation, report

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
1 st Project Draft	15
2 nd Project Draft	15
3 rd Project Draft	15
4 th Project Draft	15
Final Presentation	40
TOTAL	100%



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5. ACHIEVING A PASS

Students will achieve 3 credit hours for this course by passing **ALL** of the course assessments and achieving a **minimum overall score of 50%**.

NB *Ensure that ALL learning outcomes are taken into account

6. COURSE CONTENT (Indicative)

WEEK	LECTURE TOPIC	TIME (HOURS)
1	Introduction	1.5
	Engineering design process: owner/engineer/contractor	1.5
2	Project planning, scheduling time management, leadership and team building skills	1.5
	Technical communications; written, oral and graphical	1.5
3	Team works	1.5
	Team works	1.5
4	Project draft-1	1.5
	Team works	1.5
5	Team works	1.5
	Team works	1.5
6	Team works	1.5
	Team works	1.5
7	Project draft-2	1.5
	Team works	1.5
8	Team works	1.5
	Team works	1.5
9	Team works	1.5
	Team works	1.5
10	Team works	1.5
	Team works	1.5
11	Project draft-3	1.5
	Team works	1.5
12	Team works	1.5
	Team works	1.5
13	Team works	1.5
	Team works	1.5
14	Team works	1.5
	Team works	1.5
15	Project draft-4	1.5
	Final Presentation	1.5
	TOTAL HOURS	45
1 - 15	Plus RECOMMENDED INDEPENDENT STUDY HOURS	90
	TOTAL COURSE HOURS	135

7. RECOMMENDED READING

Core text/s:

No required text. All necessary references will be available to students upon request.

Library + online resources: