

# 강 의 계 획 서

교과목명	유체역학	주야	주간	교과 코드	20030083	이수구분	전공선택
학점	3	주당시수	이론(3) / 실기(0)			학점구성	이론(3) 실습(0) 설계(0)
개설학년	2	개설학기	1학기			강의시간	월2/화6,7
담당교수	차동진	상담일시	M-F 17:00~18:00	연구실	S8동 전 화:		
담당조교		상담일시	수시	사무실	S8동 전 화:		
					e-mail :		
인증구분	인증( ) 비인증 (O)	교과구분				선수권장 과목	

교과목의 교육목적	<ol style="list-style-type: none"> <li>1. To develop a sound knowledge of engineering fundamentals required for fluid mechanics</li> <li>2. To develop skills to integrate, synthesize, and apply engineering principles to the design and operation of fluid mechanics</li> <li>3. To develop an appreciation for the importance of professional behavior, ethics, and life-long learning in the engineering profession</li> <li>4. To develop effective skills in both written and oral communications, and the ability to work effectively in a multi-functional team environment.</li> </ol>
교과목의 개요	<p>The basic principles and concepts of fluid mechanics will be discussed. This course is necessary for handling fluids in building equipment and/of facility including air conditioning, water distribution and drainage, sanitation and fire safety equipments.</p>

구분	교재명	저자	출판사	출판년도	
교재	주교재	Fluid Mechanics Fundamentals and applications	Y.A. Cengel and J.M Cimbala	McGraw-Hill	2006
	참고 서적	유체역학(Fluid Mechanics)	이종춘 외 (원저: I.Granet)	SciTech Media	1998
비고					

강의진행 방식	<p>강의(○) 토의(○) 과제평가(○) 현장학습( ) Computer사용(○) Beam Project사용(○) OHP사용( ) VTR사용( ) 기타( )</p> <p>※ 해당란에 모두 표시</p>
------------	--

강의평가 방식	<p>정기평가(40%) 수시평가(30%) 과제평가(20%) 보고서(0%) 퀴즈(0%) 실험(0%) 프로젝트(0%) 발표(0%) 출석평가(10%) 기타(0%)</p> <p>※ 합은 100%</p>
------------	--

## 주별 강의진행계획

주	강의내용	비고
1	Introduction and Basic Concepts (Chapter 1)	Lecture and Discussion
2	Properties of Fluids (Chapter 2)	Lecture and Discussion
3	Properties of Fluids Statics I (Chapter 3)	Lecture and Discussion
4	Properties of Fluids Statics II (Chapter 3)	Lecture and Discussion
5	Fluid Kinematics (Chapter 4)	Lecture and Discussion
6	Mass, Bernoulli, and Energy Equations I (Chapter 5)	Lecture and Discussion
7	Mass, Bernoulli, and Energy Equations II (Chapter 5)	Lecture and Discussion
8	Mid-term exam	Exam
9	Differential Analysis I (Chapter 9)	Lecture and Discussion
10	Differential Analysis II (Chapter 9)	Lecture and Discussion
11	Approximate Solutions of the Navier-Stokes Equation I (Chapter 10)	Lecture and Discussion
12	Approximate Solutions of the Navier-Stokes Equation II (Chapter 10)	Lecture and Discussion
13	Flow over Bodies : Drag and Lift (Chapter 11)	Lecture and Discussion
14	Open Channel Flow (Chapter 13)	Lecture and Discussion
15	Final exam	Exam