

강의계획서

출력일시 : 2026-08-12 10:44:55

1. 교과목 정보

개설연도-학기	2026년	2학기	개설학과	구조공학
교과목번호-분반번호	8935331	01	교과목명	교량공학특론
이수구분	전공심화		학점/시수	3-3-0
강의시간/강의실	화 02 ,03 ,04 [E8-6-217(49-217)]			
수업방식	대면			
강의언어	영어		담당교수	양범주(전임교원)
전화	043-261-2402		E-mail	byang@cbnu.ac.kr
강의정원			학과전화	043-261-2380
선수과목			수강대상	통합(전학년)
강의 맛보기				

2. 교과목 개요

강의개요	This course provides a comprehensive introduction to the fundamental planning and design concepts of bridges. Students will analyze the structural and material characteristics of major bridge types, and develop an understanding of relevant design methods and construction sequences. In addition, safety issues and accident case studies for each construction phase will be examined to assess the risks associated with bridge construction.					
학습목표	Students will build a foundation in bridge engineering by mastering the principles and analytical methods related to the following: 1. The process from bridge planning through erection 2. Structural analysis approaches for different bridge types 3. Construction methods for different bridge types					
문제해결방법	Problem-solving skills will be developed primarily through worked examples in the textbook.					
수업진행방법	강의	토의/토론	실험/실습	현장학습	개별/팀별 발표	기타
	100 %	0 %	0 %	0 %	0 %	0 %
	상세정보	Lectures are delivered mainly via beam projector, supplemented by board writing to aid student understanding.				
평가방법	중간고사	기말고사	출석	퀴즈	과제	기타
	40 %	40 %	10 %	0 %	10 %	0 %
	상세정보	The weighting of in-class quizzes and participation relative to midterm and final exams may be adjusted accordingly.				
프로그램 학습성과의 평가	- Ability to apply knowledge of mathematics, physics, and basic engineering, along with information technology - Ability to identify, formulate, and solve problems related to bridge engineering - Creative engineering capability to actively address industrial construction challenges in areas such as construction systems, design, and construction					
교재 및 참고문헌	1. 주교재 : Instructor-prepared lecture slides (PPT), Beomjoo Yang, , 2026					
핵심역량과 연계성						

3. 주별 강의계획

주차	수업내용	교재범위 및 과제물	비고
1	Course introduction and overview		
2	Bridge fundamentals and planning		
3	Loads 1		
4	Loads 2		

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5	Structural materials 1		
6	Structural materials 2		
7	Reinforced concrete bridges		
8	Midterm exam		
9	Prestressed concrete bridges		
10	Special bridges 1		
11	Special bridges 2		
12	Special bridges 3		
13	Bridge seismic and wind design		
14	Bridge repair, strengthening, and maintenance		
15	Final exam		
16			
17			
18			
19			
20			
21			
22			

4. 장애학생을 위한 학습 및 평가지원 사항

Academic support: Lecture files provided; note-taking assistance and stenography support permitted; lecture recording permitted; extended submission deadlines (for students with visual or hand-use impairments); use of assistive devices allowed. Assessment support: Alternative assessment for English listening tests (students with hearing impairments); exam time extended by 1.5× to 1.7× depending on disability type and severity; separate exam venue and adapted exam materials provided; use of assistive equipment permitted where necessary.

5. 수강에 특별히 참고하여야 할 사항

Prior foundational knowledge in materials science and structural engineering is required.