

**CENTRAL UNIVERSITY OF KERALA
DEPARTMENT OF COMPUTER SCIENCE
M.Sc. COMPUTER SCIENCE**

VALUE ADDED COURSE					
COURSE CODE	COURSE TITLE	CONTACT HRS/WEEK			CREDITS
		LEC	LAB	TUT	
CSC5055	SOFTWARE ENGINEERING	2	2	1	Nil

Lec = Lecture, Tut = Tutorial, Lab = Practical

This is an audited/value added **skill based course** and the credits will not be added to marklist.

Course Objective:

The main objective of this course is to impart knowledge on the basic principles of software development life cycle.

By completing this course, students will obtain the following course/learning outcomes:

1. Knowledge gained:
 - (i) State of art software life cycle models
 - (ii) Software development process
2. Skill gained:
 - (iii) Modelling software applications
3. Competency gained:
 - (iv) Design and develop correct and robust software products.

Prerequisites: Nil

Grading:

Lab implementation	– 25%
Participatory based group Project	– 25%
Assignment/Quiz/presentation	– 25%
Individual project	- 25%

CSC5055 – SOFTWARE ENGINEERING

Module 1

Software Engineering-Software Process- Generic process model-Prescriptive process model-specialized, unified process-Agile development-Agile Process- Extreme Programming- Other agile Process models-Software engineering Knowledge-core Principles

Module 2

Requirements Engineering-Establishing the Groundwork-Eliciting Requirements-Developing use cases-Building the requirements model-Negotiating, validating, Requirements-Requirements Analysis-Requirements Modeling Strategies.

Module 3

Modeling, Implementation, Testing, Maintenance and case studies.

TEXT BOOKS

1. Roger S, “Software Engineering – A Practitioner’s Approach”, seventh edition, Pressman, 2010.
2. Ian Sommerville, “Software Engineering by”, Pearson Edu, 9th edition, 2010.