



# Project Management

**Introduction**..... 1

## Chapter 1: Introduction to Project Management

Topic 1: Facility Management Projects and Project Management..... 5  
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*After completing this chapter, students will be able to:*

- Discuss how projects can be defined, including common criteria and attributes.
- List common types of FM projects.
- Explain the requirements of the project manager role and the decision factors regarding whether the facility manager should adopt or delegate this role.
- Describe project management processes and models and relate them to a typical FM project format.
- Discuss the Define, Plan, Do, Check, Act, Close model.
- Apply project management to plan, organize, delegate, monitor and control projects in a way that represents the interests of the FM organization and its customers.

## Chapter 2: Define Projects

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*After completing this chapter, students will be able to:*

- Explain the Define phase of a project, including typical inputs, activities and outputs.
- Discuss the elements addressed in the process of defining the project purpose.
- Explain the project triangle.
- Discuss the programming process and its outputs.
- Describe the SMART feasibility test.

- Explain the use of a project charter for presenting a conceptual budget and business plan to decision makers to win project approval and funding.
- Develop a statement of objectives to detail project scope and deliverables and constraints of schedule, budget and quality in sufficient detail to begin project planning.

### Chapter 3: Plan Projects

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*After completing this chapter, students will be able to:*

- Outline the elements of a typical site selection process.
- Describe the progressive steps in the design process.
- Discuss the importance of the work breakdown structure, how it is created and how it is used.
- Explain the process of creating a project schedule and the various types of scheduling.
- Describe other components of the project management plan: cost estimates and budgets and quality, communications and procurement management plans.
- Discuss the role of risk management.
- Plan a project team and resources by developing specifications for project team internal staff and contractors.
- Contrast the common types of contracts.

### Chapter 4: Manage and Oversee Projects

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*After completing this chapter, students will be able to:*

- Explain the need to check availability for internal staff or contracted resources and lead times for materials.
- Describe how to select or negotiate with line managers for internal staff.
- Discuss how to acquire contracted resources for team positions, materials or professional services using an open tender/bidding process or direct negotiation.
- Describe the basic features of standard tender/bidding contracts and proposal responses.
- Integrate or coordinate the work of project team members to orchestrate schedules and tasks and maximize the efficiency and effectiveness of teams and resources.
- Execute and control project activities according to the project management plan, including project scope, schedule, cost, quality, teams, communications, risks and project changes.
- Discuss the importance of minimizing midproject change.

## Chapter 5: Close Projects

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*After completing this chapter, students will be able to:*

- Verify that all tasks have been completed and deliverables installed at the end of a project.
- Discuss how to conduct final deliverable reviews, such as checklist reviews or punch-list/snagging-list walk-throughs.
- List the steps in the final inspection or validation process, including defect repair and validation and deliverable acceptance.
- Explain the use of certificates of occupancy, commissioning, and occupying space for a design and construction project.
- Describe the contract closure process, including conducting management tasks that use judgment and administrative tasks that require diligence.
- Explain how to close projects, including issuing formal acceptance documentation, generating closure documents and dismissing teams.
- Describe how an organization learns from its successes and failures by collecting, evaluating and presenting data on project outcomes.

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