



Course Contents

Course Title	Software Requirement & Design		
Course Code	SET212	Credit Hours	2+1
Faculty	Engineering and Technology		
Department	Engineering Technology		
Semester	III	Domain / Knowledge Area	Foundation
Course Outline			
An introduction to software requirements, types of requirements. Understanding user requirements, methods, tools, and notations to specify, model and maintain software requirements. Development of user stories and use cases. Visual modeling of requirements. Requirements management, Relationship between software requirements and design. Overview of software architectures, component-based software architecture.			
Lab Outline			
Specifications of Requirements as Software Requirement Specifications, Writing User Stories, developing use cases, Using Wireframes for requirements, developing class diagrams, creating activity diagrams to specify behavior of software, developing sequence diagrams for scenario modeling.			
Course Learning Outcomes (CLOs)			
CLO No.	CLO Description	Domain and Taxonomy level	PLO mapped (i to xii)
1	Use software modeling techniques for requirements analysis and requirements presentation.	C3	iii
2	Develop user stories and use cases to represent software requirements.	C3	iii
3	Describe various software architectural styles.	C1	i
Recommended Books			
<ol style="list-style-type: none"> 1. Software Requirements (Developer Best Practices), Karl Wiegers, and Joy Beatty, 3rd Edition, ISBN - 0735679665, Microsoft Press, 2013 2. Software Modeling and Design: UML, Use Cases, Patterns, and Software Architectures, H. Gomaa, Cambridge University Press, 2011. 3. Software Architecture and Design Illuminated, K. Qian et al., 2010 			