



BITS Pilani

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SS ZG622:

Software Project Management Contact Session # 9

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Mid Semester Review

Introduction to SPM



- Characteristics of software projects and challenges in managing projects
- Software project failures
- Project life cycle vs SDLC – differences and common activities
- Portfolio vs program vs project

Project goals and metrics



- Business, program and project objectives
- Project management objectives vs. objectives for software system
- Integrating metrics within the software process

Software development models (process models)



- Plan-driven vs agile process models
- Requirements engineering process
- Managing requirements (scope creep)
- Choosing the right process model for a given software development project

Estimation techniques



- Challenges in effort estimation
- Bottom-up vs top-down estimation
- Function-point estimation
- Estimation in plan-driven vs agile processes (story points and Planning poker)
- Effort distribution in plan-driven vs agile processes

Project planning and scheduling



- Phases in plan-driven processes
- Iterations in agile processes (sprints in Scrum)
- Work breakdown structure
- Scheduling using Gantt charts and AoN diagrams
- Resource scheduling
- Effort distribution in plan-driven and agile processes

Quality planning



- Identification relevant (internal and external) quality attributes
- Selecting measures or metrics
- Defines the assessment process in detail for each quality attribute (including goals or target values)

Syllabus for mid-semester test



Contact Session	Topics	Ref Modules	Pre-contact Session prep	During Contact Session	CP# for Discussion
1,2	Introduction to SPM & Overview of Process Models	M1,M2	RL1.1, RL2.1, RL2.2, RL2.3	CS1.0, CS2.0	2,18,19,20
3	Project Initiation & Defining Project Goals	M2, M3	RL3.1, RL3.2	CS3.0	
4,5	Software Effort Estimation	M4	RL4.1 → RL4.5	CS4.0, CS5.0	1
6,7	Software Project Planning / Quality Planning	M5, M7	RL5.1 → RL5.4, RL7.1	CS6.0, CS7.0	16,17
8	(All topics covered till date)	M1 → M5 and M7	(All RLs in M1→M6)	Pre-Mid Review CS8.0	

Note: Risk management (RL6.1 and RL6.2) is not part of the mid-sem test syllabus