

CITY UNIVERSITY OF HONG KONG

Information on Courses

1. **Course Title:**
Software Engineering
2. **Course Code (3 digit number):**
CS5351
3. **Course Aims & Objectives:**
This course aims to provide a comprehensive and in-depth coverage of software engineering disciplines and techniques. Upon completion, students should be able to:
 1. produce functional specification of application systems based on functionality, performance and design constraints;
 2. decompose complex systems;
 3. document the design using appropriate methods, tools, and techniques.
4. **Units:** 3
5. **Level:** P5
6. **Medium of Instruction:** English
7. **Keyword Syllabus:**
Overview of analysis and modeling of systems. Software requirement analysis. Software specification. Design methodologies. Software design issues: software architecture; software modularization problems; module sizing; use of program design language (PDL); functional vs object-oriented designs; problems with object-oriented designs; module interface complexity avoidance. Programming paradigms. Principles of testing. Software integration, verification and validation. System testing.
8. **Teaching pattern:**
Duration of course: 1 semester
Suggested lecture/tutorial/laboratory mix: 2 hrs. lecture, 1 hr. tutorial.
9. **Assessment pattern:**
Examination duration: 2 hours
Percentage of coursework, examination, etc.: 40% CW; 60% Exam
Grading pattern: Standard (A+AA-...F)
For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.
10. **Pre-requisites:**
Nil
11. **Pre-cursor:**
Nil
12. **Equivalent Courses:** (*please quote course code & title*)
(*for courses on the "old" curriculum, please quote "old" course code*)
*CS1521 Software Engineering (from the "old" curriculum)