

4.2.4. Software Engineering Courses (CSE)

CSE2001 Introduction to Software Engineering

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
CCS2303 & CIS1000	2	4	2	2	0	3

COURSE AIM

- Understanding the software engineering process and different process models and how to choose between them.
- How to elicit requirements from a client and specify them.
- Design in the large, including principled choice of a software architecture.
- Develop a system design using UML notation. Understand good coding practices, including documentation, contracts, regression tests and daily builds.
- Understand quality assurance techniques, including unit testing, functional testing, and automated analysis tools.
- Understand the role of project management including planning, scheduling, risk management, etc.

COURSE WEEKLY CONTENTS

- 1 Introduction to Software Engineering
- 2 Software Process
- 3 Software Process Models part 1
- 4 Software Process Models part 2
- 5 Requirements Definition and Elicitation
- 6 Requirements Analysis and Specification
- 7 Structured Analysis and Design part 1
- 8 Structured Analysis and Design part 2
- 9 Object Oriented Analysis
- 10 Object Oriented Design
- 11 Design Concepts and Principles
- 12 Architectural Design
- 13 Software Quality Assurance
- 14 Verification and Validation
- 15 Projects

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	←		30	MARKS		→	30
8 to 12	←		20	MARKS		→	20
1 to 15	←		10	MARKS		→	10
16 or 17	40	Final					40

REFERENCES

Textbook Ian Sommerville, Software Engineering, Pearson .