EE4086: INTERNSHIP: ADVANCED TOPICS IN ELECTRICAL ENGINEERING

New Syllabus Proposal

Effective Term
Summer Term 2024

Part I Course Overview

Course Title
Internship: Advanced Topics in Electrical Engineering

Subject Code
EE - Electrical Engineering
Course Number
4086

Academic Unit
Electrical Engineering (EE)

College/School
College of Engineering (EG)

Course Duration
One Semester

Credit Units
3

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 EE4087

Additional Information

If student opts to take this course, it should be taken the semester right after EE4085 which is pre-requisite of this course (EE4086). Total duration for EE4085 and EE4086 should last for at least 8 months. Course registration for EE4086 can only be in Semester A or Semester B.

Part II Course Details

Abstract

This course aims to provide students with the opportunities to:

a. appreciate a real working environment under the guidance of experts
b. obtain technical knowledge of an area, including the relevant theories
c. integrate the knowledge they acquired and apply it in a real work setting

The course is conducted at the host company, whereby students are jointly supervised by the host mentor and the EE supervisor. The students should select a technical topic related to the internship' s work and report the technical content.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Present the theoretical principles of the selected topics.		x	x	
2	Relate the principles learnt in the internship to knowledge needed to serve as engineers or software programmer of the selected topics.		x	x	
3	Realize or implement the engineering solutions for the selected topics.		x	x	
4	Perform assessment on the solutions.		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	Workshop training placement/ personal coaching/ other activities	Pre/post-placement training seminars and reflection through writing interim and final reports	2, 4	

2	Workshop training placement/ personal coaching/ other activities	The actual placement work, supervision and feedback from company supervisor	1, 2, 3, 4	
3	Workshop training placement/ personal coaching/ other activities	Supervision and feedback from academic supervisor	2, 4	
4	Workshop training placement/ personal coaching/ other activities	Logbook, project presentation, company visits and interviews by CityU supervisors	2, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Placement report for actual placement work in training company	1, 2, 3, 4	30	
2	Feedback from academic supervisor based on company feedback, and visit & placement report	1, 2, 3, 4	35	
3	Placement presentation	1, 2, 3, 4	35	

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

Template for Final Report and Final Presentation

1. Introduction
a. Overview of the selected topics, including background and motivation of the works
b. Overview of theories and principles of the selected topics
c. Organization of the report

2. Background
a. Detailed theories and principles of the selected topics
b. Overview of student works.

3. Description of student works
a. Ideas of student works and/or solutions, and alternative solutions
b. Implementation of student works and/or solutions
c. Properties of student works and/or solutions

4. Results of student works and discussions
a. Settings of student works and/or solutions
b. Performance of student works and/or solutions
c. Findings of student works and/or solutions
d. Alternative solutions

5. Conclusion
Summary of student works and findings from the Internship

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

Part III Other Information

Keyword Syllabus
Nil

Reading List

Compulsory Readings

	Title
1	Nil

Additional Readings

	Title
1	Nil