Table of Contents

IFMA Credentials ............................................................................................................................................. 1
About IFMA Credentials ................................................................................................................................. 1
Facility Management Professional (FMP) Program ......................................................................................... 1
Course Overview ............................................................................................................................................... 3
Course Audience ............................................................................................................................................... 3
Course Chapters .............................................................................................................................................. 3
Course Objectives .......................................................................................................................................... 3
Course Introduction ........................................................................................................................................ 4
Facility Management (FM) ............................................................................................................................... 4
Role of Facility Managers as Related to Operations and Maintenance ....................................................... 4

Introduction to Operations and Maintenance ................................................................................................. 5

Operations and Maintenance Overview ......................................................................................................... 7
  Definitions ......................................................................................................................................................... 7
  Facility Manager Duties and Responsibilities ................................................................................................. 9
Begin with a Plan ................................................................................................................................................ 11
  Strategic Planning ........................................................................................................................................... 11
  Determine Physical Assets as an Inventory ................................................................................................. 14
  Determine Maintenance and Repair Cycle ................................................................................................. 16
  Determine Maintenance Schedule ............................................................................................................... 17
  Determine Applicable Regulations, Codes and Standards ........................................................................... 18
  Determine Agreed-Upon Occupant Services and Requirements .............................................................. 19
  Progress Check Questions ............................................................................................................................ 21

Assess and Inspect Facility Needs .................................................................................................................. 24
  Assess and Inspect Condition of Building Structure ................................................................................. 25
    Typical Building Structures and Common Deficiencies ........................................................................... 25
    Health, Safety, Security and Environmental Considerations ................................................................... 32
  Assess and Inspect Exterior Structures and Elements ............................................................................... 35
    Typical Facility Exteriors and Common Deficiencies ............................................................................... 35
    Health, Safety, Security and Environmental Considerations ................................................................... 43
  Assess and Inspect Condition of Building Systems .................................................................................... 45
    Typical Building Systems and Common Deficiencies ............................................................................ 45
    Health, Safety, Security and Environmental Considerations ................................................................... 67
  Assess and Inspect Interior Furnishings, Fixtures and Equipment ............................................................... 73
    Typical Facility Interiors and Common Deficiencies .............................................................................. 73
Manage, Oversee, and Monitor O&M of Building, Systems and Equipment ................................................................. 103

Acquire Systems, Materials and Equipment ................................................................. 105

- Acquisitions and Asset Management Overview .......................................................... 105
- The Life-Cycle Process Begins at the Acquisition ......................................................... 107
- Considerations in Deciding on an Acquisition ............................................................ 108

Install Systems, Materials and Equipment ................................................................. 121

- Installation Defined ........................................................................................................ 121
- Commissioning .............................................................................................................. 121
- Integration ..................................................................................................................... 122
- Documentation ............................................................................................................. 125

Maintain Systems, Materials and Equipment ............................................................. 129

- Maintenance Overview ............................................................................................... 129
- Types of Maintenance and Typical Maintenance Activities ......................................... 130
- Balancing Maintenance Activities: Reliability-Centered Maintenance ..................... 137
- Maintenance Management Workflow ........................................................................... 142
- Maintenance During Peak Periods ................................................................................ 154

Operate Building Systems and Equipment ................................................................. 157

- Operations Overview .................................................................................................... 157
- Systems Operation and Monitoring ............................................................................ 158
- Inspections .................................................................................................................... 164
- Emergency Planning and Preparation .......................................................................... 165

Additional Planning Procedures ..................................................................................... 168

Monitor Use and Performance of Facilities ................................................................. 171

- Expectations of the Facility Manager to Monitor Facilities ......................................... 171
- Respond to the Plan ........................................................................................................ 172
- Determine Performance Measurements ........................................................................ 173
- Consolidate in a Balanced Scorecard ........................................................................... 176
- Compare to Work Log Results ...................................................................................... 179
Recommend Future Asset Purchases ................................................................. 182
Replace Systems, Materials or Equipment ......................................................... 183
Replacement Overview ..................................................................................... 183
Recognizing an Asset’s Useful Life .................................................................... 184
Conditions for Replacement ............................................................................. 190
Managing Disposal ........................................................................................... 192
Progress Check Questions ................................................................................. 195

Manage, Oversee and Monitor Occupant Services ............................................. 197
Recognize Required Occupant Services ........................................................... 199
Occupant Services Overview .............................................................................. 199
Examples of Occupant Services ......................................................................... 199
Develop Usage and Service Level Guidelines .................................................... 203
Recognize Occupant Needs ................................................................................ 203
Workplace Design and Space ............................................................................. 213
Occupant Services Workflow Process ................................................................. 213
Guidelines Support the Workflow Process ......................................................... 215
Custodial Cleaning Example ............................................................................... 218
Prepare and Execute Modifications to Occupant Services ............................... 225
Preparing for Modifications ............................................................................... 225
Approach ........................................................................................................... 226
Alterations .......................................................................................................... 228
Move Management ............................................................................................ 228
Monitor Occupant Satisfaction .......................................................................... 231
Occupant Satisfaction Described ...................................................................... 231
Service Quotient Defined .................................................................................. 232
Satisfaction Improvement .................................................................................. 233
Chapter Activity .................................................................................................. 237
Progress Check Questions ................................................................................ 243

Select the Best Resources .................................................................................. 245
Develop Maintenance and Occupant Service Specifications ............................ 247
Service Level Agreements Defined ..................................................................... 247
Service Level Agreement Specifics ..................................................................... 249
Value of Service Level Agreements .................................................................... 251
Service Level Agreement Benefits .................................................................... 252
Select Competent Service Providers (Staff or Contract) .................................... 253
Determining What to Contract .......................................................................... 253
Determine Contract or Staff Assignments .......................................................... 258
Prepare and Execute Modifications to Occupant Services ........................................... 287
Monitor Occupant Satisfaction ............................................................................................ 287
Select the Best Resources .................................................................................................... 287
Develop Maintenance and Occupant Service Specifications ............................................. 287
Select Competent Service Providers (Staff or Contract) ..................................................... 288
Discuss and Agree on Service Level .................................................................................... 288
Monitor Work/Service Performance ..................................................................................... 288
Resolve Contract Disputes ................................................................................................... 288
Appendix ................................................................................................................................ 289
Course Summary .................................................................................................................. 291
Bibliography .......................................................................................................................... 293
Glossary ................................................................................................................................... 297
Index ....................................................................................................................................... 303
IFMA Credentials

About IFMA Credentials

Based on the GTJA, we have defined 11 competency areas on which our three world class FM credentials — Facility Management Professional™ (FMP®), Sustainability Facility Professional® (SFP®), and Certified Facility Manager® (CFM®) — are based.

1. The FMP is the foundational credential for FM professionals and industry suppliers looking to increase their depth-of-knowledge on the core FM topics deemed critical by employers.

2. The SFP is the leading credential for all FM and like-minded professionals with an interest in the development of sustainable FM strategies.

3. The CFM is the premier certification for experienced FM professionals. A comprehensive exam assesses knowledge, skills, and proficiency across all FM competency areas.

Facility Management Professional (FMP) Program

IFMA’s Facility Management Professional (FMP) credential is an assessment-based certificate program. This program demonstrates the fundamentals of facility management (FM). Developed from a foundation based on IFMA’s global job task analysis (GJTA), the FMP Credential Program is continuously refreshed to align with current industry standards.
for FM knowledge, skills and tasks. The knowledge demanded by today's global employers is taught and tested online or in the classroom.

The four knowledge domains that the FMP Credential Program provides content and assessments on are:

- Operations and maintenance
- Project management
- Finance and business
- Leadership and strategy

This course focuses on operations and maintenance. To receive the FMP credential, successfully complete all four courses (via elearning or instructor-led channels) and final assessments and submit an FMP application to IFMA for approval.
Course Overview

Course Audience

This course is designed for persons intending to earn their FMP credential or enhancing their FM industry professional development.

Course Chapters

This course consists of the following chapters:

- Introduction to Operations and Maintenance
- Assess and Inspect Facility Needs
- Manage, Oversee, and Monitor O&M of Building, Systems, and Equipment
- Manage, Oversee, and Monitor Occupant Services
- Select the Best Resources

Course Objectives

After you complete this course, you will be able to:

- Identify the role of operations and maintenance in FM.
- Identify deficiencies in building structures, exteriors, systems, interiors, and grounds and the associated health, safety, security and environmental considerations.
- Describe the elements associated with the acquisition, installation, maintenance, operation, and replacement of assets related to facility management.
- Outline the process for determining and monitoring occupant service performance expectations.
- Outline the processes for developing occupant service specifications, selecting service providers, negotiating service level agreements, monitoring performance, and resolving contract disputes.
Course Introduction

Facility Management (FM)

FM encompasses multiple disciplines which ensure functionality of the built environment, this profession requires a broad range of knowledge and skills.

IFMA conducts a global job task analyses (GJTA) to identify task, knowledge and skill areas that are important for competent performance by facility managers. The GJTA updates the core foundation of competency areas that contain the body of knowledge for FM and FM professionals.

Role of Facility Managers as Related to Operations and Maintenance

According to the IFMA GJTA:

The primary role of facility managers is to manage/oversee an operating facility. To do this, facility managers must have a working knowledge of building systems, structure, interiors and exteriors and grounds so the facility and all of its required systems function efficiently, reliably, safely, securely and in a manner consistent with existing regulations and standards.

In addition, the various aspects of operations and maintenance (O&M) are constantly changing due to wear or deterioration, new regulations or requirements, operational modifications, occupant expectations, and many other individual but interrelated circumstances. Managing a facility means continually managing change.