

CURRICULUM PLANNER
B.Sc. (Hons.) Computer Science (NEP 2024-25)
(DSC-15) - Software Engineering
Semester V

Units	Topic covered	Chapters	Schedule
Unit 1	Software Engineering– A Layered Approach Software Process– Process Framework, Umbrella Activities.Process Models – Waterfall Model, Evolutionary process Model (Prototyping,Spiral Model) Introduction to Agile, Agile Model– Scrum Incremental Model	Chapter 1 Chapter 2 Chapter 3	August
Test/Assignment/ Subject enrichment discussion with students time to time .			
Unit 2	Use Case Approach SRS Document Flow oriented Modeling - Data Flow Modeling	Chapter 3	August
Test/Assignment/ Subject enrichment discussion with students time to time .			
Unit 3	Translating Requirements model into Design Model, The Design Process, Design Concepts - Abstraction, Modularity, Functional Independence; Structure Charts	Chapter 5	September
Test/Assignment/ Subject enrichment discussion with students time to time .			
Unit 4	Software Measurement Metrics for Software Quality Software Project Estimation (FP based estimation), Function based Metrics Project Scheduling (Timeline charts, tracking the schedule)	Chapter 23 Chapter 25	September
Test/Assignment/ Subject enrichment discussion with students time to time .			
Unit 5	Quality Control and Quality Assurance Software Process Assessment and Improvement Software Risks, Risk Identification, Risk Projection, Risk Mitigation, Monitoring and Management	Chapter 15 Chapter 17 Chapter 26 Chapter 28	October
Test/Assignment/ Subject enrichment discussion with students time to time .			
Unit 6	Strategic Approach to Software Testing, Unit Testing, Integration Testing, System Testing; Black-Box and White Box Testing, Basis Path Testing Validation Testing,	Chapter 8	October + November
Test/Assignment/ Subject enrichment discussion with students time to time .			