

Course Outline

Course Code	:	CSE 417
Course Title	:	Software Engineering & Design Pattern
Credit Hours	:	3.0
Prerequisite	:	Object Oriented Programming
Course Contents	:	<ul style="list-style-type: none"> <input type="checkbox"/> Introduction to Software Engineering, The Process of Software Development, General Principles of Software Engineering, Software Myths, General Issues, Software Engineering Ethics. <input type="checkbox"/> Software Process Models: Waterfall model, V-shaped model, Incremental model, Agile Development, Scrum. <input type="checkbox"/> Requirement Engineering, Software Requirement Specification (SRS). <input type="checkbox"/> Data flow diagrams, Levels in Data Flow Diagrams. <input type="checkbox"/> Software Project management, Risk management. <input type="checkbox"/> Software testing: strategies and tactics, Maintenance and reengineering: software maintenance, supportability, reengineering, Object oriented testing, Reliability and performance, Software quality assurance. <input type="checkbox"/> System modeling: UML, Use Case, Activity, Sequence Diagram, Class Diagram etc. <input type="checkbox"/> Software Design Patterns: Singleton, Factory, Strategy, Command, Observer, Adapter, Facade, Iterator, Composite, State, Proxy. <input type="checkbox"/> SOLID Principles.