

Course Code: CIS133**Course Name: Project+****Certification: CompTIA Project+ PK0-004****Duration: Tuition: 3 months****Tuition: \$1895****Course Overview**

A project is a unique and temporary endeavor with the purpose of creating a new product, service, or result. A project will typically provide some benefit to the organization, either tangible or intangible. This course takes you through the project life cycle including project selection and initiation, as well as scope, schedule, resource, cost, and risk planning. You will review practical strategies for project communication to keep all stakeholders informed, managing project scope and schedule changes, and maintenance of documentation related to project management. This course provides a foundational knowledge base reflecting the most up-to-date project management information so you can effectively put principles to work at your own organization. This course will assist in preparing you for the CompTIA Project+ exam, and it is aligned with exam version PK0-004.

Course Content

- **Lesson 1 – Project Selection and Initiation**

This lesson covers the following topics:

- specify the properties of a project
- recognize the business reasons for the project
- distinguish between the different project selection methods
- recognize the role of the project manager in comparison to other project roles
- match project roles and responsibilities
- classify stakeholders based on their roles and relationship to the project
- distinguish between predictive and adaptive life cycles and identify multi-phase projects
- distinguish between the different project process stages
- list the common elements of a project charter
- identify the properties of a project, define the role of the project manager, and list the project process stages

- **Lesson 2 – Scope, Schedule and Cost Planning**

This lesson covers the following topics:

- identify project requirements
- identify the components of the project scope statement
- define the work breakdown structure
- specify tasks and milestones

- use estimation techniques to determine activity durations
- identify relationships between tasks, and prioritize and sequence them
- identify the critical path and calculate its duration, and label start and finish dates
- recognize the schedule compression techniques of crashing and fast tracking, and the schedule optimization techniques of leveling and smoothing
- specify necessary resources to complete scheduled tasks, and establish baseline
- specify the methods for gathering stakeholder requirements, list the six components of a scope statement, and name the four types of dependency relationships

- **Lesson 3 – Resource and Risk Planning**

This lesson covers the following topics:

- classify examples of project team organizational structures
- label assignments using a RACI matrix
- match the definitions of various resource concepts
- define the activities and attributes needed to successfully manage teams
- choose the project influence that best matches the given scenario
- identify the types of organizational change
- identify the various risk activities
- list the various risk strategies
- distinguish between the different parts of a SWOT analysis
- list the stages of team development, name the four risk responses for threats, and specify the four quadrants of a SWOT analysis

- **Lesson 4 – Communication, Changes, and Documentation**

This lesson covers the following topics:

- identify the various methods of communication
- distinguish between the different factors that influence communication methods
- identify the various communication triggers
- recognize the types of communication and documentation tools
- define the scope, schedule, and cost baselines in the context of a project plan
- list the common constraints to project success
- list the steps of the change control process
- recognize the types of common project changes
- identify common vendor documents
- list the three classifications of communication methods, name the three triple constraints, and specify the steps of reviewing a change request

- **Lesson 5 – Controlling Project Work and Closing**

This lesson covers the following topics:

- identify project expenditures and compare actual spending against the plan

- use earned value management formulas to determine cost and schedule performance
- use earned value management formulas to forecast the final project costs and variance from the budget
- apply scheduling tools and techniques to determine project performance
- distinguish between quality control tools
- identify sources of lessons learned
- list the steps required to close a project or phase
- distinguish between traditional and agile project methodologies
- identify the basic aspects of agile methodologies and SCRUM
- identify Earned Value Management formulas, list the seven basic quality tools, and specify the four Agile values

- **Lesson 6 – Planning and Controlling the Project Schedule**

This lesson covers the following topics:

- perform a forward pass using the critical path method
- perform a backward pass using the critical path method
- identify the total float of each noncritical path
- identify the free float of each activity on a noncritical path
- identify the critical path and its characteristics
- recognize how to create a schedule network diagram from a table
- recognize if resource leveling is the ideal resource optimization technique, given a scenario
- recognize if resource smoothing is the ideal resource optimization technique, given a scenario
- recognize if crashing is the most appropriate schedule compression technique, given a scenario
- recognize if fast tracking is the most appropriate schedule compression technique, given a scenario

- **Lesson 7 – Project Management Practical Exercises**

This lesson covers the following topics:

- calculate the planned value and earned value, given the budget, % of time passed, and % of work completed
- calculate the schedule variance and schedule performance index, given the earned value and planned value
- calculate the cost variance and cost performance index, given the earned value and actual costs
- determine project performance, given a set of raw data points
- utilize work performance data to determine project performance
- determine the estimate at completion, using the formulas for scenarios 1 and 2

- recognize how the choice of EAC formula depends on the project situation
- use a control chart to determine when a process is out of control
- calculate the number of communication channels, given the number of members on a team
- perform a make or buy analysis and determine the break-even point

- **Lesson 8– Quality and Procurement Planning**

This lesson covers the following topics:

- identify characteristics of fixed-price contracts
- identify characteristics of cost reimbursable and time and materials contracts
- distinguish between the four cost of quality categories
- list the characteristics of quality assurance
- list the characteristics of quality control
- recognize the relationship and distinction between quality assurance and quality control
- recognize the types of change requests that arise from quality processes
- distinguish between quality and grade, precision and accuracy, and recognize the impact of gold plating
- recognize agile and lean quality tools and techniques
- specify the types of procurement contracts, identify the elements of cost of quality and list the eight forms of waste, or muda

- **Lesson 9 – Project Planning Documents**

This lesson covers the following topics:

- identify the project statement of work, business case, and project charter
- identify the purpose of the project management plan and subsidiary plans
- identify the project scope statement, work breakdown structure (WBS), WBS dictionary, and requirements traceability matrix
- identify the activity list, activity attributes, milestone list, and project schedule network diagrams
- identify activity cost estimates and the basis of estimates
- identify the resource breakdown structure, resource calendars, project staff assignments and team performance assessments
- identify the risk register and its elements
- identify documents to solicit vendor proposals, seller proposals, source selection criteria, and procurement statement of work
- identify the stakeholder register and issue log
- identify documents from scope planning, planning procurement, and planning the schedule

- **Lesson 10 – Project Documents and Terminology**

This lesson covers the following topics:

- identify quality checklists, checksheets, metrics, and measurements
- distinguish between work performance data, information, and reports
- identify change requests and the change log
- distinguish between earned value management terminology and acronyms
- distinguish between procurement terminology and acronyms
- distinguish between procurement vendor solicitation terminology and acronyms
- distinguish between terms and acronyms for project tools and governance
- distinguish between schedule terminology and acronyms
- distinguish between quality and resource terminology and acronyms
- specify the types of work performance documents, and identify earned value management and procurement terminology