

# CPT 203

**Revision on  
week 1, week 2,  
week 8 and week 9**



**智能工程学院**  
西交利物浦大学

# How to prepare?



- ✓ Try to answer lab/tutorials questions in closed book mode -> then check the suggested answers, the lecture notes and the lecture videos
- ✓ Try to answer the past exams papers in closed book mode -> then check the lecture notes and the lecture videos ( **No** solution to the past exams is not available )
- ✓ Optional questions for week 1, 2, 8 and 9 are added on the learning mall, but no solution will be provided
- ✓ The highlighted parts in this revision can be the priority for preparation
- ✓ To gain further understanding, please read the related chapters in the text book

# Past Exam Papers



Xi'an Jiaotong-Liverpool University

西交利物浦大學

- <https://lib.xjtlu.edu.cn/>



### Discover

All-in-one Library searches for print book records, e-books, journal articles, and a wide range of digital content.



### Catalogue

Explore print book records, manage renewals and reservations, and request inter-branch delivery services.



### E-Journals

Access the electronic journals and magazines provided by the Library by entering the title in the search field.



### Databases

Alphabetically lists all Library databases to enable efficient browsing and sorting through a user-friendly interface.



### Exam Papers & Theses

Access past exam papers, as well as previous Final Year Projects (FYPs), dissertations, and theses from XJTLU graduates.



### Research Repository

Preserve and/or search for XJTLU-affiliated scholarly output; records are searchable by keywords or phrases.

Advanced Search

Paper Code

Contains

cpt203

Sort by: Paper Title

Search

Paper Title	Paper Code	Department	Year
Software Engineering I	CPT203	Department of Computing	2021-2022
Software Engineering I	CPT203	Department of Computing	2021-2022
Software Engineering I	CPT203	Department of Computing	2022-2023
Software Engineering I	CPT203	Department of Computing	2022-2023
Software Engineering I	CPT203	Department of Computing	2023-2024
Software Engineering I	CPT203	Department of Computing	2023-2024



## Week 1 topics

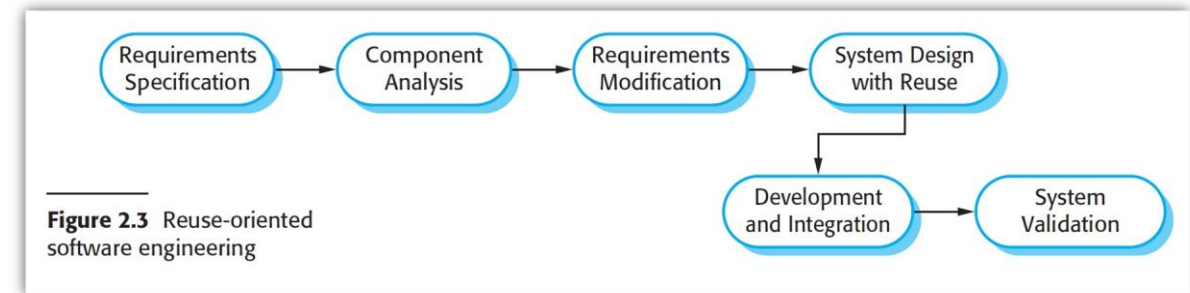
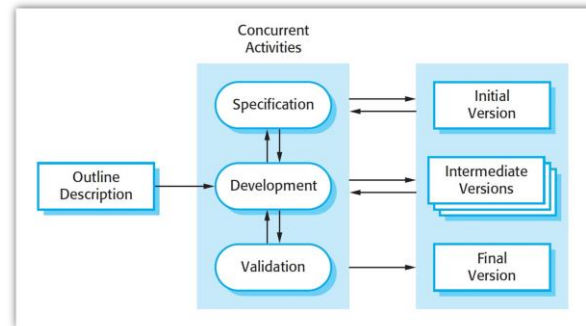
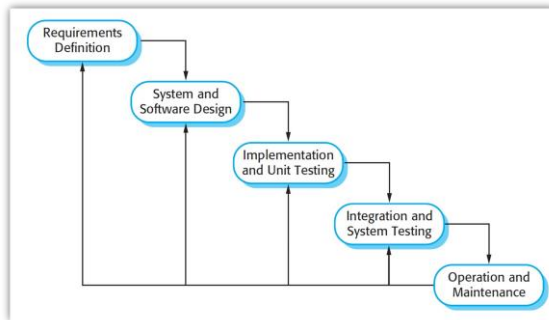
- software engineering and its importance
- development of different types of software systems
- the required different software engineering techniques
- ethical and professional issues in software engineering

## Week 1 – try to answer

- What is software engineering ?
- What are the main activities of software engineering?
- What is professional software development ?
- What are the main Software engineering ethical issues?
- What is software deterioration? How to cope with it?

## Week 2 - topics

### • Software Process Models



### • Software Process Activities



## Week 2

- What are the software process activities ?  
Definition of each of them
- What are the software process models? Able to explain them and draw the diagram of a process model
- Their characteristics, advantages and disadvantages
- Given a scenario, how to decide which process model to use? Able to provide justification



# A lab question: software control anti-lock braking

Because the anti-lock system is

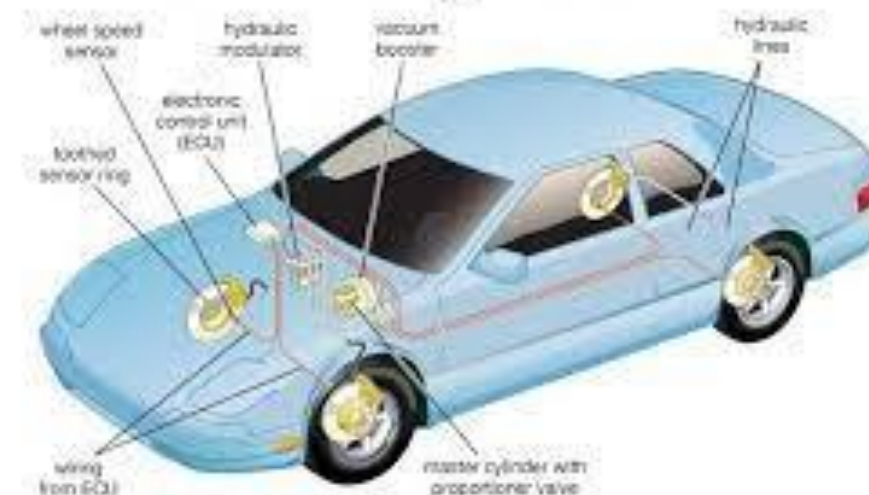
- safety-critical ; and
- detailed analysis,
- detailed requirement analysis

And waterfall model has

- formal transformations from one stage to another with approvals, tests and checks etc.;
- clearly defined requirements;
- documentation and more

Please write in proper / full sentences in your OWN words

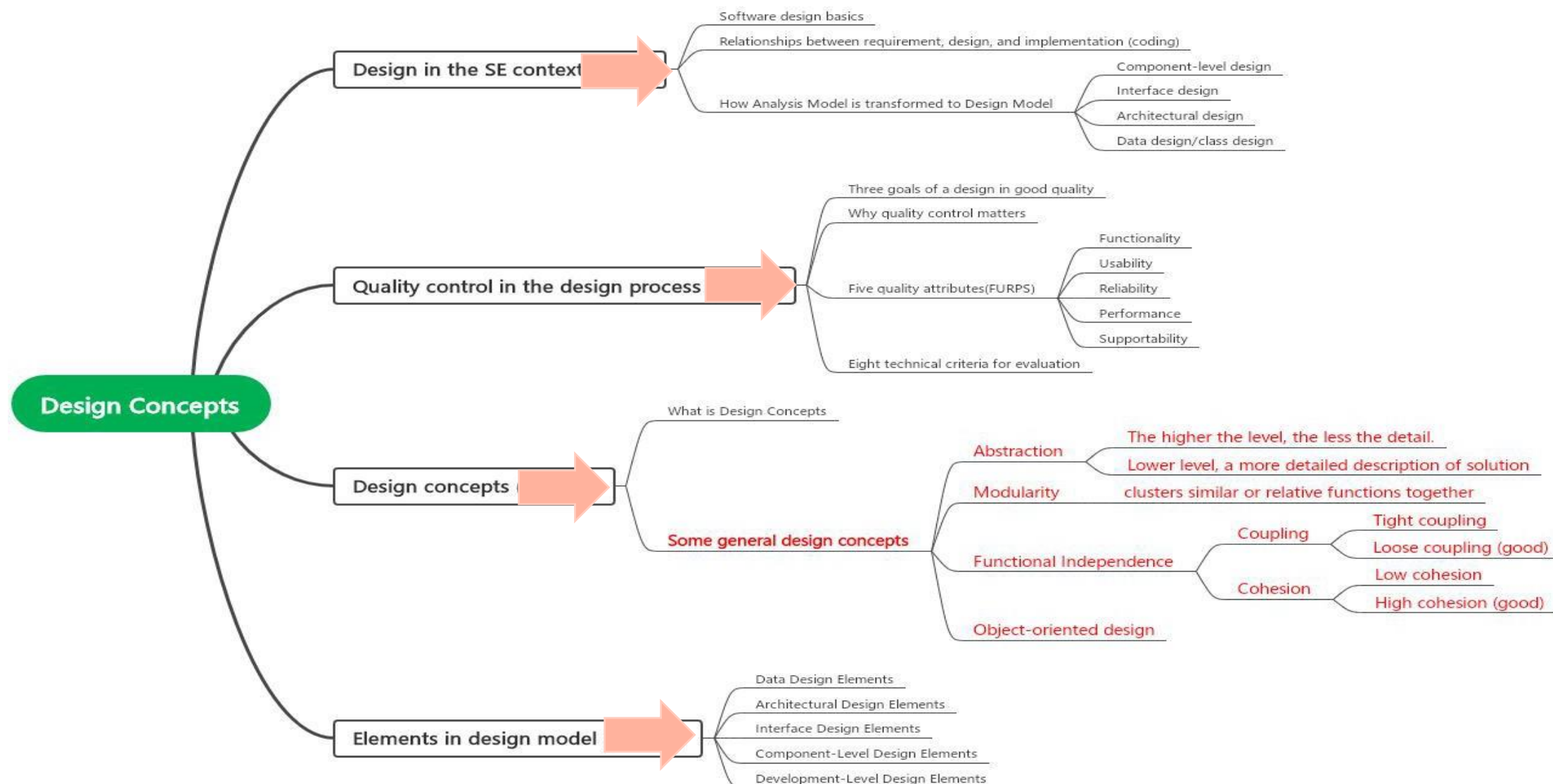
## How Does Anti-lock Braking System (ABS) Technology Works?





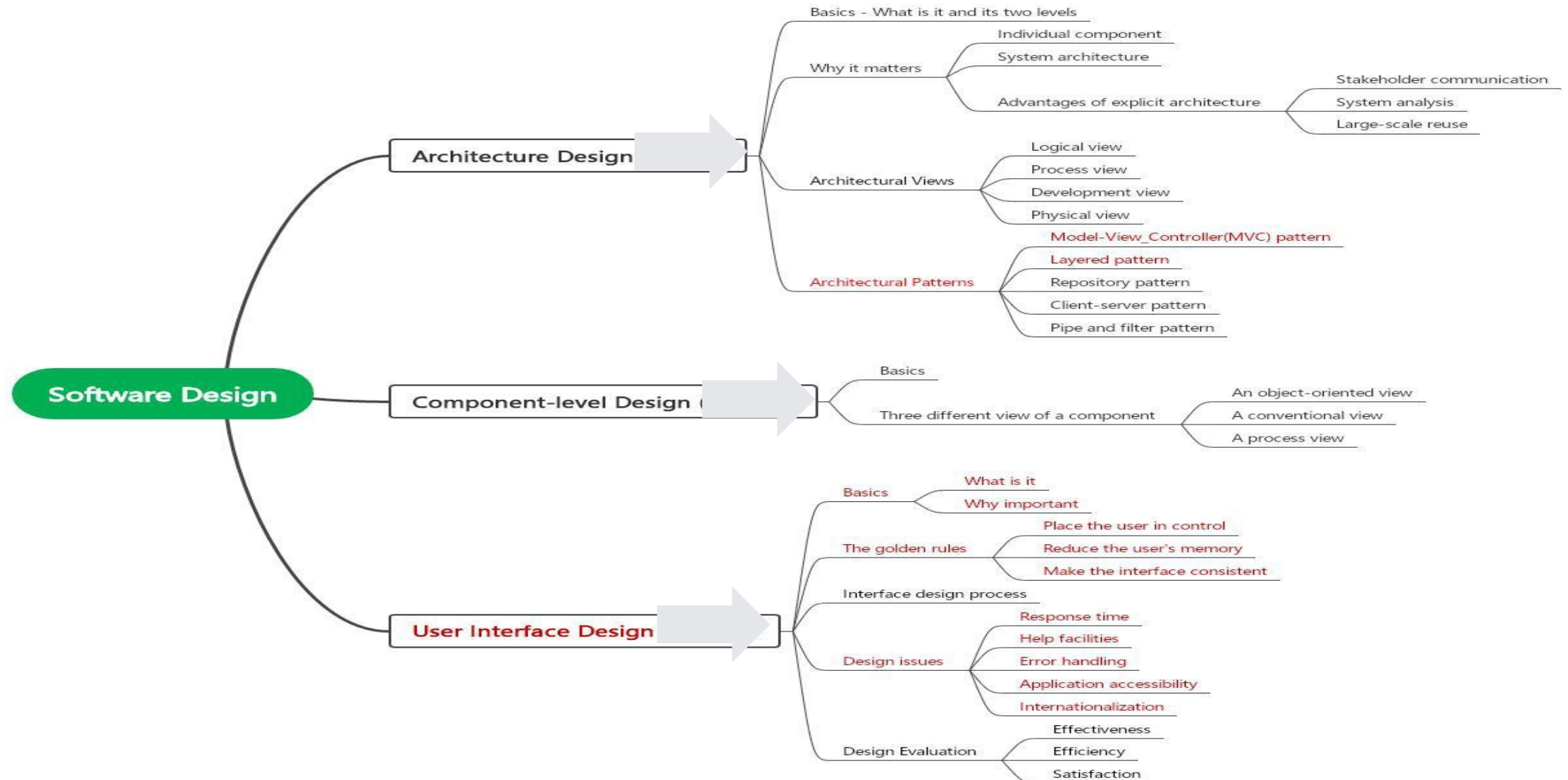


# Week 8 overview



- Understand the definition of the each design concepts
- Understand the examples provided in the lecture and the lab sessions
- Understand the importance of each design concepts (when to use, advantages, and examples etc.

# Week 9 overview



- Understand the architecture design patterns covered in the lecture (for example MVC, layered pattern) and tutorial - how they work, suitable to which type of software, etc
- Understand the three general UI design rules
- Analyse UI designs using these rules.
- Explain the benefits of using these rules