

# SEE4996: FINAL YEAR PROJECT

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## Effective Term

Semester A 2022/23

## Part I Course Overview

### Course Title

Final Year Project

### Subject Code

SEE - School of Energy and Environment

### Course Number

4996

### Academic Unit

School of Energy and Environment (E2)

### College/School

School of Energy and Environment (E2)

### Course Duration

Two Semesters

### Credit Units

0-6

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

SEE1002 Introduction to Computing for Energy and Environment; AND  
SEE2003 Introduction to Energy and Environmental Data Analysis

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

All students are required to complete an individual project under the supervision of academic staff in the School. The aims of the final year project are to give students the opportunity to develop and demonstrate their creativity and ability to carry out industrially-related or research-type project work, and in the process to allow them to illustrate their expertise in their chosen subject area related to environment. In undertaking the final year project, the student will be able to demonstrate the initiative and intellectual achievement, understanding of the chosen subject matter, and the application of mathematics, science, engineering, economics and policy knowledge in practical situations to arrive at innovative solution. The students will also develop problem-solving skills, demonstrate independence, build self-confidence and ability to make good oral presentations and report writing.

### Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Formulate a main theme of industrially-related or research-type project work upon a practical issue/problem related to environment.	10	x		
2	Conduct literature survey and work independently with innovative idea.	20	x	x	
3	Utilize appropriate theory, design and conduct experiments, apply numerical analysis tools, analyze and interpret data, etc. to create new knowledge through research, and solve problems related to the environment using scientific approach.	50	x	x	x
4	Communicate effectively the project process, experience and results in a professional manner, using written, oral and visual media. Discover their strengths, weakness and areas for improvement.	20			

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
Supervision	Each individual final year project is supervised by an academic staff of the School.	1, 2, 3, 4	1

2	Project	Activities include literature review, project works, report writing and oral presentation.	1, 2, 3, 4	9
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**Assessment Tasks / Activities (ATs)**

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Scientific/Engineering Work	1, 2, 3	60	
2	Reports	4	25	
3	Oral Presentations	4	15	

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Examination Duration (Hours)**

N/A

**Additional Information for ATs**

Examination duration: N/A

Percentage of coursework, examination, etc.: 100% by coursework

To pass a course, a student must do ALL of the following:

- 1) obtain at least 30% of the total marks allocated towards coursework (combination of assignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);
- 2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and
- 3) meet the criteria listed in the section on Assessment Rubrics.

**Assessment Rubrics (AR)****Assessment Task**

1. Literature review

**Criterion**

Ability to conduct thorough literature review

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

**Assessment Task**

2. Project work

**Criterion**

Ability to conduct scientific/engineering work and achieve tasks

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

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**Assessment Task**

3. Report writing

**Criterion**

Ability to present the project well in report writing

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

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**Assessment Task**

4. Oral presentation

**Criterion**

Ability to present the project well in oral presentation

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

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## Part III Other Information

### Keyword Syllabus

Environment related issue/problem; analytical study; numerical simulation; experimental investigation; design; research; survey.

### Reading List

#### Compulsory Readings

Title	
1	Readings recommended by supervisor.

#### Additional Readings

Title	
1	Nil