

City University of Hong Kong
Course Syllabus

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

Part I Course Overview

Course Title: Engineering Training II for Computer and Data Engineering

Course Code: EE4291

Course Duration: One Summer Semester

Credit Units: 0

Level: B4

Proposed Area: Arts and Humanities
(for GE courses only) Study of Societies, Social and Business Organisations
 Science and Technology

Medium of Instruction: English

Medium of Assessment: English

Prerequisites: (EE4290 Engineering Training I for Computer and Data Engineering
(*Course Code and Title*) *or* EE4098 Engineering Training I for Computer Engineering)
and EE2004 Microcomputer Systems
and Pre-attachment Scheme (only applicable to Part A IAS)

Precursors: Nil
(*Course Code and Title*)

Equivalent Courses: Nil
(*Course Code and Title*)

Exclusive Courses: Nil
(*Course Code and Title*)

Part II Course Details

1. Abstract

This aim of this course is to enable students to gain practical 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)

The aim of this part 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 aim of this part is to provide relevant practical training for the Computer 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 is 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.		√	√	

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

100%

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 engineering project.		√	√	√
2.	Apply contemporary engineering tools to solving real-world problems		√	√	√
3.	Demonstrate discipline and responsibility in a team.				
4.	Communicate their ideas and present their work effectively.				
* If weighting is assigned to CILOs, they should add up to 100%.		100%			

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 work 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%			

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 to 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. Students will be assigned with a group project and will be trained with knowledge in product design and project management	√	√	√	√			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 to 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%	
							100%	

* The weightings should add up to 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>								
Logbook Project deliverables e.g. reports, programmes, demonstration, etc. Presentations Attendance and work attitude	✓	✓	✓	✓			100%	
							100%	

* The weightings should add up to 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%	
							100%	

* The weightings should add up to 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)
1. Coursework	Achievements in CILOs	Reach the required levels	Not even reaching marginal levels

6. Constructive Alignment with Major Outcomes

(Please state how the course contribute to the specific MILO(s))

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, quality assurance, and engineering supports.

Part B: In-house Training

Students will be grouped into small teams and each team will be assigned a project related to computer engineering or IT. Each team will be responsible for organising amongst themselves into different functional stations of a production / QC line of a product. Through the process, students will gain experience in project planning and management. Each team is required to produce a set of document, e.g. report and manuals, for their project. Students are also required to give a presentation on their project.

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.	Training Manual
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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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