

*DEPARTMENT OF ARCHITECTURE  
COLLEGE OF ENGINEERING  
SEOUL NATIONAL UNIVERSITY*

SUBJECT PROGRAM 2022 SEMESTER 2

Subject Code/Name: M1498.014000/Introduction to Building Construction Engineering and Management  
Course/Year: Undergraduate/2nd Academic Year

Lecture Time: 10:00 ~ 12:50 Wed.

Lecturer: Prof. Park, Moonseo

**Classes for the 2nd semester of 2022 will be conducted non-face-to-face.**

Week	Lecture	Teaching Core / Announcement	Assignment
1	<ul style="list-style-type: none"> <li>▶ Construction Industry</li> <li>▶ Architectural Construction and Management Overview</li> </ul>	<ul style="list-style-type: none"> <li>▶ Characteristics of Construction Industry, Environmental Change</li> <li>▶ Definition/Concept/Method of Construction Management</li> </ul>	Team Composition
2	<ul style="list-style-type: none"> <li>▶ Construction Project Composition</li> <li>▶ Construction Project Organization</li> </ul>	<ul style="list-style-type: none"> <li>▶ Construction Production System and Participants</li> <li>▶ Organization and Operation of Construction Projects</li> </ul>	
3	<ul style="list-style-type: none"> <li>▶ Construction Contract</li> </ul>	<ul style="list-style-type: none"> <li>▶ Types and Characteristics of Construction Contracts</li> <li>▶ DB/DBB/Turnkey/PPP/IPD/Partnership</li> </ul>	
4	<ul style="list-style-type: none"> <li>▶ Process Management</li> </ul>	<ul style="list-style-type: none"> <li>▶ Process Management definitions, elements</li> </ul>	
6	<ul style="list-style-type: none"> <li>▶ Process Management Method</li> </ul>	<ul style="list-style-type: none"> <li>▶ CPM/PDM</li> </ul>	Process Management
7	<ul style="list-style-type: none"> <li>▶ Process Management Application</li> </ul>	<ul style="list-style-type: none"> <li>▶ PERT/LOB/TACT</li> </ul>	
8	<ul style="list-style-type: none"> <li>▶ Process Management Application</li> </ul>	<ul style="list-style-type: none"> <li>▶ Time-cost adjustment, resource leveling and allocation</li> </ul>	
9	Mid-term Exam		
10	<ul style="list-style-type: none"> <li>▶ Estimation</li> </ul>	<ul style="list-style-type: none"> <li>▶ Principles and Techniques of Estimation</li> </ul>	Quantity survey (apartment frame)
11	<ul style="list-style-type: none"> <li>▶ Implementation of a Construction Project</li> </ul>	<ul style="list-style-type: none"> <li>▶ Construction work plan and management</li> <li>▶ Construction work plan</li> </ul>	Construction Work plan (Temporary construction)
12	<ul style="list-style-type: none"> <li>▶ Temporary Construction</li> </ul>	<ul style="list-style-type: none"> <li>▶ Common / Temporary Construction / Safety equipment</li> </ul>	

13	▶ Earthwork and Foundation Work	<ul style="list-style-type: none"> <li>▶ Sheathing Work</li> <li>▶ Types and Characteristics According to Base Plate and Designated Format</li> <li>▶ Unequal Settlement Prevention, Drainage Method</li> </ul>	
14	▶ Reinforced Concrete Construction	<ul style="list-style-type: none"> <li>▶ Concrete Construction</li> <li>▶ Temporary Construction /Mold/Rebar Work/Lifting</li> </ul>	
15	▶ Finish Work / Construction Management and Leadership	<ul style="list-style-type: none"> <li>▶ Dwelling and Office Buildings Interior/Paint/Stone Work/Tile</li> <li>▶ Construction Industry Vision/ Innovation Plan/ Leadership</li> </ul>	
16	Final Exam		

## GRADING

- *Attendance and Participation: 20%*
- *Assignments/Announcement: 25%*
- *Mid-term Exam: 25%*
- *Final Exam: 30%*

## READING

- *ClassNote*
- *Construction engineering and management(Kim, Moon Han et al., kimoondang)*
- *Construction Engineering(Lee, Chan-Sik, Hansol Academy)*
- *Professional Construction Management(Donald S. Barrie 외, MacGraw-Hill)*
- *Construction Methods and Management(S. W. Nunnally, Regents/Prentice Hall)*
- *Precedence & Arrow Networking Techniques for Construction(Robert B. Harris, Wiley)*