

안녕하세요  
반갑습니다





# Syllabus

# Software Engineering

Fall, 2024

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## 1. 교과목 정보

개설연도-학기	2024년	2학기	개설학과	소프트웨어전공
교과목번호-분반번호	5120004	01	교과목명	소프트웨어공학
이수구분	전공필수		학점/시수	3-3-0
강의시간/강의실	화 05,06 [S4-1-104(21-104)] 목 07 [S4-1-104(21-104)]			
수업방식	대면			
강의언어		담당교수	홍장익(전임교원)	
전화	043-261-2261	E-mail	jehong@chungbuk.ac.kr	
강의정원	40	학과전화	043-261-2260	
선수과목	객체지향 설계, 객체지향 설계		수강대상	학부(3학년)
강의 맛보기				

강의개요	Software development is a creative and challenging work, and also requires spectrum-wide principles and techniques during the development. Software Engineering is the application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software. This course will familiarize students with fundamental concepts and principles of software engineering in both theoretical and practical views.
학습목표	<p>Software Engineering applies the knowledge and theoretical understanding gained through computer science to building high-quality software products. Students will have gained the following competencies at the completion of this course:</p> <ul style="list-style-type: none"><li>- Understand the fundamental concepts, approaches, and methodologies in software engineering.</li><li>- Understand the software quality, quality metrics, and how to control the quality.</li><li>- Understand the engineering issues in each phase of software development life cycle.</li><li>- Understand the concepts and issues in project management and control.</li><li>- Understand the philosophy and techniques of software testing.</li><li>- Be able to apply the software engineering issues to project practices.</li></ul>

## 문제해결방법

We will have five design activities as given homework, as followings;

- Subject 1 : Development of system description
- Subject 2 : Planning software project
- Subject 3 : Requirement elicitation and definition
- Subject 4 : Requirements specification (option)
- Subject 5 : Software testing by an example.

Some guidelines for the design activities are

- Project will be done in team work with only 2 students
- Students have responsible for topic selection.
- Project schedule will be controlled by course instructor.
- Student can present the result of project or given report if needed.

Open Source Usage

- This course highly recommends students to use open source software which is open to the public in any type of levels such as source code level or binary code level in order to perform homework or assignments.
- It is also possible for students to get supports for open source software adaption in their class activities through Open Source SW Help Desk operated by the Center for Open Source Software([osshelp@cbnu.ac.kr](mailto:osshelp@cbnu.ac.kr)).

수업진행방법	강의	토의/토론	실험/실습	현장학습	개별/팀별 발표	기타
	90%	0%	0%	0%	0%	10%
	상세정보	The Soft copy of lecture notes will be available on the course homepage (ecampus.cbnu.ac.kr) The reports of homework will be submitted through course homepage.				
평가방법	중간고사	기말고사	출석	퀴즈	과제	기타
	30%	30%	10%	0%	30%	0%
	상세정보	- Mid-term exam, Final exam, and attendance : Individual evaluation - Project : Team-based evaluation				

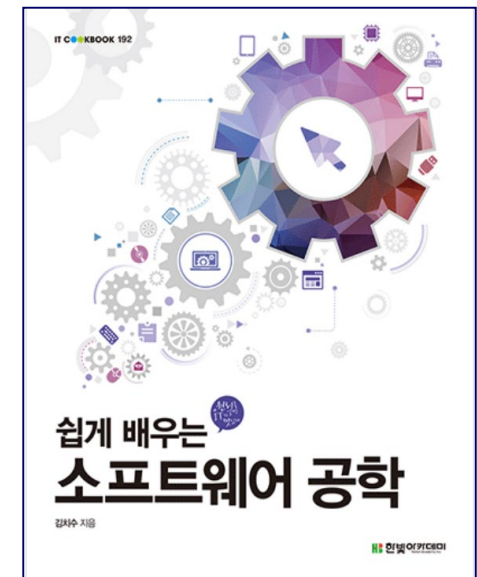
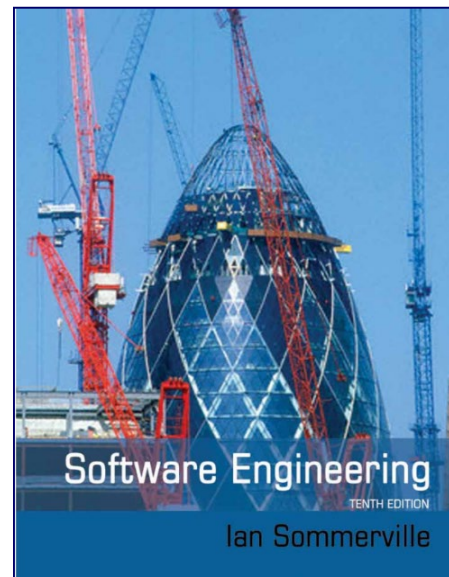
### 강의 지원 조교

\* 상정위 (Shang Zhengyu), 010-6461-6546, shangzhengyu@cbnu.ac.kr

## 교재 및 참고문헌

1. 주교재 : 소프트웨어공학 이론과 실제, 홍장의, 한빛아카데미, 2022
2. 부교재 : Software Engineering, 10th Edition, I. Sommerville, Perason publishing, 2015

→ 주교재 : Lecture Notes on Software Engineering, Edited by Jang-Eui Hong, 2024



## 3. 주별 강의계획

주차	수업내용	교재범위 및 과제물
1	Course introduction and intro. to SE	
2	Understanding Software Quality	Team formation
3	Software production processes : Waterfall, Agile and DevOps	System definition
4	Software Project Management	
5	Software Cost Estimation	Project Plan
6	Requirements Elicitation and Definition	Req. Determination
7	Requirements Analysis - Object-Oriented Analysis	
8	Mid-term Exam.	Req. Specification
9	Software Design - Modularity	
10	Design Pattern - GOF Patterns	
11	Software Design - Object-Oriented Design	
12	Inspection and Coding Standards	Testing Exercise
13	Software Testing	
14	Trends on Software Engineering	
15	Final-Exam	Test Project final Due



#### 4. 장애학생을 위한 학습 및 평가지원 사항

##### [Learning Support for Disabled Students]

Provision of lecture files, allowance of scribes and stenography support, permission to record lectures, extension of assignment submission deadlines (for students with visual impairments or difficulties using their hands), use of assistive devices, etc.

##### [Assessment Support for Disabled Students]

Replacement of English listening tests for students with hearing impairments, extension of exam duration by 1.5 to 1.7 times depending on the type and severity of the disability, provision of separate exam venues and papers, and allowance of necessary learning equipment if needed.

#### 5. 수강에 특별히 참고하여야 할 사항

- The formal language of class operation is Korean
- The above course contents are subjective to be changed for the purpose of the effective operation of the course.
- Make-up test(exam) will only be allowed for those having formal evidence.
- Late project and reports will be downgraded 10% for each 24-hour period after the due date.
- All announcement and deliverable will be posted at the homepage board (@LMS).
- For fraud and cheating that occur in this class, it will be severely punished on the basis of the university regulation, treated with F grade.
- [Academic Operations Regulations] Article 86-3 (Special Cases for Early Employment) Notwithstanding the provisions of Articles 51, 80, 86, 86-2, etc., the classes, exams, and grade evaluations for early employed students shall follow the following provisions:
  1. Classes can be conducted via online courses, e-learning, or assignment-based courses.
  2. Exams can be replaced by assignment evaluations.
  3. Grades can be awarded up to B+.

# Summary and Discussion

## Syllabus of Software Engineering

- Course goal, Homework, Course operation, Grading scheme,
- Weekly course schedule

## Let's Think

Why do you want to take Software Engineering Course?

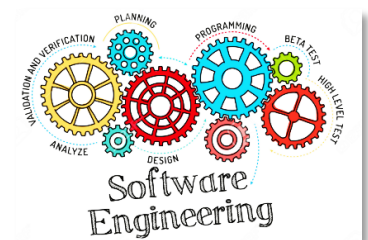
What is your expectation from this course?

## For Announcement . .

You can Access Course Homepahe at “**lms.cbnu.ac.kr**” !!

Keep the naming rule for your all reports

- \* + ID\_Number + Your\_Name



# One More

## National Holidays for the following 2 weeks

- 17 Sep. → Chuseok Holiday
- 01 Oct. → Armed Forces Day
- 03 Oct. → National Foundation Day (Gae-Cheon Jul)

## Class operation PLAN

- Chuseok Holiday → No Class (will be make-up the class)
- Armed Forces Day & National Foundation Day (Gae-Cheon Jul)
  - Off-line class will be held (if you want)