

## IE Programming and Experiment 2

Course Name	Course type (credit/hours)	Required course(3/3)			Course code	B008
	Target students Division/major/grade	Industrial Engineering/Sophomore			Opening semester	2017 2ND SEMESTER
	Class time and classroom	Tue E(Pal307)Fri E(Pal307)			English Grade	A(100%English)
Reference to this course	Prerequisite courses					
	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)		Limei Peng(Assistant Professor, Industrial Engineering)			
	Office Room Number		Office phone Number	2478	e-mail	
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

### 1. Introduction

This is a consecutive course of IE1. In this course, we will continue to use JAVA as the main programming language by referring to the same textbook "Java: How to program". In IE1, we have learnt the fundamentals of Java, such as how to input and output data stream, various control structures, the concept of methods, the purpose of methods, how to define methods, arrays, and arraylist, most of which are common to all other programming languages.

In this course, we will focus more on the unique features of Java itself, such as inheritance, polymorphism, GUI components, Graphics, etc., and file processing, recursive, etc., by mastering which would strengthen your programming capability.

### 2. Course Objectives

### 3. Class types and activities

### 4. Teaching Method

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

### 5. Support Systems in Use

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

### 6. Teaching Tools

<input 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

Fundamental Java programming capability

## 8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		5%	
midterm exam		25%	
final exam		30%	
quiz	2~3	20%	
presentation			
discussion			
homework	2~5	20%	
etc			
study hours			

## 9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
	Java: How to program (10th edition)	Paul Deitel, Harvey Deitel		

## 10. Class system and Class shedule

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### < Class Schedule >

\* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to the course	E	Limei Peng			
2	Review of IE1	E	Limei Peng			
3	Ch9-Inheritance	E	Limei Peng			
4	Ch10-Polymorphism	E	Limei Peng			
5	Practice&Quiz1	E	Limei Peng			
6	Ch11-Exception handling	E	Limei Peng			

< Class Schedule >

\* language : K-korean, E-English

Week s	Topics	lang uag e	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
7	Ch14-String, Characters and Regular Expressions	E	Limei Peng			
8	Mid-term	E	Limei Peng			
9	GUI1	E	Limei Peng			
10	Ch12-GUI components	E	Limei Peng			
11	Ch13-Graphics and Java 2D	E	Limei Peng			
12	Ch15-File processing	E	Limei Peng			
13	Practice&Quiz2	E	Limei Peng			
14	Ch16-Collections	E	Limei Peng			
15	Ch18-Recursion	E	Limei Peng			
16	Final Exam	E	Limei Peng			

11. Other items of notification