

Project Management for Construction

Course Name	Course type (credit/hours)		Required course(3/3)		Course code	E103
	Target students Division/major/grade		Architecture/Junior		Opening semester	2020 2ND SEMESTER
	Class time and classroom		Mon D(IUC825)Thu D(IUC825)		English Grade	A(100%English)
Reference to this course	Prerequisite courses		Building Construction (건축시공학)			
	Related basic courses		-			
	Recommended concurrent courses		Steel Construction (철골구조), Building Facilities (건축설비)			
	Related advanced courses		Building Estimation (건축적산)			
Instructor	Name (title/division)		Cha, Hee Sung(Professor, Architecture)			
	Office Room Number	산학원 708호	Office phone Number	2508	e-mail	
	Office hours	MW 10:00~12:00		Homepage address	http://cem.ajou.ac.kr	
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Construction management plays an important role in dealing with various types of construction project. Since many project stakeholders are highly concerned about the top-level performance of their projects, construction engineers should prepare a competency in identifying and satisfying the needs and/or requirements of the owner's project value, including time, cost, quality, safety, and productivity. This course addresses the extensive knowledge of construction management discipline regarding how to achieve the success of a project in a more effective way.

2. Course Objectives

The purpose of this course is to provide students with a systematic problem-solving ability in managing a construction project throughout the case studies and real-project planning and scheduling exercises. Once completing this course, the students will effectively define, organize, plan, and control a construction project to optimize their constrained resources in a more effective way. In addition, the students will enhance their skill in dealing with the computerized scheduling program which is widely used in the international projects.

3. Class types and activities

The course is divided into two parts, one is theory-oriented and the other is focused on real-project application. In the theory class, the students should get informed of the variety of topics regarding construction management and/or project management (CM/PM) practice. Also, they should actively participate in the open discussion and oral presentation. In the real-application, they will get acquainted with a variety of areas in CM/PM body of knowledge throughout in-depth analysis about the selected real case project.

4. Teaching Method

- | | |
|---|---|
| <input checked="" type="checkbox"/> lecture | <input checked="" type="checkbox"/> discussion and debate |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others | |

5. Support Systems in Use

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> AjouBb | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture | <input checked="" type="checkbox"/> online content | |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others | |

6. Teaching Tools

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) | <input type="checkbox"/> TBL(Team Based Learning) |
| <input type="checkbox"/> UR(Undergraduate Research) | <input type="checkbox"/> FL(Flipped Learning) | <input type="checkbox"/> DSAL(Data Science Active Learning) |
| <input type="checkbox"/> others | | |

7. Knowledge and ability required for taking this course

Basic knowledge on computerized tools and effective communication skill.(의사소통 능력, 기초적인 컴퓨터 활용능력)

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Participation
midterm exam	1	30%	Mid-term Examination
final exam	1	30%	Final Examination
quiz			
presentation	2	20%	Group case-study presentation (총 8회 중 4회 이상)/단, 개인별 참여도 평가진행
discussion			
homework	4	10%	Cost Management, Schedule Management (각 2회, 총 8회)
etc			
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	CM best practices (CM프로젝트 이것이 최고의 성공사례다)	한미파슨스	보문당	2006
Main	Project management for engineering and construction	Garold Oberlender	Mc Graw Hill	2000
Sub	건설관리의 개념과 실제	Donald S. Barrie, Boyd C. Paul	Mcgraw-Hill Korea	2000

10. Class system and Class shedule

The course is divided into two parts, one is theory-oriented and the other is focused on real-project application. In the theory class, the studens should get informed of the variety of topics regarding construction management and/or project management (CM/PM) practice. Also, they should actively participate in the open discussion and oral presentation. In the real-application, they will get acquainted with a variety of areas in CM/PM body of knowledge throughout in-depth analysis about the selected real case project.

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Class Introduction		Cha, Hee Sung	Lecture	Essay	
2	Organization		Cha, Hee Sung	Lecture		
3	Project Initiation		Cha, Hee Sung	Lecture+Presentation		

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
4	Project Budgeting		Cha, Hee Sung	Lecture+Presentation	Exercise 1	
5	Early Estimation		Cha, Hee Sung	Lecture+Presentation	Exercise 2	
6	Project Execution Plan		Cha, Hee Sung	Lecture+Presentation		
7	Design Coordination		Cha, Hee Sung	Invited Lecture		
8	Mid-term Exam		Cha, Hee Sung	Exam	Mid-term	
9	Invited Lecture/Site Visit		Cha, Hee Sung	Lecture		
10	Project Scheduling		Cha, Hee Sung	Lecture		
11	Critical Path Method		Cha, Hee Sung	Lecture+Presentation		
12	Work Tracking		Cha, Hee Sung	Lecture+Presentation		
13	Construction Execution		Cha, Hee Sung	Lecture+Presentation		
14	Total Quality Management		Cha, Hee Sung	Lecture+Presentation		
15	Safety/Productivity		Cha, Hee Sung	Lecture		
16	Final Exam		Cha, Hee Sung	Exam	Final	

11. Other items of notification

2017년 교과목 개편으로 인한 기존 건설관리 및 실습 과목의 이론 과목 성격임.