

City University of Hong Kong
Course Syllabus

offered by College/School/Department of Electrical Engineering
with effect from Semester A in 2017/2018

Part I Course Overview

Course Title:	Engineering Training II for Information Engineering
Course Code:	EE4095
Course Duration:	Summer
Credit Units:	0
Level:	B4
Proposed Area: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English EE4093 Engineering Training I for Information Engineering and EE2311 Object-oriented Programming and Design or EE3206 Java Programming and Applications and Pre-attachment Training (only applicable to Part A IAS)
Prerequisites: <i>(Course Code and Title)</i>	<u>For Part B only:</u> 2013/14 entering EE major and thereafter Nil <u>2012/13 entering EE major and before</u> CS3161 Operating System Principles, or CS3103 Operating System
Precursors: <i>(Course Code and Title)</i>	CS3103 Operating System
Equivalent Courses: <i>(Course Code and Title)</i>	Nil
Exclusive Courses: <i>(Course Code and Title)</i>	Nil

Part II Course Details

1. Abstract

The aim of this course is to provide students with practical working experience under the Industrial Attachment Scheme (Part-A) or the in-house training scheme (Part-B). or the Summer Placement Scheme (Part C)

Part A: Industrial Attachment Scheme (IAS)

The aim is to enable students to gain practical experience and learn new technologies from an industrial environment while nurturing students with the spirit of professionalism.

Part B: In-house Training

This course aims to provide relevant practical training for the students of Information Engineering discipline. It emphasizes hands-on experiences that complement the theoretical studies covered in the regular taught courses.

Part C (Summer Placement Scheme)

The aim of this part to provide students, in collaboration with industry, the realistic working environment under guidance of expertise. The real work experience will enhance their competitiveness in an increasingly challenging job market.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

Part A

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Gain practical working experience from an industrial environment.		✓	✓	
2.	Nurture the spirit of professionalism and develop professional ethics in a real life environment.		✓		
3	Aware of the technologies used in a modern industrial setting.			✓	
4.	Communicate their ideas and present their work effectively.		✓	✓	
		100%			

* If weighting is assigned to CILOs, they should add up to 100%.

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

Part B

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Identify practical constraints and workflow behind an IT project.		✓	✓	
2.	Demonstrate discipline and responsibility in a team.		✓		
3.	Solve real-world problems by applying proper engineering tools and analysis techniques.		✓	✓	
4.	Communicate their ideas and present their work effectively.			✓	

* If weighting is assigned to CILOs, they should add up to 100%.

100%

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

Part C

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Gain solid experience in a real work environment		✓	✓	
2.	Demonstrate problem-solving ability and interpersonal skills in team work		✓	✓	
3.	Recognise the correct attitude and professionalism		✓	✓	
4.	Aware the employability by meeting the needs of industry		✓	✓	

* If weighting is assigned to CILOs, they should add up to 100%.

100%

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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 self-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.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

Part A

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
Laboratory	Students will be assigned to work in a company. A mentor in the company will provide an induction for students, assign jobs, and supervise them throughout the course of training in the company.	✓	✓	✓	✓			At least 40 hours/week (9-13 weeks)

Part B

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
Laboratory	Teaching activities are primarily based on project development followed by continuous guidance from project supervisor and technical staff. Students form a small group and work on a specific topic proposed by them. Every project group has to demonstrate their ideas and progress through oral presentations and written reports. The small class setting promotes discussions and interchange of ideas among students and the supervisor. Laboratory exercises on related topics are provided for students to get hands-on experience of certain development platforms and tools.	✓	✓	✓	✓			30 hours/week (5 weeks)

Part C

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
Laboratory	Students will work on an industrial project and/or assist in the day-to-day operation of the company as assigned by their company supervisor. Students will also meet with their CityU supervisor at regular intervals during their placement period to discuss their training and seek advice if necessary.	✓	✓	✓	✓			at least 40 hours/week (9-13 weeks)

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Part A

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1	2	3	4				
Continuous Assessment: <u>100%</u>								
Logbook, Demonstration, Presentation, Three company visits and interviews by co-supervisor	✓	✓	✓	✓			100%	
Examination: <u>N/A</u>								
* The weightings should add up to 100%.							100%	

Remarks:

The assessment is purely on a pass/fail basis. To pass the course, students must complete the training with satisfactory performance recommended by the company mentor as well as CityU co-supervisor.

Part B

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1	2	3	4				
Continuous Assessment: <u>100%</u>								
Laboratory exercises, Attendance and work attitude, Presentations, Project deliverables e.g. reports, programmes, demonstration	✓	✓	✓	✓			100%	
* The weightings should add up to 100%.							100%	

Remarks:

The assessment is purely on a pass/fail basis. To pass the course, students are required to have a laboratory attendance of 100% recorded.

Part C

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1	2	3	4				
Continuous Assessment: <u>100%</u>								
Logbook, Project Presentation, Company visits and interviews by CityU supervisors	✓	✓	✓	✓			100%	
* The weightings should add up to 100%.							100%	

Remark:

The assessment is purely on a pass/fail basis. To pass the course, individual student must complete the training with satisfactory performance recommended by the company supervisor as well as CityU supervisor.

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Pass (P)	Failure (F)
Continuous assessment on the progress of assigned tasks or group project	Achievements in CILOs	Reach the required level	Not even reaching marginal level

6. Constructive Alignment with Major Outcomes

MILO	How the course contribute to the specific MILO(s)
1, 2, 3, 5, 10	This training course provides plenty opportunities for students to practice as an engineer to carry out projects on a job position offered by the IAS or an emulated in-house environment. Students will be able to gain hands-on experiences that complement the theoretical studies covered in the regular taught courses.
4, 7	Real-world projects are commonly developed by teams. Students in this course can enhance communication skills through coordinating tasks, group discussion and presentations. The working environment also promotes team spirit and one's responsibility.
6, 8, 9	By exposing students to a competitive industrial environment, they are alerted to the importance of life-long learning. They are expected to gain knowledge in contemporary issues and be aware of the impact of engineering solutions in a broad, global and societal context. They will also realize their professional and ethical responsibilities under the guidance of mentors and supervisors.

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(Part A) - Industrial Attachment Scheme

Students are required to take nine to thirteen weeks of training in a company related to computer or IT industry. The training of each student is subject to the available engineering training programme of individual company. Student may be exposed to work in product design, production, and quality assurance.

Supervision and Assignment

An engineer of the Company will be assigned to be the mentor who is responsible for giving guidance and advice to the student and assessing the student's performance during the training. An academic staff from the Department of Electronic Engineering, City University of Hong Kong, will be appointed to co-supervise and monitor the progress of the student. Students are required to report their work in a log-book every week. The assessment is based on the log-book and the performance of their work. Students will be required to give a presentation on their work at the end of the attachment.

(Part B) - In-house Training

Mobile Game and Application Design:

iOS SDK, Android SDK, Eclipse, XCode, Java, Objective-C, principles of mobile application design

Internet Service Provider and Online Game Design:

ISP, Linux server setup, online game design

Part C: Summer Placement Scheme

Students are required to take the summer semester of training after their year-3 study in a company. Students may integrate the knowledge they acquired in classroom and apply it in real work setting. They also develop an understanding of the operation of industry, based on which students can further plan their career.

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	N/A
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2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Nil
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