

CA5101: PRODUCTION MANAGEMENT

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Production Management

Subject Code

CA - Civil and Architectural Engineering

Course Number

5101

Academic Unit

Architecture and Civil Engineering (CA)

College/School

College of Engineering (EG)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

BC5101 Production Management

Exclusive Courses

Nil

Part II Course Details

Abstract

The aims of this course are to explore various methods and techniques for managing construction works to a successful completion and to increase work effectiveness. On completion of this programme, students shall be able to demonstrate

that: a) they have acquired knowledge on the theoretical framework, b) they can apply quantitative and statistical analysis, and c) they have the ability of putting the theories they learnt into practice on managing construction works at site level. Students shall be able to analyse and explain the relationships between the project control functions and business management functions of a construction firm, which link up the business and project control management into one comprehensive premise.

Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1 identify and apply construction management principles, strategies and techniques contributing to project success;		x	x	x
2 make use of the quantitative and statistical analysis tools in performing construction planning and control process;		x	x	
3 identify and prepare/use the types of schedules used to support construction management;		x		
4 appraise the procedure manuals adopted in the various functional areas of a local general building contractor and make critical comment on the same based on the theories learnt in CILO no. 1		x	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.

Learning and Teaching Activities (LTAs)

LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1 Lectures	On topic related to production management	1, 2, 3, 4	2 hrs/wk
2 Tutorials	Class discussions	1, 2, 3, 4	1 hr/wk

Additional Information for LTAs

Semester Hours: 3 hours per week

Lecture/Tutorial/Laboratory Mix: Lecture (2); Tutorial (1); Laboratory (0)

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1 Assignments	1, 4	25	
2 Mid-term test/quiz	2, 3	30	

3	Individual project	1, 2, 3, 4	30	
4	Presentations	1, 4	15	

Continuous Assessment (%)

100

Additional Information for ATs

Coursework including, but not limited to, assignments, mid-term test/quiz, projects and presentations.

Assessment Rubrics (AR)**Assessment Task**

Assignments (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to understand, analyze and apply the theories acquired in the course

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Mid-term test/quiz (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

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Assessment Task

Individual project (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

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Assessment Task

Presentations (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to understand, analyze and apply the theories acquired in the course

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Assignments (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Ability to understand, analyze and apply the theories acquired in the course

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Mid-term test/quiz (for students admitted from Semester A 2022/23 to Summer Term 2024)

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Part III Other Information

Keyword Syllabus

Introduction to management theories and different school of thoughts; organization structure; concepts of control; operation control strategies and statistical analysis; management issues in operation; controlling and monitoring measures in construction production process.

Reading List**Compulsory Readings**

Title	
1	Nil

Additional Readings

Title	
1	Bennett, J. 1985, Construction Project Management, London: Butterworths [Call # TH438 .B434 1985]Harris, F.C. & McCaffer, R. 2006, Modern Construction Management, London: BSP Professional Books [Call # HD9715 .A2 H35 2006]
2	Oxley, R. & Poskitt, J. 1996, Management Techniques applied to the Construction Industry, 4th Edition. London: BSP Professional Books [Call # TH438 .O95 1996]