**GANPAT UNIVERSITY**

**U.V. PATEL COLLEGE OF ENGINEERING**

**Computer Engineering / Information Technology Department**

**First Internal Exam Syllabus of Software Engineering (2CE/IT602)**

|  |  |  |
| --- | --- | --- |
| **Part I** (Refer Software Engineering - Roger Pressman, 7th Ed.) | | |
| **Unit No.** | **University Syllabus Chapter / Topic** | **Corresponding Book Chapter /Topic** |
| **1** | **Introduction to Software and Software Engineering:**  FAQ about Software Engineering ,  Software characteristics,  The Changing Nature of Software,  Software Myths | **Chapter 1: Software and Software Engineering**  **1.1 (1.1.1, 1.1.2, 1.1.3)**  **1.2**  **1.3**  **1.4**  **1.6** |
| **2** | **Process Models (Software Development Life Cycle):**  What is Software Process?,  What is Software Development Life Cycle (SDLC)?,  Prescriptive models,  The water fall model (classical life cycle model),  Incremental Process model,  Evolutionary process model,  The unified process | **Chapter 2: Process Models**  **2.1 (2.1.1, 2.1.2, 2.1.3)**  **2.3 (2.3.1 to 2.3.5)**  **2.5** |
| **3** | **Building the Analysis Model:**  Requirement Analysis,  Analysis Modeling Approaches,  Data Modeling Concepts,  Object Oriented Analysis,  Scenario Based Modeling,  Class Based Modeling,  Crating a Behavioral Model,  Flow Oriented Modeling,  Entity Relationship Diagram (E-R Diagram) | **Chapter 6: Requirement Modeling: Scenarios, Information and Analysis classes**  **6.1,**  **6.2, 6.3**  **6.4,**  **6.5 (6.5.1 to 6.5.3 and 6.5.5)**  **Chapter 7: Requirement Modeling: Flow, Behavior, patterns and web apps**  **7.2**  **7.3** |
| **Part II** (Refer Software Engineering, K.K. Agrawal, Yogesh Singh , 3rd Edition) | | |
| **Unit No.** | **University Syllabus Chapter / Topic** | **Corresponding Book Chapter /Topic** |
| **7** | **Software Design:**  Design Framework,  Modularity,  Strategy of Design  Function Oriented Design,  Object Oriented Design Approach (OOD) | **Chapter 5: Software Design**  **5.1**  **5.2.**  **5.3**  **5.4**  **5.6** |
|  |  |  |

Prof. Ravi Raval Dr. Rakesh Vanzara Dr. Paresh Solanki

Prof. Yogesh Prajapati **Head, IT Dept. Head, CE Dept.**

Prof. Venus Patel

**(Subject Teacher)**