

Facility Management Accreditation Commission

Facility Management Accreditation Commission

Facility Management Accreditation Commission (FMAC)

Standards for Accredited Degree Programs (ADP)

Policies and Procedures

March 2014

Facility Management Accreditation Commission

Standards for Accredited Degree Program's (ADP) Purpose

The Facility Management Accreditation Commission (FMAC) herein presents its “Standard for Facility Management (FM) Accredited Degree Programs (ADP).” These standards apply only to facility management degree programs at the undergraduate (associate/diploma, baccalaureate) or graduate level (masters) universities and colleges offering such programs that shall adhere to these standards when seeking FMAC accreditation.

Accreditation is a voluntary process of quality assurance used by universities and institutions designed primarily to distinguish schools adhering to a defined set of educational/academic standards. The accreditation process is also known in terms of its ability to effectively drive student performance and continuous improvement in education. While accreditation is a set of rigorous protocols and research-based processes for evaluating an institution’s organizational effectiveness, it also takes into consideration the program, cultural context and the community of stakeholders to determine how well the parts work together to meet the needs of students and the public.

The purpose of the FMAC Accredited Degree Program (ADP) process is to promote excellence in undergraduate and graduate degree programs in the field of facility management. The International Facility Management Association (IFMA) and the IFMA Foundation have sponsored the development of the FMAC and the ADP programs, along with vigorously supporting the educational needs of current and future IFMA members as well as non-member FM professionals.

The goals of the “Standard for FMAC Accredited Degree Programs” are to:

1. Offer a means to strengthen existing facility management degree programs;
2. Serve as a guide for developing new facility management degree programs;
3. Provide standards for accrediting new programs and reaccrediting existing programs; and
4. Establish a minimum academic outcome that graduates of ADP FM programs are expected to achieve.

This document outlines the standards and procedures an FM program shall meet and adhere to in order to become accredited. In addition, sections 3-5 and the related appendices of this document is your ADP application. As you read through this document you will see bold italicized areas that need to be filled out and responses made. The chair or highest ranking leader of any eligible facility management academic program must obtain, complete and return this document to the FMAC executive director. The Facility Management Accreditation Commission (FMAC) will then review the application for completeness and compliance with the standards. The basis for evaluating an application rests upon an “outcomes assessment”. A visiting team will conduct at least one site visit at an institution as part of the accreditation process.

This standard is not intended to force all programs to be the same. It is understood that the emphasis on FM functions and responsibilities will differ from region to region throughout the world. Therefore, the standards shall be used to help shape an FM curriculum that characterizes the actual practice of facility management and truly prepares students for careers in the working world.

The IFMA 2009 Global Job Analysis Study (GJAS) was used as a guideline to develop the ADP core competencies and outcome based assessment expectations that are outlined in this standard. The eleven core competencies are as follows:

1. Leadership and Strategy;
2. Operations and Maintenance;
3. Project Management;
4. Communication;
5. Finance and Business;
6. Human Factors;
7. Quality;
8. Real Estate and Property Management;
9. Technology;
10. Emergency Preparedness & Business Continuity;
11. Environmental Stewardship & Sustainability

The standard describes both scholarly and real-world facility management applications and practices and provides a comprehensive model for an ideal facility management program. The Facility Management Accreditation Commission establishes standards for accreditation so that a facilities management program's outcomes can be measured by how well core competencies are being demonstrated. Each program is encouraged to retain its uniqueness while providing the basic curricular structure needed to assure that graduates are prepared for real-world careers in facility management.

This standard recognizes the importance of variation and diversity in program offerings. By applying for accreditation, an institution acknowledges that facility management is a profession that has come of age and has clearly definable professional competencies which translate into academic program outcomes. At the same time, there remains a great deal of latitude and specialization within the field.

Index

Section 1	Introduction	Page 5
Section 2	FMAC Administrative Organization	Page 10
Section 3	Standards for Accreditation	Page 17
Section 4	Accreditation Policies	Page 29
Section 5	Required Areas of Knowledge	Page 36

Appendices:

Sample Mapping Course Templates
FMAC Recommended Site Visit Process

Standards for the Facility Management Accreditation Council, Accredited Degree Programs

Section 1

1. Introduction

Mission and Purposes of the Management Accreditation Commission (FMAC) Accredited Degree Program (ADP)

The mission of the FMAC is to lead international advocate/expert of quality Facility Management education, and to promote, support, and accredit Facility Management programs. The purpose established for FMAC's ADP program is listed as follows:

1.1 Definition of Facility Management

Facility management, as defined by IFMA, is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.

1.2 Undergraduate and Graduate Degree Programs

Undergraduate and graduate degree programs are associate, baccalaureate (bachelors) and master's degree programs in post-secondary schools, colleges and universities designed to prepare students for careers as facility management professionals. Four-year undergraduate programs will include FM study at least during the junior and senior years of a baccalaureate program, with appropriate lower division course work from a four-year institution or state/government accredited community colleges.

1.3 Accredited Degree Program Standard Background

This standard was first developed in 1996 by the International Facility Management Association (IFMA) Committee on Recognized Programs, established by the IFMA board in 1996. In July 2007, IFMA and the IFMA Foundation agreed that the IFMA Foundation should assume responsibility for the Recognized Degree Programs. In April 2009 the IFMA Foundation Board of Trustees approved the Commission on Academic Affairs (CoAA) as the organization leading the accreditation process and changing the Recognized Degree Program to an Accredited Degree Program (ADP).

In December 2010 the Commission on Academic Affairs (CoAA) name was changed to the Facility Management Accreditation Commission (FMAC) along with revisions to the ADP standard to reflect current practices and requirements desired by the Council for Higher Education Accreditation (CHEA). The ADP standard was revised for several major reasons; the re-

organization of the standard's administrative functions, the addition of provisional accreditation, annual fees adjustments and adding FM program visitation requirements.

In 2013, the ADP Standard was revised to reflect several major updates:

1. Integrated, added and updated the eleven Core Competencies and converts these to an “outcomes based assessment” model, and
2. Updates the ADP application process, outlines the fees, site visit fees and annual fees, and
3. Adjusts the minimum academic requirements for each of the ADP program level: associate, bachelor, and graduate programs, and
4. Introduced the planned changes required for the FMAC to become recognized by the Council for Higher Education Accreditation (CHEA) as an Accrediting Organization, and
5. Commenced the transition of the FMAC to an independent organization, separate from IFMA, the IFMA Foundation and all other associations, and
6. Updated the FMAC Accredited Degree Programs “FM Self-Study Application” to represent the FMAC and meet their ADP Standard requirements.

Accreditation by the FMAC of a facility management program is a voluntary process. Applicants prepare and submit a self-study document that demonstrates achievement of the standards set forth in this document. This self-study is evaluated by the Facility Management Accreditation Commission. See Sections 3 and 4 of this document for more detailed information.

1.4 Purpose

The purpose of FMAC's ADP accrediting process is:

- a) to formulate a process that is consistent for all institutions seeking FM accreditation;
- b) to develop and implement accreditation criteria and standards;
- c) to carry-out the accreditation process; and
- d) publicly identify its accredited FM programs for the benefit of all concerned.

Accreditation serves the following purposes:

- a) Assuring quality: accreditation is the primary means by which FM institutions and programs assure quality to students and the public. Accredited status is a signal to students and the public that a program meets certain standards for its faculty, curriculum, student services, key stake holders, etc.
- b) Developing and maintaining employer/institution confidence: accredited status of a program is important to employers and other institutions when evaluating skills and competencies of an applicant.
- c) Enabling more consistent transfer of credits: Accreditation is important to students for a smooth transition of courses and credits among colleges, universities and programs. The ADP Standard encourages ADP institutions to develop articulation agreements with other ADP programs.

The goal of the FMAC's ADP standard is to guide those institutions desiring accreditation. The FMAC's ADP program accredits and approves FM programs that demonstrate academic preparation in the Outcome Based Assessment criteria outlined in section 5 of this standard. The

IFMA eleven Core Competency areas that were used to develop the outcome assessment requirements (further defined in section 5) are as follows:

1. Leadership and Strategy;
2. Operations and Maintenance;
3. Project Management;
4. Communication;
5. Finance and Business;
6. Human Factors;
7. Quality;
8. Real Estate and Property Management;
9. Technology;
10. Emergency Preparedness & Business Continuity;
11. Environmental Stewardship & Sustainability

A graduate from an FMAC Accredited Degree Program at the baccalaureate or graduate degree level will have the necessary academic preparation to enter the profession. The potential employer will know that a graduate of an FMAC baccalaureate or graduate degree Accredited Degree Program has received a broad-based education in the fundamentals of the entire core competency areas identified in the FMAC ADP standard and be able to join the FM workforce at the entry level or transfer to a FM baccalaureate or graduate degree program.

The other purpose of the Accredited Degree Program standard is to assist in the development of quality FM academic programs in universities and colleges that do not have sufficient offerings in the core competency areas outlined. This program should also encourage the development of new facility management programs at quality higher education institutions.

1.5 Responsibility

The FMAC is dedicated to the continued development and ongoing maintenance of the FM curriculum for FM degree programs. The FMAC reserves the right to periodically revise the standard to reflect best practices in both industry and academia, generated from input across the membership of the FMAC.

1.6 Guiding Principles

Independence

The FMAC ensures that its organizational structure remains independent from other entities, conflicting interests and conflicting activities. The FMAC defines the provisions of its independence by establishing and implementing policies, determining and administering the resources required to maintain the credential program, and making all decisions in matters related to Accreditation, protected from inappropriate or undue influence.

The FMAC has sole responsibility for decisions related to all ADP Accreditation Activities. Decisions reached by the FMAC governing panel and committees are not subject to approval by any

officers, committees, divisions or boards of IFMA, the IFMA Foundation and any other organization/association.

Transparency

The FMAC structure is designed to assure that it operates in an open and transparent manner, providing stakeholders and the public with the information they need to access the accreditation materials to benefit from the mission and purpose. Transparency is primarily about implementing fair policies, publishing policies and promoting fair practices. A list of the names and positions of all individuals involved in the accreditation decision-making process are available on the FMAC website. Email addresses are available upon request from the FMAC.

At least annually, the FMAC shall schedule and conduct an open public session to provide the opportunity for input on accreditation policies, procedures and standards. This public session will normally be scheduled during the IFMA's annual WWP conference or at other times and locations. Provisions will be made for those who are unable to attend the public meeting to send material in advance so that it can be presented to the FMAC for response.

Fairness

It is of paramount importance that all policies and procedures contribute to the development, oversight, evaluation, and maintenance of fair and equitable accreditation and assessment which advance the profession of facility management. It is essential that an equal opportunity for success is provided to each and every candidate in each and every program.

Conflict of Interest

The organizational structure of the FMAC assures that stakeholders who have a specific interest do not participate in credential-related decisions from which they may benefit. This is accomplished by self-declaration of the individual as well as implementation of policies that define conflicts of interest for the FMAC and the personnel associated with it.

1.7 Interactions with IFMA, IFMA Foundation and Other Organizations

IFMA Foundation Board of Trustees

To avoid even the appearance of any conflict of interest and to further the independent status of the FMAC, the FMAC Director of Academic Affairs serves as liaison to IFMA Foundation's Board of Trustees.

Financial

Accreditation related income provides a significant amount of IFMA Foundation's revenue; thus the IFMA Foundation has a vested interest in ensuring that the business of accreditation managed by the FMAC has the necessary fiscal resources. This includes funding routine operations and continuous improvement activities as well as investing in new Accreditation and related material to continue the global advancement of the FM profession.

Operating funds are appropriated by IFMA Foundation to cover FMAC and accreditation-related expenses based on an annual budget prepared by the Board. This budget is submitted and approved

by the IFMA Foundation's Board of Trustees as part of the normal IFMA Foundation budget process.

In order to show independent and non-biased status, the FMAC finances are a clear and identifiable component of overall reports. The financial reports should provide evidence that the Accreditation programs can be sustained in conformance with current practice for a reasonable amount of time.

IFMA Education Committee

In order to assure the continued viability and relevancy of IFMA's professional development products and services, the Education Committee is charged with assisting IFMA education staff in developing the overall strategic plan as it relates to education. The committee is instrumental in the oversight of instructor qualifications and provides guidance on education content and delivery models.

As stated in the Responsibilities section above, the FMAC is responsible for strategic planning, guidance and development of academic outcomes derived directly from the competency areas defined in the job task analysis results.

IFMA Staff

Although most FMAC committees operate at a strategic level, the FMAC is involved in tactical decisions as well. Due to its responsibility to develop and oversee policies and procedures for the operation of all FMAC Accreditation, the FMAC has a special relationship with, and is supported by the IFMA Foundation staff. While the FMAC's role is to establish and manage the operations of the Accreditation organization, it is charged with developing and monitoring procedures, not supervising or directing staff.

IFMA staff will provide guidance in the development of credential program policies and procedures to ensure compliance with ANSI requirements.

Standards for the Facility Management Accreditation Council, Accredited Degree Programs

Section 2

2. FMAC Administrative Organization

Decision making authority for implementing the accreditation process is carried out by the Facility Management Accreditation Commission (FMAC). (See Appendix A – the Bylaws of the Facility Management Accreditation Commission). Accreditation decisions determined by this body, including but not limited to revisions to the ADP standard, are not subject to approval by any officers, committees, or boards of any other organizations.

Mission and Purpose of the Management Accreditation Commission (FMAC) Accredited Degree Program (ADP)

The mission of the FMAC is to be the leading international advocate / expert of quality Facility Management education, and to promote, support, and accredit Facility Management academic programs. The purpose established for FMAC's ADP program is as follows:

Definition of Facility Management (as defined by IFMA)

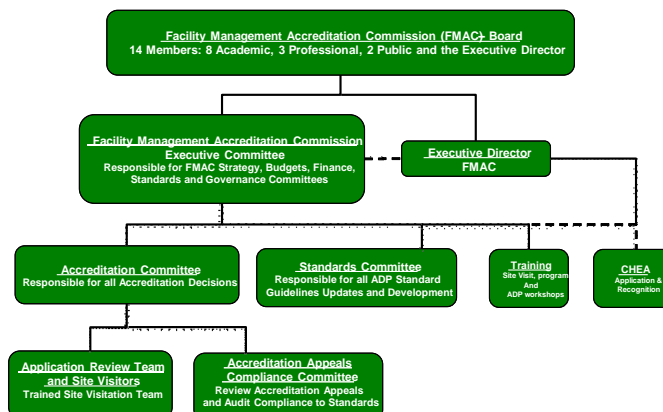
Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.

Funding

Funding and support for the FMAC comes from fees paid by Facility Management Degree programs seeking accreditation, annual fees of current FMAC accredited degree programs, IFMA, IFMA Foundation, and contributions from FM associations, individual Facility Managers, industry professionals and other interested FM related organizations.

2.1 Facility Management Accreditation Commission (FMAC)

**“Facility Management Accreditation Commission”
FMAC**



2.1.1 Commission Authority

The Facility Management Accreditation Commission has autonomous decision-making authority and responsibility for the following activities:

- a. Approving or disapproving applications for accreditation, reaccreditation and provisional accreditation.
- b. Determining the length of accreditation, reaccreditation and provisional accreditation period.
- c. Identifying and requesting additional institutional reports as needed to meet accreditation, reaccreditation or provisional accreditation requirements.
- d. Creating new standing or ad hoc sub-committees / taskforce including selection of members whose activities will enhance the work of the Facility Management Accreditation Commission. The FMAC shall be organized with standing committees as outlined in the chart above and shown in Appendix A.
- e. Reviewing and approving the accreditation, reaccreditation, and provisional accreditation fees, policies, procedures and standards (see Section 4.2 regarding fees).
- f. Reviewing and approving annual ADP reports, fees, policies, procedures and standards.

2.1.2 Notice

Institutions and members will be notified of commission decisions within 30 calendar days after the commission meets. Notice will be deemed to have been served in writing or if posted on the FMAC website’s secure portal available to all members in good standing, provided electronic mail notification of the link to such notice has been served.

2.2 Periodic Assessment

As necessary or at least every three years, the commission will review and, if necessary, revise the standards and procedures for accreditation and reaccreditation.

2.3 Appeals Process

2.3.1 Appeals Committee Membership

The appeals committee consists of the vice-chair of the Facility Management Accreditation Commission and four members of the Facility Management Accreditation Commission, consisting of three academic members and one industry member, for a total of five members. Any appeal must be voted upon by the Appeals Committee whose decision by simple majority is deemed final.

2.3.2 Decisions that May be Appealed

An institution may petition for review of adverse decisions of the commission on any of the following grounds, where the institution believes that the Facility Management Accreditation Commission:

- a. Failed to follow stated procedures; or
- b. Failed to consider all the evidence and documentation presented in favor; or
- c. Acted improperly by disregarding accreditation standards or procedures; or
- d. Included a commission member who may evidence bias.

2.3.3 Committee Activation

The appeals committee will be activated by the chair of the Facility Management Accreditation Commission upon receipt of a request to review the decision from the dean, director or chair of the FM program. The petition must be based on 2.3.2 a-d, and detailed justification provided for the basis of the request.

2.3.4 Schedule for Decision Review Petition Submission

The institution must notify the FMAC Executive Director in writing of its intention to petition for review of the decision no later than 30 calendar days from the date the institution was notified of an adverse decision. No later than 60 calendar days from the same date, the institution shall submit detailed documentation supporting such a petition.

2.3.5 Program Status during Decision Review Process

The accreditation status of the program shall remain unchanged during the review process, and there shall be no public notice of any change in program status until the review process is complete.

2.3.6 Appeals Committee Meeting

A meeting or conference call of the appeals committee shall be called by the chair of the Facility Management Accreditation Commission within 90 calendar days of the receipt of the documentation for the review petition from the filing institution. The meeting or conference call of the appeals committee shall be conducted in accordance with due process. The appellant institution has the right to a hearing before the appeals committee to present its evidence, and thereafter the committee will meet in private session to consider the matter. The Chair may also hear evidence from the Site Visit team members. The recommendation for final action and approval or denial from the appeals committee must be communicated in writing to the Facility Management Accreditation Commission Board through the Executive Director no less than 60 calendar days prior to the next scheduled meeting of the FMAC executive committee.

2.3.7 Possible Action by the Appeals Committee

The appeals committee makes recommendation to the FMAC Board that takes one of two actions:

- (1) Affirm the original decision, or
- (2) recommend that the Facility Management Accreditation Commission reconsider its original decision. In either case, the appeals committee shall provide

reasons for its recommendation. The FMAC Board will act upon the recommendation and notifying the institution of the committee's decision. This shall be in accordance with section 2.1.4.

2.3.8 Resubmission of a Review Petition

An institution may petition only once for a decision review. The review is considered complete when the Facility Management Accreditation Commission Board makes its final decision.

2.3.9 Costs Incurred by a Decision Review Petition

The costs related to activation of the appeals committee shall be shared equally by the petitioning institution and the FMAC. Costs may include, but are not limited to travel and lodging for the appeals committee to attend the meeting

2.4 Conflicts of Interest

Only commission members without potential conflicts of interest are involved in formulating recommendations or participating in the decision making process. Individuals are considered to have a potential conflict of interest if they:

- a. Have ever been employed by the institution being reviewed, or
- b. A member of the institution's Advisory Committee, or
- c. Have relatives in the employ of, or attending, the institution being reviewed, or
- d. Own more than five percent of the stock in a company that does business with the institution being reviewed, or
- e. Are employed by a company that markets products directly to the institution being reviewed, or
- f. Ever attended the institution being reviewed.

Individuals involved with accreditation or reaccreditation of programs shall remove themselves from the review of any institution when any of the aforementioned circumstances exist.

FMAC representatives must disclose financial or personal interests or affiliations that pose a conflict of interest. If an actual, potential, or perceived conflict of interest exists, the FMAC representative may not participate in discussions or vote on matters affecting the outcome or decision. This is not intended to restrict participation in discussions or decision-making that has no clear and direct impact on the business, organization, institution, or program with which the FMAC representative is associated.

A facility management program that is scheduled for evaluation by FMAC is responsible for identifying conflicts of interest and for requesting certain site visitor(s) be replaced. FMAC staff will do all that is reasonably fair in replacing individuals providing a clear conflict of interest is identified by the program in accordance with the above policy. The identification of the conflict may result in a delay in scheduling the site visit, therefore notice of the potential conflict shall be provided as early as possible to the Executive Director.

2.5 Code of Ethics and Conduct for All Volunteer Appointees

Appointment to a position with the Facility Management Accreditation Commission is an honor. To uphold the integrity of this honor, all appointees are expected to:

- Strengthen understanding of the role of accreditation in facility management education among professionals, professional organizations, industry, institutions, educators, and students;

- Communicate FMAC information accurately;
- Maintain confidentiality of privileged information;
- Recognize and accept responsibility to uphold all procedures and policies of FMAC;
- Maintain loyalty to FMAC, pursue its objectives, and support the public interest;
- Serve FMAC impartially, offering no special privileges to any member organization or interest group;
- Refrain from promoting self-serving interests of any individual group or organization;
- Engage in no FMAC activities for personal financial gain;
- Promote and maintain the highest level of integrity in all FMAC activities;
- Cooperate in every reasonable and proper way with staff, directors, commissioners, and others;
- Maintain the highest standards of personal conduct.

2.6 List of Those Serving on the Facility Management Accreditation Commission

A list of all individuals on the Facility Management Accreditation Commission is available upon request from the Executive Director and can also be found on the FMAC website. The list contains names, professional addresses, telephone numbers and e-mail addresses.

2.7 Committees within the Facility Management Accreditation Commission

The FMAC has several standing and ad-hoc committees organized to serve the objectives of the Commission. All committees are voluntary and rely on the participation of both academic institutions and industry participants. The committee descriptions are as follows:

2.7.1 Standards Committee

The Standards Committee develops, reviews, and revises standards for the purpose of the assessment of higher education level programs in facility management, taking into consideration the body of knowledge and changes in society, higher education, and the profession. Standards are written to ensure accountability, measurability and reliable application. Standards Committee recommendations are reviewed by the Accreditation Commission and forwarded to the FMAC Board for approval. The Standards Committee reports to the FMAC Board.

2.7.2 Appeals Board

The FMAC Board appoints individuals who are familiar with the accreditation process and the field of facility management to an Appeals Board. The Accreditation Commission may appoint members from this Board to serve, as needed, on a panel to hear an appeal of an adverse decision made by the Accreditation Commission. The Appeal Panel is responsible for reviewing the appeal and may affirm the decision of the Commission or remand the decision to the Commission for further consideration.

2.7.3 Site Visitors

Site visitors serve as team members on accreditation site visits to facility management programs seeking accreditation. Further, site visitors may be called upon as part of the overall site visit process to review self-study reports prior to the site visit for benefit of the team, as well as review

the final Visiting Team Report and Recommendations and provide comments to the Commission about the reports. Site visitors must have appropriate academic Accreditation, teaching or relevant professional experience in the field of facility management or related academic programs, objectivity, and strong communication skills. Site visitors are appointed by the FMAC Board following an application process.

2.7.3.1 Site Visitor Qualifications

Site visitors review programs seeking accreditation. One important characteristic of accreditation, as a non- governmental system of quality assurance, is that it is a peer review process. Consequently, site visitors are drawn from the field of facility and allied management fields and play an important role in the accreditation process. As on- site evaluators, site visitors are responsible for gathering evidence and developing informed judgments regarding program compliance with FMAC Standards. To serve in this role, volunteers must apply and supply references that testify to professional and personal qualities that will contribute to the effective participation of the volunteer.

The site visitor profile shall have the following attributes: an academic background, advanced degrees, knowledge about the academic process at universities and knowledge of the FM profession, preferably at a leadership level. Those with previous accreditation experience, even if not in facility management is preferred. Every site visitor, except those with extensive and demonstrable accreditation experience, is required to have training that begins with a training course (4-8 hours) sponsored by FMAC, typically at IFMA events. Once they have had the site visitor training, they then move into reviewing ADP self-study applications and evaluate them against the ADP standards as a visitor-in- training. After a minimum of 1 ADP application reviews, the person can move into a site visit position. At this time the site visitor-in-training will shadow a site visiting team on 1 site visits before they can go on a site visit as a site visitor. After a minimum of 3 site visits and additional training, this person can petition to become a site visit chair or co-chair. Training and an understanding of the academic process is critical to success of the accreditation process.

Minimum qualifications for site visitors are:

- An academic background and substantial understanding of the academic process
- Previous accreditation experience, either through other accrediting organizations in preparation of accreditation self-studies within their institution.
- Facility Management or related industry experience in a leadership level role
- Commitment to FMAC's mission and Code of Ethics.
- Willingness to devote the time necessary to participate fully in at least one site visit or accreditation report review annually.
- Willingness to participate in training activities.
- A master's degree is preferred in a facility management or related field.
- Experience in teaching or relevant professional practice in the field of facility management or allied professions. Experience should indicate a broad exposure and expertise, not a narrow and exclusive focus on one particular area of facility management. An educator must be currently teaching in, or have taught in, a facility management or related program. A practitioner must have had some relationship to education during the course of their professional life. For example, he or she may have worked as a teaching assistant, trainer, supervised interns, worked as an adjunct faculty, or served on an educational advisory board.
- Objectivity and open- mindedness.
- Strong communication skills, both oral and written.
- Ability to work well as a team member.

- Sufficient professional references.

Site visitors are given training to familiarize them with FMAC Standards, practices, and procedures. An on- going training program promotes good practices in accreditation and informs about changes to accreditation processes, procedures, and standards. Site visitors are evaluated by their fellow team members as well as by the programs they visit.

Site visitors do not receive pay or gratuities, but are reimbursed by the FMAC for their travel related expenses. Site visitors are not to accept any gifts of significant value from the programs being reviewed, but may accept appropriately valued meals and food from the candidate institution.

2.7.3.2 Volunteering for the Facility Management Accreditation Commission

The facility management educator or practitioner interested in serving as a volunteer site visitor shall review the description of duties and qualifications before completing the Site Visitor Application form. Application materials are also available from the FMAC office.

A person interested in serving on the Standards Committee shall forward a copy of his or her resume or vitae, with a cover letter expressing interest, to the FMAC Executive Director.

The FMAC board makes all volunteer appointments. Inquiries may be directed to the FMAC Executive Director.

2.7.3.3 Website

The Facility Management Accreditation Commission maintains a web site to include the official list of accredited programs, resources for programs and site visitors, membership, and other basic information about FMAC, and that shall serve as a central communication tool among members. The website address is: insert link

2.8 Accreditation Policy and Procedure

Accreditation policy and procedures are available for download on FMAC's website noted above. This policy and procedure serves as a comprehensive reference to all matters relating to FMAC and the accreditation process. The latest edition of this policy and procedure will always be listed on the website.

2.9 Notice to Facility Management Accreditation Commission Office

Director Accreditation and Academic Affairs
Facility Management Accreditation Commission (FMAC)
IFMA Foundation
800 Gessner Road,
Suite 900
Houston, Texas 77024-4257
Telephone: 281-974-5601
Fax: 479.696.9494
E- mail: steve.lockwood@ifma.org

Standards for the Facility Management Accreditation Council, Accredited Degree Programs

Section 3

3. Standards for Accreditation – Undergraduate and Graduate Degree Programs

3.1 Applicability

3.1.1 The objective of FMAC accreditation and reaccreditation is to ensure that Accredited Degree Programs (ADP) in facility management is in compliance with established standards as outlined in this section of the document. It is understood that programs will vary in their compliance with the standards. The Facility Management Accreditation Commission will have sole responsibility for determining compliance.

3.1.2 Professional Level Education Accreditation at the professional level of education is directed toward those programs that provide academic preparation for the professional facility manager. This preparation is the first component of a recommended sequence including formal education, entry-level experience, and satisfactory completion of professional certification examination(s). Compliance with FMAC Standards can occur in a variety of academic settings.

3.1.3 Eligibility Requirements

The program is required to submit documentation with an application showing that eligible institution and program requirements are met. The FMAC will review this information. If the eligible institution and eligible program requirements are met, the application will be formally accepted by the FMAC and the program notified to that effect prior to proceeding with the review of program compliance with standards.

3.1.3.1 Institutional and Program Eligibility

A program seeking accreditation must demonstrate that it is housed within an institution that is accredited or recognized by:

An institutional accrediting body that is recognized by the U.S. Department of Higher Education, or the appropriate higher education agency or authority in the institution's country of origin.

An FM program seeking accreditation must provide evidence and demonstrate that:

- a) The institution is accredited and recognized by other accrediting organizations
- b) The program culminates at a minimum of an associate's degree.
- c) The program follows the graduation requirements of the institution, has an FM program that has been approved by the institution, has a Facility Management Advisory Committee, and demonstrates that it follows the FMAC Guidelines for an Accredited Degree Program.
- d) A minimum of two cohort classes have graduated from the program prior to submission of the application, or demonstration that the program has started within the institution and has admitted students.
- e) The majority of student work displayed as evidence of student achievement shall be produced from the current curriculum.
- f) Program outcomes are assessed based on an on-going curriculum that has produced a body of work for review, taken from no longer than the preceding 5 years, or since the previous accreditation cycle.

In addition to demonstrating the institutional and program eligibility requirements above, programs housed in institutions located outside the United States must demonstrate that the institution is accredited and recognized by local accrediting organizations

A program located in a non-English language institution must confirm that all program documents (published materials as well as course outlines, handbooks, project statements, etc.) and communications with FMAC are to be provided in English for purposes of the accreditation process.

3.1.3.2 Eligibility of Programs Delivered through Alternate Methods

Application for accreditation is open to programs that are delivered through alternate methods, such as distance education and on-line programs. If the program demonstrates that it meets all eligible institution and eligible program requirements, the program will be reviewed for accreditation exactly like a traditional institution based FM program. These programs will require a site visit and preparing a display of student work for evaluation as described in the *Site Visit Section of the Accreditation Manual*.

Each applicant institution will prepare a self-study report that documents its compliance with the standards. In this accreditation process, the emphasis is an outcomes based assessment. The entire self-study must be submitted in English and prepared in the format provided by the FMAC. The self-study report shall follow the guidelines in this document and be completed by representatives of the institution's administrative staff and teaching faculty.

Provide and document the eligibility requirements stated above. Include: name of institution main contacts with contact information, date in which the FM program was officially approved, number of current students, number of graduates over the past 5 years (shown by year), identify the title of the degree that will be shown on the diploma and transcript. Include an approval signature of the Dean, Provost and/or highest level of approval authority.

3.1.4 Philosophy and Objectives

3.1.4.1 Mission

The mission and purpose of the academic division that houses the facility management program shall be compatible with the definition of facility management as set forth in section 1.1.

Identify the mission statement and discuss its compatibility.

3.1.4.2 Program Goals

The facility management program shall have clearly written goals and outcomes for its graduates and shall state its strategies for achieving these goals and outcomes.

Identify the program level goals and outcomes and the strategies employed to assure the goals and outcomes are met.

3.1.4.3 Program Acceptance

The program shall be understood and supported by appropriate individuals and representative groups within the internal university community, the external business and the facility management community.

Identify and describe the program support within and external to the university community.

3.2 Program

3.2.1 Program Name

Each program and/or program option shall have the words "facility (facilities) management" in the title. Titles such as "business," "engineering" or "architecture," which imply that the focus of the program is in a related field of study, are not appropriate.

Identify the published program name.

3.2.2 Program Level

Accredited Degree Programs may award FM degrees at the following levels:

- Associate
- Baccalaureate (Bachelor)
- Master's (Graduate)

3.2.2.1 An institution may confer any of the above degrees, but each must be accredited separately using the criteria herein.

3.2.2.2 Associate degree programs must have at least one articulation agreement with an Accredited Degree Program (this requirement can be waived by the FMAC if the institution submits compelling information as to the effect it would have on achieving accreditation).

3.2.2.3 Baccalaureate programs are expected to offer the primary FM programs in the junior and senior years of study. Appropriate lower level basic courses may be offered by the aforementioned institution's or may be transferred from other institutions in accordance with the institutions transfer policy. Identify the transfer credit policy.

3.2.2.4 Master's program must require that the admission criteria include a baccalaureate degree in FM or a related area.

Identify the Program level

3.2.3 Program Definition

3.2.3.1 Associate degree. Due to limited classroom time at the associate degree level, each program should only have one option, specialization or concentration. It shall be demonstrated through the program's course of study that academic outcomes and competencies for the graduates must include:

- Operations and Maintenance
- Technology
- Project Management
- Environmental Stewardship and Sustainability

Specific course requirements for each area of knowledge shall be clearly specified and shall meet or exceed ADP standards; however, a course that teaches to the 11 core competencies is required. A capstone course at the Associate level is not required.

3.2.3.2 Baccalaureate degrees may have one or more options, specializations or concentrations. Specific course requirements shall meet or exceed all of the ADP outcome standards. Each of the 11 core competency areas must be covered in the program.

3.2.3.3 Master's programs may have one or more options, specializations or concentrations and shall at a minimum demonstrate strength in the following outcome and competency areas:

- Finance and Business
- Communication
- Leadership and Strategy
- Quality

Master's degree program shall require independent thinking skills and the ability to solve challenging problems to which solutions can be found through research, investigation, and analysis development. A presentation in defense of compiled research data shall also be included. Specific course requirements shall meet or exceed the ADP outcome and competency standards. It is required that an institution teach at least 1 course that covers the 11 core competency areas of knowledge identified in Section 5. Certain standards, such as follow-up studies of graduates, may not be appropriate for new options within established programs, and a waiver may be granted by the Facility Management Accreditation Commission.

3.2.3.4 Fully or partially web based programs can be accredited and are encouraged as a means to educate working FM professionals. They should meet the criteria set forth in Sections 3.2.2 and 3.2.3

Identify Program Level

3.2.4 Program Emphasis – Of the 11 Core Competencies, What is the Program's Strength?

Primary emphasis in the program shall reflect accepted facility management practices.

Describe the program emphasis.

3.2.5 Course Sequencing

There shall be evidence of appropriate sequencing of course work in each program to ensure that advanced level courses build upon concepts covered in beginning level course work.

Provide the published graduation plan and indicate any sequencing requirements and/or prerequisites.

3.2.6 Field Experiences

Each program shall include industry appropriate field experiences, such as on site visits, facility tours, work-study options, internships and cooperative education, or a series of practitioner seminars focusing on problem-solving activities related to facility situations. An internship is not required, but is highly recommended.

Provide a summary of field experiences, other than internships, provided by the academic program over the past two years.

Provide the program internship requirements

3.2.7 Program Validation

Appropriate validation and internal review of program content shall be an ongoing process and shall be accomplished through a combination of external experts, a formal advisory committee and follow-up studies of program graduates.

Provide documentation indicating how the program and academic content is reviewed, how often the program is reviewed by each method identified, and the date and results of the last two program review cycles.

3.2.8 Program Development, Revision and Evaluation

Program development, revision and evaluation shall involve currently enrolled students, individuals responsible for instruction, program graduates and representative employers. These individuals shall be part of the advisory process and may be members of a formal advisory committee.

Identify the membership constituency of the last program review cycle and discuss examples of specific input and how their input was solicited and applied.

3.2.9 Transfer Course Work

Policies shall ensure that course work transferred from other institutions is comparable to course work offered at the institution with program accreditation or seeking program accreditation.

Describe/provide the institutional transfer policy, and in particular, transfer policy of credit for Facility Management required coursework.

3.2.10 Program Publicity

Institutions shall broadly and accurately publicize to potential students (on the program website and other materials): (a) Facility management program goals and learning outcomes; (b) Pre-admission standards, testing or evaluation requirements; (c) Assessment measures used to advance students

through the program; (d) Graduation rates; (e) placement rates in facility management professions, and their starting salaries; and (f) Fees and other charges.

Provide evidence on how this information is publicized.

3.2.11 Legal Authorization

Only institutions and programs legally authorized under applicable law to provide a program beyond the secondary level are considered for accreditation.

Identify the legal authorization of the institution.

3.3 Instruction

3.3.1 Syllabi and Course Manual Notebook

3.3.1.1 Syllabi

Course syllabi and other related course materials for each course specifically required by the FM program for their degree must be listed in the self-study, and fully included in the self-study report as an appendix, representing conformance to the institutional requirements, or the requirements listed below:

- a. Course Number and title;
- b. Instructor name and rank/title;
- c. Subject matter to include goals, learning outcomes and competencies with reference to how they relate to the ADP standards in Section 5 areas of knowledge covered;
- d. Summary of assessment methods, including assignments, quizzes and tests;
- e. Number of lecture and laboratory/workshop hours, as well as credit hours;
- f. If course is required (core) or elective;
- g. Prerequisites if required;
- h. Brief description of the course as shown in the program catalog or online summary;
- i. Required texts and/or required/recommended reading, including books, periodicals, web sources and other resources in a standard format;
- j. Summary outline of subjects addressed in each lecture;
- k. Grading methods describing attendance, participation, assignments, reports, examinations, presentations, grade percentage values, and so forth;

3.3.1.2 Course Manuals Notebook

Separate, labeled and tabbed course manuals notebook shall be available in hard copy for the site visit team, and shall include:

- a. Syllabi and a screen-copy of the online course description
- b. Written faculty summary of course objectives, teaching methodologies, and how integrative problem solving activities are applied (one to two pages maximum)
- c. Course mapping graphically showing how the learning outcomes and competencies are applied in the course and their relative density of application across the course.
- d. A summary and brief description of the written and oral assignments within the course.
- e. Evidence of at least one representative graded, de-identified assignment or assessment method for each competency identified, showing good, average and poor student work product, the grade for such assignment, and the faculty feedback provided. The assignment criteria as presented to students shall be supplied with the graded work.

- f. Final grade distribution for each class section offered over the past two years.
- g. Feedback methods, such as student rating of teaching surveys from students and de-identified results obtained, and explanation from the faculty how that feedback informs course improvements.
- h. Program review of the course including information and results of the last program level course review, such as identified weakness and actions taken.

Course syllabi and other related course materials for each course specifically required by the FM program for their degree must be listed in the self-study, and fully included in the self-study report as an appendix, representing conformance to the institutional requirements, or the requirements listed above.

3.3.2 Program Level Assessment of Learning

Assessment tools and methods for the program. Evaluation of the scope of learning and tools for evaluation of student achievement of the objectives shall be clearly outlined to provide the site visit team an understanding of how the program assesses student learning outcomes and how these evaluations impact course content, course development, and course and program improvement.

Describe the program level ongoing annual assessment methods and provide evidence of assessment results. Identify how these results are published to students (see section 3.02.10(c)).

3.3.3 Program Balance

A reasonable balance must be maintained in course work between the practical application of "how" and the conceptual emphasis of "why." The learning associated with program competencies shall not be concentrated in a few courses, but dispersed in a reasonable distribution of coursework, ideally providing for ways of knowing, application of that knowledge and critical thinking skills.

Provide a summary of the types of integrative and problem solving activities used in the program and a program mapping summary of all learning outcomes and competencies against the program course offerings.

3.3.4 Computer Applications

The program shall include instruction on computer applications for facility management problem solving.

Summarize the computer applications used at the program and course levels.

3.3.5 Communications

Oral presentations and technical report writing shall be elements of each FM course requirements and emphasized by the program. A minimum of 2 written reports and 2 presentations is required for each FM course. Formal evaluation is required for each report and presentation.

Summarize the emphasis on communication skills at the program level, and the courses with the greatest application of communication based assignments. Under Section 3.3.1.2(f), provide the course level summary of written and oral assignments.

3.4 Faculty

3.4.1 Full-Time Faculty

We recognize that each institution has established qualifications for faculty. This includes education/academic achievement levels, full and part time assignments, length of service requirements, and appropriate teaching load requirements.

Our interest is to make sure that each program meets the institution's established qualification and to make sure that each program and program option shall have at least one appropriately qualified faculty member dedicated to the facility management program. Faculty qualifications shall include emphasis upon:

- a. Extent and pertinence of academic preparation;
- b. Extent, recency and pertinence of facility professional level experience (such as technical supervision or management);
- c. Extent, recency and pertinence of applied facility experience (such as technical applications); and
- d. Membership and participation in appropriate professional organizations.

[Provide a summary of full time faculty and adjunct faculty, their curriculum vitae, and a web screen shot of the faculty list on the program website.](#)

3.4.2 Minimum Full-Time Faculty Qualifications

The minimum academic qualifications for a full time faculty member shall meet the institution's established requirements in a discipline closely related to the faculty member's instructional assignments (except in unusual circumstances that must be justified individually). Professional degrees, licenses, certifications and other professional experience also will be considered in the evaluation process.

[Provide the institutional and program level summary of qualifications to teach for full time faculty.](#)

3.4.3 Minimum Adjunct or Part Time Faculty Qualifications

The minimum academic qualifications for adjunct or part time faculty members shall meet the institution's established requirements in a discipline closely related to the faculty member's instructional assignments (except in unusual circumstances that must be justified individually). Professional degrees, licenses, certifications and other professional experience also will be considered in the evaluation process.

[Provide the institutional and program level summary of qualifications to teach for adjunct or part-time faculty.](#)

3.4.4 Selection and Appointment Policies

Policies and procedures utilized in the selection and appointment of faculty shall be clearly specified and shall be conducive to the maintenance of high-quality instruction.

[Provide the institutional and program level policies and procedures for hiring full, part-time and adjunct faculty.](#)

3.4.5 Tenure and Reappointment Policies

Faculty tenure and reappointment policies and procedures shall follow the institution's established policies.

Provide a summary of the institutional tenure and re-appointment policies.

3.4.6 Faculty Loads

Faculty teaching, advising and service loads shall be comparable to the faculty in other professional program areas of the institution. Consideration shall be given in faculty teaching load assignments to high contact hours resulting from laboratory and studio teaching assignments.

Provide a summary of the faculty teaching loads for all faculty regularly teaching in the program. Also, include the institutional policy on faculty loads.

3.5 Students

3.5.1 Admission and Retention Standards

Admission and retention standards shall be used to ensure that students enrolled are of high quality. These standards shall compare favorably with the institution's standards. Sources of information may include admission test scores, secondary school rankings, grade point averages, course syllabi, course examinations, written assignments and oral presentations.

Provide institutional and program level admission and retention standards, and provide evidence of their publication on program websites.

3.5.2 Scholastic Success of Students

Facility management students shall have scholastic success comparable to those in other curricula in the institution. Grading practices in facility management courses shall be comparable to other departments and/or programs in the institution.

Provide evidence of scholastic success of FM students in comparison to institutional norms.

3.5.3 Placement Services

Appropriate services shall be available to assist with the placement of program interns and graduates. Placement of graduates shall be tracked and the effectiveness of the services shall be evaluated by the administrative unit containing the facility management program.

Provide a summary of the program graduate and internship placement programs, advising procedures and staffing with website links to the program career services office where information is provided for students.

3.5.4 Placement of Graduates

The initial placement, job titles, job descriptions and salaries of graduates shall be consistent with the program goals and objectives. Follow-up studies of graduates shall be conducted at least every six years to coincide with reaccreditation and made available to students and prospective students.

Provide summary placement statistics including placement rates and salary levels of program graduates, and indicate how this information is made available to students and prospective students.

3.5.5 Student Evaluation of the Program

Evaluations of the facility management program shall be made by its graduates at least every six years to coincide with reaccreditation. Student evaluations of individual classes shall be conducted on a regular basis.

Provide sample survey forms and results of graduate surveys evaluating the program and/or institution. Provide results of individual courses surveys in the course manual (see section 3.1.1.2(g)).

3.5.6 Student Enrollment and Retention

The level of available resources shall be considered as a constraint on the maximum number of qualified students to be admitted to the program. Enrollment and retention shall be tracked, and factors affecting enrollment and retention patterns identified and analyzed. Enrollment projections shall be made that relate closely to short and long-range goals and resource needs.

Explain the program's enrollment history, projections and trends supported by a summary of student enrollment and retention data for the past five years.

3.5.7 Academic Advisory and Counseling Services

Adequate and timely academic advising and counseling services shall be made available for students.

Provide a summary of academic advising services, staff to student ratios, and advising usage reports. Provide a copy of standardized advising and academic progress report forms.

3.5.8 Ethical Practices

Ethical practices shall be fostered, including equitable student tuition refunds and non-discriminatory practices in admissions and employment.

Explain the program and institutional policies on ethical practices, tuition refunds, admission practices and employment.

3.5.9 Academic Honesty and Plagiarism

An institution's recruiting material shall emphasize its commitment to academic integrity and reject plagiarism for both classroom and online courses. Student orientation meetings and course syllabi shall contain the same material. Typical disciplinary actions for individuals deemed to have cheated shall be explained, publicized, and readily available to all students.

Provide the academic dishonesty policies and indicate where they are publicized for students.

3.6 Administration

3.6.1 Program Administration

Programs in facility management are expected to have an identifiable, qualified individual with direct responsibility for facility management program coordination and curriculum development. This

individual shall be a full-time faculty, part-time faculty member with appropriately allocated compensated non-teaching time, or an administrative employee of the institution.

Identify the individual and explain the role of that person in administering the facility management program.

3.6.2 Administrative Leadership

Individuals assigned to administer facility management programs must demonstrate effective leadership as defined by the institution and demonstrate satisfactory support for the program.

Provide a summary of the administrative leadership structure, including an organizational chart up to the Provost level, and the role of the administrative team members.

3.6.3 Administrative Support

There must be appropriate support for facility management from the personnel holding leadership positions in the departments and colleges where facility management is located.

Provide a summary of the support from the university or college level, up to and including the Provost and Dean level.

3.6.4 Support Personnel

Support personnel such as administrative assistants, teaching assistants, student work-study assistants, service technicians, teaching and learning specialists, student life staff, librarians, marketing, career services and other staff as appropriate shall be adequate to support program objectives.

Summarize the list, roles and qualifications of all program support staff.

3.7 Facilities and Equipment

3.7.1 Adequacy of Facilities and Equipment

Physical facilities and equipment, which are suitable to serve the goals and objectives of the program, shall be available for each program option. These include laboratory facilities, library resources, computer hardware and peripherals, facility management and office suite software, wireless broadband Internet access, etc.

Summarize the adequacy of facilities and equipment, including institutional classroom management procedures, dedicated facility management space, and available technical resources.

3.7.2 Support for Facilities and Equipment

Facility and equipment needs shall be reflected in the long term goals, objectives and strategic plan of the program. Sources of potential funding shall be identified.

Identify long term facility needs (if any) tied to enrollment projections, and potential funding sources.

3.8 Computer Systems

3.8.1 Technical Support

Appropriate computer systems shall be available to students and faculty to cover functions and applications in each program area. These systems must be on-site, centralized or decentralized as long as the systems are accessible to students and faculty by networks and/or other appropriate equipment.

Summarize the software hardware and technical support available to students, including standard business applications, specialized FM systems, and institutional course management systems, including policies on their usage and application, and the degree to which they are used within the program.

3.9 Financial Resources

3.9.1 Financial Support

The budget for the facility management program shall be adequate to support program objectives, comparable to budgets of other similar programs within the institution or college, and available to the FM program director.

Summarize the program budget; how the budget is determined, managed and allocated within the institution, college and department, and comparison of the program budget to other departments of similar size and composition.

3.10 Library Services

3.10.1 Library Resources

The administrative unit containing the facility management program and/or the institutional library shall maintain a collection of current facility management literature and reference materials adequate to meet the curriculum and research needs of students and faculty in house, through the internet, or inter-library loans.

Summarize the adequacy of the library resources for FM students and faculty, the breadth/depth of the FM materials, and the budget annual available for expanding library offerings for the FM program, and how this budget has been allocated in the past.

3.11 Facility Management Program Advisory Committee

3.11.1 Program Advisory Committee (PAC)

An advisory committee of knowledgeable FM professionals consisting of practicing FM professionals, program graduates, and at least one member from outside the geographical area served by the institution, shall assist in the validation of program content, advise on industry trends, assist in providing access to internships, employment and publicity for the program, and if permitted, fundraising for the program. If more than one program or program option is available, then appropriately qualified facility representatives shall be added to the committee or more than one committee shall be maintained. Provide evidence of the PAC charter indicating member selection policies, length of appointment, organization of the committee and sub-committees, committee responsibilities, frequency of meetings, and methods of conducting business.

Provide a summary of present PAC membership with their individual industry connections, the history of how the PAC has helped to sustain and support the program.

3.11.2 Program Advisory Committee (PAC) Meetings

The program advisory committee shall meet at least once each year and publish all recorded meeting minutes.

Provide copies of the last two PAC meeting minutes.

Standards for the Facility Management Accreditation Council, Accredited Degree Programs

Section 4

4. Accreditation Policies

4.1 Type of Program

The FMAC recognizes clearly identifiable Facility Management programs at the associate (diploma), undergraduate (bachelor) and graduate (master's) level that meet the FMAC standards of accreditation. The sponsoring institution or department must meet the official accreditation or accreditation standards for institutions of higher education appropriate to its country.

4.1.1 Legal Authorization

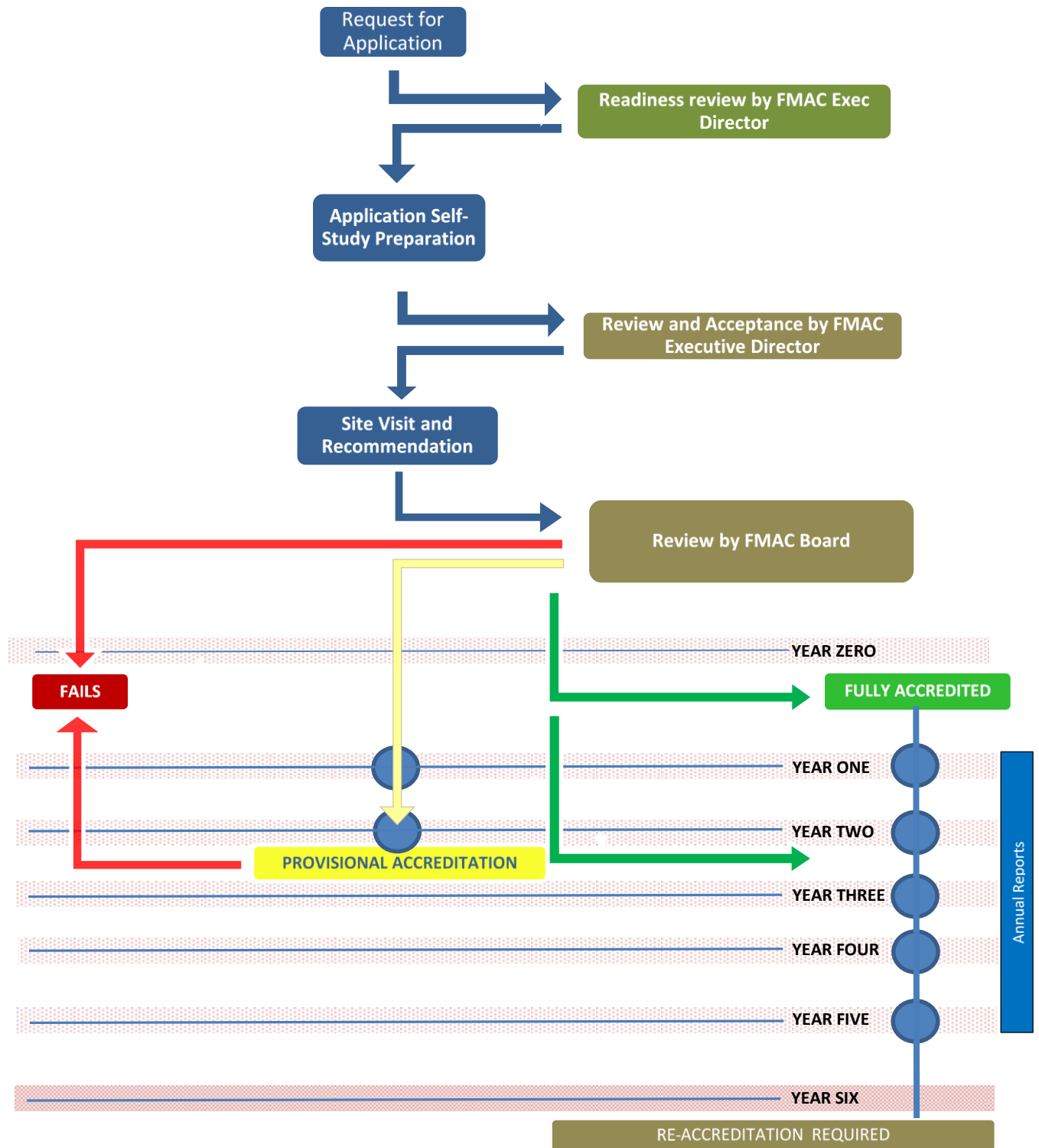
Only institutions and programs legally authorized under applicable law to provide a program beyond the secondary level are considered for accreditation.

4.2 Accreditation Fees and Costs

The fees for accreditation, reaccreditation, provisional accreditation, the annual maintenance fee, and any new costs and fees will be determined by the FMAC and approved by the FMAC Executive Committee. Costs and fees will be comparable to those of other accreditation bodies while set to encourage FM program accreditation and reaccreditation. Current costs and fees will be posted on the FMAC website. Changes to costs and fees shall be posted to the website a minimum of two months ahead of implementation with more advanced notice provided whenever possible.

Accreditation and reaccreditation fees must be received by the FMAC prior to an ADP self-study report review and the scheduling of an accreditation site visit. Annual fees must be paid by the date on the FMAC invoice or sanctions may be invoked.

4.3 Accreditation Process



4.3.1 Accreditation Self-Study Report

The institution must submit one (1) hard copy and an electronic PDF file copy of their entire application to the FMAC Executive Director. The format and content for the self-study is included in this document. It is understood that courses will be taught in the native language of the institution; however, the self-study must be submitted in English. The FMAC will distribute the report to the Visiting Team.

4.3.2 Accreditation Site Visit

4.3.2.1 The FMAC Executive Director will select the site visitation team. The team will consist of 3 FMAC accreditation trained representatives. The ideal site visit team will consist of the following: one team member being an FM academic, one member being an FM professional member and the third may be an ADP site visitor in training. FMAC shall visit the institution seeking accreditation within 90 days after the self-study is submitted.

4.3.2.2 The site visit shall be two - three days in length and includes the following:

- a) Initial intake meeting and program review (1-2 hours max)
- b) Tour of program facilities;
- c) Meeting with program coordinator(s) and staff, academic adviser(s) and career services staff
- d) Meeting with Department Head, Dean, and highest academic officer (two meetings)
- e) Meeting with the FM faculty;
- f) Attendance and/or participation in FM classes;
- g) In-depth review individual course manuals (see Section 3.1.1.2)
- h) Meeting with a cross-section of FM students from each year of study.
- i) Meeting with school or college administrative staff where the FM program is housed
- j) Meet with Advisory Board
- k) Meeting with graduates of the FM program (If available. This could be accomplished via conference call).
- l) An exit interview with the FM program head and other key faculty and administrators as determined by the institution.

4.3.2.3 The travel costs for the ADP site visitation team will be paid by the institution seeking accreditation. The site visitation team will consist of a 3-member team. Expense reimbursement shall be in accordance with the FMAC policies and procedures (available upon request).

4.3.2.4 The site visitation team visitors will submit a written report and recommendation to the Facility Management Accreditation Commission outlining their findings within 30 days of the accreditation visit.

4.4 Review and Action of the ADP Report by the FMAC Executive Committee (EC)

The EC will review and act on each ADP self-study report. This may be accomplished by one of the following actions: at one of its two annual meetings, video/teleconference discussion, bi-monthly FMAC video conference call, or a special meeting. Any or all of these actions may require an electronic ballot. The head of the institution or his or her representative may address the meeting or teleconference to briefly address the commission. This person will not be permitted to remain in the meeting after his or her address is completed. The final action by the FMAC EC will be reported:

- a. Orally (upon request) by the FMAC Executive Director after the meeting to an institutional representative who may be in attendance at the meeting;
- b. By e-mail and letter from the FMAC Executive Director to the head of the applicant institution and the head of the program within 30 calendar days after the commission meeting. In cases where adverse action was taken by the commission, the letter will include a statement of the reasons for the adverse decision along with a copy of the appeals procedure; and
- c. In appropriate IFMA, IFMA Foundation and other FM and related professional publications, if the action is to grant accreditation or maintain accreditation.
- d. If favorable, within the FMAC website as a recognized ADP.

4.5 Accreditation Publicity

An institution may indicate FMAC accreditation only during the period of such accreditation. Institutions may not publicize that they either have "applied for accreditation" or that they are a "candidate for accreditation" or any similar claim.

4.6 Review of Complaints

Complaints against an FMAC ADP accredited program will be investigated if the complaint is submitted in writing, with appropriate documentation, to the Executive Director of the Facility Management Accreditation Commission. The complaint first will be referred to and reviewed by the FMAC Chair of the Compliance Committee or their designee, and a decision will be made by this person on whether to pursue the complaint. Only complaints relating to the violation of standards will be pursued. If the decision is made not to review the complaint, the individual submitting the complaint will be notified within 30 calendar days of receipt of the complaint of this decision, and the institution against whom the complaint is lodged will be notified within 30 calendar days of receipt of the complaint that a complaint was received and a decision was made not to pursue it.

If a decision is made to pursue the complaint, the institution and program head will be notified within 30 calendar days of receipt of complaint and they must respond to the complaint in writing within 30 days of receipt of the notice. After receipt of the written response, the Director of the FMAC or their designee, within 30 calendar days of receipt of the written response, may decide to refer the complaint to the Facility Management Accreditation Commission for action, decide not to further pursue the complaint, or take other actions such as sending a representative approved by the commission for an on-site investigation visit. The representative, within 30 calendar days of the on-site visit must submit a report and recommendation regarding the complaint for possible action by the Facility Management Accreditation Commission. If, at this stage, the Facility Management Accreditation Commission believes the institution has adequately refuted the complaint, or if the institution acknowledges the validity of the complaint and initiates appropriate and adequate action to correct the violation, the commission will act in a timely manner to notify the complainant and the institution of the resolution of the complaint. If the institution either does not adequately refute the alleged violations, or if it cannot or will not attempt to correct the alleged violations, the matter will be placed on the agenda for the next Facility Management Accreditation Commission meeting for action, or a special meeting of the commission will be called by the chair. Actions that may be taken by the Facility Management Accreditation Commission may include withdrawal of program accreditation. Every effort will be made to ensure that complaints are handled in a fair and timely manner.

It is the policy of the Facility Management Accreditation Commission that all complaints are to be considered confidential. All FMAC commission members shall be bound by the signed confidentiality agreement.

4.7 Review and Approval of Accreditation Policies, Procedures and Standards

Responsibility for developing proposed policies, procedures and standards (and the revision of existing materials) for the accreditation of facility management programs rests with the Facility Management Accreditation Commission. The Facility Management Accreditation Commission shall conduct hearings at least every three years to review accreditation policies, procedures and standards and shall seek input from institutions with Accredited Degree Programs, institutions with non-accredited programs, institutions seeking accreditation, and along with reviews of other accrediting organizations. Accreditation policies, procedures and standards are printed in this document which is available upon request to interested individuals, organizations and on the FMAC website.

4.8 Accreditation Status of Programs

The FMAC office maintains a list that identifies institutions with accredited programs, the type of programs at each institution that have been accredited, and the date for the next scheduled review or reconsideration of accreditation. This list is made available to the public and is also posted on the FMAC website, and linked to the www.ifmafoundation.org.

4.9 Related Accrediting Agency Status

In considering whether to grant initial accreditation to a program, the Facility Management Accreditation Commission will take into account actions by other accrediting agencies that have denied accreditation to the institution or program, have placed the institution or program on public probationary status or have revoked the accreditation status of the institution or program.

Furthermore, if any of the above actions take place during an accreditation period, the status of accreditation will be reviewed promptly to determine if there is cause to alter that status. It will be the responsibility of the head of the institution to notify the Facility Management Accreditation Commission of any change in institutional or program accreditation status during a period of accreditation.

4.10 Requests for Extensions

The Facility Management Accreditation Commission may grant up to a one year extension for the initial accreditation period or for the reaccreditation period. Such extensions are granted only in rare instances, and institutions submitting such a request must provide significant documentation of the reasons for the request. Requests for extensions shall be received at the FMAC 60 calendar days prior to one year in advance of the end of the accreditation or reaccreditation period for the institution. Any extensions granted will be applied toward the subsequent accreditation or reaccreditation periods.

4.11 Annual Report

On July 1 of every calendar year, the director of the FMAC will request that each accredited program furnish the FMAC with an annual report covering the most current academic calendar year. Based on institutions having differing calendar years, the most current reporting year is desired. Annual fee as outlined in Section 4.2 of this document are also due at this time. The annual report and fee will be due September 31 of every calendar year.

The purpose of providing the annual report to the Facility Management Accreditation Commission is to add value to the Accredited Degree Program. By sharing the report information, including successes and challenges, all the Accredited Degree Programs shall maintain their focus on the standard and engage in continuous improvement. Through this effort, the FMAC will promote the development of a community of best practices in facility management education.

4.11.1 Annual Report Content

The annual report shall provide the following information:

- a. The number of students in the program during each academic year;
- b. The number of degrees granted, providing both undergraduate and graduate degree information where applicable;
- c. Identify types of jobs graduates are obtaining upon graduation
- d. Any changes in faculty. For new faculty submit a curriculum vitae;
- e. Any substantial program changes made during this period;
 - (1) If it appears to the Facility Management Accreditation Commission that the changes may have altered the compliance status of the program, the committee may require a more extensive report on the changes and then review the accreditation status of the program.
- f. Any changes in courses, course materials, added or deleted course and course outcomes. Provide all of the updated and added course materials.
- g. Minutes of the Program Advisory Committee's meeting(s) during the year; and
- h. While not required, it is highly recommended that the institution furnish the following:
 - (1) Significant program successes; and
 - (2) Significant program challenges.

4.12 Procedures for Provisional Accreditation

4.12.1 Provisional Accreditation Self-Study Report

The institution shall submit their entire application on one (1) paper copy and one (1) electronic PDF file copy. The format and content for the self-study is included in this document. It is understood that courses will be taught in the native language of the institution; however, the self-study must be submitted in English. The FMAC will distribute the report to the Facility Management Accreditation Commission and any visitors.

4.12.2 Provisional Accreditation

4.12.2.1 In order to be considered for provisional accreditation the following conditions must be met:

- a) FM curriculum must be approved by all institutional and government bodies with codified responsibility.
- b) A definite start date for matriculating FM students must be agreed upon and published.
- c) Qualified students must be accepted into the FM program.
- d) Courses must be planned and developed that meet the requirements of the outcome based assessments outlined in section 5 of this document.

4.12.2.2 Provisional accreditation is available for associate/diploma, baccalaureate/bachelor, and master's degrees.

4.12.2.3 Provisional accreditation will be granted for:

- a) Associate/diploma and master's degrees for a maximum of four years. This time period reflects that associate/diploma and master's degree programs generally require students

two years to complete the degree. During this two year time two cohorts must be graduated before full accreditation can be considered.

- b) Bachelor's degrees a maximum of four years. This time period considers that an institution can initiate a facilities management program and not graduate two cohorts until four years later.
- c) Exceptions to the aforementioned may be granted by the FMAC if the institution can provided adequate justification for an extension.

4.12.2.8 Institutions that are provisionally accredited must submit an annual report as outlined in Section 4.12.

4.13 Accreditation Levels (Determined by Autonomous Authority of the Facility Management Accreditation Commission)

4.13.1 Initial Accreditation

a. Accreditation

Accreditation will be granted if the program meets or exceeds the standards put forth in this document. The commission will determine the length of the accreditation period, not to exceed six years.

b. Non-Accreditation

Denial of accreditation occurs when a program does not substantially comply with the standards put forth in this document.

4.13.2 Reaccreditation

a. Reaccreditation

Continued accreditation will be granted if the program meets or exceeds the standards put forth in this document. The commission will determine the length of the reaccreditation period, not to exceed six years.

b. Non-Reaccreditation

Denial of reaccreditation occurs when a program does not substantially comply with the standards put forth in this document.

4.13.3 Provisional Accreditation

a. Provisional Accreditation

Provisional accreditation will be granted if the program meets or exceeds the standards put forth in this document, but have sufficient weaknesses that can be addressed within a reasonable time frame to enable full accreditation. The commission will determine the length of the provisional accreditation period within which these identified weaknesses must be addressed, not to exceed three years.

Thereafter, the balance remaining on a full six year accreditation cycle will resume. Upon notification to the Executive Director indicating completion of the corrections along with evidence supporting the claim, a single site team visitor will be appointed to verify that the corrections have been made, either in person with an abbreviated site visit or via a conference call(s).

b. Non-Provisional Accreditation

Denial of provisional accreditation occurs when a program does not substantially comply with the standards put forth in this document. If the site team visitor finds the weaknesses have not been addressed per 4.15.3(a), the report will recommend that the provisional accreditation be rescinded by the Board. The institution may re- apply for accreditation no sooner than two years from the date of the rescinding action.

REQUIRED AREA OF KNOWLEDGE

Section 5.0 – Required Area of Knowledge

5.01 Facility Management Accreditation Commission Accredited Degree Program Standards for Accreditation: Required Areas of Knowledge Using an Outcomes Based Competency Standard

The FMAC Accredited Degree Programs are required to demonstrate via an evidence based approach seven measurable outcomes that are central and fundamental to all facility management education programs. The seven outcomes are:

- 1 Graduates can understand the FM history, practice and profession**
- 2 Graduates can plan, manage and lead projects.**
- 3 Graduates can manage building systems, facility operations, occupant services and maintenance operations**
- 4 Graduates apply assessment, management and leadership principles of facility organizations and their stakeholders**
- 5 Graduates apply financial management tools to the Facility program and organization**
- 6 Graduates apply human factor principles to the facility operation and stakeholders**
- 7 Graduates are effective communicators**

Outcomes demonstrate *what* the program is expected to achieve, and each of the outcomes apply competencies that demonstrate *how* the program is expected to achieve the outcomes. The competencies described below are to be measured and/or assessed in some way within the program. The means and methods applied to achieve the outcomes using the competency standards is fully up to the institution, and creativity of approach is encouraged under the fundamental premise that there are multiple ways of learning. Whatever method is used, assessment of the competency to demonstrate mastery is critical to accreditation, and evidence of the assessment is the principal tool to measure outcomes, the success of the graduates and the program.

The fifteen competencies that inform the outcomes are based on three fundamental taxonomies in the following sequence: ways of knowing (awareness), ways of understanding, and ways of applying (thinking). Generally speaking, awareness suggests the basic “core knowledge” that is typically covered by lecture, readings or demonstration. Ways of understanding builds upon the “awareness” and is derived from *measurable* activities, such as assignments, quizzes, etc. Ways of applying demonstrates awareness and understanding using activities that assess the student’s ability to think critically or solve problems. These taxonomies are considered a sequential hierarchy where each builds upon the foundation of its predecessor.

The basis for the core knowledge areas derives from the eleven IFMA Core Competencies distilled for an academic environment to seven outcomes and fifteen competencies. Neither the Capstone nor an Internship experience, perhaps the ultimate assessment of student learning, shall be the sole measures of academic demonstration of competency. Evidence shall be sourced from across the curriculum. Mapping is required to demonstrate how all the competencies, and thus the outcomes, are covered across the curriculum (breadth) and within each course (depth), with an emphasis on

showing the relative density of coverage each competency has across the curriculum. (See sample mapping templates on page 77 of this report). The outcomes and competencies covered at the course level should also be published within the course syllabi.

Institutions should realize that the visiting team is assessing how well the outcomes and competencies are covered and have been demonstrated via evidence. No evidence, no coverage.

5.02 ASSOCIATE PROGRAMS

Two year associate programs are not expected to cover all competencies, but shall demonstrate the depth and breadth of FM knowledge by the following three outcomes:

- 1 Graduates can understand the FM history, practice and profession
- 2 Graduates can plan, manage and lead projects.
- 3 Graduates can manage building systems, facility operations, occupant services and maintenance operations, and

A more cursory coverage of the following outcomes shall include:

- 6 Graduates apply human factor principles to the facility operation and stakeholders
- 7 Graduates are effective communicators.

The program shall identify its program orientation within its self-study, and explain how the mapping demonstrates the relative weight of outcomes covered across the curriculum in support of the program goals.

5.03 BACCALAUREATE PROGRAMS

Four year baccalaureate programs leading to a Bachelor degree shall cover all outcomes and competencies to varying degrees, however certain competencies, as an example (4) leadership and management, or (6) human factors, might have greater weight or emphasis within the program. All competencies must be covered, but the accreditation standards do not assign weighted values to each outcome, and the visiting team therefore cannot measure the relative “worth” of the greater or lesser coverage of one outcome over another. The program shall identify its program orientation within its self-study, and explain how the mapping demonstrates the relative weight of outcomes covered across the curriculum in support of the program goals.

5.04 GRADUATE PROGRAMS

Graduate programs are not required to re-cover all outcomes per se, but should orient their programs to application (ways of applying) and critical thinking (ways of thinking) competencies as opposed to merely ways of knowing. Therefore, graduate program mapping may still touch upon all seven outcomes, but the weight shall be demonstrated in the application and critical thinking competencies. The program shall identify its program orientation within its self-study, and explain how the mapping demonstrates the relative weight of outcomes covered across the curriculum in support of the program goals.

5.05 SUMMARY OF FACILITY MANAGEMENT PROGRAM CURRICULAR OUTCOMES AND COMPETENCIES¹

Following are the seven academic outcomes and the fifteen competencies that inform them:

- 1 **OUTCOME: Graduates understand the FM history, practice and profession**
Competency 1.1 The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)
- 2 **OUTCOME: Graduates can plan and manage projects.**
Competency 2.1 The student can manage project initiation, planning, execution, control and closeout (ways of knowing), using scope, quality, schedule, budget, resources and risk (ways of understanding).
- 3 **OUTCOME: Graduates can manage building systems, facility operations, occupant services and maintenance operations**
Competency 3.1 Using principles of acquisition, installation, operations, maintenance, outsourcing, renovation and disposition of building systems, structure, interiors, exterior and grounds, the student can demonstrate the phases of facility management from design/acquisition to final disposition. (ways of understanding)
Competency 3.2 As a foundation for operations, maintenance and energy management, the student can recognize the systems, services and functions thereof, and the software applications that support them. (ways of knowing)
Competency 3.3 The student can assess the condition of the facility including its systems, structure, interiors, exteriors and grounds to establish a long term facility plan for the organization. (ways of applying)
Competency 3.4 The student can demonstrate a method to plan, measure and evaluate the facility's operational performance. (ways of applying)
Competency 3.5 The student can interpret, apply, and recommend quality improvement programs. (ways of applying)
Competency 3.6 The student align facility management technology with organizational information technology. (ways of understanding)
Competency 3.7 The student can comprehend and prepare emergency preparedness and business continuity strategies. (ways of understanding)
Competency 3.8 The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)

¹ Basic presumptive definitions used in this guide:

Outcomes: *what* you expect to achieve Competencies: *how* you expect to achieve them

- 4 **OUTCOME: Graduates apply assessment, management and leadership principles of facility organizations and their stakeholders**
Competency 4.1 The student can identify the skills needed to strategically lead process, the organization, stakeholders and technologies in an ethically responsible way. (ways of knowing)
- 5 **OUTCOME: Graduates apply financial management tools to the Facility program and organization**
Competency 5.1 The student uses analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of facility financial management. (ways of understanding)
Competency 5.2 The student can demonstrate applications of corporate real estate finance, management and transactional execution. (ways of applying)
- 6 **OUTCOME: Graduates apply human factor principles to the facility operation and stakeholders**
Competency 6.1 Using factors around health, safety, welfare, comfort, safety and security within the organization, the student can practice applications of human resource management. (ways of applying)
- 7 **OUTCOME: Graduates are effective communicators**
Competency 7.1 The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre. (ways of applying)

5.06 OUTCOME 1: Graduates understand the FM history, practice and profession

Competency 1.1 The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)²

Entry level facility managers have a basic understanding of the nature and structure of the Facilities Management/department, the nature and diversity of roles within the unit, and how their (and these) roles evolved over time.

Student Learning Expectations

Students *know*:

- a) Their role within the larger framework of the Facilities Management organization
- b) How the FM profession has evolved.
- c) The leadership and management skills required of the FM professional
- d) Context of the FM unit within the larger organization.

Student work demonstrates *understanding* of:

- a) The facility management organization and the various roles needed to support it
- b) The skills needed to strategically lead process, organization, stakeholders and technologies of the FM organization in an ethically responsible way

Program Expectations

The Facilities Management program provides evidence of:

- a) Foundational level instruction and assessment on the history¹ and roles of the profession
- b) Exposure to the various roles² within the FM organization
- c) Exposure to the principles of ethical leadership and management³

Program Guidance – Competency 1.1: The student can explain the history, international practices, corporate organization and roles of the Facilities Management profession.

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Discussion of the evolution of the facility manager over time, and where the facility management organization “fits” within the larger corporate organization, delivered over multiple courses to reinforce the concepts.*

² *This should occur within multiple courses, such as when discussing building energy systems, the sub specialty roles could be reinforced as just one of many. The Internship should be the primary means of exposure to the various roles, both in terms of preparation for various job opportunities while searching for an internship, and exposure to different roles while in their internship experience.*

³ *Leadership, management and ethical concepts shall be reinforced across the curriculum in a variety of courses, providing both breadth and depth of coverage. Case study approaches to leadership, management and ethics are encouraged.*

² Maps to IFMA Core Competency 1.0: Leadership, and specifically 1.1: A student can explain the history, international practices, corporate organization and roles of the facility management profession, and 1.2: a student can identify the skills needed to strategically lead process, organization, stakeholders and technologies in an ethically responsible way.

5.07 OUTCOME 2: Graduates can plan and manage projects.

Competency 2.1 The student can manage project initiation, planning, execution, control and closeout (what), using scope, quality, schedule, budget, resources and risk (ways of understanding)³.

Entry level facility managers understand the nature of a project, what constitutes the limiting parameters (scope), how it is structured, organized and executed, and how to apply the constraints of time, cost, quality and risk assessment to the project delivery process.

Student Learning Expectations

Students *know*:

- a) The key components of a project: the project charter and the limits defined therein (scope), the planning involved in the project evolution and delivery, and how a project is closed and commissioned for use)
- b) Ways a project is managed, controlled and delivered

Student work demonstrates *understanding* of:

- a) What constitutes project risk and how to assess and manage it
- b) The triple constraint of time/cost/quality.

Program Expectations

The Facility Management program provides evidence of:

- a) Exposure and assessment on project planning and scheduling¹
- b) Exposure and assessment of project cost determination and management²
- c) Exposure to the variety of project risk scenarios³
- d) Exposure to quality assessment and determination of success measures⁴
- e) Exposure to project delivery process – charter through closeout⁵

³ Maps to IFMA Core Competency #3: Project Management, and specifically 3.1: the student can manage project initiation, planning, execution, control and closeout using scope, quality, schedule, budget, resources and risk; and 3.2: the student can plan projects; and 3.3: the student can manage and oversee projects.

Program Guidance - Competency 2.1: *The student can manage project initiation, planning, execution, control and closeout (what), using scope, quality, schedule, budget, resources and risk*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include project based learning on the techniques of project planning, organization, sequencing, staging and delivery using case study or real project problems*

² *Examples include basic fundamentals of cost estimating, comprehension of what constitutes "cost", labor, equipment and material quantity takeoffs, application and assessment of general requirements, overhead and profit. Further, the distinction between project construction cost and total project cost can be demonstrated, identifying applicable soft and financing costs within the total cost modeling.*

³ *Examples include exposure to the origins of project risk(s), the assessment and application of risk mitigation strategies, and the assessment of student understanding of project risk applying a case study solutions approach.*

⁴ *Examples include recognizing approaches to project specification, standard industry determinants of quality, standards for and differentiation of quality assurance and quality control procedures, and understanding of applicable testing methods and agencies. Should also include means and methods of determining and assessing project success.*

⁵ *Examples include exposure to and comprehension of the varied project delivery methods (design/ bid/ build; design/ build; engineer/ procure/ construct, job order contracting, etc.), their different applications and similarity of objective. Recognition of the established project management process life cycle, from determination of project need to commissioning and warranty of the final result, including the Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK) or similar management process standards. Programs are encouraged to distribute these concepts broadly across the curriculum, rather than in a concentrated form in a singular offering, using project based learning strategies.*

5.08 OUTCOME 3: Graduates can demonstrate knowledge of building systems, facility operations, occupant services and maintenance operations, consistent with the corporate mission.

Competency 3.1 Using principles of acquisition, installation, operations, maintenance, outsourcing, renovation and disposition of building systems, structure, interiors, exterior and grounds, the student can demonstrate the phases of facility management from design/acquisition to final disposition. (ways of understanding)⁴

Entry level facility managers possess a working knowledge of building systems, structure, interiors, exterior and grounds, and understand their role managing the operation of the facility, its acquisition, installation, operations, maintenance, renovation, outsourcing and disposition, in an efficient, reliable, safe and secure manner in accordance with applicable regulations, standards and bylaws.

Student Learning Expectations

Students *know*:

- a) The built environment and its full life cycle
- b) The varied facility types and their functional purpose
- c) Common ancillary facility functions in support of human occupancy

Student work demonstrates *understanding* of:

- a) What constitutes the physical facility; its structure, building envelope, systems infrastructure, interiors, and grounds; for a variety of facility types.
- b) The lifecycle of the built environment from its acquisition/creation, installation/commissioning, facility operations, maintenance, renovation and ultimate disposition.

Program Expectations

The Facility Management program provides:

- a) Exposure to and assessment of the basics of the built environment, including structure, envelope infrastructure systems (HVAC, Plumbing, Electrical, Fire Protection, IT, Security, Telecom), interior finishes and furnishings, and the grounds for a variety of facility types.¹
- b) Exposure to and assessment of the life cycle of the facility occupation, including acquisition/creation, installation/commissioning, facility operations and maintenance (predictive, preventative and corrective), and the ultimate disposition of the facility, for a variety of facility types.²

⁴ Maps to IFMA Core Competency #5.2 Operations and Maintenance, and specifically 5.2.8: Ability to assess the condition of the facility including its systems, structure, interiors, exteriors and grounds; 5.2.14: Ability to manage / oversee facility operations and maintenance activities of building systems, structure, interiors exterior and grounds; 5.2.20 Ability to manage / oversee occupant services such as: parking, janitorial services, food services, concierge, facility help desk and security and safety; 5.2.24: Ability to manage / oversee the maintenance contracting process; and 5.2.30: Ability to develop, recommend and manage / oversee the facility's operational planning requirements (temperature control, lighting, equipment replacement and so forth).

- c) Exposure to and assessment of the customary occupant services including but not limited to parking and fleet management, janitorial, food service, concierge, facility help desk, security and safety, and the means and methods of providing those services.

Program Guidance, Competency 3.1 *Using principles of acquisition, installation, operations, maintenance, outsourcing and disposition of building systems, structure, interiors, exterior and grounds, the student can demonstrate the management of facility operations.*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include a thorough survey of building systems for a variety of facility types and the inherent implications for managing and changing these systems to suit the facility function and its human occupancy. Exposure to maintaining the building structure and envelope (skin), the function and operation of mechanical, electrical and low-voltage systems and their consumption of energy, interior environments for human comfort and productivity, and functions of the building grounds for access, environmental protection and security are essential ingredients of academic programs.*

² *Examples include the basic understanding of what constitutes the life cycle, pragmatic life cycle considerations such as facility obsolescence as well as physical life cycle considerations such as wear and tear, and the ability to alter these conditions to extend the functional life cycle of the facility. Curriculum shall include both theoretical evaluation methods, and empirical, data driven methods; suggesting a problems-based methods approach*

Competency 3.2 As a foundation for operations, maintenance and energy management (what), the student can recognize the systems, services and functions thereof, and the software applications that support them. (ways of knowing)⁵

Entry level facility managers understand the facility operations, maintenance and energy management functions, and can navigate the supporting software at a basic level.

Student Learning Expectations

Students **know**:

- a) The essential functions of facility operations within the corporate organizational structure, including but not limited to Food Services operations, custodial services, waste management strategies, transportation/ fleet management and aviation operations, warehouse operations and related functions
- a) Primary energy, site energy and renewable energy strategies
- b) Energy efficient strategies in facility operation and maintenance
- c) Load management principles (peak and off-peak, demand and energy)
- d) The basic framework, design and context of facility operations software systems

Student work demonstrates **understanding** of (ways of knowing):

- a) The fundamentals of heating, ventilation, plumbing, electrical, lighting, fire protection and low voltage systems (MEP) within a facility
- b) How to identify and employ energy management practices
- c) Environmental stewardship and sustainability as it applies to the facility operations, and how economic and social results translate to the bottom line.
- d) Software applications that support the facility operations

Program Expectations

The Facility Management program provides evidence of:

- a) Exposure and assessment of facility operation functions including HVAC, plumbing, electrical, low voltage systems and fire protection ¹
- b) Exposure to and assessment of the customary occupant services including but not limited to parking and fleet management, janitorial, food service, concierge, facility help desk, security and safety, and the means and methods of providing those services.²
- c) Exposure and assessment of waste management practices³
- d) Exposure and assessment of energy management practices⁴
- e) Exposure and assessment of environmental stewardship and sustainability principles⁵

⁵ Maps to IFMA Core Competency 5.2 – Operations and Maintenance, and specifically the context defined by 5.2.1 through 5.2.7

- f) Exposure to software applications that support the facility functions⁶

Program Guidance, Competency 3.2: *As a foundation for operations, maintenance and energy management (what), the student can recognize the systems, services and functions thereof, and the software applications that support them. The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.*

¹ *Examples include case studies of various facility operations within the larger corporate context, including possible field trips for observation of selected operations. Coursework in the fundamentals of heating, cooling, ventilation, plumbing, electrical, lighting, and low voltage systems.*

² *Examples include exposure to the variety of occupant services possible in a variety of facility types, giving the student broad exposure to those services, how they are typically identified, sourced and managed, and the challenges inherent in their management for different facility types. Coursework shall touch on the human factors around occupant service management, and the variety of ways these services can be provided (e.g. insourcing versus outsourcing) and their performance efficacy measured.*

³ *Examples include examples of various waste management strategies from a variety of organizations*

⁴ *Examples include case studies and problem sets around energy use and management*

⁵ *Examples include case studies of various sustainability initiatives, how to determine effectiveness and problem sets developing potential solutions.*

⁶ *Direct application of software available to students for assignments or projects.*

Competency 3.3 The student can assess the condition of the facility including its systems, structure, interiors, exteriors and grounds to establish a long term facility plan for the organization. (ways of applying)⁶

Entry level facility managers understand the basic structure, properties and mechanics of the building envelope and systems, including but not limited to site, structure, envelope, HVAC and interiors to enable assessment of their condition.

Student Learning Expectations

Students **know**:

- a) Ways to optimize building functions
- b) Impact(s) of people, weather and catastrophe on a building or site
- c) The factors around human comfort , accommodation and safety within a building or site

Student work demonstrates **understanding** of:

- a) The constructs and components of a long term facility plan
- b) Space programming for meeting organizational needs
- c) Space planning and management to support organizational goals and to respond to organizational change
- d) The techniques applied to facility condition assessment/index.
- e) The various systems, components and properties of the built environment – building and grounds

Program Expectations

The Facility Management program provides evidence of:

- a) Exposure to building systems – structural, envelope, mechanical, electrical and site ¹
- b) Exposure to interiors and its materials and systems to accommodate human comfort²
- c) Exposure to the physical principles of building enclosure³
- d) Exposure to factors around human comfort ,accommodation and safety.⁴
- e) Exposure to principles and practices of [programming and space planning].⁵

Program Guidance, Competency 3.3: *The student can assess the condition of the facility including its systems, structure, interiors, exteriors and grounds*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include technical presentation of building structure, building skin, MEP systems, and functions of the site environment*

² *Examples include exposure to the various interior systems including surface materials and their properties, furniture systems, and their effects on human comfort*

³ *Application of principles around keeping air/ moisture out, the effect of weather and people on the building skin, and applications therefrom on a controlled interior environment.*

⁴ *Examples human factors design, parameters and assessment principles*

⁵ *Application of fundamental project programming techniques followed by basic space planning techniques and practices, typically at a project level assignment..*

⁶ Maps to IFMA Core Competency #5.2.8 – Ability to assess the condition of the facility including its systems, structure, interiors, exteriors and grounds.

Competency 3.4 The student can demonstrate a method to plan, measure and evaluate the facility's operational performance (ways of applying)⁷

Entry level facility managers understand the importance of measuring performance across all of the facility operations by researching, developing and adherence to applicable standards, applying performance metrics, and assessing/monitoring performance against those metrics.

Student Learning Expectations

Students *know*:

- a) The basic research design, methodology, collection and interpretation of facility management data, and the presentation thereof.
- b) The concepts of key performance indicators (KPI) such as benchmarking, measuring observable behaviors, services response resolution times, etc.
- c) Ways of specifying, applying and maintaining performance for material, equipment, furniture, fixtures, and design criteria.
- d) Ways to collect, verify, analyze and report facility management data from a variety of sources.
- e) The basics of life-cycle cost analysis, conditions assessment and facility performance..
- f) The basics and measurable determinants of Energy audits.

Student work demonstrates *understanding* of:

- a) Researching, applying and interpreting key performance indicators of the facility operations to solve problems.

Program Expectations

The Facility Management program provides:

- a) Grounding in basic research design, methods and interpretation¹
- b) Exposure to the variety of research methods and tools available to the facility manager²
- c) Examples of key performance indicators, their principles and applications³
- d) Application of appropriate key performance indicators to the facility organization to solve operational problems, their interpretation and presentation of performance based solutions⁴
- e) Exposure to compliance standards, codes and regulations, policies, and specifications as a frame of reference for performance assessments.⁵

⁷ Maps to IFMA Core Competency #5.7 Quality: 5.7 Ability to develop and manage / oversee the creation and application of standards for the facility organization; 5.13 Ability to measure the quality of services provided; and 5.18 Ability to manage / oversee the improvement of work processes

Program Guidance, Competency 3.4: *The student can demonstrate a method to plan, measure and evaluate the facility's operational performance*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include basic and inferential statistical methods, research methodology and design, and interpretation of data research data, using a problem solving basis specific to facility operations*

² *Examples include development and application of surveys, observed behaviors, cycle time observation and data collection, and other tools appropriate to the problem being addressed.*

³ *Examples include a broad survey of typical operation performance metrics for all aspects of the facility operations, and problem solving geared toward understanding how and when these metrics are applied*

⁴ *Examples include project based and/or case study approaches to solving sample performance problems, assessing the student's ability to identify the problems, establish a methodology, identify the key performance indicators applicable to the problems, and through data acquisition, analyze and/or develop and present solutions.*

⁵ *Examples include coursework in specifications, performance standards, the regulatory environment within which the Facility Managers operate, and the relevance of these specifications and standards to the assessment of the facility operational performance.*

Competency 3.5 The student can interpret, apply, and recommend quality improvement programs. (ways of applying)⁸

Entry level facility managers understand the concepts of continuous and measurable quality improvement and the application of quality improvement initiatives to the facility organization.

Student Learning Expectations

Students *know*:

- a) The concepts and elements of “quality”
- b) Ways to measure the quality of service *desired* against the quality of service *provided*
- c) Ways to conduct assessments of internal and external service providers.
- d) The basis for measuring and assessing quality improvement.
- e) That occupant satisfaction must also be measured and assessed to determine quality.

Student work demonstrates *understanding* of:

- a) How to develop a quality improvement program

Program Expectations

The Facility Management program provides:

- a) Exposure to best value practices across the range of facility management functions.
- b) Methods to source, collect, verify, analyze and report operational data²
- c) Practices and methods for assessing performance of internal and external service providers across the gamut of facility operations³
- d) Grounding in the principles of workforce and workplace productivity, human factors, service efficiency and effectiveness, and how to measure output⁴

⁸ Maps to IFMA Core Competency #5.7 Quality: 5.7 Ability to develop and manage / oversee the creation and application of standards for the facility organization; 5.13 Ability to measure the quality of services provided; and 5.18 Ability to manage / oversee the improvement of work processes

Program Guidance, Competency 3.5: The student can interpret, apply, and recommend quality improvement programs

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹*Examples include case study presentation of best value performance in a variety of facility operational settings, suggesting how (and whether) the best value was determined and achieved.*

²*Examples include a broad exposure to the types of data the facility operation can yield, including empirical data such as utility consumption, work orders, work history, and implicit data resulting from observation, feedback surveys, etc. and the means and methods for gathering this data.*

³*Examples include case study sampling of a variety of service provider outputs and the basis for determining their effectiveness against established benchmarks, followed by the means of reporting and/or delivering the assessment data in a variety of operational scenarios.*

⁴*Examples include principles and practices of workplace and workforce productivity, human factors affecting productivity, how productivity is defined and measured, involving sample problem solving determining productivity outputs against benchmark standard, and using the determination and assessment of customer satisfaction as a basis for quality programs or projects.*

Competency 3.6 The student align facility management technology with organizational information technology. (ways of understanding)⁹

Entry level facility managers understand the basic role of information technology applications within the business at large, and how the facility manager must support the physical Information Technology (IT) infrastructure in terms of its operational, environmental, space and security requirements, and its disposal in environmentally responsible ways.

Student Learning Expectations

Students **know**:

- a) The current typical facility requirements needed to support the IT infrastructure and the need to continually assess the application of technology within the facility operations.
- b) The pace of change of technology trends and their application to the facility infrastructure
- c) The ways of performing and assessing a technology needs analysis
- d) The role and inter-operability of current integrated workplace management systems

Student work demonstrates **understanding** of:

- a) The basic business needs, requirements and life cycle of a typical technology infrastructure system
- b) The application of common FM information, office and communication software to their roles as Facility Managers

Program Expectations

The Facility Management program provides:

- a) Survey of the various business IT applications across the spectrum of industries and the facility infrastructure needed to support them¹
- b) The basic history of information technology, highlighting the pace of change and its application to the facility to maintain the ever evolving pace of change, with an eye toward identifying technology trends as they evolve and applying them to the facility infrastructure.²
- c) Applications and ways of assessing technology needs ³
- d) Direct application of facility systems and management software and business application software across the curriculum to enhance learning⁴

⁹ Maps to IFMA Core Competency #5.9.6: Ability to plan, direct and manage / oversee the facility management business and operational technologies.

Program Guidance, Competency 3.6: *The student can identify the information and communication technology interface between business and facilities*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include case studies of the business information needs, how they are supported technically within the brick and mortar and virtual infrastructure of the facility, comparing the needs of variety of business applications e.g. factory to hospital, hotel to office, etc.*

² *Examples include the evolution of technology within a physical structure, and how rapidly the changes to technology occurred, and how rapidly the facility systems have or have not kept up with the pace of change. The emphasis shall be on guidance for students to seek out the trends that will continually define their careers, how those trends can affect the business as a whole, and how their roles as facility managers is critical to the support of IT systems as a part of the business success.*

³ *Examples include techniques used to assess the needs of technology, from the very simple to the more complex, yielding basic tools such as surveys to help the business identify and analyze their needs. (NOTE: this can overlap with the Quality Assessment guidance)*

⁴ *The program must expose students to IWMS software in some way(s), and best if across multiple courses within the program. Student editions of software should be sought and applied to project work and assignments wherever possible. Other business and communication software, such as Word, Excel, Project, PowerPoint and applicable communication media is also required, again preferably across the curriculum applied to assignments and student project work. Exposure to and application of C.A.D software and Revit is also encouraged, but may be limited in scope to single course.*

Competency 3.7 The student can comprehend and prepare emergency preparedness and business continuity strategies. (ways of understanding)¹⁰

Entry level facility managers understand the role they play and the responsibilities they share for emergency preparedness within the overall business organization, including security, risk management, finance, human resources, environmental health and safety, information technology and business continuity planning.

Student Learning Expectations

Students *know*:

- a) The nature of risk (security, business, and weather-related) and the impact of business loss, the impact and cost of business redundancy strategies, and emergency preparedness planning, procedure and response.
- b) What emergency management and business continuity means and how it is applied to both the business and facility organization
- c) The basic components of, and methods to develop and test an emergency management plan, including effective communications to the facility occupants.

Student work demonstrates *understanding* of:

- a) Various risk mitigation strategies as applied specifically to facilities and the business at large

Program Expectations

The Facility Management program provides:

- a) Exposure to the basic understanding of risk and security, business loss, redundancy and continuity strategies¹
- b) Exposure to case study examples of emergency management plans within a variety of business and facility applications, how they evolved and are maintained²
- c) Grounding in the nature and assessment of business and facility risk, and practice in the design of risk mitigation strategies and plans³

¹⁰ Maps to IFMA Core Competency #5.10 Emergency Preparedness & Business Continuity, and specifically 5.10.5 Ability to plan, manage / oversee and support the entire organization's emergency preparedness program, and 5.10.11 Ability to plan, manage / oversee and support the entire organization's business continuity program

Program Guidance, Competency 3.7: The student can comprehend and prepare emergency preparedness and business continuity strategies

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹*Examples suggest a broad survey of the nature of security threats, business risks and the potential for business loss that needs to be monitored and managed across a variety of industry and facility types*

²*Examples include actual case studies (historical or current) of the types of emergency management plans being used across a variety of facility and business types. Enable students to solve case studies by applying their own risk mitigation strategies and presenting them for scrutiny.*

³*Examples include project based learning focused on the assessment, development and implementation of an emergency management plan, potentially including the design of simulations or exercises to test the plan components, with the goal of maintaining business continuity.*

Competency 3.8 The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)¹¹

Entry level facility managers understand the basic concepts of environmental stewardship and sustainability, their importance to the business enterprise and their application to the operation and maintenance of the facility.

Student Learning Expectations

Students *know*:

- a) What constitutes an environmental stewardship and sustainability policy for the business enterprise and how it is developed and managed
- b) The impact of the regulatory environment on the sustainable management of the facility operations
- c) Ways of assessing facility management decisions in terms of environmental & social consequences and business operational cost

Student work demonstrates *understanding* of:

- a) Impacts of the built environment on the natural environment, and the importance of maintaining and operating the built environment in a sustainable way

Program Expectations

The Facility Management program provides:

- a) Exposure to the fundamental principles and precepts of sustainability and environmental stewardship upon the built environment, and the agencies and organizations that promote and/or regulate these principles¹
- b) Ways to convert policy into action by developing and managing an environmental stewardship and sustainability policy, including economic and social sustainability regulations and standards²
- c) Exposure to environmental regulation and the applicability to the facility manager³
- d) Grounding in the assessment tools used to evaluate sustainability programs and proposals, such as asset life cycle cost, and the means and methods for obtaining data to effect these assessment tools.⁴

¹¹ Maps to IFMA Core Competency #5.11 Environmental Stewardship & Sustainability, and specifically 5.11.5 Ability to plan, manage / oversee and support the entire organization's commitment to protecting the environment, and 5.11.8 Ability to manage / oversee the entire organization's commitment to sustainability of the built and natural environments.

Program Guidance, Competency 3.8 *The student can demonstrate awareness of environmental stewardship and sustainable principles applied to the organization*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹*Examples include a course in basic environmental sustainability with a focus on the built environment and its impact on the natural environment and the health, safety and welfare of the facility users and occupants. However, the precepts of sustainability and environmental stewardship shall attempt to be broadly applied across the curriculum.*

²*Examples include case study examples of sustainability and environmental stewardship plans for a variety of facilities and industries, both during construction and when operational, including as well their inherent complexities, costs, challenges, obstacles and outcomes, giving exposure to students of the breadth and depth of the planning and managing process.*

³*Examples include exposure to the environmental regulatory environment for a variety of industries, the direct application of those regulations on the construction and maintenance/operation of the facility, and the consequences for non-adherence to the business enterprise.*

⁴*Examples include a methods approach to the empirical assessment of impacts to environmental decisions, including rigorous life cycle cost assessment, data collection and modeling.*

5.09 OUTCOME 4: Graduates apply assessment, management and leadership principles of facility organizations and their stakeholders

Competency 4.1 The student can identify the skills needed to strategically lead process, the organization, stakeholders and technologies in an ethically responsible way (ways of knowing)¹².

Entry level facility managers understand the fundamentals and differences of leadership and management, and can recognize ethical conflicts in the discharge of their duties.

Student Learning Expectations

Students *know*:

- a) The basics of business ethics, the meaning of a code of conduct, and the necessity to practice it in business applications.
- b) They must *both* lead the facility organization by providing guidance to staff and service providers, and must influence the decisions and attitudes of the enterprise leadership as well as that of its occupants, government officials, suppliers, community leaders, and business partners.

Student work demonstrates *understanding* of:

- a) How to recognize an ethical dilemma
- b) The fundamentals of, the differences between, and the application of leadership and management principles.

Program Expectations

The Facility Management program provides:

- a) Fundamentals of business law, ethics, and code(s) of conduct¹
- b) Exposure to the history and evolution of the facility management organization, the role(s) and profession, providing a context for the student toward stakeholders affected by the facility manager's role (see also Competency 1.1)²
- c) Exposure to the communication strategies as applied to management and leadership roles, and more specifically, to resolving conflicts and to ways of influencing others in an ethically responsible way, reflecting the variety of stakeholder interests (see also Competency 7.1)³
- d) Exposure to methods of strategic planning⁴

¹² Maps to IFMA Core Competency #

Program Guidance, Competency 4.1: The student can identify the skills needed to strategically lead process, organization, stakeholders and technologies in an ethically responsible way

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹*Examples include a basic business law course with a fundamental discussion of ethics. Ethics must be broadly applied and infused across the entire curriculum and not relegated to a single class.*

²*Examples include a history of the profession and its roles so the student understands the various stakeholders they must lead, manage or influence. This is generally covered in an introductory FM course whose concepts are reiterated across all FM curriculum.*

³*Examples include a variety of coursework across the curriculum that expose students to ways of communicating, orally and in writing, that expose the nuances of leadership and management roles, and provide practice and assessment in the methods of informing, argument, influence, conflict resolution and other communication strategies.*

⁴*Examples include fundamentals of strategic planning principles and processes, research and assessment of the facility needs, and application of a case study approach to challenge the student to develop and present their own strategic plan.*

5.10 OUTCOME 5: Graduates apply financial management tools to the Facility program and organization

Competency 5.1 The student uses analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of facility financial management. (ways of understanding)¹³

Entry level facility managers understand and can articulate fundamental financial concepts and terminology associated with the financial and business management of the facility enterprise, and the need for financial justification and communication of facility enterprise decisions.

Student Learning Expectations

Students *know*:

- a) The need for operational and maintenance budget and facility capital renewal forecasting, accurate and unbiased financial justification and business case reporting of facility decisions, and the risk assessment/impact of financial decisions.
- b) The means and methods of achieving financial goals, including contracting and procurement, budget oversight, and determination, justification and administration of chargeback procedures.

Student work demonstrates *understanding* of:

- a) The fundamentals of financial and managerial accounting and the determination of life cycle cost assessments, payback analysis, net present value, depreciation, budgeting, expense and capital project reporting, risk management and analysis.
- b) Analysis and interpretation of financial documents, statements, budgets, contract elements and the ability to communicate the findings.

Program Expectations

The Facility Management program provides:

- a) Exposure to fundamentals of economics, and managerial finance and accounting, including student assessment of terminology, calculation and interpretation of financial data.¹
- b) Exposure to and student assessment of FM specific accounting and finance techniques, including budgeting, forecasting, depreciation, payback, life-cycle assessment, capital needs determination, chargeback determination and justification, and the accurate, unbiased reporting of financial information when making business cases.²
- c) Exposure to FM specific budgeting and management techniques and methods, including outsourced contracting implementation, monitoring and management for a variety of facility types and occupant services.³
- d) Practice in the means, methods and effectiveness of reporting financial information and making business cases⁴

¹³ Maps to IFMA Core Competency #5.5, Business and Finance, including 5.5.5: Ability to manage / oversee the financial management of the facility organization; 5.5.9: Ability to administer and manage / oversee the finances associated with contracts, and 5.5.14 Ability to administer procurement and chargeback procedures

Program Guidance, Competency 5.1: The student uses analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of facility financial management

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ Examples include basic coursework in the fundamentals of economics, business finance and managerial accounting - a broad, over-arching perspective of the financial management landscape.

² Examples include dedicated coursework with student assessment of FM specific accounting and finance techniques, including budgeting, forecasting, depreciation, payback, life-cycle assessment, capital needs determination, chargeback determination and justification, and the accurate, unbiased reporting of financial information when making business cases. Coursework shall be based in problem-set determination and solution, presentation techniques of financial data using a case study approach, and examples of actual FM financial models covering a variety of facility types and occupant services.

³ Examples include coursework covering documents and contracts applied to the FM practice, using a case study approach to prepare, manage, measure and monitor contracting effectiveness for a variety of facility types and occupant services.

⁴ Examples include case study solutions to business case development using financial metrics in support of decision making, and the means of presenting this information to the corporate suite.

Competency 5.2 The student can demonstrate applications of corporate real estate finance, management and transactional execution. (ways of applying)¹⁴

Entry level facility managers understand sourcing, acquisition, possession and disposition of real property assets as part of an overall real estate master plan.

Student Learning Expectations

Students *know*:

- a) The principles of marketing, market analysis and real property appraisal
- b) The principles of real estate taxation
- c) The principles of property development in context within an overall real estate plan
- d) How real estate is transacted.

Student work demonstrates *understanding* of:

- a) Real estate assessment, development and financial implications.

Program Expectations

The Facility Management program provides:

- a) Exposure to models of real estate development and utilization in the context of a master real estate plan¹
- b) Application and assessment of real estate cost and finance modeling²
- c) Application of principles around marketing, market analysis and appraisal³
- d) Means and methods for determining and evaluating real estate requirements, including space utilization, management, highest and best use⁴
- e) Exposure to principles of acquisition and disposal of the real estate portfolio⁵

¹⁴ Maps to IFMA Core Competency #5.8 Real Estate and Property Management, 5.8.6 Ability to manage/oversee the real estate assets.

Program Guidance, Competency 5.2: *The student can demonstrate applications of corporate real estate finance, management and transactional execution.*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include case studies of various real estate master plans for a variety of facility types, how they were assembled, evolved and were managed over time;*

² *Examples include problem based assessment of real estate cost and financing determinants that demonstrate an understanding of basic real estate economic principles including leasing or leasing/ owning position and their modeling techniques; international prospectus in CRE functions.*

³ *Examples include solving case study problems that demonstrate market determination and analysis techniques, options for determining an appraised value, and comparison of multiple solutions to a single real estate problem.*

⁴ *Examples include project based determination of highest and best use of a given facility, programming the utilization of the space for a variety of facility types, incorporating problems of space fit within existing real estate limitations, and the facility management implications of those solutions.*

⁵ *Examples include comparing and contrasting mock acquisition and disposal strategies*

5.11 OUTCOME 6: Graduates apply human factor principles to optimize facility & stakeholder operations.

Competency 6.1 Using factors around health, safety, welfare, comfort, safety and security within the organization, the student can practice applications of human resource management. (ways of applying)¹⁵

Entry level facility managers understand how the research and application of human factors analysis can impact the performance of the facility organization.

Student Learning Expectations

Students *know*:

- a) Research methods for assessing human factors, including the environmental, psychological, physiological and ergonomic factors, and for monitoring and evaluating performance.
- b) The implication of human factors on the health, safety and welfare of the entire organization.

Student work demonstrates *understanding* of:

- a) The methods of research, analysis and application of human factors assessments to the facility organization, and
- b) Ways to develop and implement practices that support the performance and goals of the entire facility organization.

Program Expectations

The Facility Management program provides:

- a) An overview of human factors assessments, their purpose, methodology and measurement¹
- b) Fundamentals of human ergonomics and its application to the built environment²
- c) Exposure to and application of research methods, analysis and assessment of human factors within the facility organization³
- d) Exposure to the human factor impacts on the facility organization around the health, safety and welfare of the human occupancy⁴

¹⁵ Maps to IFMA Core Competency 6.0 Human factors, and specifically 6.1: using factors around health safety and welfare and security within the organization, the student can practice applications of human resource management, and 6.2: the student can develop and implement practices that support the performance and goals of the entire organization, and 6.3: ability to develop and implement practices that support the performance of the facility organization..

Program Guidance, Competency 6.1: *Using factors around health, safety, welfare and security within the organization, the student can practice applications of human resource management.*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include a survey and case study demonstrations of human factor analysis within the facility organization, including the types of factors possible within different facility types, and how minor adjustments can make significant impacts in facility performance.*

² *Examples include a basic presentation of human ergonomics, perhaps with classroom applications of ergonomic demonstrations, such as repetitive motion scenarios to physically demonstrate the impact.*

³ *Examples include discussion and demonstration of the basic ways to research human factor impacts, with student project work focused on their own human factors assessment of the campus facilities.*

⁴ *Examples include solving actual facility case studies of human factor problems, their assessment, application and monitoring within multiple facility types.*

5.12 OUTCOME 7: Graduates are effective communicators

Competency 7.1 The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre. (ways of applying)¹⁶

Entry level facility managers understand the critical role of communication skills in managing the facility organization.

Student Learning Expectations

Students *know*:

- a) The role and application of writing, speaking and listening as part of an overall communication strategy for both internal and external constituents.
- b) The importance and means of accurately communicating financial, graphic and technical information
- c) The variety and comparative effectiveness of professional communication genre available

Student work demonstrates *understanding* of:

- a) Means and methods of effective communication for managing the facility organization, applying contemporary communication tools and genre.

Program Expectations

The Facility Management program provides:

- a) Exposure to and rigorous practice of writing, listening and speaking exercises broadly distributed across the FM curriculum¹
- b) Application of specific professional business genre toward solving a variety of facility management problems²
- c) Exposure to multiple opportunities for oral presentation techniques and practices, resulting in professional oral presentations³
- d) Exposure to the risks and pitfalls of poor communication techniques⁴
- e) Exposure to past, present and future communication technologies and media⁵
- f) Exposure to managing changes in technology⁶.

¹⁶ Maps to IFMA Core Competency #5.4, Communication; 5.4.2 Ability to manage/oversee the development and use of the facility communications plan, and 5.4.7, Ability to prepare and deliver messages that achieve the intended results.

Program Guidance, Competency 7.1: *The student demonstrates written, oral, aural, and graphic communication skill through repetitive assessment and evaluation of industry appropriate genre.*

The following guidance is provided to promote consistent understanding of the referenced criteria. Examples offered are for the purposes of illustration only and should not be construed as required or as an inclusive list of items that must be evidenced.

¹ *Examples include assignment and assessment of fundamental business writing, techniques for listening and speaking, and evidence demonstrating the application of these methods across multiple FM courses in the curriculum.*

² *Examples include exposure to and application of all manner of business communication genre, including but not limited to memoranda, correspondence (physical and electronic), reports, graphics, charts, presentations, electronic communication methods, incorporated as part of assignment based learning in multiple FM coursework. Additionally, the student should be able to create a corporate communication plan for their facility*

³ *Examples include oral exercises intended to improve presentation techniques and including formal and informal project presentation opportunities across the FM curriculums*

⁴ *Examples include case study approaches to the actual consequence of poor communication within the industry specifically, and the larger business community at large.*

⁵ *Examples include the evolution and history of communication techniques within the industry, and the application of future communication tools and techniques as they develop and evolve, exploring their technical and practical applications and risks*

⁶ *Examples include communicating the evolving technical and spatial requirements for new and emerging technology, such as creating a virtual network where none existed before.*

5.13 Integrative and Problem Solving Skills (aka Capstone Course)

There must be at least one major integrative, problem-solving exercise in which students apply at least 8 of the 15 key competencies learned in the specific knowledge areas covered by the program, to a problem that spans several phases of planning and managing facilities. This problem must require real information gathering and measurement. The project will culminate in a professional quality report and presentation to an audience.

Programs must provide the following evidence:

- 1 Problem statement or definition provided to students
- 2 Examples of the resources available to students
- 3 At least three examples of de-identified student work (good, average, poor), including presentation materials.
- 4 Criticism/feedback and assessment provided to student examples
- 5 Participants in the presentation pool

Site team evaluation of the capstone experience will be focused on the capture of the program outcomes and competencies embodied in the student work. Provide a summary of the capstone process and how these outcomes were defined and measured by the capstone project experience.

5.14 Internship or Work/Study

By the year 2020, every baccalaureate level FM Accredited Degree Program must include an internship experience for credit. The structure of the program is not defined herein, but should include at a minimum:

- 1 A defined process within the institution for enabling students to find internships, and
- 2 An on-site work experience related to the FM industry, and
- 3 A report, journal or communication assignment between the program and the student(s), and
- 4 A formula for converting working hours into an earned credit, and a published statement of the minimum credits required by students to graduate, and
- 5 A feedback system from employers.

Students that are attending the institution and currently work within the FM industry, may, at the institute's discretion, provide an alternate credit requirement such as an elective or a directed research project.

Course Mapping Templates

APPENDIX: MAPPING TEMPLATES

Following are representative examples of possible mapping techniques, measuring the outcomes and competencies both across the courses and up to the program level. The institution has broad flexibility in how to create and implement the mapping process - these are examples only. Some attempt at relative density of coverage (i.e., light/medium/heavy) or taxonomy (i.e. "K" knowing, "U" for understanding, "AP" ability application) is useful to understand, especially at the program level, how depth and quality of coverage is established across the curriculum (i.e. different graphical block color or perhaps digital ratings)

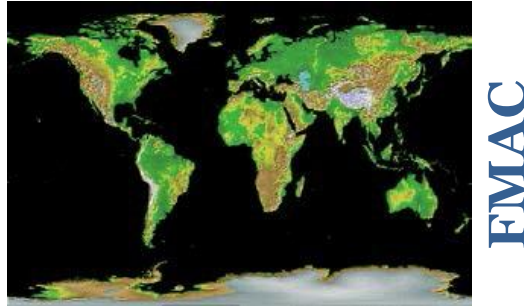
SAMPLE MAPPING: PROGRAM LEVEL EXAMPLE

		FM 101: Intro to FM	FM 300: Facility Quality	FM 350: Facility Operations	FM 411: Real Estate Principles	ADD ONTO MAP FOR EACH COURSE
1	Graduates understand the FM history, practice and profession					
1.1	The student can explain the history, international practices, corporate organization and roles of the Facility Management profession (ways of knowing)	K				
2	Graduates can plan and manage projects					
2.1	The student can manage project initiation, planning, execution, control and closeout (ways of knowing), using scope, quality, schedule, budget, resources and risk (ways of understanding)		U			
3	Graduates can manage building systems, facility operations, occupant services and maintenance operations					
3.1	Using principles of acquisition, installation, operations, maintenance, outsourcing, renovation and disposition of building systems, structure, interiors, exterior and grounds, the student can demonstrate the phases of facility management from design/acquisition to final disposition. (ways of understanding)				AP	
3.2	As a foundation for operations, maintenance and energy management (what), the student can recognize the systems, services and functions thereof, and the software applications that support them. (ways of knowing)			1.5		
3.3	The student can assess the condition of the facility including its systems, structure, interiors, exteriors and grounds to establish a long term facility plan for the organization. (ways of applying)		0.5			
ADD ONTO MAP FOR EACH COMPETENCY AND OUTCOME						

SAMPLE MAPPING: COURSE LEVEL EXAMPLE
Complete for each competency and each course

2.1	Graduates can plan and manage projects	Assignments Assessments			
		Q1: Q1 on Project Charter	Q2: Q2 on Project Planning	Q3: Project Overview	Q4: Project 2 Schedule
The student can manage project initiation, planning, execution, control and closeout, using scope, quality, schedule, budget, resources and risk.					
Students Know:					Notes:
a)	The project charter and the limits defined therein	K			
b)	The planning involved in the project evolution and delivery				
c)	Ways a project is managed, controlled and delivered			AP	
d)	How to apply the constraints of cost, time and quality to the project delivery				
e)	Where the project risk is manifested and how it is assessed and managed				
f)	How a project is closed and commissioned for use.				
		NO ISS.	NO ISS.	NO ISS.	NO ISS.

Facility Management Accreditation Commission Site Visit Guidelines



Facility Management Accreditation Commission

Facility Management Accreditation Commission Accredited Degree Programs (ADP) Recommended ADP Site Visit Guidelines

Following is an overview of the FMAC ADP Site Visit process. It is not necessary that you follow this recommended schedule in the exact order due to scheduling challenges, but the SVT will need a final schedule as soon as possible in which the SVT can arrange to cover required activities during the site visit.

If you have any questions or concerns regarding this Site Visit Guidelines, please let me know.

1. Site visit: the Facility Management Accreditation Commission (FMAC) will schedule the required 2 to 3 day site visit to the Institution. The site visit will cover the following activities and initiatives:
 - a. A formal review of the FM Program
 - i. Includes a review of how the overall FM program will meet the FMAC ADP requirements
 - ii. Related to this is how will the program determine outcome knowledge of the student
 - b. Meet the FM program faculty and staff and faculty from other courses outside of the FM program area
 - c. Review in depth a course mapping diagram of how the FM program courses satisfy the FMAC accreditation requirements in section 5 of the ADP Standard – “Required Area of Knowledge”
 - d. Meet the FM Advisory committee
 - e. Meet some graduates of the FM program
 - f. Meet current students of the program
 - g. Meet the Institution’s leadership (at least the Dean, Provost, or Chief Academic Officer if possible)

- h. Review the FM programs resources and amenities
- i. Review FM and other course content:
 - i. Student projects
 - ii. Evaluation process of work and grading
 - iii. Syllabus
 - iv. Required readings and books
 - v. Other student work
 - vi. Learning objectives
 - vii. Review work labs
 - viii. Observe a couple of courses / lectures
 - ix. Observe a FM student organization meeting
 - x. If applicable, how the student internship program functions
- 2. Develop a preliminary document of findings report to orally discuss with the institutions leadership (this meeting will occur on the last day of the site visitation). This report will cover the following:
 - a. Program strengths
 - b. Program weaknesses and areas of concern
 - c. Identify those areas that need to be changed and a time line for those changes
 - d. Initial findings and how the recommendation will be developed
 - e. Questions and Answer session

The site visit SVT will have prepared for further FMAC discussion the following:

1. Formal FMAC recommendation, approval and acknowledgement to the Institution (Verbal and Written) This Formal recommendation, approval and acknowledgement will require 30 to 45 days to complete.
2. Once the formal FMAC recommendation has been approved the Institution will be notified, formally recognized and acknowledged at IFMA World Workplace and/or another IFMA sponsored event in addition IFMA and IFMA Foundation will document the accreditation in one or more of the IFMA printed publications.

A typical site visit SVT schedule could be as follows:

Schedule of activities during the visit

The visitation will normally take three days. The Site Visiting SVT (SVT) members should make arrangements to arrive at the institution 1 day prior to the first official site visit start day. Final adjournment of the site visit should be timed to permit site visit SVT members to make air or other transportation connections so that they may arrive home on the evening of the third day. It is expected that a site visit will include some or all of the following:

a) Evening of the Date of Arrival:

Prior to the start of the formal visitation, the SVT will meet with the Facility Management program(s) administrators to review final details of the visit including the time schedule. This conference is held so that the SVT members may be made aware of any issues, changes to the schedule or other needs. It also is intended to orient the administrators to the methods and procedures of the SVT. After this conference, an executive session of the SVT should be held to review assignments and the work schedule; to review the appropriate FMAC site visit documents dealing with accreditation visits and those dealing with the institution; and to consider other necessary details.

At this time, the SVT Chair may make additional assignments to SVT members to be accomplished during and subsequent to the visit, including but not limited to the following: Tour of laboratories, classrooms, offices and other physical plant facilities and equipment, with the instructor(s) responsible for each. Conduct of interviews with faculty members so that each will have been visited with individually. Topics to be discussed should include faculty members' opinions of the Facility Management program, its role or function whether its goals and objectives are realistic and are they being met, program strengths, weaknesses and areas for possible improvement, and the instructors' teaching philosophies and personal goals.

Conduct short interviews with representative groups of students utilizing the same topics as above. Observation of a sampling of lectures, laboratories and related instruction.

Conduct interviews with: the admissions officer; representatives of supporting academic disciplines; the librarian most concerned with the Facility Management education holdings; administrative units who contribute to the success of the Facility Management program; representatives of agencies with which students have had or are gaining work experiences; placement office representatives; local professionals and community college personnel who are regularly associated with the Facility Management program. Conferences with the administrative officer to whom the Facility Management program administrator(s) report focusing on progress and changes being affected by the institution which apply to the program.

During conduct of the visitation, SVT members should record their observations and make comments for use in preparing their assigned portions of the SVT report.

b) Morning of the First Day of Site Visit

During the morning of the first day, the SVT should have scheduled an orientation tour of the institution campus, and the facilities of the FM program, including classrooms, laboratories and other resources. The remainder of the morning should be utilized to review the following materials and data, which should be readily available to the SVT:

- A syllabus for each course required in the curriculum stating the course objectives in relation to the program goals and objectives, outlining instructional methods, outlining in reasonable detail the topical content of course, and a course calendar.
- Copies of textbooks, laboratory manuals and reference materials used, to determine appropriateness, adequacy of coverage, and currency of texts and other reference materials.
- For each course in the curriculum, copies of actual homework, quizzes, midterm and final examinations, term papers, and special study assignments given which are typical of all student work. To ensure accurate evaluation, more than one set of student work must be provided and the materials presented must be a reasonable cross-section, not a compilation of only the best work.
- Copies of grade reports and other measures of student competency in the courses taken. Such grade reports should correlate with student work displayed.
- Student records for compliance with program curriculum requirements and policies.
- Evidence of any contact the undergraduate students may have with research, community service and internship or similar professional experiences.

c) Afternoon of the First Day of Visit

SVT members continue with their assigned duties. There will be a short break right after lunch to regroup and discuss any issues that may have come out of the morning session.

d) Evening of the First Day of Visit

A dinner may be held at this time with local Facility Management industry, program alumni, FM faculty, and other representatives. After dinner the SVT reassembles for a review of findings concerning program and administrative elements examined that day. Strengths and weaknesses discovered in both program and supporting areas should be discussed.

e) Morning of the Second Day of Visit

On the morning of the second day, a meeting with the Chief Executive Officer (Dean, Provost, or Chief Academic Officer) of the institution or his representative should be held to explain the purposes of the site visit and the procedures to be followed. A meeting with the Facility Management program(s) administrator should be held to discuss the following: operating finances, relationships with the next higher administrative level and with administrators of the institution, and other topics as deemed necessary for the accomplishment of the visit by the SVT.

At these meetings, the SVT Chair should explain to the administrators the purposes of the visit, how it is to be carried out and the fact that an analysis of the findings will be presented prior to the SVT's departure. All SVT members should attend and actively participate in these meetings.

After completion of these meetings, SVT members proceed to carry out their assigned responsibilities.

f) Luncheon Meeting on the Second Day of Visit

Representatives of the institution and the members of the SVT may join in a luncheon, if they so desire. Normally a small group, including the Dean (Provost, or Chief Academic Officer or Administrator, other department heads and Facility Management program faculty will be involved.

g) Afternoon of the Second Day of Visit

SVT members proceed with their assigned duties. If any additional time is available, SVT members should continue reviewing course materials. There will be a short break right after lunch to regroup and discuss any issues that may have come out of the morning session.

h) Evening of the Second Day of Visit

A dinner may be held at this time with local Facility Management industry, program alumni, FM faculty, and other representatives may be held for those parties that did not attend the dinner held on the evening of the first day. The SVT reassembles after dinner for another review of findings concerning program elements examined that day. Strengths and weaknesses related to FMAC criteria discovered should be fully discussed. Wherever one SVT member encounters unusual conditions, another SVT member should be assigned to make a crosscheck. Members should begin preparing their portion of the Visiting SVT Report utilizing observations and notes.

i) Morning of the Third Day of Visit

SVT members continue with their respective assignments. This time should also be used for any follow up necessary for clarification of any questions.

j) Lunch on the Third Day of Visit

Lunch on the third day should be an executive session of the SVT for the purpose of evaluating the visit and to begin preparation of a preliminary report.

k) Afternoon of the Third Day of Visit

SVT members hold an executive session to continue evaluation of the site visit to that point, complete individual SVT member portions of the Visiting SVT Report and to finalize the preliminary report on strengths and weaknesses of the program along with any concerns which the SVT may have.

If time permits, the preliminary report should be reviewed with the Facility Management program administrator prior to being presented to the Chief Executive Officer (Dean, Provost, or Chief Academic Officer) of the institution. This preliminary report is presented in an exit interview during which the SVT as a whole meets with the program administrator, the administrator of the next higher unit and the Chief Executive Officer (Dean, Provost, or Chief Academic Officer) of the institution for the following purposes:

- a. To present an objective analysis of the findings of the Visiting SVT.
- b. To discuss observed strengths and all weaknesses of the program in relation to the applicable FMAC Standards and Criteria.
- c. To discuss all concerns of the SVT members regarding the program.
- d. To ask the assembled administrators if, in their opinion, these findings are in accord with the facts.
- e. To explain the procedures in the accreditation process which will follow from that time forward.

The agreed upon recommendations of the visiting SVT regarding accreditation should not be mentioned to institution officials during this meeting or at any other meeting.

At the completion of the meeting with administrators, SVT members should:

- a) Return their copy of the Self-Evaluation Study to the SVT Chair.
- b) If completed, provide the SVT Chair with the draft of their assigned portion of the SVT report. If not completed, it should be submitted to the SVT Chair as quickly as possible.
- c) Discuss target dates for completion, review and return of the final SVT Report to the Chair.

Upon completion of the above and release by the SVT Chair, SVT members are free to depart and the site visit has ended.