CA2507: INDUSTRIAL TRAINING - ARCHITECTURAL ENGINEERING

Justification for this inactivation request

PolyU-IC is the sole provider of this course to offer the practical training to our students of the major: BEng in Architectural Engineering. However, PolyU-IC informed ACE that they will no longer provide the industrial training to all outsiders after 2024 summer. Since PolyU-IC is the sole provider of this service in Hong Kong, we have no choice but to change the course from CA2507 Industrial Training to CA2506 Industrial Internship in order to maintain the provision of practical training to the students.

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Industrial Training - Architectural Engineering

Subject Code

CA - Civil and Architectural Engineering

Course Number

2507

Academic Unit

Architecture and Civil Engineering (CA)

College/School

College of Engineering (EG)

Course Duration

One Semester

Credit Units

3

Level

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

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

CA2501 Industrial Training - Building Services Engineering

Exclusive Courses

CA2506 Industrial Internship

Part II Course Details

Abstract

The course provides an environment for the students to undertake practical industrial training for a period of eight weeks so that they understand various practical techniques and processes related to architectural engineering. This is to fulfil the requirements of The Hong Kong Institution of Engineers (HKIE) regarding practical training of engineers.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	describe relevant engineering theories and principles and to apply them in hands-on training exercises to determine architectural system feasibility;	15	x		
2	describe the conceptual design, develop actual work sequences and methods for various electrical and mechanical installations;	15	x		
3	undertake the design, construction, testing and commissioning of architectural engineering systems in buildings on the basis of recognize the engineering standards, regulations and practices;	20		x	
4	apply intelligent building control technology effectively on various architectural engineering systems. Evaluate new building automation/ intelligent control schemes to achieve a safe, comfort and efficient building environment; and	25		x	
5	apply the knowledge and skills for effective trouble shooting, test and commissioning of integral building systems.	25		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	Hands-on exercises in different workshops	Students will engage in Introduction, briefing and practicing sessions in workshops	1, 2, 3, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Practical and Written Assignment	1, 2, 3, 4, 5	40		No
2	Test	1, 2, 4, 5	30		No
3	Logbook/Module Report	1, 2, 3, 4, 5	30		No

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

40

Minimum Examination Passing Requirement (%)

0

Assessment Rubrics (AR)

Assessment Task

Practical and Written Assignment

Criterion

1.1 ABILITY to APPLY the knowledge periodically throughout the training

Failure (F)

Not even reaching marginal levels

Assessment Task

Test

Criterion

2.1 ABILITY to DESCRIBE the breadth and depth of their understanding on specific topics

Failure (F)

Not even reaching marginal levels

Assessment Task

Logbook/Module Report

Criterion

3.1 ABILITY to DESCRIBE the theories and practical knowledge on the topics of the training
3.2 ABILITY to PRESENT the concepts of different topics learned from the training

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Industrial training on structure related trades at a training centre in Construction Industry Council, City University of Hong Kong, Hong Kong Polytechnic University, Vocational Training Council, or equivalent.

Reading List

Compulsory Readings

	Title
1	Nil

Additional Readings

	Title
1	Duct board fabrication concepts (1989) Thermal Insulation Manufacturer's Association (Videorecording: TH1715. D82 cst.1)
2	Lee, S. (2008) Plumbing technology design and installation, Clifton Park: New York (TH6123. S57 2008)
3	Linsley, T. (2005) Basic electrical installation work, Oxford: Newnes (CityU electronic resource)
4	Wilson, J.A. and Kaufman, M. (1977) Bazz electronics: theory and practice, New York: Gregg Division, McGraw - Hill (TK7816.W56.c3)