

INTRODUCTION TO COMPUTER SCIENCE

CREDIT	3	INSTRUCTOR	Han Tack Don
OFFICE	D802	OFFICE HOURS	TBA
TIME	Mon–Fri 13:30–16:00	CLASSROOM LOCATION	TBA
E-MAIL	hantack@yonsei.ac.kr		

[COURSE INFORMATION]

COURSE DESCRIPTION & GOALS	<p>This course will cover introduction to computer science. Topics include: digital technology, computer architecture, operating system, computer network, programming language, concept of computer algorithms and Artificial Intelligent.</p> <p>Successful completion of the course will allow students to:</p> <ol style="list-style-type: none"> 1. Understanding fundamental principles of computation 2. Computer organization and operating system 3. Learn principal programming concepts and structures 4. Preparing the advanced computer science courses.
PREREQUISITE	There are no prerequisites.
COURSE REQUIREMENTS	<p>In this course, lectures will cover the text book chapters. To support book chapters, Six Lab Assignments and One Project will be given. Each class will consists of two hour lecture and one hour Lab. No programming experience is required. Students will learn Python language and several basic simulation tools. Lab will cover Logisim, CPU and RAM simulator, Python, MySQL and Deep Learning tool. Six Lab assignments and one project will be provided during this winter term.</p>
GRADING POLICY	<p>Exam 1: 20%</p> <p>Exam 2: 20%</p> <p>Exam 3: 20%</p> <p>Six Lab Assignments: 30%</p> <p>One Project : 10%</p>
TEXTS & REFERENCES	<p>Compute Science 13th Edition, Pearson Publisher</p> <p>J Glenn Brookshear</p>
INSTRUCTOR'S PROFILE	<p>Tack Don Han is a professor in the department of computer science at Yonsei University. He received his Ph.D. Degree in Computer Engineering from University of Massachusetts at Amherst in 1987, M.S. degree in Computer Engineering from Wayne State University in 1982, and B.S. degree in Electronics at Yonsei University in 1978. His current research interests include the design of 3D graphics System, User interface design, and Argument Realty and Smart Space Design.</p>

[WEEKLY SCHEDULE]

WEEK	DAILY TOPIC & CONTENTS	COURSE MATERIAL & ASSIGNMENTS	REFERENCE
1	Course Overview	Chapter0	
	Data Storage	Chapter 1	
	Data Manipulation	Chapter 2	Lab1: Logisim
	Operating System	Chapter 3	Lab2: CPU Simulator
	Network and Internet	Chapter 4	Exam 1
2	Algorithms	Chapter 5	Lab3: Python 1
	Programming Language	Chapter 6	Lab4: Python 2
	Software Engineering	Chapter 7	Lab5: Python 3
	Data Abstractions	Chapter 8	
	Database Systems	Chapter 9	EXAM 2
3	Computer Graphics	Chapter 10	Lab6: MySQL
	Artificial Intelligence	Chapter 11	Project Lab
	Artificial Intelligence Deep Learning	Chapter 11	
	Theory of Computation	Chapter 12	
	Project presentation		Exam 3