

Software Project Management Course Outline

Course Overview:

The Project Management Fundamentals for Technology and Software Development Projects course is designed to provide students with a comprehensive understanding of project management principles, methodologies, and best practices. Students will learn how to effectively manage projects focusing on software development and other technology related initiatives. The course will cover key project management concepts, tools, and techniques specific to technology and software development, helping students develop the necessary skills to lead and manage projects successfully.

Course Outline:

Module 1: Introduction to Project Management.

- Understanding the role and importance of project management.
- Key project management terms and definitions.
- Project life cycle and phases in technology and software development projects.
- Project stakeholders and their roles in technology projects.
- Project success factors.

Module 2: Project Initiation in Technology and Software Development Projects

- Project identification and selection.
- Defining project objectives and scope for software development.
- Conducting feasibility studies.
- Stakeholder analysis and engagement.
- Developing a project plan.

Module 3: Project Planning for Technology and Software Development Projects

- Breaking down work structure based on the project plan.
- Activity sequencing and scheduling.
- Estimating activity durations and resources.

- Developing a project schedule with timelines.
- Risk identification and assessment.
- Change management

Module 4: Project Execution in Technology and Software Development Projects

- Team building and communication strategies.
- Managing project risks and issues in software development.
- Procurement and vendor management.
- Quality assurance and control.
- Monitoring and controlling project progress.

Module 5: Project Closure in Technology and Software Development Projects

- Project handover and acceptance procedures.
- Lessons learned and post-project review.
- Project documentation and archiving.
- Finalizing project contracts and financials.

Module 6: Agile Project Management for Technology and Software Development

- Introduction to Agile methodologies in software development.
- Scrum framework and roles.
- Agile planning and estimation.
- Sprint execution and monitoring.
- Agile project reporting and adaptation.
- Continuous Integration and Continuous Delivery (CI/CD)

Software tools:

- Zenhub : \$12 / user / month
- Slack : free
- GitHub : \$ 3.67 / user / month
- Google Drive : free