

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA -8

(Affiliated to Krishna University, Machilipatnam)

SYLLABUS

Subject: Computer Science

Semester: VI

Course Title: Practical - VIII

Course Code: COMPC087

No of Hours: 30

Credits: 2

Objectives

- To develop and present case studies to demonstrate the practical applications of different concepts
- To provide a scope to the students where they can solve small, real life problems

Course outcomes

CO1: Able to use modern engineering tools necessary for software project management, time management and software reuse.

CO2: Analyze and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology

List of practicals:

1. Practical Title
 - Problem statement
 - Process model
 - Studying various phases of waterfall
2. Requirement analysis
 - Creating a Data Flow
 - Data dictionary
 - Use cases
3. Project management
 - Computing FP
 - Effort
 - Schedule, Risk Table, TimeLine Chart

4. Design Engineering
 - Architectural Design
 - Data Design, Component Level Design
5. Testing
 - Design Test Cases
 - Basis Path Testing

Sample projects:

1. DTC Route Information about the bus routes and their frequency and fares.
2. Carpooling: To maintain a web based internet application that enables the corporate employees within an organization to avail the facility of carpooling.
3. Patient appointment and prescription Management System.
4. Organized Retail Shopping Management System.
5. Parking Allocation System.
6. Wholesale Management System.
7. Ticket vending machine
8. Attendance Management System.
9. Computerized Examination System.
10. Bakery Store
11. Sub Suggestion website

Reference Books:

1. Roger S.Pressman, Software engineering- A practitioner's Approach, McGraw-Hill
2. Ian Sommerville, Software engineering, Pearson education Asia, 6th edition, 2000.
3. Pankaj Jalote- An Integrated Approach to Software Engineering, Springer Verlag, 1997.
4. James F Peters and Witold Pedryez, "Software Engineering – An Engineering Approach", John Wiley and Sons, New Delhi, 2000.