

CA2502: INDUSTRIAL TRAINING - CONSTRUCTION ENGINEERING AND MANAGEMENT

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Industrial Training - Construction Engineering and Management

Subject Code

CA - Civil and Architectural Engineering

Course Number

2502

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

Nil

Exclusive Courses

CA3504 Industrial Internship

Part II Course Details

Abstract

The course provides an environment for the students to undertake practical industrial training for a period of four weeks so that they understand various practical techniques and processes related to construction engineering.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	explain the importance of the practical working processes in building and construction projects	5	x	x	
2	explain the roles of the technicians and workers in building and construction projects	5	x	x	
3	apply the basic engineering knowledge in studying/performing construction works and processes	30		x	x
4	use hands-on approach in demonstrating his/her knowledge and skills on various types of basic construction works related to building construction	60		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.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Introduction and Briefing Sessions	Introduction and briefing sessions in the workshops	1, 2, 3
2	Demonstrations	Demonstrations of the proper working processes for basic construction works in a building and construction project	3
3	Workshop Trainings	Workshop trainings on construction safety, and performing construction works involved in basic building construction activities by using a hands-on approach	4

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Assignment/Report Writing	1, 2, 3, 4	40	
2	Quiz	1, 2, 3, 4	30	
3	Grading on works performed	3, 4	30	

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

100% attendance is required.

Assessment Rubrics (AR)**Assessment Task**

Assignment/Report Writing

Criterion

Capability to discuss the importance of the practical working processes in building and construction projects, the roles of the technicians and workers in building and construction projects, the basic engineering knowledge in studying/performing construction works and processes, and the experience acquired from using hands-on approach in demonstrating his/her knowledge and skills on various types of basic construction works related to building construction

Failure (F)

Not even reaching marginal levels

Assessment Task

Quiz

Criterion

Capability to discuss the importance of the practical working processes in building and construction projects, the roles of the technicians and workers in building and construction projects, the basic engineering knowledge in studying/performing construction works and processes, and the experience acquired from using hands-on approach in demonstrating his/her knowledge and skills on various types of basic construction works related to building construction

Failure (F)

Not even reaching marginal levels

Assessment Task

Grading on works performed

Criterion

Ability to apply hands-on approach in demonstrating his/her knowledge and skills on various types of basic construction works related to building construction

Failure (F)

Not even reaching marginal levels

Part III Other Information**Keyword Syllabus**

Industrial training on construction engineering and management 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	Handouts and training guides to be provided by the module instructors

Additional Readings

Title	
1	Chandler, I., 1987. Building Technology. London: Batsford Ltd.
2	Grundy, J.T., 1979. Construction Technology. Oxford: Butterworth-Heinemann Ltd.
3	Chudley, R., 1987. Construction Technology. 2nd ed. Philadelphia: Trans-Atlantic Publications.