



SOFTWARE ENGINEERING

PROF. RAJIB MALL

Department of Computer Science and Engineering

IIT Kharagpur

INTENDED AUDIENCE : CSE, IT

PRE-REQUISITES : C Programming, Java or C++ programming

COURSE OUTLINE :

Large scale software development poses special challenges. This course targets to expose the students to the challenges of large scale software development and would expose the students as to how to overcome those. Starting with basic life cycle model concepts, it would discuss requirements, specification, design, and testing issues. The concepts will be illustrated with appropriate examples.

ABOUT INSTRUCTOR :

Prof. Rajib Mall is Professor, Department of Computer Science and Engineering at Indian Institute of Technology Kharagpur, West Bengal. He has more than two decades of teaching experience in the areas of program analysis and testing. He has written five text books and over 150 refereed research papers.

COURSE PLAN :

Week 01 : Introduction

Week 02 : Life Cycle Models I

Week 03 : Life Cycle Models II

Week 04 : Requirements analysis and specification

Week 05 : Basics of software design

Week 06 : Procedural design methodology

Week 07 : Object-oriented concepts

Week 08 : Introduction to UML: Class and Interaction Diagrams

Week 09 : Object-oriented analysis and design

Week 10 : Testing I

Week 11 : Testing II

Week 12 : Testing III