

EE Internship Programs:

EE4085 Internship: Engineering Practice

EE4086 Internship: Advanced Topics in Electrical Engineering



EE4087 Internship: Industrial Project

Program Coordinator: Prof. Eric Wong

Internship Program Aim

To provide students with the opportunity to :

- nurture student's engineering skill and sustainability
- develop core value towards career
- appreciate a real working environment under guidance of expertise
- integrate the knowledge they acquired in classroom and apply it in real work setting
- appreciate and harmonize team work, group/organizational behaviour in a work environment
- gain the real work experience which will enhance their competitiveness in an increasingly challenging job market

Duration and Course(s) taken

Duration	Course(s) taken (Assessment: by grading system)	Credit Units	Starting time (preferred)	Waiver
4 months	EE4085 Internship: Engineering Practice*	3	EE4085 Summer or SemA	EE2066 Engineers in Society and EE4090 Engineering Training
8 months	EE4085* and EE4086 Advanced Topics in Electrical Engineering*	3 + 3 (6 total)	EE4086 SemA or SemB	EE2066 Engineers in Society and EE4090 Engineering Training and One major elective
12 months	EE4085* and EE4087 Internship: Industrial Project* (follow assessment framework and all assessment activities of EE4080 – Final Year Project)	3 + 6 (9 total)	EE4087 SemA + SemB OR SemB + Summer	EE2066 Engineers in Society and EE4090 Engineering Training and EE4080 Project

EE4085 : Engineering Practice

Course aims: Provide students with the opportunity 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.

EE4085 : Template for Final Report and Final Presentation

1. Introduction

a. Overview of the company's organizational framework

b. Discussion on the key departments, roles, and responsibilities

c. Analysis of the company's hierarchical structure and decision-making process

2. Business Overview

- a. Description of the company's core business activities
- b. Discussion on the company's products, services, and innovations
- c. Examination of the company's competitive advantages and market positioning
- 3. Relationship with Hong Kong and Greater China
 - a. Overview of the company's presence and operations in HK and Greater China
 - b. Discussion on strategic partnerships and collaborations with local entities
 - c. Analysis of the company's contributions to the local and regional economy

EE4085 : Template for Final Report and Final Presentation (continued)

- 4. Technical Side Content
 - a. Examination of specific projects or initiatives undertaken by the company in HK and Greater China
 - b. Analysis of the outcomes, successes, and challenges faced in these endeavors
 - c. Technical activities in the internship period
- 5. Engineering Practice Content
 - a. Based on the company's operations, discuss the obligations, roles and professional conduct of an engineer in a modern society. Concrete examples to be provided for illustration.

b. Based on company's operations, discuss the legal, environmental and socioeconomic factors (economic, ethics, etc.) that engineering practices should consider

6. Conclusion

Summary of student works and findings from the Internship

EE4086 : Advanced Topics in Electrical Engineering

• Prerequisites: EE4085

- Course aims: Provide students with the opportunities to:
 - a. appreciate a real working environment under the guidance of expertsb. obtain technical knowledge of an area, including the relevant theoriesc. integrate the knowledge they acquired and apply it in a real work setting

EE4086 : 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

EE4086 : Template for Final Report and Final Presentation (continued)

- 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

EE4087 : Industrial Project

• Prerequisites: EE4085

- Course aims: Provide students with the opportunities to:
 - a. appreciate a real working environment under the guidance of experts;
 - b. integrate the knowledge they acquired and apply it in a real work setting;
 c. appreciate team work, group / organizational behaviour in a work environment;

d. gain real work experience, which will enhance their competitiveness in an increasingly challenging job market

- This course follows assessment framework and all assessment activities of EE4080 – Final Year Project
- 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 **Industrial Project** at the host company.

EE4087 : 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.

Time and Place

- The program is conducted at the host company whereby students are jointly supervised by the company mentors and the CityU supervisors.
- Program Duration: 4 12 months (the exact duration is negotiable between the company and student)
- **Program starting time:** flexible; for internship of 12 months, starting date is 1 June, otherwise, starting date is 1 September

Role of Training Partner Companies

- provide training position titles and job specifications
- arrange interviews and confirm offers
- provide a training relevant to the student's major study
- allow a day-release of one day per week for students to take coursework at CityU (only during semester time)
- provide a salary to the student
- assign a company mentor with relevant expertise to co-supervise the student with the CityU supervisor and to review the log book regularly
- need to complete the evaluation included in logbook at the last month of internship period

Joint Supervision

- A Company mentor with the relevant expertise shall be assigned to supervise the student(s). His/Her responsibilities include providing general guidance and technical advice to students and assessing their performance during the training period
- An academic staff member from the Department shall be assigned to co-supervise and monitor the progress of students
- The CityU supervisor will visit students 3 times during the training period

New initiative for 12-month internship: Industry FYP internship

- Existing 12-month scheme:
 - You do company's assigned work in the company, part of it becoming your FYP
 - You need to decide your FYP title 4 months later after starting the scheme
- New 12-month scheme:
 - You only do your FYP in the company
 - You will choose your FYP title before starting the scheme
- Quota: **30**

Companies joining industry FYP internship

- Sengital Limited
- Hk RnD Limited
- SenMedia Limited
- Suga Electronics Limited
- Loco Limited
- LSCM
- NTT Com Asia Limited
- Ricoh (Hong Kong) Limited
- Autotoll Limited
- Gold Peak Limited
- ... more

Projects for industry FYP internship (1)

- Smart Web Search Engine for GenAl Agent
- Smart Web Content Verification Engine for GenAI Agent
- Smart Database builder using GenAI
- Smart Document Finder for GenAI Agent
- Prompt Generator using GenAl
- GenAl Agent For Investment Data Analyzer
- Image Generation GenAl Agent
- Diagram Generation GenAl Agent

Projects for industry FYP internship (3)

- Video Generation GenAl Agent
- GenAl Agent for Accounting Data Analyzer
- GenAl Agent for Research Data Analyzer
- GenAl Agent for Sales Data Analyzer
- GenAI Agent For Survey Result Analyzer
- GenAI Agent for Form Result Analyzer
- GenAl Agent for Performance Data Analyzer
- GenAI-based Stock Predictor

Projects for industry FYP internship (3)

- GenAI-based Stock Market Analyzer
- Innovative Smart Electronic Devices for Pet Industry
- Smart Transportation System for
- Smart Shared-bike System for
- Smart Agriculture System
- Smart Cooling System for Data Centre
- Smart 5G Network System Applications
- Smart P5G Network System for University Campus Applications
- Smart AloT System Applications

Time-line

Period	Events			
5 Mar 2025 (Wednesday)	Industrial FYP internship briefing with CV and application letter workshop			
7 Mar 2025 (Friday)	Applications start for 4/8-11 months Internship. (** <u>Deadline: March 16 2025**</u>)			
11 Mar 2025 (Tuesday)	Industrial FYP internship project introduction			
14 - 17 Mar 2025	Applications start for 12 months Internship. (** <u>Deadline: March 21 2025**</u>)			
21 Mar 2025 (Friday)	Deadline of submission (all schemes): students submit job preferences, transcript, CV and study plan of remaining courses			
By 25 April 2024 (Friday)	Company interviews and companies confirm offers			
25 April 2024 (Friday)	Final submission of signed form by student, company and supervisor			
June - September 2025	Placement commencement			

Things you need to do

- Study the job listing of available positions on EE Internship System (<u>https://intranet.ee.cityu.edu.hk/intern/</u>)
- Prepare a CV and study plan of remaining courses
- First round, choose <u>up to</u> 3 jobs and rank them according to your preference
- Submit your CV, academic transcript and study plan via EE Internship System before 16 March 2024 (1st phase) // 21 March 2024 (2nd phase)

Reminder for All Applicants

- You can take EE4085/6/7 **once** only and not applicable for retake.
- EE4086/87 will not be registered if the pre-requisite is failed and not allowed to register afterwards.
- If you withdraw from the program after confirming the offer, you cannot enroll into EE4085/6/7 again.
- If you have confirmed exchange offer, we will not consider your internship application for now.
- EE4085/6/7 students can register 2 courses or maximum 3 courses per semester under the provision of one-day release per week (or equivalent) arrangement during the internship period. Any unauthorized additional courses will be de-registered during/after the course add/drop period.
- **Termination/Warning/Possible Grade change** could be taken if serious misconduct were reported (*e.g. consistent punctuality issue, poor performance, dishonesty...*), and the student may receive "F" in final grade.



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