

#### Introduction:

IT project management presents unique challenges due to the rapid advancement of IT solutions and the ever-changing needs of stakeholders. Often, what stakeholders initially request may differ from what they truly need, requiring effective project management approaches to navigate these complexities. While traditional predictive methods, such as Waterfall, have been used to manage IT projects, the increasing complexity and diversity of IT demands have led to the adoption of more agile methodologies, which have proven more effective in addressing stakeholder needs.

This **Information Technology Project Management** course focuses on the methodologies, tools, and practices that IT project managers use to lead successful projects. The course covers critical aspects of IT project management, including strategic planning, budgeting, risk management, and team leadership, all essential for managing projects efficiently and aligning them with organizational goals.

#### Targeted Groups:

- IT Directors considering digital transformation.
- IT Project Managers.
- Business analysts, programmers, and quality assurance specialists.
- Technical specialists involved in IT projects.
- Stakeholders in organizations who influence IT projects.

#### Course Objectives:

Upon completion of this course, participants will be able to:

- Understand when to apply different project lifecycles (Agile, Waterfall) to IT projects.
- Foster effective collaboration among stakeholders in IT projects.
- Implement core practices in both predictive and agile IT management approaches.
- Identify and resolve common issues in IT project management.
- Control project progress and produce accurate status reports.

#### Targeted Competencies:

Participants will develop competencies in:

- Predictive IT Project Management (Waterfall approach).
- Roles and responsibilities of IT project managers.
- Core project management practices such as scoping, scheduling, and budgeting.
- Managing project quality, change, risk, communication, and stakeholders.
- Managing all phases of IT projects: initiation, planning, execution, control, and closure.

Course Content:

#### Unit 1: Nature of IT Projects

- Characteristics of IT projects and how they differ from other types of projects.
- Key concepts in project management.
- IT project lifecycle and its core phases (initiation, planning, execution, closure).
- Managing IT product development and considerations in globally distributed teams.
- IT project initiation and the creation of the project charter.

#### Unit 2: Scope - IT Requirements

- Understanding **Requirements Engineering**: the foundation of project scope.
- Effective stakeholder management.
- Techniques for requirements elicitation and ensuring quality in requirements engineering.
- Key roles: Product Manager, Product Owner, Business Analyst.
- Managing emergent requirements throughout the project lifecycle.

#### Unit 3: Detailed Planning

- Software Engineering Methods for IT projects.

- Using **Work Breakdown Structures** (WBS) to manage scope.
- Building a project schedule and managing the critical path.
- Establishing a release plan for software products.
- Key roles in planning: Technical Architect, Designer, Developer, and Quality Assurance (QA) specialists.
- IT Project Quality Management: planning, executing, and controlling quality.
- Developing a **Quality Assurance Plan (QA plan)** for the project.

#### Unit 4: Managing Project Execution

- Managing IT project costs and budget allocation.
- Building and managing a software engineering team.
- Addressing risks and managing uncertainty in projects.
- Challenges of using Waterfall for IT projects and its limitations.
- Agile Software Development: principles, values, and the benefits of Agile.
- Adaptive Project Management (SCRUM methodology).
- Comparing Waterfall vs Agile approaches for managing IT projects.

#### Unit 5: Controlling and Closing IT Projects

- Preparing progress reports: traditional reporting methods and dashboards.
- Using **Earned Value Management** (EVM) for tracking project progress and performance.
- Scrum reviews and using Agile methodologies to measure value generation.
- Measuring project success through **Requirements Traceability Matrix** and confirming value generation.

- The importance of continuous improvement through **Lessons Learned** and **Retrospectives**.

Conclusion:

The **Information Technology Project Management** course provides participants with the knowledge and skills necessary to successfully lead IT projects. This training equips individuals with essential IT project management skills, including risk assessment, communication, stakeholder management, and project lifecycle methodologies. The course covers both traditional (Waterfall) and modern (Agile/SCRUM) project management methodologies, empowering professionals to choose the best approach for their projects.

By completing this course, participants will be prepared to pursue IT Project Manager certification, demonstrating their proficiency in managing complex IT projects. The course emphasizes the importance of IT project management in achieving business objectives and delivering successful technology initiatives that drive organizational success.

This course is a vital step for professionals looking to enhance their careers in IT project management and lead technology-driven projects that contribute to innovation and business growth.