

# EE4087: INTERNSHIP: INDUSTRIAL PROJECT

## New Syllabus Proposal

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### Effective Term

Summer Term 2024

## Part I Course Overview

### Course Title

Internship: Industrial Project

### Subject Code

EE - Electrical Engineering

### Course Number

4087

### Academic Unit

Electrical Engineering (EE)

### College/School

College of Engineering (EG)

### Course Duration

Two Semesters

### Credit Units

0-6

### Level

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

### Medium of Instruction

Other Languages

### Other Languages for Medium of Instruction

English and other languages appropriate to the placement setting

### Medium of Assessment

English

### Prerequisites

EE4085

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

EE4081 or EE4082 or EE4083 or EE4084 or EE4086

## Additional Information

### Course Fulfilment:

Students successfully completed the Internship Program will earn 6 Credit Units in their academic records at the University, which can be used to fulfill EE4080 Project or its equivalent.

If student opts to take this course, it should be taken the semester right after EE4085 which is pre-requisite of this course (EE4087). Total duration for EE4085 and EE4087 should last for at least 12 months. Course registration for EE4087 can only start from Semester A or Semester B, right after EE4085 taken in Summer or Semester A respectively.

## Part II Course Details

### Abstract

This course aims to provide students with the opportunities to:

- appreciate a real working environment under the guidance of experts;
- integrate the knowledge they acquired and apply it in a real work setting;
- appreciate team work, group / organizational behaviour in a work environment;
- gain real work experience, which will enhance their competitiveness in an increasingly challenging job market

The program is conducted at the host company, whereby students are jointly supervised by the host mentor and the EE supervisor. Students will complete their Final Year Project at the host company.

### Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1 Complete an industrial project in design, applied research or development		x	x	x
2 Demonstrate initiative, innovative and intellectual abilities in handling a challenging technical project		x	x	x
3 Communicate in written form, a substantial formal report reflecting outcomes effectively and accurately		x	x	x
4 Communicate orally with company mentors to identify industrial needs and solve technical problems		x	x	x

#### 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.

### Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Industrial laboratory and other activities	Project guidance by project supervisor and self-learning	1, 2, 3, 4	Laboratory: 104 hrs (8hrs x 13wks) Other activities: 72 hrs (5.5hrs x 13wks) Total: 176 hrs/semester

**Assessment Tasks / Activities (ATs)**

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Project report, Demonstration, Oral Presentation	1, 2, 3, 4	100	For a student to pass the course, (i) They must conduct an oral presentation, (ii) They must obtain an overall pass (D) grade or above, (iii) They did not obtain a final fail (F) grade from the supervisor and assessor.

**Continuous Assessment (%)**

100

**Examination (%)**

0

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

Coursework

**Criterion**

Achievements in CILOs

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

High

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

Significant

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

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

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**Additional Information for AR**

Information on evidence for each level of achievements is available in the attached additional document.

## Part III Other Information

### Keyword Syllabus

#### Project Implementation

Formulation of design problem; utilization of engineering/problem solving skills; analysis, assumptions, extension of knowledge; concepts, innovation; project management; usage, resource management.

#### Project Demonstration

Live demonstration; guided tour; supporting material; explanation of problems encountered.

#### Project Report

Organization; content, engineering/theoretical analysis, relevance; use of appendices, engineering/theoretical work, report writing style and grammar; presentation of material; visual.

#### Project Oral Presentation

Content; relevance, accuracy, delivery; organization, preparation and effectiveness of delivery, style, pacing and body language, time management.

### Reading List

#### Compulsory Readings

Title	
1	Nil

#### Additional Readings

Title	
1	The project supervisor should recommend relevant books, publications and reference materials prior to the commencement of the project. The student, however, is expected to perform some of the literature search himself/herself.