

CA2503: INDUSTRIAL TRAINING - CIVIL AND STRUCTURAL ENGINEERING

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Industrial Training - Civil and Structural Engineering

Subject Code

CA - Civil and Architectural Engineering

Course Number

2503

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

Other Languages

Other Languages for Medium of Instruction

English / Chinese

Medium of Assessment

Other Languages

Other Languages for Medium of Assessment

English / Chinese

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

CA2505 Industrial Training - Civil Engineering

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 eight weeks so that they understand various practical techniques and processes related to civil and structural engineering. This is to fulfill the requirements of The Hong Kong Institution of Engineers (HKIE) regarding practical training of engineers.

Course Intended Learning Outcomes (CILOs)

| CILOs | | Weighting (if DEC-A1 DEC-A2 DEC-A3 app.) | | | |
|-------|--|--|---|---|--|
| 1 | explain the importances of the practical working processes in building and construction projects | | x | | |
| 2 | explain the roles of the technicians and labours in building and construction projects | | x | | |
| 3 | apply the basic engineering knowledge to the construction processes | | | x | |
| 4 | apply appropriate hands-on methods in various working procedures related to construction engineering | | | 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 workshops | 1, 2 |
| 2 | Demonstrations | Demonstrations for the working processes in a civil and structural engineering project | 2, 3 |
| 3 | Workshop Trainings | Workshop trainings for practical construction process | 4 |

Assessment Tasks / Activities (ATs)

| ATs | | CILO No. | Weighting (%) | Remarks (e.g. Parameter for GenAI use) |
|-----|---|------------|---------------|--|
| 1 | Report writing, grading of the technical skills in the workshop | 1, 2, 3, 4 | 100 | |

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

100% attendance is required.

Assessment Rubrics (AR)**Assessment Task**

Report writing, grading of the technical skills in the workshop

Criterion

1. ABILITY to USE the skills and tools introduced in the workshop
2. ABILITY to PRESENT the methods learned in the workshop

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 | Nil |