



Course 323: Managing Mid-Size Software Projects

Course Description...

A software project is a temporary endeavor with a specific objective, typically to produce or maintain a software package. This course examines the problem of project management, as expressed in the Project Management Body of Knowledge (PMBOK) and shows how the principles expressed in the PMBOK are applied to planning and tracking software projects that are three to twelve months in duration.

Learning objectives...

- Understand the principles of project management, expressed in the PMBOK.
- Show how to construct, evaluate, and maintain a software project plan.
- Apply the principles to planning and tracking software development and maintenance projects.
- Show how modern tools can be employed in project planning and tracking activities.

Who should attend...

Audience includes project managers at all levels of experience, quality assurance professionals, and software practitioners, with an interest in developing their project management skills.

Prerequisites...

No specific prerequisites are needed.

See next page for a detailed course outline...

Course Outline...

Introduction and Overview

Course Objectives

Unit 1: Introduction

Project management concepts

- Earmarks of successful projects
- Characteristics of mid-size projects
- Project definition
- Project management definition
- The Project Management Body of Knowledge

Project management context

- Software project life cycle phases
- Work breakdown structure
- Software project stakeholders
- Organizational influences
- Management skills
- Environmental issues

Software project management processes

- Initiating
- Planning
- Controlling
- Executing
- Closing

Unit summary and best practices

Unit 2: Software Project Integration and Scope Management

Software project integration management

- Project planning
- Project plan execution
- Change control

Software project scope management

Initiation

- Scope planning
- Scope definition
- Scope verification
- Scope change control

Workshop: writing a project goal statement

Unit summary and best practices

Unit 3: Software Project Time, Cost, and Risk Management

Software project time management

- Activity definition
- Activity sequencing
- Activity duration estimating
- Schedule development
- Schedule control
- Review meetings as control mechanisms

Software project cost management

- Resource planning
- Cost estimating
- Cost budgeting
- Cost control

Software project risk management

- Risk identification
- Risk quantification
- Risk response development
- Risk response control

Workshop: prioritizing risks

Unit summary and best practices

Unit 4: Software Project Quality and Procurement Management

Software project quality management

- Quality planning
- Quality assurance
- Quality control
- Cost and non-cost of quality

Software project procurement management

- Procurement planning
- Solicitation planning
- Solicitation
- Source selection
- Contract administration
- Contract close-out

Unit summary and best practices

Unit 5: Software Project Human Resource and Communications Management

Software project human resource management

- Organizational planning
- Staff acquisition
- Team development

Software project communications management

- Communication planning
- Information distribution
- Performance reporting
- Administrative closure

Unit summary and best practices

Unit 6: The Bottom Line

Ideas to use

Where to go for more information