

**Elective III**

**MTCE707 A(A)  
Software Project Management**

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**4 0 0**

**Credits: 4**

**Project Life Cycle Models:** What is a project life cycle model? A framework for studying, different cycle models. the waterfall model, the prototyping model, the rapid application development(RAD) model, the spiral model and its variants. Process models: characteristics of a process, what constitutes effective process, why are the processes important ,process models, common misconceptions about processes.

**Metrics:** The matrices roadmap, a typical metrics strategy, what should you measure, set targets and trace them, understanding and trying to minimize variability, act on data, people and organizational issues metrics programs, common pitfalls to watch out for in metrics programs, metrics implementation checklist & tools.

**Software Configuration Management:** The processes and activities of software configuration management, configuration status accounting. Configuration audit, software configuration management in geographically distributed teams, metrics in software configuration management tools & automation.

**Software Quality Assurance:** How do you define quality ,why is quality important in software, quality control and quality assurance, cost & benefits of quality, software quality analysts functions, some popular misconceptions about the SQA's role ,software quality assurance tools, organizational structures, profile of a successful SQA's.measures of SQA's success, pitfalls to watch out for in the SQA's role .

**Risk Management :** What is risk management and why it is important ?Risk management cycle ,risk identification; common tools and techniques, risk quantification, risk monitoring, risk mitigation .Risks and Mitigation in the context of global project teams .some practical techniques in risk management ,metrics in risk management.

**Project Initiation:** Activities during project initiation, outputs ,quality records and completion criteria for the project intimation phase, interfaces to the process database.