

FLORIDA A&M UNIVERSITY

School of Architecture + Engineering Technology

Facility Management Accreditation Commission (FMAC)



Master of Science in Architecture with a Major in Facilities Management

SELF-STUDY REPORT

JUNE 2018

SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY

1938 S MLK Blvd

Tallahassee, FL 32307

Phone: 850-599-3244 Fax: 850-599-3536

www.famu.edu/ARCHITECTURE

This page intentionally left blank

DocuSign Envelope ID: 948AF9C0-49B4-4024-995B-69233EDE88D5

Florida A&M University
School of Architecture + Engineering Technology
Master of Science in Architecture with a major in Facilities Management
Self-Study June 2018

**International Facility Management Association
Facility Management Accreditation Commission (FMAC)**

SELF-STUDY REPORT / APPLICATION

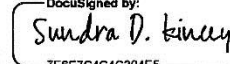
Name of Institution: Florida A&M University
Academic Unit: School of Architecture + Engineering Technology (SAET) in
collaboration with the School of Business & Industry (SBI)
Degree Name: Master of Science in Architecture with a Major in Facilities Management

REVIEWED BY:

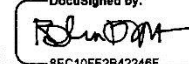
DocuSigned by:

Signature: _____
Andrew Chin, MArch
Interim Dean, SAET

REVIEWED BY:

DocuSigned by:

Signature: _____
Sundra D. Kinsey, PhD
Director of Program Quality

APPROVED BY:

DocuSigned by:

Signature: _____
Rodner B. Wright, AIA
Interim Provost & Vice-President for Academic Affairs

APPROVED BY:

Signature:  _____
Larry Robinson, PhD
President

TABLE OF CONTENTS

STANDARD 1	MISSION & CAPACITY.....	7
A.	Institution Contact Information.....	8
B.	Identification of Individuals Who Helped Prepare the Preliminary Questionnaire	8
C.	University Success	9
D.	Program Success	9
E.	Florida A&M University Mission Statement.....	13
F.	School of Architecture + Engineering Technology Mission Statement.....	14
1. A	Master’s Degree	15
1. B	Master’s Degree Programs.....	15
1. C	Program Orientation/Emphasis	16
	Curriculum	18
	Course Mapping Overview	21
STANDARD 2	RESOURCES	26
2. A	Administration	27
2. B	Program Administration	27
2. C	Administrative Leadership	29
2. D	Administrative Support.....	30
2. E	Support Personnel	31
2. F. 1	Facilities and Equipment.....	31
2. F. 2	Adequacy of Facilities and Equipment	34
2. F. 3	Support for Facilities and Equipment	35
2. G	Computer Systems	35
2. G. 1	Technical Support.....	36
2. H	Financial Resources	36
2. I	Library Services.....	37
2. J	Program Advisory Committee (PAC).....	48
STANDARD 3 - FACULTY	55
3.	Faculty.....	56
3. C	Selection and Appointment Policies	58
3.D	Tenure and Reappointment Policies	59
3.E	Faculty Loads.....	61

STANDARD 4	CURRICULUM	63
4	Instruction	64
4. A	Syllabi and Course Manual Notebook	64
4. B	Course Manuals Notebook.....	64
4. C	Program Level Assessment of Learning	66
4. D	Program Balance	69
4. E	Oral Presentations and Technical Report Writing	70
STANDARD 5	STUDENTS.....	71
5	Students.....	72
5. A	Admission and Retention Standards	73
5. C	Placement Services	77
5. D	Placement of Graduates	79
5. E	Student Evaluation of the Program	81
5. F	Student Enrollment and Retention	82
5. G	Academic Advisory and Counseling Services	83
5. H	Ethical Practices.....	86
5. I	Academic Honesty and Plagiarism	89
STANDARD 6	OUTCOMES	92
6.	SUMMARY OF FACILITY MANAGEMENT PROGRAM CURRICULAR OUTCOMES AND COMPETENCIES.....	93
APPENDIX	102
A.	FAMU ORGANIZATIONAL CHART	103
B.	SAET Organizational Chart.....	104
C.	Faculty Screen Shots.....	105
D.	MscFM Syllabi of Required Courses.....	109
E.	Faculty Resumes in the MS FM Program (Required Courses).....	131
F.	Summary of spring 2018 Student Graduate Exit Surveys (Typical).....	145



Florida Agricultural and Mechanical University

TALLAHASSEE, FLORIDA 32307-3200

TELEPHONE (850) 599-3197
FAX (850) 561-2289

FACILITIES PLANNING CONSTRUCTION AND SAFETY
2400 WAHNSH WAY, SUITE 100
TALLAHASSEE, FLORIDA 32307

May 30, 2018

A. Peter Hilger, AIA
Morse Distinguished University Teacher
Faculty Director, Curriculum & Internship Adviser
FM Program Director
Construction and Facility Management Program
University of Minnesota
College of Continuing and Professional Studies (CCAPA)
20 Ruttan Hall (St. Paul Campus)
1994 Buford Ave., St. Paul, MN 55108

RE: Facility Management Accreditation Commission (FMAC) IFMA Foundation

Dear Professor Hilger:

More than half of current practitioners in the field of Facilities Management are planning to retire within the next fifteen years. Facilities Management covers a broad spectrum, from operations to new construction and business administration. A quick scan in the Facilities Management industry today reveals that practitioners in this field have traditionally come from Architecture, Engineering, or Construction background.

I have been practicing in the Facilities Management industry for over 24 years. During these years, I have had the honor to also present and attend several IFMA conferences. Being International Facilities Management Association (IFMA) certified Facilities Management Professional and Sustainable Facilities Professional, I understand the urgency and a genuine industry need to market this field to bright young minds, so that we can make Facilities Management as a career of choice. I therefore write in support of School of Architecture and Engineering Technology at Florida Agricultural and Mechanical University (FAMU) in their quest to seek accreditation for their Facilities Management program through IFMA's Facility Management Accreditation Commission (FMAC).

With collaboration between two schools (Architecture and Business), FAMU offers the Bachelor and Master's degrees in the field of Facilities Management. These hands-on internship driven programs cover the history, practice, and profession of Facilities Management. Students in this program learn to effectively plan, communicate, and lead projects; manage building systems, facility operations, occupant services, maintenance operations; and apply measurement, management, and leadership principles to organizations and their stakeholders.

My department of Facilities Planning Construction and Safety at FAMU has a unique perspective on the School of Architecture and Engineering Technology's Facilities Management program and their students.

We have partnered with this program for past few years and tried to effectively bridge the academic and administrative sides through several joint initiatives and programs. Some of these programs include establishment of master plan steering committee, space planning committee, grant program participation, internship programs, offering operational tours, etc.

Through these partnerships, we have been able to expose the students of Facilities Management to various areas of Facilities Planning Construction and Safety from day to day physical plant operations, business administration, to construction, and environmental health and safety. The students have been able to get hands on experience in real life scenarios by working with our team of Architects, Engineers, Construction Managers, and Business professionals. They get to participate in the project and operations meetings with the internal and external stakeholders, thereby implementing their classroom knowledge to solve the real-world concerns.

FAMU School of Architecture and Engineering Technology has been very successful in training their students in the field of Facilities Management. One of the projects our team worked with the students included campus safety enhancement through the sidewalk repair project. The students completed the project to identify the hazards posed by uneven sidewalks and walkway surfaces. The students presented their findings to staff and provided maps of the hazard locations with recommendations, estimated costs and possible time frames for completion of the project. The information provided by the students provided the data needed to justify the allocation of funds for the project and served as an important starting point for campus safety program. Other projects include identification of solutions for housing facilities, campus ROTC building enhancements, space assessment and validation for classroom, teaching and research labs, etc. Findings from the space assessment program was also used as a foundation for the new Ad-Astra program implemented by the office of the Registrar.

Through all these collaboration opportunities, I can confidently say that the FAMU School of Architecture and Engineering Technology has not only successfully prepared our students academically but has also taught them the necessary soft skills of professionalism, value, and service. I hope you review FAMU's submission and find them to be favorably geared in getting this accreditation and in solving the need of our Facilities Management industry. I look forward to answering any question you may have or providing additional information if necessary.

Sincerely,



Sameer Kapileshwari, P.E. LEED AP FMP
Associate Vice President Facilities, Planning, Construction, and Safety

STANDARD 1 MISSION & CAPACITY

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.

A 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 Program Advisory Committee (PAC), 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. Programs may apply for Provisional Accreditation prior to the successful completion of two Cohorts graduated.**
- 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.**

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 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.

Identify the mission statement and discuss its compatibility.

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.

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.

Identify the Program level

Background Information

A. Institution Contact Information

Name of institution: Florida Agricultural and Mechanical University or Florida A&M University (FAMU)

Name of school or program: School of Architecture + Engineering Technology (SAET)

Name of degree: Master of Science in Architecture with a major in Facilities Management

Name/title of president: Larry Robinson, Ph.D., President

Name/title of chief academic officer: Rodner Wright, M.Arch., Registered Architect, Interim Provost and Vice President for Academic Affairs

Name/title of business unit head: Andrew Chin, M.Arch., Interim Dean

The institution's self-study coordinator contact information:

Andrew Chin, M.Arch., Interim Dean
Ronald B. Lumpkin, PhD, MS Facilities Management Program Developer, Director of Student Services
School of Architecture + Engineering Technology
Walter L. Smith Architecture Building, 1938 S MLK Blvd.
Tallahassee, FL 32307
Phone: 850-599-3244 FAX: 850-599-3535
Email: Andrew.chin@famuedu

Date of Self Study Submission: June 2018

Proposed date of accreditation site visit: September 9-12, 2018

B. Identification of Individuals Who Helped Prepare the Preliminary Questionnaire

All SAET faculty and staff and select faculty that prepared the School of Business & Industry (SBI) self-study are engaged in SAET's self-study process. The table below lists the faculty and staff that are most actively involved in preparing this self-study.

Name	Title
Andrew Chin	Interim Dean, SAET
Ronald B. Lumpkin, IFMA, PhD	Director of Student Services, SAET
Robert Goodwin, Registered Architect	Research Associate, FM Coordinator, SAET
Bobby Davis, PhD	Professor & Associate Dean, SBI
Jennifer Collins, PhD	Professor & Assistant Dean, SBI
Roscoe Hightower, Jr., PhD	Professor, SBI

Felicia Williams, PhD

Director of Student Services, SBI

C. University Success

Recently, *U.S. News & World Report* selected the University as the number one public Historically Black College and University in the country (September 2017). In addition, FAMU also appears on the most recent *U.S. News & World Report* list for the top overall 132 public schools in the nation at number 113. Further, high school teachers and guidance counselors ranked the institution in the top 254 colleges at number 177. The University also launched, *FAMU Rising*, the 2017-2022 Strategic Plan. Also, the University has selected written communication skills as the topic focus for its Quality Enhancement Plan (as a part of the SACSCOCC reaffirmation process). These University-level enhancements will have a strong, positive influence on our Facilities Management degree programs by increasing the number of students enrolling in the University as well as improving student written communication skills across the curriculum.

D. Program Success

Collaboration

The collaborative undergraduate and graduate degrees in Facilities Management at FAMU are the first in Florida and at an Historical Black College or University (HBCU). Twenty one students have graduated with the Bachelor of Science in Business Administration with a program major in Facilities Management since the program began in 2009. The reaffirmation work team submitted an abstract entitled “Managing the Accreditation Process” and presented their framework for accreditation and reaffirmation at the 2017 IFMA World Workplace conference in Houston, TX. In addition, the full paper will be presented to *Journal of Facility Management and Education Research* for publication in 2018. Since inception August 2013, four cohorts and 32 graduates have completed the Master of Science in Architecture with a major in Facilities Management (MScFM). The SAET has employment information on over 90% of its MScFM graduates. Three of the graduates are employed by college or university facilities planning departments. As can be seen in Figure 1, the Facility Maintenance & Operation Committee (FMOC) “Graduate Enrollment MS Facilities Management 2011-2012, the FAMU program is the fourth largest in the US and was described as “...trending consistent increase 2012-2014, stable 2015”.

Figure 1. Master of Science FM Trends

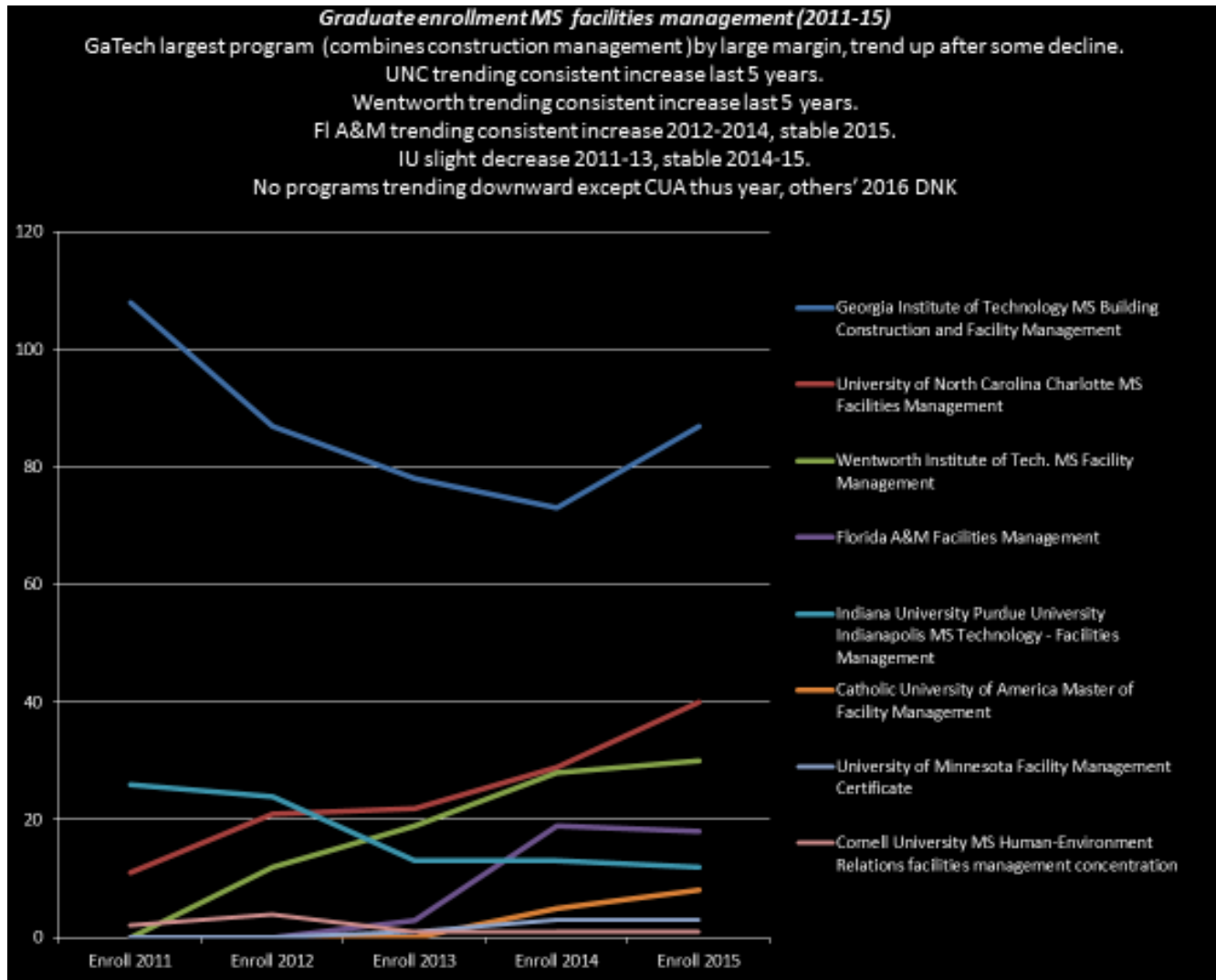


Figure 1. Presented at the Facility Maintenance & Operation Committee (FMOC) February 2017, courtesy of Thomas L. Mitchell, Jr., CFM, CFMJ, IFMA Fellow.

Strength of the School of Architecture + Engineering Technology

In 1973, the State University System completed *A Study of Florida's Future Need for Architects* which concluded that the state would need more than twice the number of professional architects the two schools then existing in Florida could produce. Since the then Board of Regents now Board of Governors had no control over the private University of Miami and the program at the University of Florida was considered too large to expand further, a new school of architecture at one of the other eight universities was proposed.

At the same time, the 1974 version of Florida's Plan for Equalizing Educational Opportunity in Public Higher Education was completed. This document, along with the Federal Equalizing Educational Plan of 1974, called for increasing the number of Black students in the eight state universities, which were traditionally white schools, and for increasing the number of non-black students at the historically Black Florida A & M University. The establishment of a professional school that traditionally attracts very few other-than-White males provided a solution to both the desegregation of FAMU and the need to educate more architects to practice in the state. Consequently, the School of Architecture at FAMU welcomed its first students September 1975.

A few noteworthy of the Division of Architecture which houses the MScFM accolades follow:

- The National Architectural Accrediting Board (NAAB) accredited Master of Architecture enrolls students with a 4-year pre-professional undergraduate degree in architecture, or students with any undergraduate degree
- The NAAB-accredited Bachelor of Architecture accepts students with a 4-year pre-professional undergraduate in architecture. Students are admitted into the traditional 1-year 30-hour track (4+1) or the 2-year 30-hour commuter track for working professionals in the field with extensive experience
- In 1986, the eight-semester FAMU/USF (University of South Florida) Master of Architecture Cooperative Program was opened to students who had undergraduate degrees in other fields. This program received its own accreditation in 1992 and shortly thereafter became independent from the FAMU School of Architecture.
- Fall 2011, the SOA was renamed the School of Architecture + Engineering Technology (SAET) and organized into the Division of Architecture and the Division of Engineering Technology
- FAMU is unique amongst Historically Black Colleges and Universities (HBCU) in offering both NAAB-accredited Master of Architecture and Bachelor of Architecture degrees
- FAMU is unique in Florida and amongst HBCUs in offering either degrees in Facilities Management
- Within the guidance of the State and university, the SAET architecture program prides itself on its unique accomplishments related to diversity, equity, and access:
 - From 2007-2012, the architecture program led the nation in the production of African-American graduates with an undergraduate degree in architecture with more than 200 degrees awarded during that period, (*Diverse Issues in Higher Education*)
 - In 2017, the architecture program led the nation in the production of African-American graduates with a undergraduate degree in architecture (*Diverse Issues in Higher Education*) ([web link](#))
 - In 2007, the architecture program led the nation in the production of African-American graduates with a graduate degree in architecture (*Diverse Issues in Higher Education*) ([web link](#))
 - Since 2005/06, 70% of the architecture degrees awarded to African-American students in the State of Florida are graduates of FAMU (Florida Board of Governors), 83.3 % 2012/2013
 - More than 25% of the students in the FAMU architecture program are not African-American
 - The SAET female student population has increased more than 25% in the last 10 years
 - The SAET has a unique presence of African-American professors and administrators
 - According to the *2018 Directory of African American Architects* 23% of African American architects in Florida are FAMU graduates

- According to the *2018 Directory of African American Architects* 1 of 25 female African American architects in the US are FAMU graduates

Strength of the MScFM Program

Diversity, state-of-the-art facilities, and multi-disciplinary content provided by the School of Business & Industry, College of Social Sciences Arts & Humanities, College of Education, FAMU/FSU College of Engineering, and School of the Environment are strengths of the FAMU MScFM. As Facility Management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology, this collaborative approach provides future facility managers a broad spectrum of skills, experiences, and resources to help in making informed decisions. More specific, technical courses are offered through the SAET, business and financial management courses through SBI, environmental policy, sustainability, and practice through the School of the Environment, public administration through the College of Social Sciences Arts and Humanities, management and operation of healthcare facilities by the School of Allied Health Sciences, and management and operation of recreational facilities by the College of Education.

The MScFM was conceived as a hybrid degree program, delivering content online as well as in a traditional classroom setting. To date, two students have completed the program utilizing online courses only. This 49-hour program accepts undergraduate students from any discipline. However, students who have undergraduate degrees in architecture or business may have already completed core MScFM courses and need less than the 49. A minimum of 30 graduate-level hours is needed for the MScFM. Students have matriculated from undergraduate degrees in Architecture, Biology, Business Administration, Computer Engineering, Exercise Science, Facilities Management, Health Promotion, Interdisciplinary Studies, and Math. The collaborative multi-disciplinary curriculum and course offerings from varied academic units at FAMU is shown in Figure 2.

Figure 2. FAMU Schools or Colleges Offering MScFM Courses

Course Title	Credits	Program Offering Course
REQUIRED COURSES		
Principles of Space Planning	3	School of Architecture + Engineering Technology (SAET)
Advanced Topics in Digital Architecture	1	SAET
The Facility Management Profession	3	SAET
Intro to Technology of Architecture	3	SAET
Environmental Systems in Architecture	3	SAET
Facility Management	3	SAET
Construction Management	3	SAET
Facility Management Internship	1-3	SAET
Masters Seminar (Capstone)	3	SAET
Managerial Accounting Principles	3	School of Business & Industry (SBI)
Corporation Finance	3	SBI
Quantitative Methods & Bus Decisions I	3	SBI
Principles of Environmental & Occupational Health	3	School of the Environment
ELECTIVES		
Legal Issues & Environment	3	School of Business & Industry
Public Management	3	College of Social Sciences, Arts, & Humanities
Public Personnel Administration	3	College of Social Sciences, Arts, & Humanities
Seminar in Public Finance Administration	3	College of Social Sciences, Arts, & Humanities
Management & Op of Aquatic Facilities (AFO Certification)	3	School of Allied Health Sciences
Environment & Risk Management	3	School of the Environment
Environmental Policy	3	School of the Environment
Environmental Engineering Sustainability	3	FAMU/FSU College of Education
Sport & Leisure Facilities Management	3	College of Education
Ethics in Sport Management	3	College of Education
Principles of Real Estate	3	SBI and State University System of Florida (<i>online</i>)

E. Florida A&M University Mission Statement

Florida A&M University’s mission statement is located on the University’s website (www.famu.edu) and in the University’s Catalog, which is also available on the University’s website (www.famu.edu/index.cfm?catalog).

Statement of Mission: "Florida Agricultural and Mechanical University (FAMU) is an 1890 land-grant institution dedicated to the advancement of knowledge, resolution of complex issues and the empowerment of citizens and communities. The University provides a student-centered environment consistent with its core values. The faculty is committed to educating students at the undergraduate, graduate, doctoral and

professional levels, preparing graduates to apply their knowledge, critical thinking skills and creativity in their service to society. FAMU's distinction as a doctoral/research institution will continue to provide mechanisms to address emerging issues through local and global partnerships. Expanding upon the University's land-grant status, it will enhance the lives of constituents through innovative research, engaging cooperative extension, and public service. While the University continues its historic mission of educating African Americans, FAMU embraces persons of all races, ethnic origins and nationalities as life-long members of the university community."

Florida Agricultural and Mechanical University holds the following values essential to the achievement of the university's mission: scholarship, excellence, openness, fiscal responsibility, accountability, collaboration, diversity, service, fairness, courage, integrity, respect, collegiality, freedom, ethics, and shared governance.

F. School of Architecture + Engineering Technology Mission Statement

The mission of the School of Architecture & Engineering Technology, is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

The Master of Science in Architecture with a major in Facilities Management (MScFM) supports the school's mission by offering enriched academic content and work experiences that prepares students for leadership positions in Facilities Management. In addition, graduates from the MScFM understand their professional roles to ensure functionality of the built environment by integrating facilities, people, places, processes, and technology.

1. Program Definition

1. A Master's Degree

Level 5 Masters: <http://www.kbatraining.org/docs/Qualification-Framework-Comparison-Chart.pdf>

Level 5 qualifications recognize the ability to increase the depth of knowledge and understanding of an area of work or study to enable the formulation of solutions and responses to complex problems and situations. Learning at this level involves the demonstration of high levels of knowledge, a high level of work expertise in job roles and competence in managing and training others. Qualifications at this level are appropriate for people working as higher-grade technicians, professionals or managers. Level 5 qualifications are at a level equivalent to intermediate Higher Education qualifications such as Diplomas of Higher Education, Foundation and other degrees that do not typically provide access to postgraduate programs.

Specific course requirements for each area of knowledge shall be clearly specified and shall meet or exceed ADP standards; however, the program must address all the Outcomes as shown in 1 B.

The Florida A&M University School of Architecture + Engineering Technology (SAET) offers the following undergraduate degrees, Bachelor of Science in Architectural Studies, Bachelor of Science in Electronic Engineering Technology, and the Bachelor of Science in Construction Engineering Technology, as well as the National Architectural Accrediting Board (NAAB)-accredited Bachelor of Architecture. Graduate degrees offered include the Master of Science in Architecture with a major in Architecture (institutional assigned major code: 71181), NAAB-accredited Master of Architecture (71182) and the Master of Science in Architecture with a major in Facilities Management (71184). The Master of Science in Architecture with a major in Facilities Management was approved August 23, 2013 within the existing Master of Science in Architecture (federal CIP Code 04.0201).

The Master of Science in Architecture with a major in Facilities Management (MScFM) is a collaborative professional degree program between the School of Architecture & Engineering Technology (SAET) and the School of Business & Industry (SBI). The MScFM is for students who have an undergraduate degree from an accredited institution of higher learning and wish to acquire an industry driven professional degree that enables the graduate to perform facility management services. Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology. This MScFM track require independent thinking skills and the ability to solve challenging problems through research, investigation, analysis, and development of sound and learned solutions as well as include a presentation and defense.

1. B Master's Degree Programs

Master's Degree programs are not expected to cover all competencies but shall demonstrate the depth and breadth of FM knowledge by the following three outcomes: *Refer to Standard 6 for the detailed Requirements for this Degree Level.*

- 1 Graduates can understand the FM history, practice and profession**
- 2 Graduates can plan, manage and lead projects.**
- 7 Graduates are effective communicators.**

A more cursory coverage of the following outcomes shall include:

- 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

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.

The FAMU MScFM provides an overview of the profession. Comprehensive knowledge of the three recommended outcomes 1, 2, and 7 are satisfied through the multi-disciplinary and collaborative curricula. The recommended more cursory coverage of outcomes 3,4 and 5 are met as well. The FAMU MScFM prepares future facilities managers with the knowledge and skills to:

- Plan and organize facility function:
 - Interface with professionals and clients in the design and construction of facilities
 - Perceive design requirements, their impact on quality of life and environmental issues, and their value in the engineering of facilities
 - Prepare candidates to work at the local, state, national and international level.
- Manage personnel assigned to the facility function:
 - Coordinate efforts of in-house staff and consultants to perform specific aspects of the facilities management function.
 - Evaluate performance and support personnel development
 - Provide leadership
- Administer the facility function:
 - Synthesize interdisciplinary efforts and act across traditional administrative, planning, and operational boundaries to organize, coordinate, and control diverse facilities and management activities.
 - Analyze facilities needs and develop planning initiatives and effective implementation strategies that are responsive to specific current and projected facilities issues.
- Manage the Delivery of Facility Services:
 - Manage the process of facility development to complete projects on schedule and within budget, to a specified standard of quality
 - Coordinate development activities with ongoing operations to minimize disruptions and maintain the continuity of facilities functions and economic viability.

1. C Program Orientation/Emphasis

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 must 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.

The IFMA Foundation's Accredited Degree Program accredits and approves FM programs that demonstrate substantial academic preparation. The Master of Science in Architecture with a program major in Facilities Management (MScFM) is housed in the Division of Architecture. Many faculty teaching courses are either Registered Architects, Building Contractors, LEED -AP certified, or served as Facility Managers or Construction Managers in their careers.

FAMU's MScFM was structured to meet 5 of 11 2009 Accredited Degree Program (ADP) core competencies: **Leadership and Strategy** (Building delivery, Construction management, Maintenance and operation management); **Project Management** (Construction management, facility management function); **Finance and Business** (budgeting and acquisitions, accounting practices); **Quality** (architectural planning and design, strategic planning, building internal comfort); and **Environmental Stewardship and Sustainability** (environmental impact, sustainability). Academic content also meets the requirements of Facility Management Accreditation Commission (FMAC) Accreditation Standards for master's degree programs adopted October 2017.

The Florida A&M University (FAMU) MScFM emphasis is to graduate well-rounded, and technically-savvy competent professionals to ensure functionality of the built environment by integrating people, place, process, and technology. The SAET's motto in describing degree programs in Construction Engineering Technology, Electronic Engineering Technology, Architecture, and Facilities Management is Design, Build, and Manage.

In the State of Florida, only FAMU currently offers a degree program in Facility Management at the undergraduate level. The multi-disciplinary track at the master's level is unique as well. The facility management function consists of a distinct set of responsibilities. The FAMU MScFM academic content include:

- Architectural planning and design
- Energy use analysis and planning
- Environmental Impact and strategic planning
- Budgeting
- Building delivery and construction management
- New technologies of enclosed buildings

IFMA encourages each program to retain its uniqueness while providing the basic curricular structure needed to assure that its graduates are truly prepared for real-world careers in Facility Management. According to the 2017 Accreditation Standards, "Master Degree programs are not expected to cover all competencies but shall demonstrate the depth and breadth of FM knowledge by addressing Outcomes 1, 2, and 7". Therefore, the FAMU's MScFM satisfies the competencies for Outcomes 1, 2, and 7, and addresses competencies 3c, 3e, 3h, and 5a.

Outcome 1: Graduates can understand the FM history, practice and profession

Competency 1a: The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)

Outcome 2: Graduates can plan, manage, and lead projects

Competency 2a: The student can manage project initiation, planning, execution, control and closeout (ways of knowing: using scope, quality, schedule, budget, resources and risk) demonstrated via internship, case studies, and simulation

Outcome 7: Graduates are effective communicators

Competency 7a: The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Outcome 3: Graduates can manage building systems, facility operations, occupant services and maintenance operations

- Competency 3 c: 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.
- Competency 3 e: The student can interpret, apply, and recommend quality improvement programs.
- Competency 3 h: The student can demonstrate awareness of sustainable stewardship principles applied to the built environment.

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

- Competency 5 a: Using case studies and or internship experiences the student can analyze data, create budgets using standard principles of accounting, employ risk management practices and create reports that align with best practices for the financial management of facilities.

Curriculum

In the curriculum, *inquiry*, *vision*, and *intervention* as concepts become themselves the objects of inquiry through the exploration of their relationships with various value positions. *Inquiry* involves having an inquisitive mind, preparing for decisions with insightful questions and rigorous research, and being interested in identifying patterns and principles. *Vision* involves imagination and creativity and the design of environments that establish direction, energize resources and people, that empower, enable, and inspire individuals and organizations. *Intervention* involves understanding the effects and consequences of decisions, especially building design decisions that can affect and are affected by a wide range of contexts such as ecology, energy, sustainability, human behavior, health and safety, productivity, culture, aesthetics, theory, economics, sociology, and politics. The MScFM provides pathways for students from diverse academic backgrounds. Core courses are as follows:

Required Courses

ARC 2161	Advanced Topics in Digital Architecture	1	(BS Architectural Studies)
ARC 2470	Introduction to Technology of Architecture	3	(BS Architectural Studies)
ARC 4610	Environmental Systems in Architecture	3	(BS Architectural Studies)
ARC 5018	Facility Management	3	
ARC 5289	Facility Management Profession	3	
ARC 5291	Principles of Space Planning	3	(BS Architectural Studies)
ARC 6278	Construction Management	3	
ARC 6932	Masters' Seminar (<i>Capstone</i>)	3	
ARC 6949	Coop Internship or MAN 5940 MBA Internship	3	
ACG 2071	Managerial Accounting Principles	3	
EVR 5062	Principles of Environmental & Occupational Health	3	
FIN 3403	Corporation Finance	3	
QMB 2100	Quantitative Methods for Business Decisions 1	3	

Electives

<i>Environmental Stewardship Electives (select 2)</i>	6
ENV 5617 Environmental Engineering Sustainability	

EVR 5864 Environment & Risk Management
 EVR or EVS Graduate Level Electives
 Graduate Real Estate
 Graduate Sustainability
 ARC 5000-6000 Urban Design

<i>Leadership Strategy Elective (select 2)</i>	6
BUL 5323 Legal Issues & the Environment	
PAD 5025 Public Management	
PAD 5417 Public Personnel Administration	
PAD 6227 Seminar in Public Finance Administration	
SPM 5108 Sport & Leisure Facilities Management	

<i>Total Number of Hours</i>	49*
<i>Minimum Graduate-Level Hours needed for MScFM</i>	30

Note. Students entering the MScFM with an undergraduate degree in architecture have completed ARC 2161 (3 credits), ARC 2470 (3 credits), ARC 4610 (3 credits) and design studio (3 credits), therefore reducing their hours to degree. Students entering the MScFM with an undergraduate degree in Facilities Management have completed ARC 2161 (3 credits), ARC 2470 (3 credits), ARC 4610 (3 credits), design studio (3 credits), ACG 2071 (3 credits), FIN 3043 (3 credits) and (QMB 2100 (3 credits), therefore reducing their hours to degree. Students must still complete 30 graduate-level hours to earn a masters degree at FAMU and additional hours, if necessary, are selected upon conferring with the Director of Student Services.

Course Descriptions

ACG 2071 Managerial Accounting Principles (3). Study of fundamental principles, concepts, and functions of external reporting.

ARC 2161 Advanced Topics in Digital Architecture (3). Course introduces students to the use of digital media for architectural design through specific drawing and modeling applications. The computer as a concept, the computability of design, and computers as design/modeling tools are areas of emphasis. Generation, manipulation, and reproduction of two-dimensional and three-dimensional architectural models using digital media are stressed. CADD and Revit platforms are utilized.

ARC 4610 Advanced Environmental Technology (3). This course considers thermal, electrical, mechanical and conveyance systems and their integration into the architectural design process. This course familiarizes students with the integrated building technology systems (thermal, electrical conveyance and mechanical systems) within the architectural design process. Students will gain an understanding of these behaviors and systems (sanitary water supply, sewage disposal conveyance heating, ventilating, air conditioning, and passive and active sustainable systems) and practices for creating and controlling interior environments, building envelopes & conditions.

ARC 5018 Facility Management and Maintenance (3). Role of the facility manger in acquiring new facilities and in managing and maintaining existing building stock is covered. Focus of the course includes

(1) architect selection strategies, (2) management of the building delivery process from a client perspective, (3) move-in logistics, (4) evaluation of space needs and effectiveness, (5) renovation, and (6) facility maintenance planning.

ARC 5289 Facility Management Profession (3). This is the introduction to and overview of Facility Management. Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, planning, engineering, architecture, construction management, facility system technical services (HVAC, electrical, plumbing), business support services (financial management, IT, HR, Strategic Planning). The course is an overview of the facility management profession. It also introduces students to the diverse roles and responsibilities of facility managers in public and private organizations.

ARC 5291 Principles of Space Planning (3). This course is a study of the various phases of building delivery and design process, and of different approaches to ordering in a systematic fashion. Students will use one such systematic approach in the investigation and development of design solutions for a project of moderate scale and complexity. Application of orderly design processes to building projects of moderate complexity and scale.

ARC 6278 Construction Management (3). This course includes: 1). a review of basic math; 2). quantity recognition from working drawings; 3). discussions of various units of measure and productivity rates; and 4). current estimating software. Study of the processes, techniques and tools associated with construction management in a Green Building environment. Topics include the role of the project manager and other key personnel; the elements and main objective of construction management; the construction industry, construction practices in sustainability; project cost management; project planning and scheduling; resource management and project financial management. Primavera and Prolog Management Software are introduced in this course as tools to understand the relationships of material, equipment, manpower and contractual obligation to the stakeholders.

ARC 6932 Masters' Seminar (3). This is the capstone for the Facility Management Program and demonstrates competence in the three major discipline areas of architecture, business and construction. Successful completion of the Capstone requires a demonstration of competency in critical thinking skills, technical expertise, and research in the four major core units of (a) planning and organizing facility function, (b) managing personnel assigned to the facility function, (c) administering the facility function, and (d) managing the delivery of facility services. Comprehensive examination of the art and science of formulating, implementing and evaluating policies and procedures that enable organizations to achieve short- and long-term objectives are also course objectives.

ARC 6949 Internship or MAN 5940 MBA Internship (1). By permission only. Full-time affiliation as an intern with a School of Architecture + Engineering Technology or and Engineering Technology School of Business and Industry approved organization or institution.

EVR 5062 Principles of Environmental and Occupational Health (3). Discussion of the various ways in which environmental factors influence human health as well as an examination of technology and current research; includes physiological interaction; response to hazards.

FIN 3403 Corporation Finance (3). Course focuses on financial management cases and provides students with an active learning experience. Case work is based on concepts learned in introductory corporate

finance. Topics discussed include measuring and interpreting cash flow performance, financial forecasting and turnaround management; capital investment and cost of capital; capital structure, dividend policy and firm valuation.

QMB 2100 Quantitative Methods for Business Decisions I (3). Prerequisite: MAC 1104. Major Topics: probability theory; random variables; hypothesis testing; confidence intervals; small sample methods; correlation; simple regression.

ELECTIVES

SPM 5108 Sport & Leisure Facilities Management (3). This course takes a comprehensive look into the discipline of public assembly facility management and event planning. Sports activities are held in large facilities that create unique opportunities for the manager. Various events held in such facilities also create unique opportunities; those are examined in depth.

BUL 5323 Legal Issues and Environment (3). Fundamental concepts of business law as they apply to varied and changing global business environments.

ENV 5217 Environmental Engineering Sustainability (3). This course explores theory in the field of environmental sustainability and green engineering; material will also cover sustainability in relation to other disciplines but will focus on environmental engineering concepts.

EVR 5864 Environmental Policy & Risk Management (3). This course is a series of lectures and case study presentations which illustrates the principles involved in environmental health policy, risk management, and risk decision-making.

PAD 5025 Public Management (3). Meaning, content, significance, and evolutionary development of public administration; administration and politics; patterns of management; and legal bases of administration, accountability, and administrative responsibility.

PAD 5417 Public Personnel Administration (3). Basic problems encountered by government executives in recruiting, maintaining, and developing personnel, such as career development, leadership, motivation, and employee relations.

PAD 6227 Seminar in Public Finance Administration (3). Review of administration, organization, methods, problems, and policy implications of execution of governmental fiscal policies through budgetary formulation and revenue collection.

Course Mapping Overview

The FAMU MScFM Course Map found on page 25 supports the premise that facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology. The Course Map identifies the selected FMAC Outcomes 1, 2, and 7, and competencies 3c, 3e, 3h, and 5a in the required courses in the curriculum. In the State of Florida, only FAMU currently offers a degree program in Facility Management at the undergraduate level. The multi-disciplinary track at the master's level is unique as well. The facility management function

consists of a distinct set of responsibilities. As aforementioned, the FAMU MScFM academic content include:

- Architectural planning and design
- Energy use analysis and planning
- Environmental Impact and strategic planning
- Budgeting
- Building delivery and construction management
- New technologies of enclosed buildings

FAMU MScFM Outcomes & Competencies Addressed	ARC 2161 Advanced Topics Digital ARC	ARC 2470 Intro Technology of ARC	ARC 4610 Environmental Systems in ARC	ARC 5018 Facility Management	ARC 5289 Facility Management Profession	ARC 5291 Principles of Space Planning	ARC 6278 Construction Management	ARC 6932 Masters' Seminar	ARC 6949 Internship	ACG 2071 Managerial Accounting Principles	FIN 3403 Corporation Finance	QMB 2100 Quantitative Methods Bus Decisions I	EVR 5062 Principles of Environmental Occupational Health
OUTCOME 1: Graduates understand the FM history, practice and profession													
Competency 1 a: The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)					U								
OUTCOME 2: Graduates can plan and manage projects.													
Competency 2 a: 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		K	A	A	A				
OUTCOME 3: Graduates can manage building systems, facility operations, occupant services and maintenance operations													
Competency 3 c: 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)		K	U				U	A	A				
Competency 3 e: The student can interpret, apply, and recommend quality improvement programs. (ways of applying)				U				A					
Competency 3 h: The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)		U	A										A
OUTCOME 5: Graduates apply fiscal management tools to the Facility program and organization											A		
Competency 5 a: The student uses analysis, budgeting, accounting, risk management, and reporting to demonstrate applications for facility financial management (ways of understanding)										A		K	
OUTCOME 7: Graduates are effective communicators									A				
Competency 7a: The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.	A			A	A	A		A	A				

Ways of K=Knowing U=Understanding A=Applying

STANDARD 2

RESOURCES

2. A Administration

The School of Architecture + Engineering Technology (SAET) complies with all tenets of Standard 2. Florida A&M University's (FAMU) Division of Academic Affairs is responsible for overseeing the academic mission of the University. More specifically, the Provost and Vice President for Academic Affairs has oversight of 54 bachelor's degrees, 29 master's degrees, 3 professional degrees and 12 doctoral degrees. The three professional degrees include the J.D., Pharm.D., and the Doctor of Physical Therapy. The 12 doctoral degree programs include 11 Ph.D. degrees and 1 Doctor of Public Health (DrPH). The Ph.D. degrees include the following: biomedical engineering, chemical engineering, civil engineering, electrical engineering, mechanical engineering, industrial engineering, pharmaceutical sciences, physics, educational leadership, environmental science, and entomology (see Appendix A).

The Provost has the ultimate responsibility for maintaining and enhancing an environment in which students and faculty can accomplish their academic goals while carrying out the University's motto of "Excellence with Caring." The administrators and staff in the Division of Academic Affairs, in concert with the deans and faculty within the 14 schools and colleges, administer and review existing programs; develop new programs; review, revise, and develop academic policies and procedures; and steward the financial and physical resources of all credit and non-credit instructional programs.

2. B 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.

During the 2017-18 academic year, the Dean of SAET is responsible for 27 full time faculty members, 2 adjuncts, 2 Research Associates, and 6 full-time staff. With respect to the School's academic unit, the SAET has two divisions; Architecture, and Engineering Technology. As previously stated, the Division of Architecture offers the 4-year pre-professional Bachelor of Science in Architectural Studies, 5-year NAAB professionally accredited Bachelor of Architecture, and the 4+2- or 3.5-year NAAB professionally accredited Master of Architecture, and the Master of Science in Architecture with a major in Facilities Management. The Division of Architecture is housed in the state-of-the-art, Walter L. Smith Architecture Building. The Division of Engineering Technology occupies Unit A of the historic Benjamin Banneker Technology Center.

With respect to academic support services, the School has an Office of Student Services, which includes undergraduate and graduate recruitment, admission, advisement (retention and progression), graduation, and alumni support. Additional support services include a library, Computer Labs with pc's, a mechatronic lab, model and construction lab, fabrication and 3-D Digital lab. Additionally, SAET's Assessment Coordinator, who is responsible for the assessment of instructional programs, research, and community service, reports to the dean. The administrators of the set, communicate, and deploy SAET's values and performance expectations.

The academic administrative structure of the school consists of the Dean, Director of Architecture, Director of Engineering Technology, Construction Engineering Technology Coordinator, Electronic Engineering

Technology Coordinator, undergraduate Architecture Coordinator, Graduate and Professional Architecture Coordinator, and Master of Science in Architecture with a major in Facilities Management Coordinator.

Since the inception of the MScFM Dr. Ronald B. Lumpkin has been the key architect and coordinator of the program, working in conjunction with Dr. Roscoe Hightower, Professor in SBI. The multi-discipline content of the MScFM is achieved by collaboration with administration and faculty in the FAMU College of Social Sciences, Arts, and Humanities; FAMU/FSU College of Engineering; College of Education; and the School of the Environment.

Dr. Lumpkin, in coordination with the SAET Dean, Director of Architecture and Director of Engineering Technology provide the appropriate leadership and administrative support for the Facilities Management program. Some of the specific activities associated with administering the Facilities Management program that Dr. Lumpkin is involved, includes:

1. Program Planning & Development
 - a. Developed application packet and documents for new degree program
 - b. Managed approval process from SAET to university level from application to approval
 - c. Aligned potential program focus based on IFMA 2009 Standards of Accreditation to collaborative strengths from other FAMU academic programs
 - d. Coordinated with the developing undergraduate SBI FM degree program
2. Curriculum Development & Design
 - a. Developed initial course map, aligning course outcomes with IFMA competencies
 - b. Modified or created new courses to meet competencies
 - c. Developed course syllabi for all courses taught in the SAET
 - d. Coordinated with the developing undergraduate SBI FM degree programs
 - e. Incorporate online course selections as the MScFM was conceived as an online degree program
 - f. Curriculum management
3. Recruitment
 - a. Marketing to in-house undergraduate architecture students
 - b. Marketing to FAMU SBI undergraduate FM students
 - c. Marketing to undergrad Environmental Science students
 - d. Marketing to undergrad students in Interdisciplinary Studies
 - e. Establishment of Graduate Feeder Programs, Academic Common Market, and Caribbean graduates as FAMU can award Latin and Caribbean (LAC) scholarships providing these students with in-state tuition
 - f. Direct summer camps for middle and high school students
4. Academic Administration
 - a. Intrusive academic advisement utilizing electronic monitoring and tracking of student progress to insure completion in a timely manner; selection of courses (hybrid, online, or traditional)
 - b. Retention: grade change, appeals, letters of recommendation
 - c. Graduation certification
 - d. Gather employment sites on graduates
 - e. Coordinate School Climate Surveys of graduates with Dr. Sang Park
 - f. Internship coordinator
5. Linkages to the Profession

- a. Maintain IFMA membership and connections
- b. Distribute IFMA post to current students and/or graduates
- c. Member of the SBI Facility Management Accrediting Commission (FMAC)

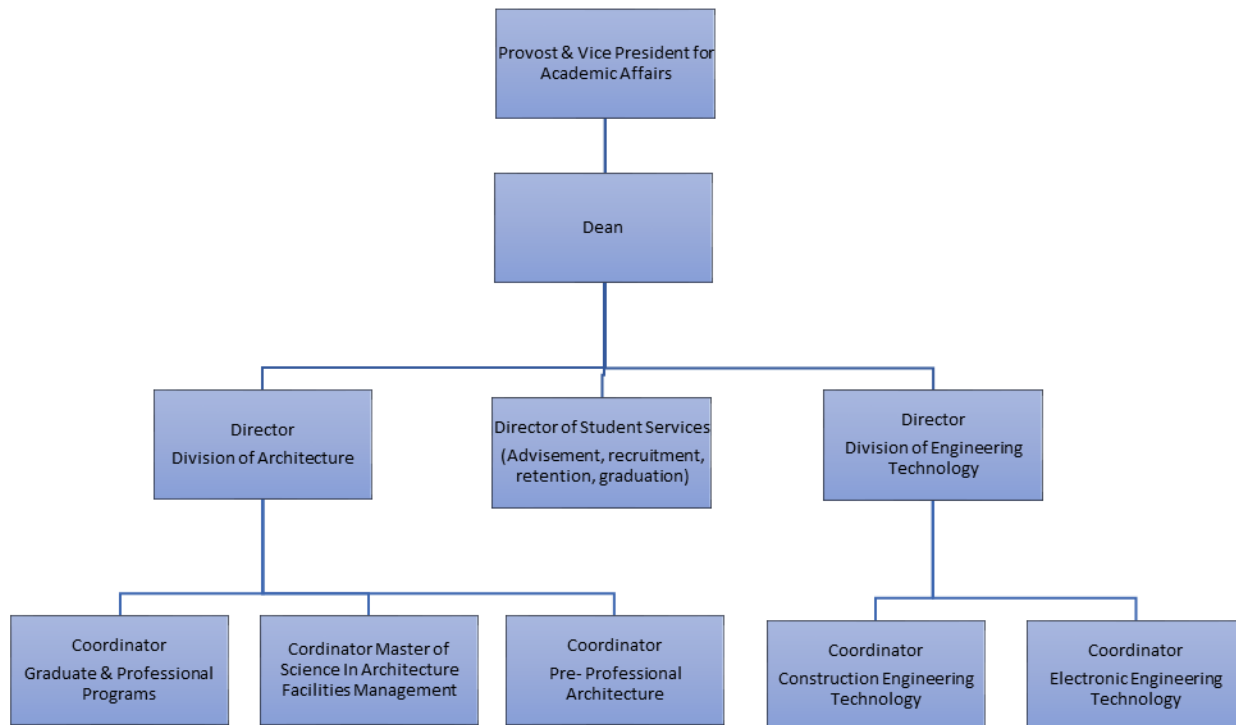
2. C Administrative Leadership

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.

As aforementioned the Vice President for Academic Affairs and Provost has the ultimate responsibility for maintaining and enhancing an environment in which students and faculty can accomplish their academic goals while carrying out the University’s motto of “Excellence with Caring.” The administrators and staff in the Division of Academic Affairs, in concert with the deans and faculty within the 14 schools and colleges, administer and review existing programs; develop new programs; review, revise, and develop academic policies and procedures; and steward the financial and physical resources of all credit and non-credit instructional programs. The administrative structure of the SAET is shown in Figure 2.

Figure 3. Administrative Structure of the SAET



2. D 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.

The Master of Science in Architecture with a program major in Facilities Management (MScFM) is aligned with the mission and goals of Florida A&M University. Our specific mission, as stated in Section F above is an extension of the fundamental university mission, to further the education of African American students and residents of the State of Florida. Therefore, at the most fundamental level, the architecture program contributes to its institutional context in a cooperative manner.

In addition, the MScFM contributes to the university's ability to meet the State of Florida Board of Governors Performance Metrics ([web link](#)), more specific to graduating students in Areas of Strategic Emphasis and STEM. In Florida graduates from the SAET are STEM. Graduate degrees awarded by the SAET including the MScFM contribute to FAMU meeting or exceeding this measure. As such, the university sees value in the MScFM, and the community supports this degree. Notable contributions:

- The Provost's Office allocates resources and faculty training for the MScFM to be an online degree program
- In addition to support provided by SBI, faculty travel grants are available to FM faculty through the Division of Academic Affairs Faculty Travel Grant Program, which is designed to provide financial assistance to FAMU presenting research findings.
- The University also supports FM faculty seeking professional development leave who have accumulated three or more years of service. Sabbatical leave is also available to faculty who have at least six years of full-time service in the State University System.
- The Division of Academic Affairs also creates special initiatives each year designed specifically to support faculty in their endeavors towards teaching, research, and service. The Provost's Digital Learning Initiative was implemented in 2017 with the goal of providing faculty an opportunity to leverage digital technology with evidence-based teaching practices.
- The Office of Career Development provides students with internship and permanent placement opportunities in facilities management
- Dean and faculty in the School of the Environment teach elective courses for Webcast in the architecture building.
- Deans and faculty in the School of Business & Industry (undergraduate accredited FM), College of Education, FAMU/FSU College of Engineering, School of Allied Health provide curriculum-required and elective courses
- The SAET Graduate Council has been commissioned by the Dean to for faculty to discuss and implement critical curriculum issues, assess the graduate programs and make recommendations for improvement.
- The SAET Director of Student Services continues to advise Facility Management students at the undergraduate and graduate level, produce marketing and promotional materials, as well as develop transfer and feeder programs
- Annually, the SAET Job Fair hosts companies that recruit our graduates
- Annually the SAET supports faculty and student participation at IFMA's World Workplace

2. E 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.

Figure 4. Roles and Qualifications of SAET Support Staff

Name	Role	Qualifications
Bennett, Mary	Librarian, SAET Library	Association of College and Research Libraries (ACRL) Certified
McQueen, Portia	Librarian, SAET Library	ACRL Certified
Brewster, Bertina	SAET Registrar	BS Criminal Justice
Cloud, Sandra	SAET Sr. Administrative Assistant	15+ years experience
Perkins, Felicia	SAET Administrative Assistant	15+ years experience
Williams, Shelia	SAET Administrative Assistant	10+ years experience

In addition to support personnel employed by the SAET, the MScFM enjoys all the benefits of being a collaborative professional degree with the FAMU SBI. As such, the MScFM students have access to SBI's Office of Student Services, faculty resources and expertise, a well-established internship and job placement program, Big Bend student-run IFMA chapter, as well as the 138,646 gross square feet SBI facility.

2. F. 1 Facilities and Equipment

The FAMU Walter L. Smith Architecture building was first constructed during 1983-1984 and occupied in January 1985. In 1995 authorization was given by the Florida Board of Regents to proceed with plans for the renovation and expansion of the School of Architecture building. Similar to the original design, the open display of the structural and mechanical systems was continued so that the building could continue to serve as a teaching tool. In 2001, an \$11.5 million renovation/ expansion was completed. The total facility is 102,526 gross square feet that provides 67,871 net square feet.

Walter Smith Architecture Building

Space Category	SF
Classrooms and Class Labs	4,220
Studios	28,165
Meeting Rooms	7,948
Student Lounge	205
Library	4,299
Computer Labs	3,432
Exhibition/Gathering	2,368
Campus Support Services	1,487
Atriums (2)	8,100
Office	7,647
Total	<u>67,871</u>

GSF = 102,526

The new design “squared off” the building to the west and converted the two courtyards into interior atrium spaces. This expansion provided the following benefits:

- The building is more secure and has a more controlled perimeter because all circulation through the building is now interior circulation.
- The transformation of the courtyards into interior atriums has provided space for pin-ups, formal and informal gatherings, and display of work; they have become internal “streets.”
- Studios are larger and more accessible, thus allowing for more inaction between various studio sections and levels.
- The administrative offices are more centrally located, allowing for more opportunity for “management by walking around” and access to visitors, faculty, and students.
- A wireless network, allowing faculty and student convenient access to the Internet at any time, supports the entire building.
- The faculty and administrative offices along with the library and classrooms are wired with fiber-optical connections providing a secure, 100 mbps computer network throughout the building.
- Computer labs have been expanded to include a student lab, dedicated teaching lab and distance learning spaces.
- The architecture library has nearly doubled in space to over 7,700 square feet.

The first floor includes the following facilities:

- Wing A is composed of an informal assembly area “under the bridge,” a 50-seat multimedia lecture room, a 30-seat multimedia classroom, a dedicated archive room, and a student organization office/store.
- Wing B houses the Architecture Library.
- Wing C is occupied by a studio (currently the Team Room) and a 100-seat lecture hall.
- Wing D houses the Digital Fabrication/ Printing Lab and the M.Arch/ B.Arch studio.
- Wing E houses the Building Construction Lab
- The north atrium is located between Wings B and C while the south Atrium is between Wings C and D.

The second floor includes the following facilities:

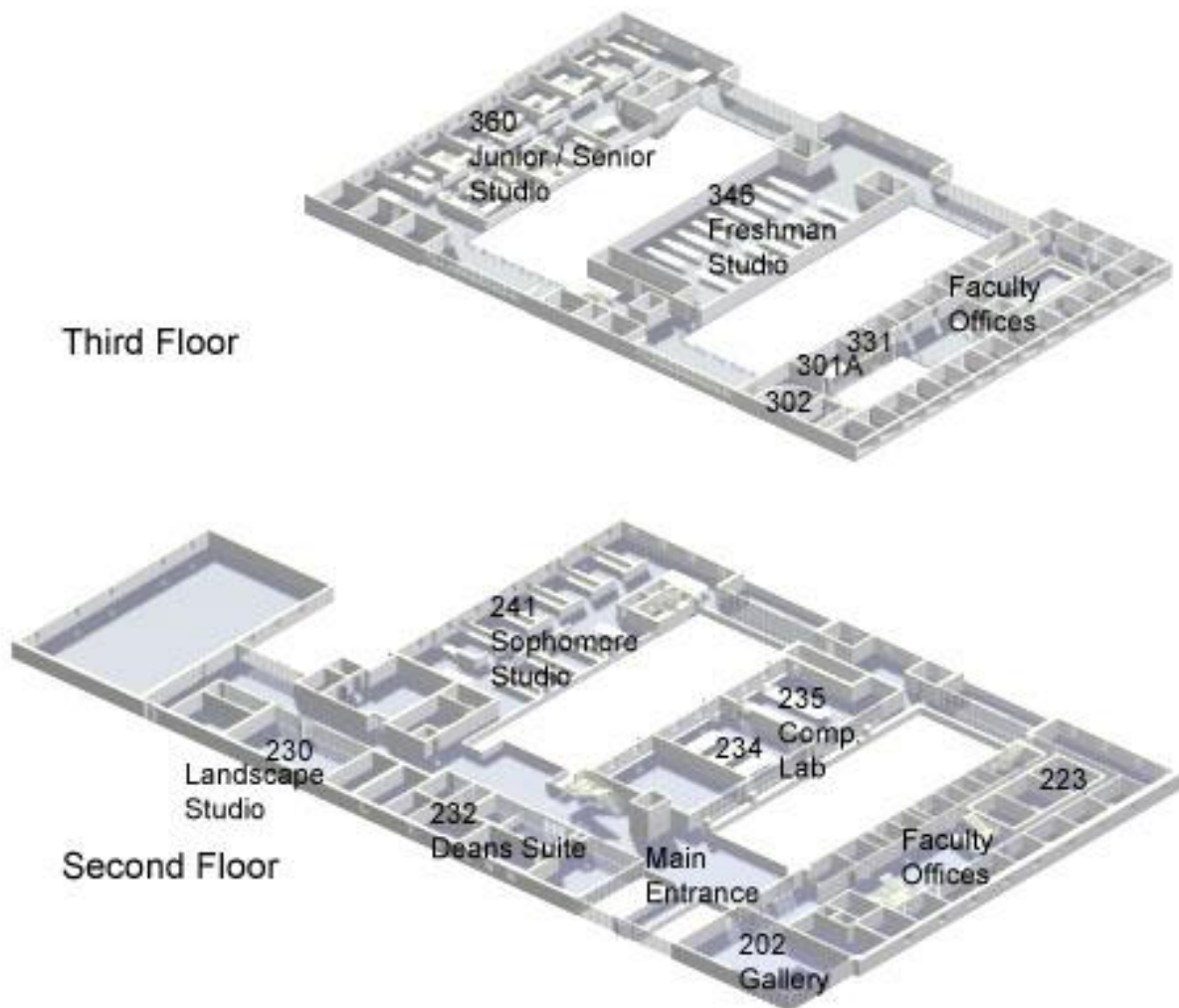
- Wing A houses the deans’ suite and administrative staff offices, and the Mechatronics Lab
- Wing B includes a reception area, faculty and support staff office, employee lounge/ mail room, a small conference room, and the SAET gallery.
- Wing C houses a flexible classroom/ meeting room, teaching and student computer labs, student organization office, and vending/lounge area.
- Wing D houses undergraduate studio space.

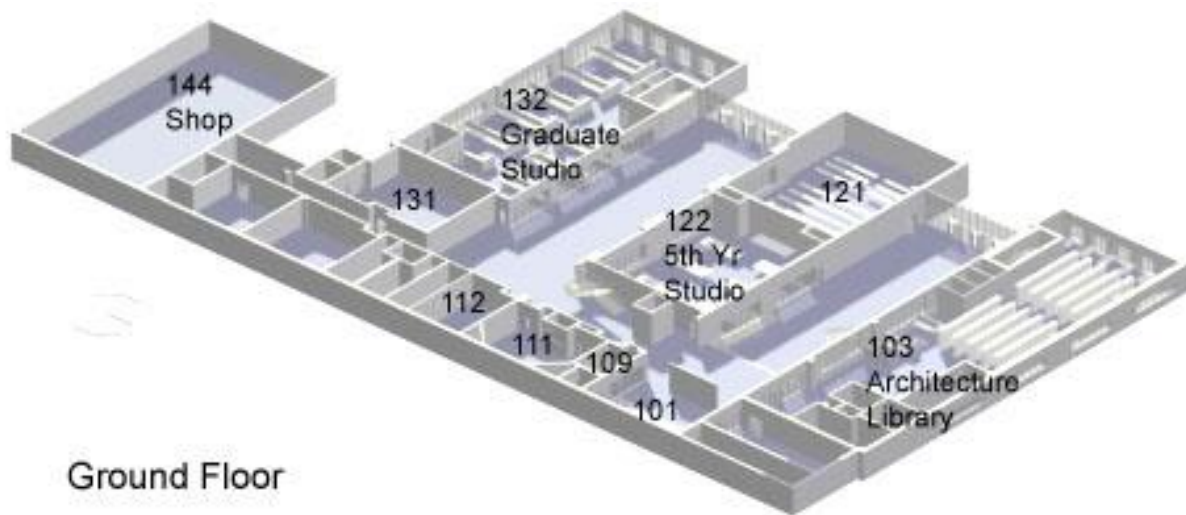
The third floor includes the following:

- Wing B houses faculty and support staff offices and seminar rooms.

- Wing C is first-year studio space.
- Wing D houses undergraduate studio space.

Figure 5. Organizational Plans of the Architecture Building





2. F. 2 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.

Digital Fabrication Lab

Large format plotting, up to 36" in width, is now available to students and faculty. Students make online reservation for the printing service and use of the two laser cutters. Large size flatbed scanners are also available in the student lab and faculty workspace. They also have access to a high-resolution slide scanner for digitizing their personal image collections.

Model & Construction Lab

The Model Lab is a building construction facility that is in the south wing of the School of Architecture & Engineering Technology complex. It has approximately 4500 square feet of work and equipment space for projects that include model building, furniture, sculpture and construction projects. The lab's ceiling is more than 30 feet. Major equipment includes: Table Saw, Radial Arm Saw, Panel Saw, Miter Saw, Band Saw, Coping Saw, Scroll Saw, Sanders, Drill Press, Router Table, Planer, Jointer, Arc Welder, Resistance Welder, Oxy/Acetylene Welder, Bending Break, Metal Lathe, Mill, Horizontal Band Saw, Chop Saw, Beverly Shear, Mortar and Concrete Mixer, Generator and Generator Welder and various hand and power tools. You must be a registered SAET student and must complete Shop Orientation before you can use the shop. Orientation takes about 2.5 hours and is usually completed in the first-year studio in the fall semester. Orientation can be scheduled in groups as need throughout the year. Hours are 9 am- 12 noon and 2 pm -5 pm. No student can work in the shop alone or unsupervised.

University Libraries

The Architecture Library in the Walter L. Smith Architecture building, Journalism Library, Science and Research Center Library and Coleman Library provide traditional print and non-print resources, electronic access to full text books and journals, bibliographic and abstracting databases, and numerous online and traditional services, which are readily accessible to on-campus and off-campus students and are sufficient in scope to support SAET's degree programs. Thus, SAET's library in conjunction with other University libraries are adequate for high quality operations and instructional delivery for students and faculty. Maintaining a robust and well-staffed library is one requirement for NAAB accreditation for the SAET Bachelor and Master of Architecture degrees. More detailed information is provided in Section 2.I.1 in this document.

Architecture Library

The Library occupies a space with 7,725 net square feet, which provides adequate space for housing the print collection, providing student study spaces, and providing access to computers, and other equipment. The space has optimum visibility and is strategically placed within the School. The Library is spacious, well maintained, comfortable, and inviting to students, faculty, and staff. Recent upgrades and improvements have served to enhance the access to resources and the overall study environment. Additional electrical outlets were installed near wall adjacent, study tables, so that students may charge their laptops, and other mobile devices. New task chairs were purchased for the study tables in 2016. The monitors on the student use computers were upgraded in size to 27-inch monitors. The student use computers were replaced with new Dell mini-computers in 2016. There is room within the Library for storage, and storage is available in Coleman, the main library, if the need arises. A group study room, equipped with a wall mounted monitor, is available for student use. Carrels are available for individual study. Faculty may use the conference room, which is equipped with two 70-inch wall mounted monitors, to teach. All spaces comply with the American Disabilities Act.

2. F. 3 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. The FAMU Office of Facilities, Planning, Construction, and Safety in 2018 updated the space plan of the Walter L. Smith Architecture building. Now there are assignable spaces to accommodate current and future graduate facilities management students. According to the SAET Recruitment Plan, each cohort will be limited to 15 students. Existing space and equipment is adequate for current and future MScFM enrollment.

2. G Computer Systems

The SAET network provides both wired and wireless full-time high-speed network coverage throughout all five wings of the building. Fiber-optic cable tethered workspaces offer broad bandwidth and high throughput for each networked station and other network devices, such as group printers. The wireless network covers all areas of the building, and provides students, faculty and staff great flexibility in accessing information - anywhere and anytime in the building.

2. G. 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.

Student Computer Labs

There are two computer labs in the SAET available to all enrolled students. The Teaching Lab has 24 high-end workstations and the Student Lab with 12 high-end workstations. All workstations are networked and equipped with the necessary software for Architecture and Facility Management teaching or research purposes such as Autodesk Revit Architecture 2018, MS Office, Photo Shop, SketchUp, etc. The Student lab is available during library hours and is accessible via students' programmed security fob. The hardware and software are maintained by a full-time staff member who has the Master in Computer Engineering and Software Design.

The SBI has software on its computers to support the financial applications aspects of the undergraduate and graduate Facility Management programs.

Distance Learning Lab

To support the online MScFM, the SAET has recently developed a Distance Learning Conference room adjacent to the Teaching Lab and two additional Distance Learning Classrooms on the ground floor. The systems provided teachers and remote sites high quality bi-directional audio and visual communication.

Faculty Workstations

Each faculty and staff member's personal workstation is configured to access networked output centers (two) for unlimited black and white printing. Color printing is limited with a quota assigned to each faculty and staff member. High volume and high-speed digitizing of paper materials is available to all faculty and staff members. It allows users to convert papers or books to USB storage devices conveniently.

2. H Financial Resources

2. H. 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.

The major sources of funding for Florida A&M University and the SAET Division of Architecture programs, including the Master of Science in Architecture with a major in Facilities Management (MScFM) are a combination of allocations from the State of Florida and student tuition. Moneys from these sources are provided annually through the University to the academic units on a fiscal calendar of October 1 -

September 30. As shown in Table 2, these funds are used to support virtually all components of the School, including faculty and staff salaries, operating and maintenance expenses, travel, and capital equipment purchases. Table 3 shows the budget history of the school from fiscal year 2012 to 2018.

Figure 6. SAET 2017-2018 Budget

Budget Category	Dollar Amount
Salary	\$3,407,968.00
OPS	\$18,201.00
Expense	\$60,000.00
Mandatory	\$33,275.00
OCO	\$0.00
TOTAL	\$3,519,444.00

Figure 7. SAET Budget History 2012 through 2018

	2012	2013	2014	2015	2016	2017	2018
Salary	2,978,308	2,970,256	2,953,196	3,113,805	3,368,519	3,333,659	3,407,968
OPS	269,366	149,476	158,616	180,605	118,446	85,881	18,201
Expense	118,570	329,396	456,341	345,246	207,554	195,241	60,000
Mandatory	48,479	55,063	58,330	25,536	24,843	25,556	33,275
OCO	24,315	20,802	0	0	0	106,950	0
Total	3,439,038	3,524,993	3,626,483	3,665,192	3,719,362	3,747,287	3,519,444

Additional information is available (e.g. a comparison of the SAET budget to other FAMU professional programs and scholarship/ financial assistance funds). But, due to the sensitive nature of fiscal information, we would rather provide the information as either a direct email to the Chair of the visit or as hard copies during the visit.

2. I Library Services

The following section was compiled by Dr. Brenda Wright, Associate Dean, FAMU Libraries to support MScFM 2018 accreditation. It was originally titled, "Library/Information Resources in Support of Facilities Management".

2. I. 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.

Library resources and services are sufficient to ensure the achievement of the goals and outcomes of the Facilities Management program. The [University Libraries](#) provide collections of current books, periodicals, and pertinent reference materials, which are readily accessible to students and are sufficient in scope to support the curriculum. The Samuel H. Coleman Memorial Library (the main library) and branch libraries provide traditional print, as well as electronic access to full text databases, e-journals, e-books, and audiovisual materials. Library collections contain materials that support the Facilities Management program directly and indirectly through interdisciplinary collections.

The following table shows library holdings targeted for use by the general campus and community population, as well as holdings targeted to support facilities management.

Figure 8. Library Holdings for the General and Facilities Management

Library Resources	General	Facilities Management
Holdings	1,638,853	15,506
Books	1,407,354	1,307
Audiovisual	95,458	51
Electronic Books	173,004	344
Journals/Serial	116,217	37
Electronic Journals	90,192	30
Electronic databases	320	11

The University maintains borrowing agreements and memberships that mutually enhance resources availability for FAMU and other Florida learning communities. Partnerships are with the [State University Libraries of Florida](#), the [Florida College System Libraries](#) and the [State Library of Florida](#). The Libraries are members of the [Florida Academic Library Services Cooperative \(FALSC\)](#) which provides services to the users and staff of Florida’s public college and university libraries. Florida public postsecondary college and university libraries provide services directly and indirectly to students and faculty of State of Florida postsecondary institutions.

Onsite and reciprocal borrowing privileges to students and faculty at all 40 Florida public institutions of postsecondary education is provided. Services include [UBorrow](#), an interlibrary loan system between the 40 public postsecondary institutions and daily document delivery via statewide courier to over 250 libraries in the [Florida Library Information Network \(FLIN\)](#).

Budget

Table 4 illustrates the University Libraries’ funding over the last five years and the expenditures for facilities management resources during that period.

Figure 9. University Libraries Budget and Expenditures to Support FM

Year	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
University Budget	\$3,417,950.00	\$3,772,815.00	\$3,088,963.00	\$2,731,856.00	\$2,460,806.00
FM Expenditures					
Books	\$15,483.00	\$10,150.00	\$15,809.00	\$1,253.00	\$6,713.00
Journals	\$3,580.00	\$3,713.00	\$4,100.00	\$4,258.00	\$6,660.00
Total	\$55,478.00	\$50,863.00	\$56,909.00	\$42,911.00	\$56,873.00

Access to Collections and Services

Students, faculty and staff have access to collections, resources and services 24 hours a day, seven days a week, either through the 135 hours that the main library is open or through the library web page. Through the University Libraries’ [web page](#), faculty and students have full access to the FAMU [library catalog](#) on or off campus, and the library catalogs of the [State University System](#) and [Florida College System](#) libraries. Online resources and services are available within the libraries, from campus computers, in faculty offices, and from residence halls. Off-campus access is also available 24 hours a day to authenticated users (students, faculty, and staff). Support services such as room bookings, instruction, interlibrary loans, loan renewals, course reserves, reference assistance, and distance learning services are also accessible from the web page.

Services

FAMU Libraries provide a full range of traditional and innovative library services. Users have access to [reference services](#) via local and toll free telephone, [electronic mail](#), [online chat service \(AskALibrarian\)](#), [text](#) and fax. Services enable users to access and to use information resources in the libraries and from remote locations. The Information Commons, in Coleman Library, allows users to access main library services from one common area. Several Library services are available from this service point. Services include borrowing privileges, interlibrary loan, course reserves, reference and research services, and systems support services.

Borrowing Privileges

Students, faculty, and staff have borrowing privileges at the FAMU Libraries, and reciprocal borrowing privileges to the 40 public [universities](#) and [colleges](#) in Florida. Borrowers may view and renew items that are currently checked out through the online catalog.

Interlibrary Loan

Students, faculty, and staff who are currently enrolled and engaged in academic research have [Interlibrary Loan](#) (ILL) borrowing privileges to the 40 public [universities and colleges](#) in Florida and to other libraries globally. Requests may be initiated in person or through the [online catalog](#), which along with reciprocal borrowing, provides access to materials that the University does not own.

Course Reserves

Print and electronic materials may be placed on reserve at the Libraries. The reserve service provides a central and convenient location for students to retrieve materials. These materials are owned by the University or come from the private collections of faculty who place materials on reserve for enrolled students.

Reference and Research Services

On site and virtual reference/research services are provided. Reference Services include individual research/consultation, the provision of electronic and print [research guides](#) and the provision of online tutorials. Reference librarians provide a variety of instructional services to meet the information literacy needs of students, faculty, staff, administrators, and the community at large.

Instruction/Information Literacy

The University Libraries provide competent, quality, and timely instruction through a variety of instructional services. Information is delivered through informal and point of use instruction, individual and group instruction, formal orientations and literacy sessions, orientation to new student groups, subject specific scheduled workshops, printed handouts, [research guides](#) and online tutorials. Instruction is provided to local users as well as to distance learners. Library users should be able to differentiate between trustworthy and untrustworthy sources and have the skills to use resources independently. Information literacy sessions are designed to equip users with the skills needed to locate, evaluate, and use library information resources and services. Formal literacy instruction is based upon goals as defined by classroom faculty. These classes are held in a classroom which allows hands-on interactive instruction. Library instruction is based upon guidelines published by the Association of College and Research Libraries (ACRL) [Guidelines for Instruction Programs in Academic Libraries](#) and [Framework for Information Literacy for Higher Education](#).

Liaison Program

Librarians work with all academic units to assure that the collection supports defined curricular goals and that adequate services, including instruction are provided. The School of Architecture has appointed a liaison to the Library Collection Development Committee. This liaison works in collaboration with librarians to evaluate, select, and purchase resources recommended for architecture programs.

Systems Support Services

The Systems Department provides and maintains 250 public computers along with software, hardware and support services necessary for providing and using information resources. Computers are configured to provide access to the libraries' web page and online catalog. Computers are also configured with various

types of production software. Computers are available in group study rooms and wireless access is available in the Café. Library users can print to designated print stations. Computers are located on each floor of the main library and in all branch libraries, including the [Architecture Library](#). A help desk is staffed as part of the Information Commons to assist users with software applications and technology support. Helpdesk staff assists patrons with directional questions, laptop registration and circulation, referrals and resolution of computing and printing needs and issues.

Staff

All Library and related personnel meet or exceed minimal educational requirements as defined by the Association of College and Research Libraries (ACRL). Librarians hold master's degrees from ALA accredited schools. Additionally, two faculty librarians have completed the specialists' degree in library science and three faculty librarians have completed master's degrees in other subject disciplines. The University employs 16 librarians. Support staff are also very well qualified, evidenced by one support staff holding a master's degree and 17 support staff holding bachelor's degrees.

Facilities

All faculty and students have full access to [FAMU Libraries](#) and the facilities. These facilities adequately support faculty and student use of information technology for instruction, learning and research. FAMU library facilities consist of the main [Samuel H. Coleman Memorial Library](#) and [branch libraries](#). Library branches are located in schools and colleges to provide specialty collections and services to users in their respective disciplines. Library branches include the [Architecture Library](#). Coleman Library occupies approximately 88,964 net square feet. The Coleman Library facility includes: seating for 740 students, 7 individual carrels that are available to all students on a first come basis, 22 individual graduate carrels, a digitization suite, presentation practice room, a conference room with multimedia capability, an information literacy/instruction room with 51 seats, an art gallery, a heritage room for rare books, mobile boards, a student study lounge, a café, open stacks and closed compact shelving, collaborative study spaces, and staff offices and work areas. Over 20,000 additional square feet are available in the branch libraries. Faculty and students have access to 23 laptops, 15 headphones, 3 USB drives and 260+ computers in the main and branch libraries and reading rooms. Twenty-three laptops are available for use through the laptop loan program. Computers receive regular maintenance and are updated on a regular and rotating schedule. Library buildings have networking, switching gear, and dense fiber optic and category 5 wiring to form a robust infrastructure. The main library and much of its immediate grounds are wireless, enabling students and faculty convenient and generous access to the wireless network using their personal laptops or those borrowed through the library laptop lending service.

[The Architecture Library](#) supports the curriculum of the School of Architecture and Engineering Technology. Collections include monographs, periodicals, sample materials, and audiovisual materials pertaining to Architecture, Engineering Technology, Facilities Management, and related fields. The library is located in the School of Architecture. It has 7,725 net square feet with seating for 75 students.

The [Office of Instructional Technology](#) is housed in Coleman Library. Instructional Technology contains two teleconference centers/distance learning classrooms, with a combined seating capacity of over 50 people, designed for both satellite teleconferencing and for mediated viewing. The OIT also contains an

open computer laboratory and faculty development laboratory. Audiovisual resources and equipment are available for faculty to reserve and/or view

Florida A&M University Libraries Selected Facilities Management Journals

- Architects' journal (London) ISSN: 0003-8466 [Journal Details](#) ▼ 07/05/2007 to Present in [Art and Architecture Source](#) 2016 to Present in [EBSCOhost EJS](#)
- Architectural record ISSN: 0003-858X [Journal Details](#) ▼ 01/01/1998 to Present in [Art and Architecture Source](#) 01/01/2001 to Present in [Business Source Complete](#)
- Amusement & Theme Parks, Recreation & Amateur Sports Facilities (incl. Tennis Centers, Golf Courses, Ski Resorts) and Gambling Establishments (but not Casino Hotels or Race Tracks) Industry (US) 10/05/2015 to Present in [ABI/INFORM Collection](#)
- Buildings (Cedar Rapids. 1947) Alternate Title: Buildings ISSN: 0007-3725 [Journal Details](#) ▼ 01/01/1989 to Present in [Business Collection](#) 07/01/1996 to Present in [Business Source Complete](#) 11/01/1997 to Present in [ABI/INFORM Collection](#)
- Computer Programming, Systems Design, Computer Facilities Management and Related Services 01/14/2016 to Present in [ABI/INFORM Collection](#)
- Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly 07/30/2015 to Present in [ABI/INFORM Collection](#)
- Facilities design & management ISSN: 0279-4438 01/01/1988 to 03/31/2003 in [ABI/INFORM Collection](#) 06/01/2001 to 03/31/2003 in [Home Improvement Collection](#) [Vocations & Careers Collection](#)
- Golf Courses, Country Clubs, Ski Resorts, Gym, Fitness Centers and Other Recreational Facilities Industry (US) 10/05/2015 to Present in [ABI/INFORM Collection](#)
- Health facilities management ISSN: 0899-6210 01/01/1995 to Present in [Business Source Complete](#)
- Journal of property management ISSN: 0022-3905 01/01/1988 to Present in [ABI/INFORM Collection](#) 07/01/1993 to Present in [Business Source Complete](#)
- Metropolis (New York, N.Y.) Alternate Title: Metropolis ISSN: 0279-4977 [Journal Details](#) ▼ 11/01/2008 to Present in [Art and Architecture Source](#)
- Nursing and Residential Care Facilities, including Skilled Nursing Facilities, Assisted Living Facilities and Continuing Care Retirement Communities Industry (US) 07/30/2015 to Present in [ABI/INFORM Collection](#)
- Outsourced Computer Facilities Management and Operations Services Industry (US) 01/14/2016 to Present in [ABI/INFORM Collection](#)
- Planning (Chicago, Ill. 1969) Alternate Title: Planning ISSN: 0001-2610 [Journal Details](#) ▼ 12/01/1987 to Present in [ABI/INFORM Collection](#) 07/01/1993 to Present in [Art and Architecture Source](#) [Business Source Complete](#)
- Progressive architecture ISSN: 0033-0752 [Journal Details](#) ▼ 01/01/1984 to 12/31/1995 in [Academic OneFile](#) [Business Insights: Essentials](#) [Home Improvement Collection](#)

Peer Reviewed

- Facilities (Bradford, West Yorkshire, England) ISSN: 0263-2772 Peer Reviewed 01/01/1992 to 1 year ago in [ABI/INFORM Collection](#) [ProQuest SciTech Collection](#) 01/01/1994 to Present in [Emerald Management eJournals](#)
- International journal of contemporary hospitality management ISSN: 0959-6119 01/01/1992 to 1 year ago in [ABI/INFORM Collection](#) 01/01/1994 to Present in [Emerald Management eJournals](#)

- International journal of strategic property management ISSN: 1648-715X
03/01/2004 to 12/31/2012 in [ABI/INFORM Collection](#) 03/01/2005 to 12/31/2012 in [Business Source Complete](#) 01/01/2006 to 09/30/2014 in [Academic OneFile Business Collection](#)
- Journal of facilities management ISSN: 1472-5967 01/01/2002 to Present in [Emerald Management eJournals](#)
- Journal of financial management of property and construction ISSN: 1366-4387 03/01/2005 to Present in [Emerald Management eJournals](#)

Florida A&M University Libraries Selected Facilities Management Books

1. Gustin JF. *Bioterrorism : A guide for facility managers*. Lilburn, Ga: Fairmont Press; 2005.
2. Hales HL. *Computer aided facilities planning*. New York, N.Y: M. Dekker; 1984.
3. National Research Council (US) Board on Infrastructure and the, Constructed Environment, National Research Council (US) Committee on Core Competencies for Federal Facilities, Asset Management, National Research Council (US) Division on Engineering and, Physical Sciences. *Core competencies for federal facilities asset management through 2020 : Transformational strategies*. Washington, D.C: National Academies Press; 2008.
4. Gustin JF, NetLibrary I. *Cyber terrorism a guide for facility managers*. Lilburn, Ga. : New York: Fairmont Press ; Marcel Dekker; 2004. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=107520> <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=111910>.
5. Gustin JF. *Disaster & recovery planning : A guide for facility managers, 6th ed.* 6th edition. ed. Lilburn, GA: Fairmont Press; 2013.
6. Federal FC, NetLibrary I. *Emerging information technologies for facilities owners research and practical applications : Symposium proceedings*. Washington, D.C: National Academy Press; 2001. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=86943>.
7. Jackson J. *Energy budgets at risk (EBaR) a risk management approach to energy purchase and efficiency choices*. Hoboken, N.J: John Wiley & Sons; 2008. <http://famuproxy.fcla.edu/login?url=http://catalogimages.wiley.com/images/db/jimages/9780470197677.jpg> <http://famuproxy.fcla.edu/login?url=http://dx.doi.org/10.1002/9781119198413> <http://famuproxy.fcla.edu/login?url=http://onlinelibrary.wiley.com/book/10.1002/9781119198413>.
8. United States Government, Accountability Office. *FAA facilities : Improved condition assessment methods could better inform maintenance decisions and capital-planning efforts : Report to congressional committees*. Washington, D.C: United States Government Accountability Office; 2013. <http://purl.fdlp.gov/GPO/gpo44696>.
9. Finch E. *Facilities change management*. Hoboken: John Wiley & Sons; 2011. <http://famuproxy.fcla.edu/login?url=http://onlinelibrary.wiley.com/book/10.1002/9781119967316>
10. Finch E. *Facilities change management*. Chichester, West Sussex, UK: Wiley-Blackwell; 2012.
11. Molnar J. *Facilities management handbook*. New York: Van Nostrand Reinhold Co; 1983.
12. Wiggins JM, ebrary I. *Facilities manager's desk reference*. Chichester, West Sussex, UK ; Ames, Iowa, USA: Blackwell; 2010. <http://famuproxy.fcla.edu/login?url=http://site.ebrary.com/lib/famu/Doc?id=10392953><http://famuproxy.fcla.edu/login?url=http://site.ebrary.com/lib/famu/Doc?id=10392953>.
13. Finkel CL, American Society for Training, and Development, Finkel AD. *Facilities planning managing the training function*. Alexandria, Va: American Society for Training and Development; 2000. <http://famuproxy.fcla.edu/login?url=http://proquestcombo.safaribooksonline.com/?uiCode=famu&xmlId=758504>.
14. Brauer RL, NetLibrary I. *Facilities planning the user requirements method*. 2nd ed. ed. New York: American Management Association; 1992. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=2797>.

15. Austin J, Aziz A, Bain AL, et al. *Facility design and management handbook*. New York: McGraw-Hill; 2001. <http://famuproxy.fcla.edu/login?url=http://accessengineeringlibrary.com/browse/facility-design-and-management-handbook>.
16. Teicholz E, Ikeda T. *Facility management technology : Lessons from the U.S. and japan*. New York: Wiley; 1995. <http://www.loc.gov/catdir/toc/onix02/94033595.html>.
17. Government/industry Forum on Capital Facilities and, Core Competencies, Federal FC, NetLibrary I. *Government/industry forum on capital facilities and core competencies summary report*. Washington: National Academy Press; 1998. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=14148>.
18. Woodroof EA, ebrary. *Green facilities handbook : Simple & profitable strategies for managers*. Lilburn, GA : Boca Raton: Fairmont Press ; CRC Press; 2009. <http://famuproxy.fcla.edu/login?url=http://site.ebrary.com/lib/famu/Doc?id=10849098>.
19. Woodroof EA. *Green facilities handbook : Simple & profitable strategies for managers*. Lilburn, GA : Boca Raton: Fairmont Press ; CRC Press; 2009.
20. Borello LJ, Roper KO. *International facility management*. Chichester, West Sussex, United Kingdom: Wiley-Blackwell; 2014. <http://famuproxy.fcla.edu/login?url=http://onlinelibrary.wiley.com/book/10.1002/9781118771686>
21. McCarthy D, NetLibrary I, Rich N. *Lean TPM a blueprint for change*. Oxford: Elsevier Butterworth-Heinemann; 2004. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=117148>.
22. Wood D, NetLibrary I. *Lighting upgrades a guide for facility managers*. 2nd ed. ed. Lilburn, Ga. : New York: Fairmont Press ; Distributed by Marcel Dekker; 2004. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=112055>.
23. Higgins LR, Mobley RK, NetLibrary I, Wikoff DJ. *Maintenance engineering handbook*. 7th ed. ed. New York: McGraw-Hill; 2008. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=226086>.
24. Alexander K, Price I. *Managing organizational ecologies : Space, management and organizations*. New York: Routledge; 2012.
25. Daskin MS. *Network and discrete location : Models, algorithms, and applications*. Second edition. ed. Hoboken, New Jersey: John Wiley & Sons, Inc; 2013. <http://famuproxy.fcla.edu/login?url=http://onlinelibrary.wiley.com/book/10.1002/9781118537015>
26. Riordan JJ. *Perceptions of industry practitioners toward an academic degree program in public assembly facility management*. Florida Atlantic University; 2009. <http://purl.flvc.org/FAU/186765>.
27. ebrary I. *Proceedings of government/industry forum the owner's role in project management and preproject planning*. Washington, D.C: National Academy Press; 2002. <http://famuproxy.fcla.edu/login?url=http://site.ebrary.com/lib/famu/Doc?id=10038549>.
28. Smith AM, Hinchcliffe GR. *RCM gateway to world class maintenance*. Amsterdam ; Boston: Elsevier Butterworth-Heinemann; 2004.
29. Gustin JF, NetLibrary I. *Safety management a guide for facility managers*. New York, N.Y: UpWord Pub; 1996. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=14590>.

30. Kelly AMS, Kelly, Anthony M Sc Maintenance organization and systems, Kelly, Anthony M Sc Maintenance strategy. *Strategic maintenance planning*. Amsterdam ; Oxford: Elsevier Butterworth-Heinemann; 2006. <http://famuproxy.fcla.edu/login?url=http://site.ebrary.com/lib/famu/Doc?id=10186172>.
31. Haimann T. *Supervisory management for health care institutions*. St. Louis: Catholic Hospital Association; 1973.
32. Foundation I, Teicholz E. *Technology for facility managers : The impact of cutting-edge technology on facility management*. Hoboken, New Jersey: John Wiley & Sons, Inc; 2013. <http://catalogimages.wiley.com/images/db/jimages/9781118382837.jpg>.
33. Person Harm A, Cooper J. *The care and keeping of cultural facilities : A best practice guidebook for museum facility management*. Lanham: Rowman & Littlefield; 2014.
34. Baker PR, Benny DJ. *The complete guide to physical security*. Boca Raton: CRC Press; 2013.
35. Roper KO, Cotts, David G Facility management handbook, Payant RP. *The facility management handbook*. Fourth editon. ed. New York: American Management Association; 2014.
36. Roper KO, Payant RP. *The facility management handbook*. 4th ed. ed. New York: AMACOM; 2014. <http://famuproxy.fcla.edu/login?url=http://proquestcombo.safaribooksonline.com/?uiCode=famu&xmlId=9780814432150>.
37. Gustin JF, NetLibrary I. *The facility manager's handbook*. Lilburn, Ga. : New York: Fairmont Press ; M. Dekker; 2003. <http://famuproxy.fcla.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=79474>.

Florida A&M University Libraries Selected Facilities Management Databases

- [ABI/INFORM Collection](#)
- [Art & Architecture Source](#)
- [Avery Index to Architectural Periodicals](#)
- [Access Business News](#)
- [Business Collection](#)
- [Business Source Complete](#)
- [Cambridge Journals Online](#)
- [Emerald Insight](#)
- [JSTOR](#)
- [ScienceDirect](#)
- [SpringerLink](#)

Architecture Library Facilities

The Architecture Library, a branch library designed to serve the architecture programs, including the Master of Science in Architecture with a major in Facilities Management (MScFM), is housed in the School of Architecture + Engineering Technology (SAET) and draws upon the resources of the main library. The Architecture Library occupies a space with 7,725 net square feet, which provides adequate space for housing the print collection, providing student study spaces, and providing access to computers, and other equipment. The space has optimum visibility and is strategically placed within the School. The Library is spacious, well maintained, comfortable, and inviting to students, faculty, and staff. Recent upgrades and improvements have served to enhance the access to resources and the overall study environment. Additional electrical outlets were installed near wall adjacent, study tables, so that students may charge their laptops,

and other mobile devices. New task chairs were purchased for the study tables in 2016. The monitors on the student use computers were upgraded in size to 27-inch monitors. The student use computers were replaced with new Dell mini-computers in 2016. There is room within the Library for storage, and storage is available in Coleman, the main library, if the need arises. A group study room, equipped with a wall mounted monitor, is available for student use. Carrels are available for individual study. Faculty may use the conference room, which is equipped with two 70-inch wall mounted monitors, to teach. All spaces are in compliance with the American Disabilities Act.

2. J Program Advisory Committee (PAC)

2. J. 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.

The FAMU Facilities Management Advisory Council connects the university with professionals working in architecture, construction, real estate, and facilities management. Industry partners on the Council's professional experiences and perspectives assist the university in chartering future academic program growth and monitors program quality and effectiveness.

FAMU Facilities Management Advisory Committee Criteria for Membership

The MScFM is a collaborative degree with the FAMU School of Business & Industry (SBI). The Facilities Management Advisory Committee was first formed to provide support to the undergraduate program and subsequently the graduate program. Criteria is as follows:

Executives will be appointed to the FAMU Facilities Management Board of Advisors by the Deans of the SBI and the SAET in accordance with the following criteria:

- Board members will be accomplished professionals whose knowledge, skills, and experience will aid the Schools in achieving goals and objectives.
- Board members will be committed to the growth and prosperity of Florida A&M University SBI and SAET. Members are expected to attend scheduled meetings and work collaboratively with the members of SBI, SAET and the Board.
- Board members should not have, nor appear to have, a conflict of interest that would in any way reflect unfavorably on Florida A&M University and the SBI and the SAET or impair the Board member's ability to objectively handle the business of the Facilities Management Board of Advisors.

FAMU Facilities Management Advisory Committee Membership Guidelines

The FAMU/SBI Board of Advisors has adopted the following guidelines to assist the Members of the Board in understanding and fulfilling their responsibilities as a Member. Service as a Member is both an honor recognizing the accomplishments and potential of the member, and a fiduciary commitment by the Member to pursue impartially the best interests of **SBI** as an organization.

- Members are expected to promote the mission and vision of the **SBI**. Members must avoid any use of their position to promote private or personal business interests. Board members often have involvement in other advocacy groups or boards and are in a position to bring a wide range of views to bear on issues that confront **FAMU**. While such viewpoints are necessary to setting a balance course for the **SBI**, it is important that each Member set aside any outside interests when acting on **FAMU SBI** matters.
- Members are expected to use their judgment and show loyalty to the best interests of the **SBI**. When any circumstances arise that might present a potential conflict of ethical or business interests, a Member is expected to disclose the fact of such actual or potential conflict, and to avoid any discussion or participation in decisions affecting such issue. In the event of any potential issue or doubt, the Member should take steps to clarify the potential issue and resolve all uncertainty in favor of avoiding even the appearance of a conflict of interest.
- Members are expected to participate actively in advising **SBI** and to attend the meetings of the Board. Members are expected to attend at least 75% of the regular Board meetings, with 100% participation desired, in person or via conference call. Members are also expected to annually participate actively in at least two SBI initiatives during their 3- year term. It is also expected that Members will attend or support at least one **FAMU SBI** educational event per year.

Figure 10. FAMU Facilities Management Advisory Committee Roster 6/9/2017

NAME	JOB TITLE / ORGANIZATION
Thomas Mitchell, Jr.	Senior Vice President/Chief Operating Officer, FM 3IS, LLC
Francisco Abrantes	Director, Jones Lang LaSalle
Sophia Bromfield	Assistant Project Manager, Studley Strategic Portfolio solutions
David Castro	Associate Project Manager, P&G Account at Jones Lang LaSalle
Vicky Hardy	CEO Star Island Conference Center & Family Retreat
Raynal Harris	Partner, Harris + Smith
Michael Hicks	Co-Founder, Cohesive Constructors, LLC
Michael Ruiz	Vice President for BIM Strategies, Atlanta Applied Software
Greg Summerlin	Cintas, Inc.
Andrew Chin, MArch	Interim Dean and Associate Professor, FAMU SAET
Ronald Lumpkin, PhD	Associate Professor & Director of Student Services, FAMU SAET
Roscoe Hightower, Jr., PhD	Professor, Marketing, FAMU School of Business and Industry (SBI)
Felicia Williams, PhD	Director of Student Services, FAMU SBI
Jennifer B. Collins, PhD	Assistant Dean and Associate Professor, FAMU SBI
Bobby Davis, PhD	Associate Dean and Professor, FAMU SBI
Shawnta Friday-Stroud, PhD	Dean and Professor, FAMU SBI

2. J. 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.

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY

Facilities Management (FM) Academic Program

Advisory Council Meeting

May 2, 2014

Teleconference Meeting

11:00 a.m.

Council Members Present: Thomas Mitchell, Roscoe Hightower, Shawnta Friday-Stroud, Bobby Davis, Ayinde Johnson, Vicky Hardy, Enn Ots, David Castro, Sophia Bromfield, Michael Hicks, Greg Summerlin, Ronald Lumpkin

-Not Present: Michael Ruiz, Francisco Abrantes, Andrew Chin

Introductions and Remarks

Shawnta Friday-Stroud and Andrew Chin provided welcoming remarks and thanked everyone for joining the meeting for a brief and informative session.

Roscoe Hightower provided an overview of the facilities management undergraduate program. We have had an outstanding year. Currently there are 24 students enrolled in the undergraduate program. There will possibly be 2 students graduating this semester, the second graduating class.

Andrew Chin provided an overview of the masters level facilities management program. There were six students initially enrolled in the graduate program; 1 will graduate this semester (Spring 2014) and the other 5 will graduate in the summer 2014. Eleven students have been admitted for the Fall 2014 semester and there are 3-4 pending applications. We are expecting 12-15 students fall 2014.

Dean Chin – update initiated MS program with 6 students; 1 graduate this sem and the other 5 this summer; 11 students admitted for fall; 3-4 pending applications at the time; expecting 12-15 students; internships are challenging to get in the fall and spring in Tallahassee.

Vicky Hardy – city and county may be good places to get interns; they have had interns from other places. Chin – I think they are receptive, but changes in the state budget have hampered providing internships. The internships are going to be pretty competitive. Chin – we need to get MOUs from

V Hardy – the Performing Arts Facilities are good places as well. Vicky has worked with people in Tallahassee and can get a connection.

Case – Jasmine Nettles for 12 weeks; came prepared and started strong and finished stronger;

V Hardy – 40% of graduates went to work for people who they interned for.

Chin – Case – focused internship; registration for New Orleans; interviewing students on site for internships.

Jeff – Foundation is working with putting together focused opportunity to talk about student internships. Will be held during New Orleans. Presentation on Workforce Gap; FM is one profession to

be hit the hardest b/c of retirement of current fm professionals. Reaching out to Business, Academics. 2 pieces not focusing on is government and

Steve Lockwood – Nuts and bolts of accreditation process – Great opportunity at this point to help develop the b&b students who will meet the challenging needs of the workforce of the future. Launched Feb-March a new ADP standard. Needed to do that for:

Old standard developed 6-8 years ago

Many of the areas of the standard were outdated and we needed to revisit what we were doing as an organization.

Gaining momentum and looking at accrediting more programs globally. We needed a standard to look at more

Looked at another organization – CHEA – they are our guiding force right now.

Outcome based education model – going to student outcome not fm outcome

Criteria was based on prior was the core competencies established thru IFMA for credentials and not institution programs. That's major change we worked towards. No program will be penalized as we go through this process .. we understand the cost and processes involved in making this change.

Mitchell – Working on putting together ... Jasmine set a high standard;

SFS – continuing to prepare students to fill in the gaps of the anticipated workforce shortage.

There is a federal grant available for skill and education development monies. Application deadline is quickly coming at us – July 7, 2014. How do we work in unison with our ADP programs. Sent out to 5 institutions. Grant would go to colleges and universities who have only have programs 2 years or less. The Universities are encouraged to work with professional associations.

Chin – FAMU will take the lead in writing the grant. Hightower – we're ready to go.

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY
Facilities Management (FM) Academic Program Advisory Council Meeting
October 10, 2012

Teleconference Meeting 11:00 a.m.

Council Members Present: Thomas Mitchell, Roscoe Hightower, Shawnta Friday-Stroud, Bobby Davis, Ayinde Johnson, Vicky Hardy, Enn Ots, David Castro, Sophia Bromfield, Michael Hicks, Greg Summerlin, Ronald Lumpkin
-Not Present: Michael Ruiz, Francisco Abrantes, Andrew Chin

Introductions and Remarks

Councilor Introductions: **Greg Summerlin** - General Manager for Cintas Uniform Company, a facilities management company located in Marianna, Florida. Mr. Summerlin is the point of contact for the relationship between Cintas and FAMU. **Enn Ots**, Professor in the FAMU School of Architecture. Mr. Ots has several years of experience in facilities management. He began the graduate program in the FAMU School of Architecture. Dr. Friday-Stroud invited **Raynal Harris**, of Architecture firm Harris and Mitchell, to be a part of this Council.

The minutes from the September 26, 2012 meeting were unanimously approved.

FM Program Development Update

David Dunn and Steve Lockwood will arrive on October 16. We are planning a welcome dinner at 5:30. A full day of activities will begin on Wednesday with breakfast, driving tour of the campus, introduction of SBI and SOA faculty, to include showing them their office space here on campus. The schedule also includes observation of the SBI FM Student Organization meeting. Please send any additional suggestions for updates to the agenda to Ron Lumpkin or Roscoe Hightower.

It was noted that Lucy Diala, an SBI student won the 2012 IFMA graduate scholarship. She was selected by the Suncoast Chapter out of Tampa, FL. She will be attending Worldwide Workplace.

Overview of IFMA Foundation FM ADP Process

Ms. Hardy provided an overview of the IFMA Foundation FM ADP Process. The accreditation process is based on the model of American Council of Construction Education. Blooms Taxonomy is also used. It focuses on knowledge comprehension and application to focus on their curriculum. After two graduating classes, we will do a self-study again. We will need to identify a course that addresses each of the 144 sub competencies listed by each area of knowledge. This document will be used by the team when they come for the site visit. In addition, the course syllabi/manual should show that those issues are addressed. IFMA does not expect any program to meet all 144 competencies. Even though FAMU's program is more about the business side of FM, the core competencies are expected to be addressed at least at an introductory level. They will also want to see it in student work. In addition, the self-study information will need to be validated and one full time dedicated faculty member who works with the FM program.

Mr. Mitchell added we will have an opportunity to sign our commitment to make our program successful. We are looking forward to this first step towards institutionalizing the responsibilities we have assumed to have FAMU be successful in the future.

Ayinde Johnson has set up the site and has received the application to submit the required data, and the IT FAMU will do what they have to do to grant the advisory council members access.

The next meeting will be held October 17, 2012, 4:00-5:15 EST. Webinar capabilities will be used. Please come to Tallahassee if you can. Mr. Mitchell will send a draft of the governance partnering agreement.

The meeting was adjourned at 12:15 p.m.

The Board impact education and recruitment by hosting a seminar

INTRODUCTION TO FACILITY MANAGEMENT

Thomas Mitchell Jr., Moderator

October 17, 2012

2:30 pm-4:00 pm

SOA 111

PANEL AGENDA ITEMS

	Presenter
✓ Welcome	Andrew Chin <i>Interim Dean, SOA</i>
✓ Introductions	Ronald Lumpkin <i>Assistant Professor, SOA</i>
✓ Overview of Facility Management Profession	Thomas Mitchell, Jr., CFM, CFMJ <i>Managing Director, Facilities & Asset management Consulting Services</i> <i>Booz, Allen, Hamilton</i> <i>San Antonio, Texas</i>
✓ The Facility Management Professional	Sophia Bromfield, LEED AP <i>Asst Project Manager</i> <i>Studley</i> <i>Atlanta, Georgia</i>
✓ The Facility Management Professional	David Castro, LEED AP BD+C <i>Associate Project Manager</i> <i>Jones Lang LaSalle</i> <i>Cincinnati, Ohio</i>
✓ The Facility Management Professional	Kimberly Strobel-Ball, AIA, LEED AP BD + C <i>Project Manager</i> <i>FSU Facilities Design & Construction</i> <i>Florida State University</i> <i>Tallahassee, Florida</i>
✓ Student Presentations	Dominick Bailey, Lucy Diala, Jesse Hughes
✓ Questions and Answers	

STANDARD 3 - FACULTY

3. Faculty

The FMAC recognizes that the institutional and regional accrediting bodies have oversight for the standards and qualifications of for faculty commensurate with the degree level. The local authorities will set the minimum standards while the FMAC reserves the right to review and recommend standards for faculty qualifications.

The SAET administration, staff and faculty are a diverse and experienced group with a national presence and a diverse range of interests, philosophies, and expertise. The SAET Division of Architecture which houses the MScFM, administration team includes four (4) full-time administrators with limited teaching responsibilities and thirteen (13) full-time faculty with limited administrative responsibilities, and two (2) research associates. The full-time administrators include the Dean, Associate Dean, Director of the Professional Programs in Architecture, and the Director of Student Services. The faculty with limited administrative responsibilities are the Coordinators for the Bachelor of Science in Architectural Studies and the Master of Science in Architecture with a major in Facilities management. The position descriptions for these individuals are available online. Web screenshots of SAET faculty are included in Appendix C.

Figure 11. Faculty Qualifications

Faculty Member	Highest Degree	Rank	Discipline	FM Course Taught	Professional Certification	Tenure	Professional Organizations
Akinsanya, David	MArch	Instructor & CET Lab Manager	Construction Engineering Technology (CET)	BCN 1221, BCN 2230	OSHA	No	American Society Engineering Education
Anglade, Yves	PhD	Assoc. Professor & Assoc. Dean	CET, Director Engineering Technology			Yes	
Bellarmine, Thomas	PhD	Professor	Electronic Engineering Technology (EET)		Professional Engineer (PE)	Yes	
Chamel, Olivier	M.Arch	Asst. Professor	Architecture (ARC)		Registered Architect (RA), AIA, LEED-AP		AIA
Chin, Andrew	M.Arch.	Assoc. Professor	Interim Dean			Yes	
Ding, Pat	MS EEng	Research Assoc.	IT			No	
Goodwin, Valerie	MArch	Assoc. Professor	Interim Director Architecture		RA	Yes	
Goodwin, Robert	MArch	Research Assoc.	ARC & Facility Management (FM)	ARC 1274/5289, ARC 4010/5018, ARC 1050/5291, ARC 6932, ARC 6949	RA, past FAMU Director Facility Planning	No	
Hammond, Rhonda	BArch, MS	Visiting Assistant	ARC & FM	ARC 1160, ARC 2161	RA, AIA	No	
Huffman, Craig	MArch	Professor	ARC		RA	Yes	
Knight, Roy	MArch	Professor	ARC		RA, FAIA	Yes	
Kobelo, Doreen	PhD	Assoc. Professor	CET			Yes	
LaGrasse, Deborah	MFA	Instructor	ARC	ARC 1301		No	
Lewis, Elizabeth	MArch	Assoc. Prof	ARC & FM	ARC 2470	RA, AIA, LEED-AP	Yes	
Li, Chao	PhD	Assoc. Professor	EET		PE	Yes	

Florida A&M University
 School of Architecture + Engineering Technology
 Master of Science in Architecture with a major in Facilities Management
 Self-Study June 2018

Lumpkin, Ronald	PhD	Assoc. Prof & Dir Student Services	ARC & FM	ARC 1050/5291, ARC 6949		Yes	IFMA
Mohsenin, Mahsan	PhD	Assist. Professor	ARC & FM	ARC 2470, ARC 4610		No	
Muhammad, Rabbani	MArch	Assist. Professor	CET	BCN 3700	RA	Yes	
Nicholson, Luke	MS	Visiting Assistant Professor	ARC & FM	ARC 6278	General Contractor	No	
Ots, Enn	MArch	Professor	ARC & FM	ARC 1274/5289, ARC 1050/5291,	RA, Facility Architect	Yes	
Pabon, Arleen	MArch, JD, PhD	Professor	ARC		RA, Attorney	Yes	
Park, Sangbum	PhD	Visiting	ARC & FM	ARC 2470, ARC 4610		No	
Prosper, Leon	MS Elec Eng	Instructor	EET			Yes	
Robles, Eduardo	MFA, MArch	Assoc. Professor	ARC & FM	ARC 1050/5291		Yes	
Shadravan, Behnam	PhD	Visiting Assistant	CET			No	
Soares, Antonio	PhD	Assoc. Professor	EET			Yes	
Tinner, Stacy	MS	Sr. Teaching Lab Spedialist	CET			No	
Wells-Bowie, LaVerne	MFA, MArch	Professor	Architecture			Yes	
White, Edward	MArch	Professor	Architecture		RA, Facility Architect	Yes	

3. A. 1 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.

In accordance with FAMU's Faculty Credentialing Policy, SAET's full-time faculty have sufficient academic credentials and professional experience to ensure appropriate emphasis on theory and practice to meet the objectives of SAET's programs. More specifically, SAC's mandates faculty have at least a master's degree and 18 graduate level hours in the area they teach.

3. B. 1 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.

In accordance with FAMU's Faculty Credentialing Policy, SAET's part-time and adjunct faculty have sufficient academic credentials and professional experience to ensure appropriate emphasis on theory and practice to meet the objectives of SAET's programs. More specifically, SAC's mandates faculty have at least a master's degree and 18 graduate level hours in the area they teach.

3. C 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.

The policies and procedures for the appointment of all faculty at the University are mandated by both a Collective Bargaining Agreement between the Board of Trustees and the United Faculty of Florida and by extensive search and screen procedures developed by the University's Equal Employment Opportunity (EEO) office. The entire search procedure, interview process, post-interview procedure, and hiring process must be carefully documented and submitted to the EEO office for approval.

[Based on Article 8, Policy 8.1, of the Collective Bargaining Agreement](#)

“The Board shall exercise its authority to determine the standards, qualifications, and criteria so as to fill appointment vacancies in the bargaining unit with the best possible candidates. In furtherance of this aim, the Board shall, through the university, (a) advertise such appointment vacancies, receive applications and screen candidates therefore, and make such appointments as it deems appropriate under such standards, qualifications, and criteria, and (b) commit to an effort to identify and seek qualified women and minority candidates for vacancies and new positions.”

The Collective Bargaining Agreement includes policies related to hiring for both full-time and part-time faculty, including but not limited to appointments, assignment of responsibilities, and tenure and promotion requirements.

3.D 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

Given that faculty teaching in the MScFM program will be in primarily School of Business and Industry (SBI) and the School of Architecture Engineering and Technology (SAET) Tenure Regulations and the Tenure Guidelines for both SBI and SAET are delineated. Content delivered by faculty in the College of Education, College of Arts, Social Sciences and Humanities, and the School of the Environment all adhere to qualifications approved by their respective colleges, FAMU Board of Trustees and the United Faculty of Florida. The University specifies its policies and procedures for both the promotion and tenure of faculty members according to its agreement with the United Faculty of Florida. Each school or college within FAMU must develop and have approved by the University a set of criteria and evaluation factors for each. In the case of promotion, separate criteria are specified for promotion to each rank. Complete copies of the SAET's Guidelines for the Evaluation of Applications for Tenure and the Criteria for Consideration of Applications for Promotion are available online ([web link](#)).

Tenure in the University – A faculty employee who has been granted tenure by the BOT shall have the status of permanent member of the faculty and be in the continuing employment of the University until he or she:

1. Resigns;
2. Retires;
3. Is dismissed for just cause under the provision of University rules or the BOT/UFF Collective Bargaining Agreement; or
4. Is discontinued pursuant to the layoff provisions in the University's regulations, and the BOT/UFF Collective Bargaining Agreement.

a) Only those Faculty employees serving in tenure earning positions as described above are eligible to be recommended for tenure at the University. Tenure shall not extend to administrative appointments in the general faculty or administrative and professional classification plans.

b) Except for Faculty employees who by virtue of prior service credited at the time of their appointment, are eligible for consideration earlier, a decision whether to nominate a Faculty employee for tenure shall normally be made during the sixth year of continuous full-time service, or equivalent part time service, in a tenure earning position. The word "normally" as used in this rule takes cognizance of the fact that an employee may satisfy the requirements for tenure in his/her department or equivalent unit after 4 or 5 years of continuous full-time service, or equivalent part-time service. It also implies that an employee's tenure earning eligibility may be deferred for a certain period. An employee's written request for early tenure consideration is subject to the University's written agreement. Continuous employment for the purpose of tenure earning eligibility consideration for full time service shall mean employment during at least 39 weeks of any 12-month period. Continuous employment for the purpose of tenure-earning eligibility consideration for part time service shall mean employment during at least one semester of any 12-month period. Part time service of an employee employed at least one full semester in any 12-month period shall be accumulated.

For example, two semesters of half time service shall be considered one half year of service for purposes of tenure eligibility.

- c) The number of years of previous tenure earning service at other institutions of higher education which the President or President's designee may agree to approve as credit toward a Faculty employee's eligibility time for tenure shall be agreed upon in writing at the time of employment, subject to the following restrictions: the President or President's designee may approve credit for not more than two years of tenure earning service for a Faculty employee hired as an assistant professor, not more than three years for a Faculty employee hired as an associate professor, and not more than four years for a Faculty employee hired as a professor.

- d) Time spent by a Faculty employee under joint appointment or exchange within or without the State University System (SUS) on a duly established personnel exchange program of the University or on a special assignment for the benefit of the University or for the SUS shall be counted toward the time for fulfillment of eligibility for tenure. In all such cases, the faculty employee shall be so informed in writing at the time leave is granted.

- e) Time spent on uncompensated leave shall not be credited as time earned toward tenure, except by agreement of the Faculty employee and the President or President's designee. In deciding whether to credit uncompensated leave toward tenure eligibility, the President or President's designee shall consider the relevance of the employee's activity while on such leave to the employee's professional development and to the employee's field of employment, the benefits, if any, which accrue to the University by virtue of placing the employee on such leave, and other appropriate factors. Time spent on compensated leave shall be credited as time earned toward tenure, unless the Faculty employee and the President or President's designee agree in writing that such leave is not to be credited.

Granting of Tenure

- a) By the end of six years of continuous full time, or equivalent part time service in a tenure earning position in the University, a Faculty employee shall be nominated for tenure or given notice that further employment will not be offered, in the affected position with reason(s) why the employee was not nominated for tenure.

- b) Applications for tenure are normally submitted to the University at the beginning of the faculty employee's sixth tenure earning year, in accordance with the Tenure and Promotion Schedule provided by the Provost.

- c) The tenure review process shall include the following steps:
 - i) A recommendation from the employee's supervisor
 - ii) A poll by secret ballot and recommendation of the tenured members of the department or unit.
 - iii) A poll by secret ballot and recommendation from the college/school/institute tenure and promotion committee
 - iv) Recommendation from the dean/director of the college/school or institute.
 - v) A poll by secret ballot and recommendation from the University Tenure and Promotion Committee
 - vi) Recommendation from the Provost
 - vii) Nomination by the President

viii) Approval of tenure by the Board of Trustees

d) Tenure applicants shall be notified of the recommendations from the supervisor, department/unit, college/school/institute, dean, and university committee. Any recommendation for disapproval shall include the reason for the negative recommendation.

e) Upon nomination by the President and approval by the BOT, tenure shall be granted. The decision shall normally be made at the May Board meeting, but no later than the following meeting. The effective date of tenure shall be the date of approval by the BOT. Each nomination for tenure shall be acted upon with careful consideration being given to the qualifications of the faculty employee, including evaluation by colleagues and the immediate supervisor. In making judgments pertaining to the decision to award tenure, evaluation of research and other creative activities by qualified scholars, in pertinent disciplines, both within and outside the University should be included. When one of the duties of the faculty employee being nominated is teaching, the quality of the faculty employee's teaching shall be gauged by the standards outlined in this regulation, the BOT/UFF Collective Bargaining Agreement, where applicable, as well as the regulation which governs faculty evaluation and the approved criteria of the appropriate academic department/unit.

f) With sufficient justification, an employee may be nominated by the President and approved by the BOT for tenure at the time of initial appointment or prior to the fifth year of tenure earning service. The President or President's designee shall consider the recommendation of the department or equivalent unit prior to making his/her tenure nomination.

Transfer of Tenure

A tenured faculty member may seek a transfer with tenure through the normal hiring process within the University to a vacant position in the same or similar discipline. The President or Provost may approve the transfer at her or his discretion and may consider any discrepancies in the tenure criteria in approving the transfer. When a tenured faculty member is transferred as a result of reorganization or program curtailment within the University and is employed in the same or similar discipline in which tenure was granted, the employee's tenure shall be transferred to the new department.

Standards for Maintaining Tenure of Faculty Employees

An employee with tenure who is appointed to an Administrative and Professional position shall retain tenure in the academic position and in the academic department/unit where granted and not in the Administrative or Professional position.

Duration of Tenure

A tenured faculty member retains this status as long as he/she is employed in any appropriate academic unit of the University.

3.E 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.

Architecture faculty are hired with a work distribution load that targets 80% teaching and 20% service and research. The University recommendation for full-time status translates into one studio course and one lecture course or three lecture courses. Teaching positions are nine-month appointments. Benefits are supported over summer breaks. Faculty members are eligible for a paid sabbatical leave of one semester after completing 14 consecutive semesters of teaching (along with other conditions noted on the Provost's web site).

In general, the FAMU SAET design studios are small. The typical faculty-student ratio in the undergraduate classes for all design levels is 1:15. This can trend down to as few as 1:10, but rarely exceeds 1:19. The graduate courses are even smaller. The typical faculty-student ratio in a graduate course is 1:10 or less. While FAMU is a large HBCU, the attitude, culture and expectation are that of a small college atmosphere.

STANDARD 4 CURRICULUM

4 Instruction

4.A Syllabi and Course Manual Notebook

4. A. 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. Number of lectures, coached self-study, autonomous self-study, total workload. Provide course notebook with the following contents: syllabus, schedule and title of lectures, assignments, quizzes and exams and samples of graded student work for each grade level.
- g. If course is required (core) or elective;
- h. Prerequisites if required;
- i. Brief description of the course as shown in the program catalog or online summary;
- j. Required texts and/or required/recommended reading, including books, periodicals, web sources and other resources in a standard format;
- k. Summary outline of subjects addressed in each lecture;
- l. Grading methods describing attendance, participation, assignments, reports, examinations, presentations, grade percentage values, and so forth;

Syllabi are included in the Appendix.

4. B 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.

Figure 12. Table of Contents for MScFM Course Manual Notebooks



**Facility Management Accreditation Commission (FMAC)
Master of Science in Architecture-Facilities Management**

Table of Contents

Tab 1:	Syllabi and Screen-Copy of Online Course Description
Tab 2:	Course Climate Survey Summary Sheet
TAB 3:	Course Mapping
TAB 4:	Graded Assignments
TAB 5:	Two Cycles of Grade Rosters

4.C 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.

According to the Office of University Assessment website, “Florida Agricultural and Mechanical University (FAMU) defines assessment as ‘a systematic process of documenting and analyzing the effectiveness of the teaching and learning processes to ensure that the expectations and standards are met in fulfilling the mission of FAMU. The process includes monitoring and enhancing the administrative and educational support structure that leads to the continuous quality improvement of FAMU’s academic programs and administrative and educational support services.’

Beginning in 2014, the University institute the STARS method for assessment. The STARS assessment method is based on the University overarching philosophy of continuous improvement. The STARS method involves five sequential steps, as shown in the diagram below: 1) Student Learning Outcome/Objectives; 2) Target Performance Levels; 3) Analysis and Review Results; 4) Reflect on Results; and 5) Strengthen programs/services.



These five steps in the STARS assessment method are embedded into LiveText, the online assessment management system used by the University for all assessment reporting and analysis. The Office of University Assessment provides an annual calendar to guide assessment conducted in the University’s academic and non-academic units. At the beginning of each academic year, each academic unit reviews the assessment results for each degree program from the previous year in order to develop continuous improvement plans as well as refine the learning goals or targeted outcomes for each program. Each academic unit submits a report for the results of the previous

year, including continuous improvement efforts. In addition, each unit submits an assessment plan for the upcoming academic year that includes learning goals, assessment measures, and performance targets for each degree program. MScFM assessment reports are available online at <http://www.famu.edu/index.cfm?Assessment&2016-2017>

SAET Regular Self-Assessment: The architecture program uses various tools for scheduled self-assessment each month, semester and year. The varied methods of self-reflection include faculty meetings, fall planning meetings, Deans Council meetings and more. The discussions help the program understand its deficiencies and causes of concern.

- **Student Reviews:** Every week, formal and informal student reviews occur at all year levels of the FAMU program. The critics are made up of the faculty, invited academics, peers from the student body, and practitioners. The events provide a very informal opportunity to understand the programs strengths and weaknesses. ([photo link](#))
- **Faculty Meetings:** Monthly Faculty Meetings provide an immediate source to identify issues and opportunities. A planning meeting at the start of each academic year promotes communication and identifies critical concerns. The meetings at the end of each semester allow faculty members to assess the content and success of each year level, discuss new objectives, and re-evaluate the curriculum document.
- **Dean's Council Meetings:** Monthly Dean's Council Meetings include representatives from each studio and the active student organizations. The meetings provide an opportunity for the students to speak clearly about their concerns and potential solutions. ([PDF link](#))
- **Faculty Course Evaluations:** At the end of each semester, students complete a course evaluation form. The questions address the teacher and course content. The computer scored form is later reported to the faculty member and the Dean. These evaluations can serve as important tool in monitoring a teacher's progress. The process is managed by the University Testing and Evaluation Services (UTES) ([web link](#))
- **Faculty Annual Review:** At the end of each semester, faculty complete an annual review form that summarizes his/her efforts in teaching, creative activity, research, and public service. This document asks faculty to define "specific goals and objectives, including areas in which improvement will be sought in the coming year." The Dean then reviews this material.
- **Advisory Board:** Once a year, architectural professionals and individuals from allied fields will become part of the program assessment through participation on the recently established Advisory Board for Architecture Programs. Appointed by the Dean, this group is informed of and encouraged to advise on current programs. The group forms an important communication link between the program and the architectural profession and the construction industry. ([PDF link](#))
- **Institutional Assessment Reports:** Once a year, the architecture program submits an Assessment Report to the Office of University Assessment (OUA) for each of its degree programs ([weblink](#)). The primary purpose of the Office of University Assessment is to monitor and support academic, administrative, and educational support units in the continuous improvement of student learning and the quality of support services.
- **Faculty Promotion + Tenure Review:** After three (3) years, tenure-track faculty have an optional mid-review for preliminary and critical feedback. At the end of five (5) years, a tenure track faculty must submit their final dossier. All of the tenured-faculty vote in the School review, followed by the Dean, and then the Provost.

Strengths, Challenges and Opportunities: The architecture program faculty complete surveys that identify the program's Strengths, Weaknesses, Opportunities and Threats (SWOT). ([PDF link](#)) A similar exercise was done with students and will be done with the Advisory Board. ([PDF link](#)) The results are used to develop the program's long-range plan.

Impact of Results: The most significant impact from the assessment activities are the changes to the Integrated Architectural Design Experience.

Curricular Assessment and Development

University Input- Admissions Office: Student assessment begins with the admissions process and graduate portfolio reviews. Students must first be accepted to the University. Then, the student record is reviewed by the architecture program.

University Input- Assessment Report: The architecture program submits Assessment Reports to the Office of University Assessment (OUA) for each of its degree programs. The primary purpose of the OUA is to monitor and support academic, administrative, and educational support units in the continuous improvement of student learning and the quality of support services.

Faculty Input- Academic Councils: The SAET Undergraduate and Graduate Councils are the primary means for faculty to discuss critical curriculum issues, assess the undergraduate and graduate programs and make recommendations for improvement. In the last five years, Council recommendations have resulted in significant changes to the SOA curriculum, including:

- the restructuring of the computer skills classes and
- the restructuring of the Integrated Architectural Design Experience.

Student Input- Dean's Council: The Dean's Council is a student body of peer-selected representatives from each year level of the undergraduate and graduate programs. The Council meets regularly with the Dean to discuss ideas, projects, and plans, and to advise on matters of importance to students. The Council also plays a major role in revising and updating SAET's Studio Culture Policy and helping to facilitate an inclusive process between the students, faculty and SAET administration. The Dean's Council meetings generally occur twice a semester.

Student Input- Course Evaluations: Online course evaluations are completed every semester for every course. These evaluations are accessible to the faculty, who can use this information to make appropriate modifications to improve courses and learning. The data can be used by the Dean in the Annual Faculty Reviews in order to reflect on quality and effectiveness of teaching. A summary is included in each Course Notebook.

Student Input - Student Surveys: The program initiated the use of student surveys to provide data from a large cross section of graduate and undergraduate students on issues such as time spent in studio, time spent on outside employment, economic need and its effect on student performance, demographics, etc. The data will help the program understand the experience of its students. The Office of University Assessment has prepared comprehensive reports of the Graduate Exit Survey results for each College/School. The survey results can be found in the Appendix.

4.D 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.

As earlier stated, the Course Map for the FAMU MScFM supports the premise that facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology. The Course Map identify the selected FMAC Outcomes 1, 2, and 7, and competencies 3c, 3e, 3h, and 5a in the required courses in the curriculum. In the State of Florida, only FAMU currently offers a degree program in Facility Management at the undergraduate level. The multi-disciplinary track at the master’s level is unique as well. The facility management function consists of a distinct set of responsibilities. As aforementioned, the FAMU MScFM Program Emphasis academic content is identified in Figure 6.

Figure 13. Program Emphasis Academic Content

CONTENT	COURSES DELIVERING CONTENT
Architectural planning and design	ARC 2161 Advanced Topics in Digital Design ARC 5291 Principles of Space Planning
Energy use analysis and planning	ARC 2470 Introduction to Technology of Architecture ARC 4610 Environmental Systems in Architecture
Environmental Impact and strategic planning	ARC 2470 Introduction to Technology of Architecture ARC 4610 Environmental Systems in Architecture EVR 5062 Principles of Environmental & Occupational Health
Budgeting	ACG 2071 Managerial Accounting Principles FIN 3403 Corporation Finance
Building delivery and construction management	ARC 5018 Facility Management ARC 6278 Construction Management
New technologies of enclosed buildings	ARC 2470 Introduction to Technology of Architecture ARC 4610 Environmental Systems in Architecture ARC 5018 Facility Management

Course assignments for the MScFM students are facilities management specific projects utilizing case studies and simulating real-life challenges. The MScFM projects are designed so students can respond to the content areas identified in Figure 6 in a design, re-design/adaption, energy-use analysis, etc., of a facility. ARC 6949 is the Capstone course which is designed around researching/solving a real corporate problem and making recommendations to the corporate executives. For example, the spring 2017 capstone designed new campus entry/exit/security, student housing, pedestrian access, vehicular/service corridors, and recreational areas for a multi-use site near the Walter L. Smith Architecture Building as identified on the FAMU Master Plan. Students presented their findings to staff of the FAMU Office of Facilities Planning, Construction, and Safety. ARC 5018 Facility Management and ARC 5291 Principles of Space Planning clients are often local developers, realtors, finance COO’s, etc. Students must apply design, fiscal management, sustainability, and human resource management tools to all facility management solutions.

All students in the MScFM program must take 12-hours of elective courses outside the SAET. The electives are in two content areas: Leadership and Strategy, and Environmental Stewardship. These electives build student's awareness and contribute to the practical application of "how and why".

4 E. Oral Presentations and Technical Report Writing

shall be elements of each FM course requirements and emphasized by the program. 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. Provide the course level summary of written and oral assignments.

As the FAMU MScFM is housed in the Division of Architecture, graphic and oral communication skills are imperative to student academic success. It is the culture of architectural education that students formulate design ideas, communicate these ideas in graphic form, and explain the solution's response to the problem verbally. For example, written reports are submitted as a partial requirement of the grade in ARC 5289 Facility Management Profession (Introduction to FM), ARC 5018 Facility Management, ARC 6932 Master's Seminar (Capstone), and ARC 6949 Internship. The Course Notebooks contain examples, as well as, those from supporting courses from other FAMU schools and colleges supplying collaborative content to the MScFM program.

Further, the University recently adopted as its Quality Enhancement Plan (QEP), "#WriteOnFAMU." The overarching goal of FAMU's QEP is to improve writing proficiency by providing students with multiple opportunities throughout their matriculation to engage in writing activities. The FAMU QEP involves the implementation of a Writing Across the Curriculum program where students will complete writing enhanced courses during each year of their matriculation. The undergraduate FM degree program is scheduled to be certified as a Writing Enhanced program by Fall 2020, which means that Writing Across the Curriculum best practices have been implemented in at least five courses in the FM curriculum. As earlier mentioned, these SBI undergraduate courses are required in the MScFM and therefore increase written communication skills of the students: ACG 2071 Managerial Accounting Principles, FIN 3403 Corporation Finance, QMB 2100 Quantitative Methods for Business Decisions I.

In addition, MScFM students can utilize various Computer Aided Drafting and Design software, presentation software, word processing and report generating software, as well as live web-based recordings and broadcast. MScFM students graphic, written, and verbal communication skills are a "brag point" of professors outside the SAET. These students possess an enhanced level of communication skills. To enhance the student learning process and students' overall performance, collaborative, content-related extracurricular activities are held with student clubs and organizations, as well as, corporate partners.

STANDARD 5

STUDENTS

5 Students

SAET and SBI are perennial enclaves of student success at FAMU. The architecture program balances the characteristic of a 21st century Historically Black College/ University (HBCU) and a public school in Florida’s State University System (SUS). The University’s “historic mission of educating African Americans” and the SAET’s “committed to cultural diversity” illustrate an unmatched dedication to non-traditional students. As a HBCU with a national reputation, the University draws African American students from across the country. The School of Architecture was founded to integrate the profession of architecture in Florida and to integrate HBCU FAMU. The Division of Architecture which houses the MScFM retains this historic purpose.

The SAET offers a unique degree combination with the professionally-accredited 5-year Bachelor of Architecture and the MScFM. Students earn a degree enabling licensure as a Registered Architect (RA) and a master’s degree enabling licensure as a Certified Facility Manger (CFM). Figure 7 shows student successes since program inception August 2013.

Figure 14. MScFM Advisory Report Fall 2017

1 st student enrolled summer 2013
1 st graduate spring 2014
28 graduates as of spring 2017 <ul style="list-style-type: none"> ▪ Confirmed employment of all but 2; 1 deceased ▪ Diverse MScFM student undergrad degrees: 8 BSFM from SBI, 17 SAET, and 3 other ▪ 2015 nationally recognized by the FMOC as a stable program: #1 Georgia Tech which is a combination FM and Construction Management (85), #2 University of North Carolina (40), #3 Wentworth Institute of Technology (25), #4 FAMU (20)
3 MScFM/BARCH Graduates & currently 3 MS BARCH students completing the MS portion
100% of students enrolled have graduated
100% retention rate
100% of students completed internship prior to graduation
17 students currently enrolled
10 new students admitted fall 2017
Only FM Program in Florida and HBCU
2015 IFMA Scholarship Awardees present at IFMA World Workplace in Denver, CO <ul style="list-style-type: none"> ▪ Undergraduate Olex Eliacin by Aramark Corporation ▪ MScFM Ryen-Allen Redding by the Airport Facilities Council ▪ MScFM Rashad Towns by the Doug Underwood/Houston Chapter
2013 IFMA Scholarship Awardees presented at World Workplace in Philadelphia, PA was MScFM Kimona Jones by the Florida Suncoast Chapter of IFMA
2012 IFMA Scholarship Awardees presented at World Workplace in San Antonio, TX was MScFM Lucy Diala by the Florida Suncoast Chapter of IFMA
E-Poster Competitors <ul style="list-style-type: none"> ▪ 2014 MScFM Garrett Solomon in New Orleans, LA ▪ 2015 MScFM Safa Shariat in Denver, CO
The School sponsored 10 graduate students to attend the 2014 World Workplace in New Orleans, LA
Future Recruitment:

- Targeted recruitment at HBCUs in Alabama, Texas, South Carolina, Louisiana for Academic Common Market (in-state tuition) as well as other HBCU's
- Development of 1st Feeder school, Okaloosa Walton College offers a BS in Project Management
- Explore booths at World Workplace
- Continue to add more online course options to reach goal of 100%

5.A 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.

SAET's admission policies have always been clearly communicated, recruitment and advising systems are operating, and the budget includes recruitment expenses. SAET has been successful in attracting women into its degree programs and has expanded its outreach to other underrepresented prospective students. As a result of the extensive number of academic support services the SAET and the University provide for students, and the continuous improvements in retention and persistence to graduation activities over the last few years, retention and graduation rates lead the institution. According to data compiled by the State University System Board of Governors, since 2005, FAMU has graduated at least 60% of all African Americans with degrees in Architecture in Florida while enrolling less than 20%. For the 2010-11 cohort, FAMU's statistics reveal, SAET's 4-year graduation rates double other schools and colleges in the institution.

The MScFM Track is appropriate for those who have an undergraduate degree from an accredited institution of higher learning and wish to acquire an International Facility Management Association (IFMA) industry driven professional degree that enables the graduate to perform facility management services. Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology. Minimum requirements for admission:

- An undergraduate degree from an accredited institution
- Foreign students may also need a TOEFL score of 550
- A minimum GPA of 3.0/4.0 in the last 60 hours of undergraduate coursework and a GRE score
- Three letters of recommendation
- Professional Resume and Intent Statement

5.A.1 Recruitment and Articulation Agreements

This 47-hour MScFM program accepts students with any undergraduate degree from a regionally accredited college or university. Students have matriculated from undergraduate degrees in Architecture, Business Administration, Facilities Management, Interdisciplinary Studies, Biology, Computer Engineering, Math, and Exercise Science and Health Promotion. One of FAMU's targets as identified in its Strategic Plan is to "*Enhance and implement effective and targeted recruitment strategies*". The SAET's Recruitment Plan is inclusive of all degree programs and levels and is administered by the Director of Student Services. The plan developed to respond to the Strategic Plan is as follows:

UNDERGRADUATE DEGREE

- Bachelor of Science in Architectural Studies
- Bachelor of Science in Construction Engineering Technology
- Bachelor of Science in Electronic Engineering Technology

GOAL

- Increase the number of undergraduate students interested in earning degrees in architecture, construction engineering, and electronic engineering technology.
- Maintain racial and gender diversity

TARGET

- Architecture: FTIC-30, 2nd Year-30, 3rd Year: 45, 4th Year: 45 Total: 150
- Construction ET: FTIC-25, 2nd Year-25, 3rd Year: 25, 4th Year:30 Total: 105
- Electronic ET: FTIC-25, 2nd Year-25, 3rd Year: 25, 4th Year:30 Total: 105
Total: 360

ACTION

- Launch an aggressive system of periodic contacts and follow-up of interested students, utilizing state-of-the art multi-media or electronic messaging
 - Utilize alumni to provide shadowing and supportive contacts to inquiring students
 - Visit high school magnet programs offering architecture, construction engineering technology, or electronic engineering technology in Florida
 - Strategically join the University general recruitment efforts where a strong pool of potential architecture, construction engineering technology, or electronic engineering technology students exist
 - Attend regional and national recruitment functions for architecture, construction engineering technology, or electronic engineering technology students
 - Develop trendy state-of-the-art printed materials to support University general recruitment efforts; and electronic media for targeted recruitment efforts
 - Increase the enrollment of high-performing architecture students, including National Achievement Scholars, so that the percentage of SA&ET scholars reflect the SA&ET's portion of the larger population

- Strengthen current pre-architecture articulation agreements with Tallahassee Community College, Northwest Florida College (formerly Okaloosa-Walton Community College), Gulf Coast Community College and Florida Community College at Jacksonville and Valencia Community College in the North Florida Area and support their recruitment efforts.
 - Visit programs with SA&ET faculty and staff, participate in juries, forums, lectures, etc.
 - Continue to host faculty and students of these programs at the SA&ET
 - Monitor effectiveness of institutional goals as expressed in the articulation agreements, enhance where appropriate
 - Establish scholarships for these graduates
 - Increase annual AA transfer architecture students entering the FAMU SA&ET from the above institutions to 10 in five years and 20 in ten years.

- Re institute or develop engineering technology AA transfer articulation programs with Tallahassee Community College, Northwest Florida College (formerly Okaloosa-Walton Community College), Gulf Coast Community College, Florida Community College at Jacksonville, Seminole State College, and Santa Fe Community College
 - Increase annual AA transfer construction engineering technology students entering the FAMU SA&ET from the above institutions to 10 in five years and 20 in ten years.
 - Increase annual AA transfer electronic engineering technology students entering the FAMU SA&ET from the above institutions to 10 in five years and 20 in ten years.

- Enhance relations with State of Florida articulated AA pre-architecture programs at Hillsborough Community College, St. Pete College, Palm Beach College, Broward College, and Miami-Dade College.
 - Visit programs
 - Continue to host faculty and students of these programs at the SA&ET
 - Monitor effectiveness of institutional goals as expressed in the articulation agreements, enhance where appropriate
 - Increase annual AA transfer students entering the FAMU SA&ET Division of Architecture from the above institutions to 10 in five years and 20 in ten years.

DEGREE

- NAAB professionally-accredited Bachelor of Architecture (B.Arch)

GOAL

- Increase the number of undergraduate students interested in earning a professional degree in architecture.
- Maintain racial and gender diversity

TARGET

- Traditional Full Time: 15
- Commuter option for working professionals Part Time: 10
- Total: 25

ACTION

- Increase the number of working professionals enrolling in the part-time option to 10 in 5 years and 15 in 10 years
 - This applicant pool consists of practicing professionals who have completed their Intern Development Program (IDP) requirements, lack a professional degree and have been awarded leave time and/or substantial financial assistance from their employer to complete the degree.
 - Market aggressively through the Florida AIA
 - Direct mailings to architectural firms in Florida
 - Reconstitute the SA&ET Newsletter
 - Market through FAMU web and other PR measures

- Maintain the number of 15 students per cohort per year of the traditional BS Architectural Studies to BArch (4+1).

- Maintain number of students in 4th year design studio at 45.
- Early admit highly-qualified students with exemplary design studio grades and professional interest at the end of their third year
- Market FAMU's B.Arch. to HBCU architecture programs and others in the Southeast United States with only 4 + 2 Master of Architecture programs

DEGREE

- **MASTER OF ARCHITECTURE (M.ARCH.)**
- **MASTER OF SCIENCE IN ARCHITECTURE-FACILITIES MANAGEMENT (MS)**

GOAL

- Increase the number of graduate students interested in earning a degree in architecture.
- Integrate the MScFM students into the studio culture with the MArch students.
- Maintain racial and gender diversity Amazingly, all the students in the class need it to either graduate or stay on track (FM and ARC). Some students anticipate taking Design 1.1 and 1.2 over the summer and we typically don't offer the ARC 1160 as the ideal co-requisite to Design 1.2. Amazingly, all the students in the class need it to either graduate or stay on track (FM and ARC). Some students anticipate taking Design 1.1 and 1.2 over the summer and we typically don't offer the ARC 1160 as the ideal co-requisite to Design 1.2.

TARGET

- | | | |
|-------------------|---|-----------|
| ● M.Arch. 4+2 yr | 1 st Year-12, 2 nd Year-12 | Total: 24 |
| ● M.Arch. 3.5 yr: | 1 st Year-12, 2 nd Year-12, 3 rd Year 12 | Total: 36 |
| ● MScFM | 1 st Year-15 | Total: 15 |
| | | Total: 75 |

ACTION

- **MArch**
 - Continue to market graduate options to FAMU's student population for entry into the 3.5 Year M.Arch.
 - Maintain number of students in 4th year design studio at 45 as feeder into the traditional 4+2 M.Arch.
 - Resident option cohort of Early admit highly-qualified students with exemplary design studio grades and professional interest at the end of their third year.
 - Target other HBCU's
- **MScFM**
 - Continue in the development of online courses for the MS; target goal online degree program by 2020 with an enrollment of 60.
 - Continue to market graduate options to FAMU's student population. Targeted FAMU undergraduate degrees: Interdisciplinary Studies, Environmental Sciences, Construction or Electronic Engineering Technology, Business, Facilities Management, Architecture
 - Utilize Latin and Caribbean Scholar program via traditional feeder programs at the University of Technology of Jamaica, University of Puerto Rico, and University of the Bahamas (newly explored 3 + 3 M.Arch.)
 - Target other HBCUs

- Increase Institutional Support
 - Increase Industry Partners for Internships
 - Increase alumni donations and job placement services
 - Develop appropriate marketing materials
 - Develop or enhance additional funding mechanisms for graduate students
 - Assure timely admission and confirmation of enrollment

5.C 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.

University-Level. The Florida A&M University Career and Professional Development Center is an integral part of the total education process. The Career and Professional Development Center is a team of dedicated specialists with the goal of assisting our students in their career development. The Career Center provide FAMU students and alumni career advisement and professional development workshops, and guidance in pursuing graduate studies. The Career Center also partners with companies nationwide in the public, private, government, and corporate sectors seeking to fulfill hiring needs for full-time and summer employment, co-op positions and internship opportunities. Additional information including faculty and staff of the Career Center is available at <http://www.famu.edu/index.cfm?careercenter&Home>.

Program Level. As earlier mentioned, 100% of MScFM students intern prior to graduating. All students register for and complete the required ARC 6949 Internship course. An example of the packet students submit at the completion of the internship is included in the course notebook. Students' intern sites include but are not limited to FAMU Office of Facilities, Planning; Leon County School Board Office of Facility Planning; Aramark; Sodexo, etc. MScFM internships are administered by Professor Robert Goodwin, Jr., Registered Architect and former Director of Facilities Planning at FAMU. Three MScFM graduates who interned at FAMU Facilities, Planning, Construction, and Safety are now employed as Facility Managers in colleges or universities.

Even though the SAET does not have a formal internship program or job placement program, faculty provide career counseling and spear head efforts to identify and recommend student placement in internships or full-time employment. Internship job opportunities that come to the School are posted and distributed to all eligible students via *Black Board Connect*. SAET internships are shown in Figure 8.

Figure 15. SAET Internship Sites Fall 2016 Through Summer 2017

Student	Internship Site
<i>Bachelor of Science in Construction Engineering Technology (BS CET)</i>	
Alfonso, Robbie	Hensel Phelps Construction
Belle, Jeffery	Allstate Construction
Bole, Lyric	JE Dunn Construction
Cullins, Alon	Hedrick Brothers Construction

Student	Internship Site
Holt, Sawyer	C.O.R.E Construction
Jules, Christian	Chicago Bridge & Iron
Karr, Kenneth	Nova Engineering
Taylor, Malcolm	Universal Engineering Sciences
Walker, Jabari	JE Dunn Construction
<i>Bachelor of Science in Electronic Engineering Technology (BS EET)</i>	
Edwards, Destiny	NASA Kennedy Space Center
Canada, Mathew	NASA Kennedy Space Center
Taylor, Brian	NASA Kennedy Space Center
<i>Bachelor of Science in Architectural Studies (BS AS)</i>	
Browning, Zachary	Leon County Property Appraiser
Hughes, James	The Dodstone Group Architects
Johnson, Joel	Gensler Architects
Ledo-Massey, Rafaella	Tammy Massey Architect
Kelley, Logan	Hammond Design Group
Williams, Shannon	Architects: Lewis + Whitlock
Master of Science in Architecture Studies (Facilities Management)	
Clarke, Andre	Desmone Architects
Hunter, Saran	LGA Partners
Major, Kashela	HOK Architects
Peart, Khari	Perkins Eastman Architects
Robinson, Kimberlie	FAMU Office of Facilities Planning
Wade, Darren	FAMU Office of Facilities Planning
Williams, Miles	FAMU Office of Facilities Planning
<i>Bachelor of Architecture (B Arch)</i>	
Copeland, Anthony	Conn & Associates Inc. Architects
Donofro, Christopher	Paul A Donofro & Associates Architects
Lee, Raymond	Miami Dade County
Rittner, Robert	Prime AE Group, Inc
<i>Master of Architecture (M Arch)</i>	
Ellis, Kesha M	City of Tallahassee
Holder, Hugh	DAG Architects
Newell, Melissa	Barnett, Fronczak, Barlowe & Shuler Architects

Student	Internship Site
Paige, Devon	Barnett, Fronczak, Barlowe & Shuler Architects
Peck, Robert	4 M Design Group
Seabrooks, Keith	Gensler Architects
Smith, LéJon	Wilder Architecture, Inc

5.D 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.

The SAET Annual Job Fair provides interview opportunities for students with potential employers. In 2016, the SAET hosted 18 firms. In 2017, 12 came. Spring 2018, 15 firms have confirmed attending the Job Fair. In addition, the local American Institute of Architects host a Resume Day and personal connections are forged with a local architect. The School of Architecture was founded in 1975 and most firms visiting are represented by our graduates. A similar trend and outcome is expected as MScFM graduates return and provide opportunities to students. Job announcements to all MScFM are distributed by a variety of means, including but not limited to FAMU email, SMS Text Alerts, Black Board Connect, Electronic Kiosks, class announcements, and postings around the Walter L. Smith Architecture building.

The MScFM admitted its first students fall 2013 and graduated the first class in 2014. To date, 31 students have completed the program and employment verified for 29, or 94%. Figure 9 shows employment of graduates for each cohort.

Figure 16. Placement of MScFM Graduates

Employment Firm	City, State	MScFM Graduate	Undergrad Degrees	Undergrad
2017				
Gwinnett Technical College	Lawrenceville, GA	Clifford Achille	BS Architecture	FAMU
FAMU Facilities, Planning	Tallahassee, FL	Takeidra Nelson	BS FM	FAMU
		Darren Wade	BS Architecture	FAMU
Sodexo	Chicago, IL	Miles Williams	BS Architecture	FAMU
MG2	Seattle, Washington	Kristi Chin-Sinn	BS Architecture & BArch	FAMU
Farkas & Associates	Pittsburg, PA	LeTaj Tinker	BS & MArch	FAMU
G2 Design	St. Pete, FL	Kimberlie Robinson	BS Architecture & BArch	FAMU
2016				

Employment Firm	City, State	MScFM Graduate	Undergrad Degrees	Undergrad
US Postal Service	Tallahassee, FL	Ashley Watson	BS Business Admin.	FAMU
Realtor	Tallahassee, FL	Anthony Scott	BS Business Admin	FAMU
White Lodging Services	Tallahassee, FL	Charity Haynes-Flucker	BS Business Admin	FAMU
CRB Architects	Sarasota, FL	Ryen-Allen Redding	BS Architecture & BArch	FAMU
University Orlando Resort	Orlando, FL	Quiantae Bristol	BS Architecture	FAMU
Nicolson Construction	Miami, FL	Howard Duncanson	BS Architecture	FAMU
MDC, Facilities Manager	Miami, FL	DonDedric Walker	BS Architecture	FAMU
Gardner, Spencer, Smith, Tench, & Jarbeau Architects	Atlanta, GA	Christopher Smith	BS Architecture & BArch	FAMU
2015				
Sunniland Corp	Daytona Beach, FL	Rashad Towns	BS Computer Engineer	Bethune U
Verizon Wireless	Atlanta, GA	Shehannie Wong	BS Facility Management	FAMU
American Inst Research	Washington, DC	Jasmine Nettles	BS Facility Management	FAMU
LL Facilities Management	Tallahassee, FL	Sharine Adams	BS Facility Management	FAMU
National Sports Authority	Nassau, Bahamas	Scott Ferguson	GS Architecture	FAMU
Cuhaci & Peterson AEP	Orlando, FL	Tiana Larkins	BS Architecture	FAMU
Interplan	Orlando, FL	Emily Cloud	BS Architecture	FAMU
Amazon Logistics	Tallahassee, FL	Tenisha Toney	BS Architecture	FAMU
Deceased		Aaron Goodwin	BS Architecture	FAMU
USPS	Tallahassee, FL	Robert Julien, III	BS Architecture	FAMU
		Safa Shariat	BS Biology	FSU
Scripps College, FM	Claremont, CA	Garrett Solomon	BS Architecture	FAMU
2014				
US Army Reserves	Hayward, CA	Dominick Bailey	BS Facility Management	FAMU*
Little Foot Farms	Atlanta, GA	Carmen Emory	BS Facility Management	FAMU
Charlan, Brock & Associates, Orlando	Orlando, FL	Harold Bosfield	BS Architecture	FAMU
US Army	Elemdorf AFB, Alaska	Anthony Robinson	BS Architecture	FAMU
Morselife Health Systems, Inc	Tallahassee, FL	Ian Rawls	BS Architecture	FAMU

5.E 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.

The State University System of Florida requires semester student evaluations of all courses. Student evaluations are integral to annual performance evaluations by the Dean and supporting documents in the tenure and promotion process.

Course Climate Surveys are conducted the end of every semester where students assess the quality of instruction of the faculty. Contained here are the summaries for each undergraduate Facility Management class offered in the School of Architecture + Engineering Technology the semester and year offered. Assessed areas:

1. About the Instructor

- a. Description of course objectives and assignments
- b. Communication of ideas and information
- c. Expression of expectations for performance in this class
- d. Availability to assist students in or out of class
- e. Respect and concern for students
- f. Stimulation of interest in this course
- g. Facilitation of learning
- h. Overall assessment of instructor

2. Instructor Involvement

- a. The instructor was late to class
- b. The instructor cancelled class with less than a 24-hour notice
- c. The instructor cancelled office hours with less than a 24-hour notice

Figure 17. Summary MScFM Student Course Evaluation Offered in the SAET

Course #	Course Title	FALL 2016	SPR 2017	FALL 2017	Grand Total
ARC1160	Computer Applications in Architecture		4.94		4.94
ARC2161	Advanced Topics Digital Design	4.63		3.23	3.93
ARC2470	Intro To Technology of Architecture	4.77		4.49	4.58
ARC4610	Environmental Systems in Architecture	4.71	4.55	4.58	4.61
ARC5018	Facility Management		4.25		4.25
ARC5289	Facility Management Profession	4.58		4.58	4.58
ARC5291	Principles of Space Planning	4.25		4.60	4.43
ARC6278	Construction Management		3.63		3.63
ARC6932	Masters' Seminar (Capstone)		4.00		4.00
ARC6949	Coop - Internship		5.00	3.81	4.41
Grand Total		4.34	4.43	4.07	4.30

Graduate Survey at Completion of MSc Degree.

Graduates were emailed a survey link to complete: http://famu.co1.qualtrics.com/jfe/form/SV_3xz8JpoZyCHEZJr. This four-question survey sought graduate’s feedback in the areas of 1) academic content, 2) academic advisement, and 3) school climate.

5. F 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.

The school’s academic advisement process and small classes support a student-centered experience. The freshman-through-graduate classes at the SAET are kept relatively small and allow for personal attention. Undergraduate studios and lecture courses rarely exceed 15-20 students. At the graduate level, lecture courses typically have 10-15 students. Since the MScFM began in 2013 through fall of 2017, 34 students entered and 31 graduated. Currently, the MScFM boasts a 100% retention rate and a 91% graduation rate. The other three MScFM students are scheduled to graduate spring 2018, yielding a 100% graduation rate.

As indicated, “Florida A&M MScFM is the 4th largest program in the US and “trending consistent increase 2012-2014, stable 2015”.

5. G 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.

SAET’s student advising, and other academic support processes are performed primarily by the staff in the Office of Student Services under the leadership of the Director of Student Services and secondarily by the Program Directors and Dean. The Director of Student Services is the chief academic advisor within the Division of Architecture which houses the MScFM. In addition, the SAET has sufficient human resources available to provide leadership, advising support, administration, and assessment processes, at its single campus in Tallahassee.

Academic advisement support personnel within the Division of Architecture include Bertina Brewster, Registrar; Julian Bourne-Smothers, freshman and sophomore advisor; Felicia Perkins, automated student response system (Black Board Connect), and a MScFM graduate assistant. Career counseling services are performed primarily by faculty, and Program Directors.

Every student is advised by the Director of Student Services. Every student’s academic advisement history and grades are reflected via an online check list of projected, current, and completed courses. The SAET academic advisement process provides advisors and students with a historical record and roadmap to completion. For accuracy, only the Director of Student Services can edit the online documents. To guard student’s privacy, view access is restricted by the Dean to only SAET Program Directors and Coordinators. The process is as follows:

1. Students schedule a 20-minute session during the university’s academic advisement periods.
2. Advisor creates an electronic MScFM Completion Check form and uploads it to the FAMU One Drive System.
3. Advisor and student discuss the sequence of classes on MScFM Completion Check (see Table 5. G. 1. below). As can be seen, two of each (Leadership Strategy, Environmental Stewardship) graduate-level electives are required. Available courses may change
4. Classes are selected, the SAET Academic Advisement form is completed with advisor and student signatures (see Table 5. G. b. below).
5. Students enroll in selected courses.
6. Students receive a copy of the Academic Advisement form and the MScFM Completion Check with current selected courses.
7. Subsequent semesters, the process is repeated but completed course grades are updated.

Figure 18. SAET-Division of Architecture MScFM (71184) Completion Check

Florida A&M University
 School of Architecture + Engineering Technology
ACADEMIC ADVISEMENT FORM

FAMU STUDENT ID#				NAME				TERM/YEAR							

1. Follow all procedures established by the department offering the course.
2. To avoid an error, place add (A) or drop (D).
3. Class numbers are required and may be obtained from the online schedule of classes.
4. Lower level courses: 1000 and 2000, normally taken by freshmen and sophomores. Upper level courses: 3000 and 4000 normally taken by juniors and seniors. Graduate courses: 5000 and above; undergraduate students need Department Approval to enroll.
5. Special Study and DIS courses need the approval of the advisor and professor.
6. All students are encouraged to enroll in 15 hours per semester.

DATE

CLASSIFICATION/
STUDIO

FALL COURSES

A/ D	CATALOG			CLASS NUMBER	CR HRS	VAR	AUD	MEETING TIME		MEETING DAY							PERMISSION NUMBER	
	PREFIX	NUMBER	SECTION					BEGIN	END	M	T	W	R	F	S			

← TOTAL HOURS

SPRING COURSES

A/ D	CATALOG			CLASS NUMBER	CR HRS	VAR	AUD	MEETING TIME		MEETING DAY							PERMISSION NUMBER	
	PREFIX	NUMBER	SECTION					BEGIN	END	M	T	W	R	F	S			

← TOTAL HOURS

Current Contact Information

Email: _____

Phone: (____) _____ or (____) _____

Address: _____

STUDENT SIGNATURE _____ DATE _____

ADVISOR SIGNATURE _____ DATE _____

Figure 19. SAET-Division of Architecture MScFM (71184) Completion Check

**School of Architecture & Engineering Technology-Division of Architecture
 MSc in Architecture-Facilities Management (71184) Completion Check**

Name		ID#		Nation		Grad Date:	
Gender		Began FAMU		BS Institution			
Race		B. Degree Year		B. Degree			

S	Pre	Num	Course Title	Cr	Pre	Num	Equivalent Course Title	Grade (min B)	Cr grad
	ACG	2071	Managerial Accounting Principles*	3					
	ARC	2161	Advanced Topics in Digital Arch	1					
	ARC	2470	Intro to Technology of Architecture	3					
	ARC	5289	Facility Management Profession	3					
	ARC	5xxx	Principles of Space Planning	3					
			<i>Leadership Strategy Elective</i>	3					
	ARC	5018	Facility Management	3					
	ARC	6278	Construction Management	3					
	FIN	3403	Corporation Finance	3					
	QMB	2100	Quantitative Methods & Bus Dec 1	3					
			ARC 6949 or MAN 5940 Internship	3					
			<i>Environmental Stewardship Elective</i>	3					
	EVR	5062	Principles Environ Occupational Health	3					
	ARC	6932	Masters Seminar (<i>Capstone</i>)	3					
	ARC	4610	Environmental Systems in Architecture	3					
			<i>Leadership & Strategy Elective</i>	3					
			<i>Environmental Stewardship Elective</i>	3					
			Total Hours	47			Minimum 30 graduate-level hours required for the degree		

Capstone Topic	Committee Members
	Chair:
	Member:
Approval Date:	Member:

*Students must receive an assessment score of 80 points through www.peregrineacademics.com (FAMU-1001:password) or pass ACG 2021 Financial Accounting Principles to enroll.

Core Competency Electives

(Students may request additional courses not listed below. Written request must be submitted during drop/add period)

Leadership & Strategy (select 2)

- BUL 5323 Legal Issues & the Environment
- PAD 5417 Public Personnel Administration
- PAD 5025 Public Management
- PAD 6227 Seminar in Public Finance Administration
- PEN 4106 Man & Op of Aquatic Facilities (AFO Certification)
- SPM 5108 Sport & Leisure Facilities Management

Environmental Stewardship (select 2)

- EVR 5864 Environmental & Risk Management
- ENV 5617 Environmental Engineering Sustainability
- ARC 5-6000 Special Study "Urban Design"
- FAMU/FSU COE Graduate Sustainability Courses
- FSU Graduate Real Estate Courses
- HSA Health Facilities Elective

5. H 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.

Ethical Practices

Florida Agricultural and Mechanical University is committed to the highest standards of ethical conduct in all aspects of the University environment. In its ongoing effort to ensure excellence in all activities, the University has instituted the FAMU Compliance and Ethics Hotline as an additional method for reporting violations of University policy, compliance concerns or misconduct.

FAMU has established policies and procedures for addressing concerns of the University community and encourages its faculty and staff to use these avenues to resolve their concerns whenever possible. The FAMU Compliance and Ethics Hotline and web reporting system provide a supplementary reporting channel where an individual is unwilling or unable to use the internal resources available, including instances where he or she wishes to remain anonymous.

In a workplace as rigorous, fast-paced, and diverse as a multi-campus land grant university, doing things right can be complicated. But at its core, doing things right means acting for our mission and sticking to our essential values. Share in the University's reputation and continued success through your own responsible conduct.

FAMU's Compliance and Ethics Hotline is an effective way to report activities that may be in violation of the law, including, but not limited to the following violations or concerns:

- Discrimination
- Workplace Health and Safety Violations
- University Code of Conduct Violations
- Falsification of Financial Records, Travel or Expense Reports
- Legal or Regulatory Violations
- Misuse or Theft of University Property
- Research Misconduct

Studio Culture Policy

The SAET Studio Culture Policy provides a philosophy for faculty and students to help frame and ensure that the academic environment is conducive to healthy learning. It is, therefore, the intention of the School that faculty and students be given a nurturing and supportive environment where intellectual development can occur, where harmonious relations thrive between faculty and students, and where intellectual curiosities are matched with realistic expectations. As such, the Policy frames an academic climate that is conducive to individual and group exploration, achieving the learning outcomes, and asserting the value of each person who is a part of this community.

The SAET Studio Culture Policy is intended to ensure the healthiest possible teaching and learning environment, conducive to the development of the well-rounded student, while preparing fully for entry into the profession of architecture. Because the focus of the school's learning activity has at its heart the design

studio experience where all learning comes together, this policy gives special attention to providing the conditions to enhance that experience. The policy stands as one expression of the mission of the University, a 1890 Land Grant Institution, which seeks to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student centered environment. Six values (from the University Mission Statement) form the basis for the policy: passion, respect, professionalism, focus, integration, and time.

- **Passion:** The school provides a lively atmosphere, which encourages optimism, constructive thinking and acting, and a fervent pursuit of the best in architecture. Exploration, discovery, and creative imagination are supported by student and faculty interaction.
- **Respect:** Mutual appreciation among faculty and students creates an environment in which all benefit from the sharing of knowledge and good judgment. Faculty will work to enhance the best of student talent and abilities. Students respond to good faculty instruction and advice.
- **Professionalism:** Faculty will sustain a well-organized and clearly delineated program of study. Students will involve themselves in the learning process actively and engage the school community in a positive and self-disciplined manner.
- **Focus:** The learning and teaching setting are opportunities for giving full emphasis on architecture as the underlying purpose of the school's academic programs. Studios will provide the place where architecture has its clearest manifestation within the school.
- **Integration:** Recognizing that architecture is an inclusive field and represents a process of iterative synthesis, the faculty assists in bringing the widest possible range of knowledge and creative thinking to bear on student learning. The spirit of exploration, discovery, and critical thinking will be infused with a commitment to a search for truth that brings all together into a holistic understanding of architecture.
- **Time:** Time is valuable, and it requires careful allocation to a wide variety of activities, not only adequately providing for effective study, but also many other aspects of life. In the interest of the students' fullest personal development, the school and its faculty will endeavor to establish reasonable schedules for learning activity.

Tuition Refunds Regulation of Florida A&M University 3.009 (5).

The entire policy can be viewed at <http://www.famu.edu/index.cfm?Registrar&TuitionandFeeSchedule>. Tuition refunds are calculated on a course by course (per credit hour) basis. Students who are enrolled and then withdraw may not receive a refund. Refunds will be computed based on the actual withdrawal date certified by the Office of the Registrar. Refunds will not be made to students who do not attend class and have not completed the required withdrawal procedure. Terms in the student housing contract will determine the refund of room rent; whereas board will be prorated based on the approved date of cancellation. Refund processing is approximately two to four weeks.

- (a) Students who officially withdraw prior to the end of the drop/add period and have completed the required withdrawal procedure will be entitled to 100 percent of the tuition assessed or adjustment for waivers.
- (b) Students who officially withdraw prior to the end of the fourth week of classes and have completed the required withdrawal procedure will be entitled to 25 percent of the tuition assessed or adjustment for waivers, less building and capital improvement fees.

- (c) Students who officially withdraw at an appropriate time as designated by the University for Summer sessions and have completed the required withdrawal procedure will be entitled to 25 percent of the tuition assessed or adjustment for waivers, less building and capital improvement fees.
- (d) Exceptions to the refund policy are made only in rare instances. Written application for an exception must be filed with the Office of Student Financials and addressed to the Refund/Waiver Appeals Committee. If a student withdraws or drops one or more credit courses due to circumstances determined by the University to be exceptional and beyond the control of the student, the student will be entitled to 25 to 75 percent of the tuition assessed or adjustment for waivers.
- (e) A written appeal for a refund or other appeal action must be submitted to the University within six (6) months of the close of the semester to which the refund or other appeal action is applicable.
- (f) Pursuant to Public Law 102-325, the Higher Education Amendments of 1992, and notwithstanding the provisions of subsection (5) and paragraph (5) (a) above, for the first term in which students are enrolled at the University for the first time, a pro-rata refund of tuition, fees, room and board, and other charges shall be made as required by Public Law 102-325.

Admission Practices

The FAMU School of Graduate Studies and Research (SGSR) is one of the twelve major academic units of the University. The school has the principal responsibility of working in collaboration with the various schools, colleges and institutes to maintain, develop, coordinate, and monitor the policies and procedures that govern all graduate programs.

Graduate study is available in nine schools and colleges. Collectively, these entities offer 29 master's degree programs, one professional doctorate, (the Doctor of Physical Therapy), and 12 doctoral degrees. The 12 doctoral degree programs include 11 Ph.D. degrees and one Doctor of Public Health (DrPH). The Ph.D. degrees consist of: six in the College of Engineering, one in the College of Pharmacy, one in the College of Science and Technology, one in the College of Education, one in the School of the Environment, and one cooperative Ph.D. is offered in the College of Agricultural and Food Sciences, with the University of Florida, in Entomology.

Admission to graduate study is granted by the FAMU SGSR to qualified applicants, who are seeking degrees and to qualified post-baccalaureate students who may wish to upgrade specialty certifications or enhance their knowledge. Admission to graduate study is a two-part process. The Graduate Office of Admissions determines the applicant's eligibility for admission to the University and the academic program determines the applicant's admissibility to the degree program. Final admission to the University is subject to approval by the Graduate Office of Admissions.

All official application materials must be submitted through the online portal *CollegeNet*. Admission Requirements are as follows

- A GRE score and 3.0 GPA in Upper Division Courses of the FAMU B.S. or equivalent degree in architecture
- 3 letters of recommendation
- Professional Resume
- Professional Intent Statement
- Test of English as a Foreign Language (TOEFL= 550/paper-based; 80 internet-based) or International English Language Testing System (IELTS) scores (6.5) sent directly to FAMU from

the Testing Service, if an applicant is from a country where English is not the official language or when an applicant's degree is not from an accredited U.S. institution, or if an applicant did not earn a degree in a country where English is the only official language or from a university where English is the only official language of instruction

Employment Practices

The FAMU Equal Employment Opportunity statement: *All qualified applicants, including the disabled, will receive consideration for employment and promotion without regard to race, color, sex, religion, national origin, political affiliation, marital status, or age except as provided by law.* All employment policies and practices can be found at <http://www.famu.edu/index.cfm?hr&Employment>.

The FAMU Office of Equal Opportunity Programs is responsible for the day-to-day implementation of nondiscrimination policies. The FAMU EEO/AA policies and procedures comply with relevant regulations and guidelines, including the Office of Federal Contract Compliance Programs (OFCCP), Equal Employment Opportunity Commission (EEOC) and the Office of Civil Rights (OCR). The Office also coordinates compliance with the Americans with Disabilities Act of 1990. The FAMU Office of Equal Opportunity Programs' policies and procedures are available online.

Academic Honesty Policy. The university policy can be found at <http://www.famu.edu/BOT/Academic%20Honesty%20Policy%207.27.17.pdf>. This policy shall be posted on the University's website. Students shall also be made aware of this policy through the University's student handbook and handbooks of the respective academic units.

5. I 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.

The School of Architecture developed its Policy on Academic Honesty and Ethical Conduct of Students in 2002. The current policy of the SAET is published in the 2017-19 SAET Student Handbook: <http://www.famu.edu/Architecture/2017%20HANDBOOK%202.pdf>

A. Introduction

As a limited-access professional degree program, the Division of Architecture in the School of Architecture + Engineering Technology (SAET) requires from faculty, staff, and students alike a standard of conduct that is above reproach. The policy described herein is authorized by FAMU Rule 6C3-4.002, *Florida Administrative Code*, and defines the limits of acceptable student conduct, the process for determining whether or not a student has conducted himself or herself in an unethical or unprofessional manner, and sets policy as to the School's objective in providing this document is to guide students in proper and acceptable conduct and to provide for a fair evaluation of the actions of faculty, staff, and students whenever those activities are called into question. This policy incorporates by reference the Florida A&M University *Student Code of Conduct*. (Faculty and staff conduct is regulated by a separate policy, including applicable portions of collective bargaining agreements.)

B. Policy

- (a) The degrees awarded by the School of Architecture + Engineering Technology are indications that the faculty considers the graduate to be trustworthy and committed to protecting the interest, health, safety, and well-being of clients and the public in all his or her future work.
- (b) Any act by a student which is intended to or has the effect of deceiving instructors, the School, or the University about a student's actual knowledge and academic competency is a violation of the trust that the public invests in our degrees and our graduates.
- (c) Any act of deception committed or attempted by a student casts doubt on that student's competency not only in the area in which the deception has occurred but in all other areas as well. Such an act may create so serious a breach of trust that the School is unable to assure the public of the student's trustworthiness and competency, as implied by the granting of a degree. If the School's trust in a student is irreparably lost, it has no choice but to dismiss the student from the school.
- (d) Any student who has direct personal knowledge of or witnesses unethical or unprofessional conduct by another student is honor-bound to report this to a faculty member or the Dean. Any member of the faculty or staff of the School of Architecture & Engineering Technology who has reason to believe that actual or attempted unethical or unprofessional conduct has occurred is obligated to pursue applicable School procedures to determine the responsibility of the Student. Failure to meet this professional responsibility is unacceptable conduct.

C. Unethical Conduct

The following examples are intended to help clarify the limits of acceptable student conduct. While these examples are extensive, they are not comprehensive. Certain actions may be determined in accordance with School and University policies to be unacceptable, even though they are not specifically listed below.

- (a) Cheating on exams, quizzes, projects, or homework is unacceptable. Students found to have cheated on an exam will, at a minimum, receive a grade of "F" in the course and a letter of reprimand from the Dean. A copy of the letter will be placed in the student's file. In extreme circumstances, the student may be dismissed from the School of Architecture & Engineering Technology. Examples of cheating are:
 - a. Surreptitious use of non-permissible information sources brought into a closed book exam.
 - b. Copying from others during an examination or quiz or on homework.
 - c. Communicating exam questions or answers prior to or during an exam.
 - d. Taking an exam for another student or having another student take an exam for you.
 - e. Possessing answers to exam questions obtained by improper means before the scheduled exam.
 - f. Using project materials that are not authorized.
 - g. Using unauthorized electronic devices in taking examinations.
 - h. Obtaining information from others during a take-home exam.
- (b) Plagiarism in papers, assignments, or studio projects is unacceptable. Students found to have plagiarized the work of another person will, at a minimum, received a grade of "F" in the course and a letter of reprimand from the Dean. A copy of the letter will be placed in the student's file. In extreme circumstances, the student may be dismissed from the School of Architecture & Engineering Technology. Plagiarism involves submitting any work done by others, including your fellow students, without accurate acknowledgement. Examples of plagiarism are:
 - a. Statements copied directly or paraphrased without acknowledgement.
 - b. Illustrations that are photographed, photocopied, or traced without acknowledgement.

- c. Papers written by commercial term paper or “research” firms or receiving editorial help that exceeds simple proof-reading on papers, thesis, etc.
- (c) Excessive cooperation on out-of-class assignments is a form of cheating and is unacceptable. Regarding issues of excessive cooperation on projects or homework assignments, faculty are expected to provide clear advance instructions and criteria for evaluation so that students may know what is expected of them. The student is, in turn, responsible for being sure he/she knows and understands these.
- (d) Students are encouraged to work together, exchange notes, and discuss and debate all academic issues. However, students may not submit someone else’s work as his/her own. Students who have been assisted in completion of models or drawings must acknowledge who provided the assistance and the nature of the assistance. The student’s responsible professor should be made aware of the student’s assisted activity before it is undertaken to assure that it occurs within acceptable bounds. The student is expected to acknowledge and give credit to all those who assisted in this regard. Typing by others is accepted in most cases. Students found to have cheated on an assignment will, at a minimum, receive a grade of “F” on the assignment and a letter of reprimand from the Dean. A copy of the letter will be placed in the student’s file.
- (e) Making false or misleading statements on official document of the School is unacceptable. This includes remaining in a class for which one does not possess the necessary prerequisites, fraud, misrepresentation in seeking excused absences from class, and other such falsification. Students found to have made false or misleading statements on official documents will, at a minimum, receive a letter of reprimand from the Dean. A copy of the letter will be placed in the student’s file. Students registered improperly for a course will receive a grade of “F” or be administratively dropped from the course.

D. Unprofessional Conduct

- (a) Theft, destruction, or willful damage of property belonging to another person or the School and fighting are unacceptable conduct and constitute grounds for dismissal from the School, as well as legal action by the University.
- (b) While the School values student pursuit of practical experience in architecture and the building industry and appreciates the need of many students to work while completing their degrees, students must not enter situations which are in fact, or may be perceived to be, practicing architecture without a license. This may include, but is not limited to, the following:
 - a. Falsifying or misrepresenting the extent of one’s education, training, or experience.
 - b. Making statements that could reasonable cause an ordinarily prudent person to misunderstand or be deceived about one’s qualifications to perform work.
 - c. Using the title “architect” or doing work that is in the province of a licensed architect unless one is registered in the state in which he/she practices. Law specifically prohibits this.

STANDARD 6 OUTCOMES

6. SUMMARY OF FACILITY MANAGEMENT PROGRAM CURRICULAR OUTCOMES AND COMPETENCIES

Following are the 8 Outcomes and 16 Competencies:

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

Competency 1 a: 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 a: 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).

OUTCOME 3: Graduates can manage building systems, facility operations, occupant services and maintenance operations

Competency 3 a: 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 b: 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 c: 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 d: The student can demonstrate a method to plan, measure and evaluate the facility's operational performance. (ways of applying)

Competency 3 e: The student can interpret, apply, and recommend quality improvement programs. (ways of applying)

Competency 3 f: The student aligns facility management technology with organizational information technology. (ways of understanding)

Competency 3 g: The student can comprehend and prepare emergency preparedness and business continuity strategies. (ways of understanding)

Competency 3 h: The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)

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

Competency 4 a: 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 fiscal management tools to the Facility program and organization

Competency 5 a: The student uses analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of facility financial management. (ways of understanding)

Competency 5 b: 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 a: 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 a: The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre. (ways of applying)

8 OUTCOME: Graduates will be able to apply FM Computer Applications

Competency 8 a: The student demonstrates the ability to understand and to apply computer applications for facility management problem solving.

The MScFM is housed in the Division of Architecture. It is one of three graduate pathways for students. The MScFM and the NAAB-accredited 3.5-year Master of Architecture both admit students with any undergraduate degree. The maximum 47-hour program can be completed in one academic year even for students without an undergraduate degree in architecture or business. Architecture majors have completed the degree in two semesters.

The MScFM is technically strong. MScFM students' designs are frequently critiqued by architecture majors and this additional informal feedback is positively reflected in their class assignments and projects. Students understand their role in shaping the future built environment. They are also competent in the digital communication and design. The MScFM complies to the 2017 Accreditation Standards by satisfying the competencies for Outcomes 1, 2, and 7, and addresses competencies 3c, 3e, 3h, and 5a.

**Outcome 1: Graduates can understand the FM history, practice and profession—
UNDERSTANDING**

Competency 1a: The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)

Outcome 1 is satisfied primarily in courses ARC 1274 Introduction to Facility Management or the graduate parallel ARC 5289 Facility Management Profession. These courses provide an overview of the Facility Management profession and emphasizes the roles of a Facility Manager as a member of the organization's management and leadership team. It also introduces students to the diverse roles and responsibilities of facility managers in public and private organizations. Topics include but are not limited to

- History of facility management
- Ethical and legal responsibilities and concerns
- International facility management issues
- Facility management industry structure
- Concepts and responsibilities of the facility management profession and how it relates to other related professions
- Ancillary facility management functions

Upon successful completion of this introductory course, students are

- Familiar with relevant applications of facility managers in the built environment
- Aware of core competencies in the FAMU program
- Aware of strengths of the FAMU program
- Aware of dispositions and expectations that are expected to have an impact on student's professional careers

The above topics are reinforced in ARC 4010 Facility Management and its graduate parallel, ARC 5018 Facility Management. In addition, the SAET has also provided funds for students to attend World Workplace where interactions with facility managers from around the world and representing varied employment sectors. World Workplace reinforces the classroom lectures and exercises further strengthening students' understanding of the facility management profession.

**Outcome 2: Graduates can plan, manage, and lead projects—UNDERSTANDING lecture
courses) & APPLYING (internship)**

Competency 2a: The student can manage project initiation, planning, execution, control and closeout (ways of knowing: using scope, quality, schedule, budget, resources and risk) demonstrated via internship, case studies, and simulation

Outcome 2 is satisfied in ARC 6278 Construction Management, ARC 5018 Facility Management, and ARC 6949 Internship. Collectively, course content, exercises, case studies, and projects provides an overview of the roles of facility managers as corporation leaders who provide guidance to staff and service providers, as well as, apply skills that affect decisions of building users, government officials, community leaders, and business associates. Competencies addressed, but are not limited to:

- Leadership and Management in professional practice
- Plan, assure, and evaluate service delivery
- Manage and evaluate construction projects
- Manage and evaluate relocations
- Identify, evaluate and control change orders
- Ethical and legal responsibilities and concerns
- Roles of professionals in the building delivery process, i.e. architects, facility managers, contractors, engineers

ARC 6278 Construction management introduces processes, techniques and tools associated with construction management with Green Building Applications. Class projects simulate the role of the facility manager and other key personnel; the elements and main objective of construction management; the construction industry, construction practices in sustainability; project cost management; project planning and scheduling; resource management and project financial management. Case studies and Primavera and Prolog Management Software are introduced in this course as tools to help students understand the relationships of material, equipment, manpower and contractual obligation to clients.

All students in the MScFM register and complete at least one internship, ARC 6949. Most have interned at the FAMU Office of Facility Planning, Construction, and Safety. Students have routinely assisted staff in interpreting and applying development goals for the FAMU Campus Master Plan. Fall 2017, students helped clarify and identify growing classroom and/or studio space needs in the Walter L. Smith Architecture building to address the Strategic Plan and support programmatic growth especially in identifying specific studios and lecture spaces for the MScFM. As a result, spring 2018, new spaces were added to the inventory.

Upon the completion of ARC 6278 Construction Management and ARC 6949 Internship students are able to

- Prepare a comprehensive precedent diagram of a major construction project.
- Understand the processes and personnel involved in project implementation.
- Articulate in written and oral communication the particular language in construction management terms
- Analyze the pros and cons of different types of contracts.
- Utilize management software packages or other tools in representing aspects of construction monitoring projects
- Understand the use of the LEED credit system in evaluating the role that construction management will have in impacting the project product and construction process.

Outcome 7: Graduates are effective communicators—APPLYING

Competency 7a: The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Outcome 7 is satisfied. The MScFM is a collaborative and emergent academic experience. One of the most sacred aspects of architectural education is the “Charette or Jury”. Students are required to produce a sufficient solution to a problem, articulate the response graphically, and communicate process and program objectives/goals orally. The MScFM is housed in the Division of Architecture and all ARC courses subscribe to this evaluation process. Therefore, all graduates are skilled written, graphic, oral, aural, and interpersonal communicators. In addition, all graduates can utilize various graphic and Computer Aided Drafting and Design software.

Outcome 7 is satisfied by the digital communication skills acquired in ARC 1160 Computer Applications in Architecture and ARC 2161 Advanced Topics in Digital Architecture. These courses provide another media for students to convey their architecture work and space planning skills. Also, the various 2-d and 3-D digital interfaces introduced will be of industry standard, which will allow for a sense of preparation for the current methods and practices for professional growth. Software used is Google Sketchup, Auto Desk Revit, PhotoShop, Rhino, BIM. Students completing these courses can use, adapt, and apply the software to various facility management operations including

- Introduction to computer aided facility maintenance and operation systems
- Reading construction documents
- Producing scaled architectural drawings and digital models
- Producing presentation drawings
- Introduction to the design and development of project plans (include corporate and design standards) and alternative strategies
- Introduction to the development of bid specifications with special emphasis on space furnishings and fixtures
- Common FM and office application software
- FM technology systems and technology trends
- Communication technologies and their application to buildings and FM software
- Organizational IT systems and trends

Upon successful completion of this introductory course, students will be:

- Familiar with relevant applications of computer systems that Architects and Facility Managers currently use
- Apply basic computer programs supporting architectural design
- Use applications that enhance the facility management design experience
- Aware of applications that are expected to have an impact on student’s professional careers
- Able to work in a collaborative environment with other students
- Aware of the challenges of digital design/graphics and print

ARC 6949 Internship, all communication skills are applied. Fall 2017, MScFM student interns were lead investigators and implementers for the space inventory upgrades needed in the Walter L. Smith Architecture building. Significantly, at a fall 2017 meeting, the MScFM interns understood the technical constraints in the State Requirements of Educational Facilities that govern all construction, renovation, etc, in public educational facilities in Florida and effectively communicated the School’s space needs to the FAMU Office of Facility Planning, Construction, and Safety. The FAMU Office of Facility Planning, Construction, and Safety values the contributions of the MScFM student interns.

ARC 6932 Masters' Seminar, all communication skills are applied. Students are required to prepare a best-case solution, prepare written and electronic reports, produce graphically-appealing presentation, and defend the project to a "Jury" or select group of peers. The final presentation is also videoed.

Outcome 3: Graduates can manage building systems, facility operations, occupant services and maintenance operations

Competency 3 c: 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—**APPLYING**.

Competency 3 c is satisfied. The MScFM is housed in the Division of Architecture. The MScFM is one of three professional master level degree programs. NAAB-accredited 4+2-year and 4 + 3.5-year Master of Architecture complete the graduate offerings at the SAET. As such, there is an emphasis on building design, site planning, codes and regulations, technology, sustainability, and environmental systems. These attributes are incorporated into the MScFM. Graduate Architecture majors often take facility management courses as electives and infuse their vast levels of design, problem-solving, and building delivery process experiences into the MScFM. Architectural design principles are taught by Registered Architects who were also Facility Managers in ARC 5291 Principles of Space Design. This graduate-level course emphasizes the design process and design appreciation tailored specifically for Facilities Management professionals. The design aspects of a building are studied from the perspective of leadership and management in the profession. Planning and Project Management of different building types and the use of the technology required for a successful professional are an integral part of the design aspect of this course. Communication skills are paramount. ARC 5291 Principles of Space Planning meets the following objectives:

- Leadership and Management (Professional Practice), students:
 - Create a mission for facility function
 - Plan facility function activities
 - Organize facility function
- Planning and Project Management, students:
 - Know basic building types and their effect on organizational functions
 - Interpret the overall business goals, the organizational strategies used to accomplish those goals, and linking the facility planning to business planning
 - Develop, maintain, and evaluate long-term, interim and short-term facility plans
 - Define project scope
 - Identify project teams
 - Develop project plans (include corporate and design standards) and alternative strategies
 - Develop bid specifications (includes furniture and fixtures)
 - Develop and coordinating the approval process
 - Evaluate project results

At the successful completion of the course students are able to:

- Read, understand, and produce architectural drawings both digitally and mechanically
- Apply fundamental space planning principles

- Apply basic design skills in reference to the planning and layout of a space reflective of the corporation's goals and objectives
- Build teams and use a variety of presentation techniques.
- Explore analytical techniques for the understanding of the nature of the design problem to be solved.
- Display a strict sense of craftsmanship, discipline and work ethic
- Portray attitudes, values, and work habits appropriate to Facility Management
- Comprehend and produce financial, graphic, and technical information and documents

Students are made aware of structural, material, and environmental factors in ARC 2470 Introduction of Technology and forge an understanding of those principles in ARC 4610 Environmental Systems in Architecture. MScFM students are expected to apply structural, material, and environmental factors in the Capstone project. Professors of these courses either have Doctorates in Environmental Design or Registered Architects who are also LEED certified.

Competency 3 e: The student can interpret, apply, and recommend quality improvement programs—**APPLYING.**

Competency 3 e is satisfied. ARC 5289 Facility Management Profession introduces the student to the expectations, and challenges of the profession. ARC 5018 Facility Management reinforces those principles. Through demonstrations and case studies, students become knowledgeable of the facility managers' roles of planning, scoping, scheduling, and evaluating facility functions. Case studies of different facility types present students with "real life challenges" to develop the most effective strategies to successfully execute major initiatives and integrate people, place, processes and technology. Specific outcomes include, but are not limited to:

- Aligning the facility's strategic requirements with the entire organization's requirements
- Developing and implementing a strategic planning process
- Assessing what services are needed to meet organizational (business) requirements
- Adapting integrative problem-solving techniques to dynamic environments

Competency 3 h: The student can demonstrate awareness of sustainable stewardship principles applied to the built environment—**APPLYING.**

Competency 3 h is satisfied. The responsibility for stewardship and sustainability belongs to all users of a facility and its grounds. The facility manager is expected to take steps to protect the environment and the people who use the facility while supporting organizational effectiveness and minimizing risks and liabilities.

Institutional-Level. FAMU is committed to promoting sustainability. In 2011, FAMU was selected as one of *The Princeton Review's* "311 Green Colleges: 2011 Edition." The list focused solely on colleges that have demonstrated a strong commitment to sustainability in their academic offerings, campus infrastructure, activities and career preparation. The FAMU Sustainability Institute was founded...the US-Brazil Sustainability and Sustainable Development Education Initiative. A student-led FAMU-Wide Sustainable Task Force empowers students in planning for conservation and environmental sustainability with a focus on projects that address energy, water quality, and sanitation. That initiative as well as the FAMU

Environment and Sustainability Council is chaired by Professor Richard Gragg, PhD (widely published on the subject) teaches the EVR 5062 Principles of Environmental and Occupational Health.

Program Level. For the last three years, the SAET hosted an “Art of Sustainability” exhibit, sponsored by the FAMU Sustainability Institute. The SAET provided design assistance and construction supervision to the FAMU Sustainability Institute for two projects, the Green-Co Park in 2014 and the 2016 Home Depot Re-Tool Your School project. Assistant Professor Olivier Chamel, Registered Architect, LEED, AIA assisted the FAMU Sustainability Office in the design and construction management of the FAMU 2016 Home Depot Re-Tool Your School project. The \$30,000 award provided an “eco-classroom” that will serve as a non-traditional learning center. It will host educational demonstrations for the community on renewable energy, environmental conservation, food security, and other sustainability related initiatives. It will also serve as a place for positive community social interactions, as a seedbed for entrepreneurial possibilities related to compost and produce (herbs) and generate opportunities for student volunteer engagement across campus.

The SAET offers the NAAB-accredited Bachelor of Architecture and Master of Architecture degree. NAAB recognizes the forces that impact the education and development of professional architects. The FAMU SAET responded to each of the Perspectives in its 2018 application for Reaccreditation, one of which is *Stewardship of the Environment*. Therefore, all degree programs in the SAET, including the MScFM strive to educate students that can contribute to the world through design decisions that recognize the ecological challenges of today and tomorrow.

- Teaching: The 4-year Bachelor of Science in Architectural Studies requires 36 credit hours of design in 8 studios. Many of these studio projects explore strategies for sustainability. But, it is most evident in ARC 4610 Environmental Systems in Architecture lecture class.
- Publications: Associate Professor Elizabeth Lewis, Assistant Professor Mahsan Mohsenin and Research Associate Sang Park have multiple publications on sustainability and environmental systems. Recent research by Dr. Park and Dr. Lumpkin explore the role of environmental systems and student success. Examples of their published work is available online and listed in their resumes in the Appendix.
- Research: The funded research by Olivier Chamel illustrates the role of design build experiences in sustainability education. While two projects were built in the public space of the FAMU campus (Green-Co Park and the Outdoor Classroom), one project was built in the architecture building atrium (Modular SIPS structure). Descriptions of the projects are available online. ([video link](#))
- Enrichment Events: While numerous SAET lectures highlight sustainability, the issue was the central theme for Architecture Week 2016. The presentation by the guest speakers included;
 - “*Urban Sustainability in South America*” by Pablo Pinilla Altikes, Director of Architecture, School of Architecture and Art Universidad del Desarrollo, Concepción, Chile.
 - “*Climate Change Vulnerability Assessments in Trinidad & Tobago*” by Tisha Holmes, Ph.D., Assistant Professor, Dept of Urban & Regional Planning, Florida State University.
 - “*Green Walls in the City*” by Luis Palermo Iglesias, Vicedean of Students, Dept of Architectural Construction, Universidad Politécnica de València, Valencia, Spain.

The application of Competency 3 h principles is primarily met in ARC 4610 Environmental systems in Architecture. This course exposes students to the increasingly complex building systems and controls that provide both opportunity and challenge for the facility manager. Integration of new technologies to conduct short and long-term management of facilities is introduced, as well as, instilling a mindset to expand as new

technologies emerge. Major topics of discussion include environmental stewardship, operations and maintenance, real estate and property, finance (life cycle cost including operating and political cost), and technology.

Criterion presented include but is not limited to

- **Operation and Maintenance**
 - Monitor and evaluate how building systems perform
 - Monitor and evaluate how buildings perform
- **Finance**
 - Life-cycle costing
- **Human and Environmental Factors**
 - Materials reuse and recycling
 - Sustainability practices: building life cycle stages and concepts, environmental impact analysis, renewable energy, and functional flexibility and technological adaptability

Upon successful completion of this course, students will:

- Know the impact of sustainability on an organization's image
- Aware of the evolution of building functionality and the change of users over time.
- Understand of basic principles of sustainability in informing design decisions.
- Understand how building envelop, site, and design impact facility effectiveness.
- Understand life cycle cost analysis
- Apply communication skills, such as drawing, sketching, model making, oral presentation, etc. to communicate with planners, designers, managers, and consumers of the institutional environment
- Apply strategies that manage the built environment while safeguarding the natural environment

Supplemental courses include and EVR 5062 Principles of Environmental and Occupational Health. A MScFM elective ENV 5617 Environmental Engineering Sustainability...

Solid waste reduction and management

- Energy efficacy and emission reduction
- Water conservation and run-off management
- Manage, oversee, and safeguard the natural environment
- Provide data to support a sustainability program

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

Competency 5 a: Using case studies and or internship experiences the student can analyze data, create budgets using standard principles of accounting, employ risk management practices and create reports that align with best practices for the financial management of facilities—**APPLYING.**

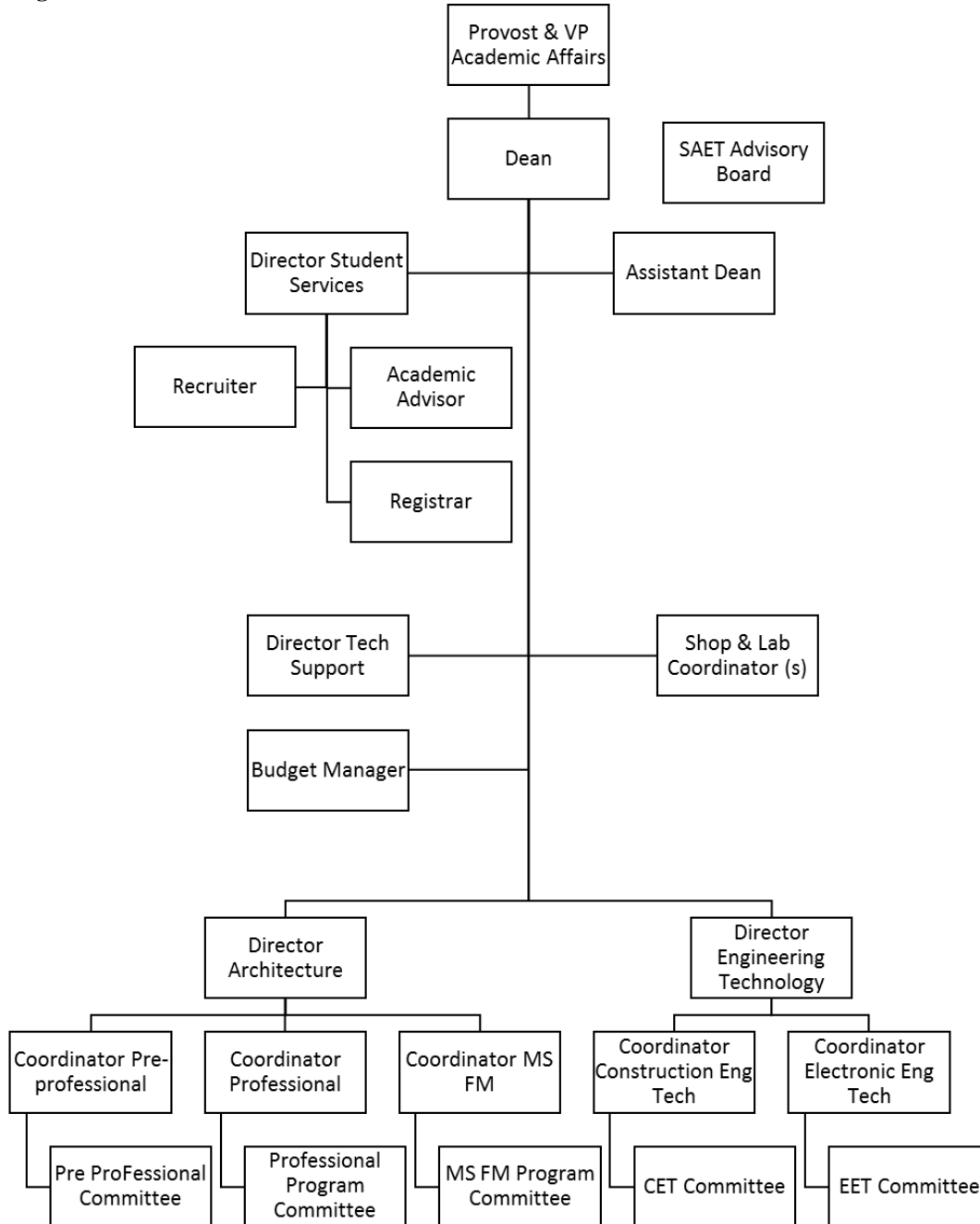
Competency 5 a is satisfied. The MScFM is a collaborative program. It is strengthened by other schools and colleges within FAMU. Because facility managers oversee aspects of the entire organization that often represents significant financial investment in technology, buildings, structures, interiors, exteriors and grounds, two finance and business courses offered by SBI are required in the MScFM program, ACG 2071 Managerial Accounting Principles and FIN 3403 Corporation Finance. The SBI is nationally recognized for its academic rigor and quality, professional development, student internships and other support mechanisms. Accounting and Finance is one of SBI's five departments. One of the learning objectives in the

undergraduate program is to recognize and apply concepts, principles and theories from the following disciplines: Accounting, Finance, Information Systems, Operations Management, Management, and Marketing. SBI's combination of common professional component, general education, elective, and advanced and specialized business courses is aimed at meeting and exceeding student and stakeholder expectations and requirements. These expectations and requirements are met through the interactive and integrative learning experiences that students engage in inside and outside of the classroom. These experiences enable them to expand their curiosity and knowledge, while demonstrating thorough assessments that they have satisfied the course learning goals and program learning goals. At the completion of ACG 2071 Managerial Accounting Principles and FIN 3403 Corporation Finance, students will be able to:

- Apply financial analysis to justify facilities decisions
- Apply financial and managerial accounting principles
- Utilize budgeting and capital project reporting
- Develop, recommend and oversee the facility's budget requirements (expenses / operational, capital).
- Determine and/or calculate net present value, depreciation, risk management and analysis, life-cycle costing
- Prepare business cases, supporting documentation and financial reports
- Analyze and interpret financial documents (budget, financial statements, ratios and so forth).
- Analyze and interpret financial contract elements (lease agreements, service contracts, cost statements and so forth).
- Administer procurement procedures (for outsourcing, products, services, contractors, designers, whole buildings and so forth).
- Define, justify and apply chargeback procedures

APPENDIX

B. SAET Organizational Chart



C. Faculty Screen Shots















The screenshot shows a web browser displaying the FAMU website. The address bar shows www.famu.edu/index.cfm?Architecture&2018SOADirectory. The page features the FAMU logo and navigation links for HOME, FAMILIA, RATTLER, and FAMCAST. A search bar and a language selection dropdown are also visible.

The main content area is titled "SCHOOL OF ARCHITECTURE AND ENGINEERING TECHNOLOGY" and "Directory School of Architecture and Engineering Technology Division of Architecture Faculty". It lists several faculty members with their photos, names, titles, and contact information:

Name	Title	Office	Phone
Michael Alfano, Jr., AIA	Associate Professor	Architecture B-307	599-3034
Olivier Chamel, RA	Assistant Professor	Architecture B-302	599-5279
Andrew Chin	Interim Dean	Architecture A-232-F	599-8763
Patrick Ding	Research Associate	Architecture B-320	599-8775
Valerie Goodwin, RA	Interim Director for Architecture Programs	Architecture B-220	561-2825
Robert Goodwin, Jr., RA	Research Associate	Architecture B-224	599-8778

Additional elements on the page include a sidebar with navigation links (SCHOOL OF ARCHITECTURE AND ENGINEERING TECHNOLOGY, DIVISION OF ARCHITECTURE, DIVISION OF ENGINEERING TECHNOLOGY, ACCREDITATION AND ALCS, RESEARCH AND SERVICE, PEOPLE, SAET GIVING, SOCIAL MEDIA, CARD ACCESS, CONTACT US), a "NEWS & HEADLINES" section with several news items, and an "UPCOMING EVENTS" section. A "MAKE A GIFT" button is located in the bottom right corner.


















edu/index.cfm?Architecture&2018SOADirectory

 <p>Craig Huffman, RA </p> <p>Associate Professor Office: Architecture B-317 Phone: 599-8781</p>	 <p>Roy Knight, FAIA </p> <p>Professor Office: Architecture B-319 Phone: 599-8783</p>
 <p>Deborah LaGrasse </p> <p>Instructor Office: Architecture A-217 Phone: 599-5280</p>	 <p>Elizabeth Lewis, AIA, LEED AP </p> <p>Associate Professor Office: Architecture B-310 Phone: 599-3163</p>
 <p>Ronald Lumpkin </p> <p>Director of Student Services Office: Architecture B-213 Phone: 599-3041</p>	 <p>Mahsan Mohsenin, Ph. D. </p> <p>Assistant Professor Office: Architecture B-308 Phone: 599-3244</p>
 <p>Luke Nicholson </p> <p>Visiting Assistant Professor Office: Architecture B-212 Phone: 561-2141</p>	 <p>Enn Ots, RA </p> <p>Associate Professor Office: Architecture B-316 Phone: 599-3845</p>
 <p>Arleen Pabón, Ph.D. </p> <p>Professor Office: Architecture B-312 Phone: 599-3155</p>	 <p>Sang Bum Park, Ph.D. </p> <p>Visiting Assistant Professor Office: Architecture B-222 Phone: 599-3979</p>
 <p>Eduardo Robles </p> <p>Associate Professor Office: Architecture B-311 Phone: 412-7052</p>	 <p>LaVerne Wells-Bowie </p> <p>Professor Office: Architecture B-318 Phone: 599-3009</p>
 <p>Edward White, RA </p> <p>Professor Office: Architecture B-305 Phone: 599-3257</p>	 <p>Rodner Wright, AIA </p> <p>Interim Provost Office: Architecture A-232-C Phone: 599-8774</p>

dex.cfm?Architecture&2018SOADirectory





[Florida Shines](#) [USN](#) [Find Florida High Sch](#) [Remind](#) [Login | Cascade CMS](#) [Blackboard Connect](#) [Florida Agricultural ar](#)

Division of Engineering Technology Faculty

 <p>David Akinsanya  Instructor & Manager Eng. Tech Computer Lab Office: Banneker B-014 Phone: 599-8622</p>	 <p>Yves Anglade, PhD  Director & Associate Professor Office: Banneker B-102 Phone: 599-8628</p>
 <p>Thomas Bellarmine, PhD. PE  Professor of Electronic Engineering Technology Office: Banneker B-202 Phone: 599-8638</p>	 <p>Doreen Kobelo, PhD  Associate Professor & Program Area Coordinator of Construction Engineering Office: Banneker B-106 Phone: 599-8601</p>
 <p>Chao Li, PhD. PE  Associate Professor & Program Area Coordinator of Electronic Engineering Technology Office: Banneker A-010 Phone: 599-8645</p>	 <p>Rabbani Muhammad  Assistant Professor Engineering Technology Office: Banneker B-211 Phone: 599-8633</p>
 <p>Leon Prosper, MSEE  Instructor of Electronic Engineering Technology Office: Banneker B-208 Phone: 599-8636</p>	 <p>Antonio Soares, PhD  Associate Professor of Electronic Engineering Technology Office: Banneker A-207 Phone: 599-8647</p>
 <p>Benham Shadravan, PhD Assistant Professor of Construction Engineering Technology Office: Banneker B-205 Phone: 599-8626</p>	

[RETURN TO TOP OF PAGE]

School of Architecture and Engineering Technology Staff

 <p>Bertina Brewster  Senior Secretary Office: Architecture B-207 Phone: 599-3244</p>	 <p>Sandra Cloud  Administrative Assistant Office: Architecture A-232 Phone: 599-8768</p>
---	---

ool of Architecture ar X






www.famu.edu/index.cfm?Architecture&2018SOADirectory

Gospel Jazz Radio | Florida Shines | Find Florida High Sch | Remind | Login | Cascade CMS | Blackboard Connect | Florida Agricu

Office: banneker b-205
Phone: 599-8626


[RETURN TO TOP OF PAGE]

School of Architecture and Engineering Technology Staff

 Bertina Brewster Senior Secretary Office: Architecture B-207 Phone: 599-3244	 Sandra Cloud Administrative Assistant Office: Architecture A-232 Phone: 599-8768
 Michael Hunnewell Lab Specialist, Architecture Office: Architecture D Wing Phone: 599-3244	 Felicia Perkins Administrative Assistant Office: Architecture A-232 Phone: 412-7815
 Stacy Tinner Sr. Teaching Lab Specialist, Electronic Engineering Technology Office: Banneker A-012 Phone: 599-8646	

[RETURN TO TOP OF PAGE]

School of Architecture Library


 Mary Love-Bennett Library Technical Assistant Office: Architecture B-107, Library Phone: 599-8770

[RETURN TO TOP OF PAGE]

HOME | ETHICS HOTLINE | LEGAL NOTICE | TERMS OF USE | WEBSITE FEEDBACK

© Copyright 1887 - 2018 | Florida Agricultural And Mechanical University | All Rights Reserved
Tallahassee, FL 32307 | 850.599.3000

Florida A&M University is an Equal Opportunity/Equal Access University



D. MscFM Syllabi of Required Courses.

Syllabi and other descriptive information for elective courses and those offered by the School of Business & Industry are contained in the Course Binders.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 2161 Advanced Topics in Digital Architecture (for facility managers), 1-credit

Instructors:

Rhonda Hammond, Registered Architect, AIA, Adjunct Professor
Office: Room 234
Rhonda.hammond@famu.edu / rhonda@hdg-architects.com
850-445-7991 (accepts text)

Catalog Description:

Continued investigation of computer aided design programs currently utilized by professionals. It is anticipated that this course will work in conjunction with the design studios to allow students to implement these digital techniques. Also, the various 2-d and 3-D digital interfaces introduced will be of industry standard, which will allow for a sense of preparation for the current methods and practices for professional growth.

Prerequisites:

ARC 1160 Computer Applications

Required texts:

http://students.autodesk.com/?nd=revit2011_english

Suggested readings:

Technology for Facility Managers: The Impact of Cutting-Edge Technology on Facility Management, by IFMA Foundation

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

Accreditation Criteria:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.2 OPERATIONS AND MAINTENANCE**
 - (3) **COMPUTER AIDED FACILITY MAINTENANCE AND OPERATION SYSTEMS**
- **5.3 PLANNING AND PROJECT MANAGEMENT**

- (11) Develop project plans (include corporate and design standards) and alternative strategies
- **5.9 TECHNOLOGY**
 - (1) Common FM and office application software
 - (2) FM technology and technology trends
 - (3) Understand basic information and communication technologies and their application to buildings and FM software
 - (4) Organizational IT systems and trends
- **Competency 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be:

1. Aware of relevant applications of computer systems that architects and facility managers are currently using
2. Understanding of basic computer programs supporting architectural design and facility management function
3. Understanding of applications that enhance the design, specifications, and procurement processes
4. Understanding of applications that are expected to have an impact on student's professional careers
5. Able to work in a collaborative environment with other students
6. Able to print digital design/graphics in a timely manner

Course Requirements (examinations, research papers, group projects, etc.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All revit projects will be individually assigned:

- Assignment 1: Interface and simple revit design and space planning
- Assignment 2: Interior elevations/perspectives/finishes
- Assignment 3: Structural, electrical, and mechanical drawings and implications for facility management
- Assignment 4: Finish Schedules, furniture allocation, and budget

Course strategies/mode of delivery

The course is delivered as a traditional lab course with direct involvement of one instructor and several teaching assistants for approximately 45 students. Group computer demonstrations or tutorials, complemented with one-on-one teaching at the student computer station, and group review of work in progress and final results, form the basis of the teaching-learning experience. It is important that each student be prepared to electronically produce drawings and models of projects assigned in studio. This class provides ONLY limited opportunity to further development and improvements to the project design.

- A. **Technical Illustration.** Analytical and illustrative diagrams are prepared for presentations. Technical illustrations - diagrams and text - are common produced by both students and professionals.
- B. **Digital three-dimensional modeling.** Architects, facility managers, and interior designers create proposals for objects and space. Any space designed with one type of program often contains objects, furniture, and fixtures that could be more appropriately modeled with a different program and then imported into the primary model.
- C. **Interior and exterior light studies using photometric light simulations.** Photorealistic images require understanding concepts of light design as well as light physical properties. Successful design requires students to understand light as a design tool.
- D. **Sun and shadow studies.** Introduces students to issues of sustainability and the effects of daylight levels as part of the design process for lighting design. As part of site design and analysis students should be able to develop sun and shadow studies and evaluate their impact in the site and surrounding properties.
- E. **Design and Cost.** Introduces students to schedules, furniture layout, interior finishes and budget considerations for the facility management professional.

Methods of evaluation (grading system and scale)

Grades ranging from A-F are used to indicate the appropriate evaluation for the student's work.

To receive a grade of 'C' or higher, the student must be able to demonstrate ability and competency in ALL of the following:

- To submit all drawings in a timely manner
- To represent two-dimensional and three-dimensional space with an aesthetic awareness of the projects intent
- To accurately depict floor plan, site plan, section, elevation, perspective and orthographic representations
- To design a presentation
- Edit images using appropriate software
- To print and display media in a timely manner
- Class Assignments
 - Project 1: 20%
 - Project 2: 20%
 - Project 3: 25%
 - Project 4: 25%
 - Attendance/Participation: 10%

Course strategies/mode of delivery

The course is delivered as a traditional lab course with direct involvement of one instructor and several teaching assistants for approximately 45 students. This course provides laboratory support for Facility Management design studio projects. Group computer demonstrations or tutorials, complemented with one-on-one teaching at the student computer station, and group review of work in progress and final results, form the basis of the teaching-learning experience. It is important that each student be prepared to electronically produce drawings and models of projects assigned in studio. This class provides ONLY limited opportunity to further development and improvements to the project design.

Methods of evaluation (grading system and scale)

Grades ranging from A-F are used to indicate the appropriate evaluation for the student's work.

To receive a grade of 'C' or higher, the student must be able to demonstrate ability and competency in ALL of the following:

- To submit all drawings in a timely manner
- To represent two-dimensional and three-dimensional space with an aesthetic awareness of the projects intent
- To accurately depict floor plan (including furniture, fixtures, and partitions), site plan, section, elevation, perspective and orthographic representations
- To design a presentation
- Edit images using appropriate software
- To print and display media in a timely manner

GRADING SCALE

Generally, a number of exercises and projects will make up the primary basis for the overall grade for the course.

Grades for various components of the course will reflect project duration and complexity. Completeness, effort and extent of apparent learning, creativity, and craftsmanship are the essential points considered in grading.

The guidelines for assessment are based on the project issues and course objectives.

- **A:** highest level of mastery; demonstration highly exceeding expectations
- **B:** high level of mastery, significant effort and apparent learning on the part of the student, and fully competent and clear presentation of consistent quality.
- **C:** meets expectations; will meet all of the above requirements in a competent manner, leaving none of the project requirements unfinished
- **D:** portions of the project are noticeably incomplete or underdeveloped
- **E:** serious level of incompleteness and a significant number of mistakes in execution

FLORIDA A&M UNIVERSITY POLICIES

Policy Statement on Non-Discrimination

It is the policy of Florida Agricultural and Mechanical University to assure that each member of the University community be permitted to work or attend classes in an environment free from any form of discrimination including race, religion, color, age, disability, sex, marital status, national origin, veteran status and sexual harassment as prohibited by state and federal statutes. This shall include applicants for admission to the University and employment.

Academic Honesty Policy

The academic honesty policy shall be adhered to by all Florida A&M University students and applies to all academic work, both inside and outside of class. Florida A&M University is committed to academic honesty and its core values, which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into this academic honesty policy. Being unaware of the Academic Honesty policy is not a defense for violations of academic honesty. ***The Academic Honesty Policy is posted on Blackboard. Any student caught cheating on any course assessment tool will receive a grade of "F" in the course.***

ADA Compliance

To comply with the provisions of the Americans with Disabilities Act (ADA), please advise instructor of accommodations required to insure participation in this course. Documentation of disability is required and should be submitted to CeDAR. For additional information please contact the CeDAR at (850) 599-3180. **Please complete your accommodation requirements with CeDAR within the first two weeks of the semester.**

Grade Change Policy

Grade changes can be made for the following reasons: (a) when it is determined that a grade was recorded in error, (b) when removing "I" grades and (c) as a result of a student's successful appeal of a grade. Academic units wishing to request grade changes must submit a "Grade Change and Academic Record Update Form" to the Registrar's Office for approval and processing. The form must contain the signature of the respective academic Dean in order to be processed.

Assigning "I" Grades

A student who is passing a course, but has not completed all of the required work by the end of the term may, with the permission of the instructor, be assigned a grade of "I."

- Grades of "I" are not assigned to any course that a student fails to attend or if a student withdraws from the University.
- A student should not register for a course(s) in which incomplete grades have been received. If he or she does, the original "I" will automatically be changed to a permanent grade of "F."
- Incomplete "I" grades will not count as hours attempted in computing cumulative grade point averages.
- It is the responsibility of the student to make arrangements with the instructor for the removal of an incomplete grade.
- All incomplete grades must be removed by the last day of classes of the term in which the student is next enrolled, or the grade will be changed to "F."

SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY POLICIES

Academic Honor Policy Statement

The relationship between students and faculty is based upon trust, and the continued maintenance of this trust is necessary for education to be successful. (1) Students need to trust that faculty has made appropriate judgments as to the content and structure of the course. (2) Faculty members need to trust that the work turned in by students represents their own effort.

Violation of this trust undermines the educational process. As such, academic dishonesty will be dealt with seriously. Any student found to have copied a homework assignment, cheated on a quiz or examination or submitted work that was created by another individual will receive a failing grade (F) for the assignment, and will be referred to the Dean of the SA+ET for disciplinary action. Students are cautioned that the disciplinary sanctions for academic dishonesty (imposed in addition to the F grade) can be quite severe.”

Additional detail on FAMU Academic Honesty Violations is provided in University Policy 2.012 (10.)(s).

Academic Learning Compacts (ALC)

The Florida Board of Governors has articulated the importance of student achievement in its strategic planning and accountability processes. Therefore, FAMU has developed Academic Learning Compacts (ALC) and related assessment processes to define and demonstrate student achievement in its degree programs. The FAMU SAET Academic Learning Compacts (ALC) are posted online.

<http://www.famu.edu/index.cfm?Architecture&AcademicLearningCompacts>

Academic Honesty Policy

The academic honesty policy shall be adhered to by all Florida A&M University students and applies to all academic work, both inside and outside of class. Florida A&M University is committed to academic honesty and its core values, which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into this academic honesty policy. Being unaware of the Academic Honesty policy is not a defense for violations of academic honesty. In cases, where the incident involves academic honesty violations and violations of the student code of conduct found in FAMU BOT Regulation 2.012, the case will be referred to the Office of Student Conduct & Conflict Resolution and FAMU BOT Regulations 2.012 and 2.013 will apply. Details of the Academic Honesty policy are available on the SAET website.

Class Attendance Policy: Class attendance is compulsory for all students. A student will be permitted one unexcused absence per credit hour of the course he/she is attending. A student exceeding the number of unexcused absences may be administratively dropped from the course and assigned the grade of “F”. Students are expected to answer the roll daily beginning the second week of class. After three (2) unexcused absences, a student’s final grade will be penalized 5 points. **A student is considered tardy if they show up for class after 10 minutes after the start.** Two tardies carry the same penalty as one absence.

In the SAET, only the Dean can grant an excused absence. Documentation must be provided for an excused absence to the Dean. Excused absences are as follow:

- Participation in recognized University activities
- Personal illness property certified
- Emergencies caused by circumstances the student has no immediate control will be excused by the Dean or Director of the unit in which the student is enrolled

Late Work: Late work will only be accepted for EXCUSED absences (Official University function, Medical and/or legal with appropriate documentation). Such situations must be brought to the attention of the instructors immediately. Late work must be submitted within two (2) class periods of the absence or before the last day of class whichever comes first.

Studio Culture Policy

The FAMU School of Architecture + Engineering Technology (SAET) Division of Architecture Studio Culture Policy is intended to ensure the healthiest possible teaching and learning environment, conducive to the development of the

well-rounded student, while preparing fully for entry into the profession of Architecture. Because the focus of the SAET's learning activity has at its heart the design studio experience where all learning comes together, this policy gives special attention to providing the conditions to enhance that experience.

The policy stands as one expression of the mission of the University, an 1890 Land Grant Institution, which seeks to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment. Six values form the basis for the policy: passion, respect, professionalism, focus, integration, and time.

1. **Passion:** The school provides a lively atmosphere, which encourages optimism, constructive thinking and acting, and a fervent pursuit of the best in architecture. Exploration, discovery, and creative imagination are supported by student and faculty interaction.
2. **Respect:** Mutual appreciation among faculty and students creates an environment in which all benefit from the sharing of knowledge and good judgment. Faculty will work to enhance the best of student talent and abilities. Students respond to good faculty instruction and advice.
3. **Professionalism:** Faculty will sustain a well-organized and clearly delineated program of study. Students will involve themselves in the learning process actively and engage the school community in a positive and self-disciplined manner.
4. **Focus:** The learning and teaching setting are opportunities for giving full emphasis on architecture as the underlying purpose of the SAET's academic programs. Studios will provide the place where architecture has its clearest manifestation within the SAET.
5. **Integration:** Recognizing that architecture is an inclusive field and represents a process of iterative synthesis, the faculty assists in bringing the widest possible range of knowledge and creative thinking to bear on student learning. The spirit of exploration, discovery, and critical thinking will be infused with a commitment to a search for truth that brings all together into a holistic understanding of architecture.
6. **Time:** Time is valuable, and it requires careful allocation to a wide variety of activities, not only adequately providing for effective study, but also many other aspects of life. In the interest of the students' fullest personal development, the SAET and its faculty will endeavor to establish reasonable schedules for learning activity.

Implementation:

In support of the broad purposes stated in the Studio Culture Policy, the following will be implemented:

- The Studio Culture Policy is published in the Florida A&M University School of Architecture + Engineering Student Handbook. Both documents can be viewed at [www.famu.edu/school of architecture/student handbook](http://www.famu.edu/school%20of%20architecture/student%20handbook).
- Students should expect to have a quiet and professional atmosphere for work in the Walter L. Smith Architecture Building. To facilitate this, noise from cell phones, radios, and music devices should be minimized according to common courtesy. Students must be cognizant of the conduct and behavior of invited guest.
- The building will be open and accessible to students enrolled in architecture courses 24-hours a day, 7-days a week, while the academic term is in progress. Conditions for study should continue through the night. Students are required to maintain respect, collegiality, professionalism, and sobriety during non-business hours. Students in violation of the spirit or principle of this policy are subject to disciplinary actions by the SAET including but not limited to termination of building access.
- Security is of paramount importance. The SAET will take the necessary steps to assure personal and property security at all times. Late evening and early morning hours will be given special consideration.
- An *esprit de corps* will be encouraged, particularly through a structured set of experiences in which younger students will have opportunity to become acquainted with older students and their work and be introduced fully into the culture of the architectural community, including faculty, professional groups, and communities of scholars.
- Every student should be able to expect that their work will not be copied by any other student and that their work will be safe from theft or vandalism.
- Everyone is expected to respect the property of others, and the SAET, and care for it accordingly. All faculty, students, and staff are expected to assist in maintaining a comfortable, respectful, and clutter-free working environment.

- The studio atmosphere will engender an attitude of mutual assistance, sharing of ideas and information, and friendly, constructive competition. Students will be encouraged to spend time in the studio adequate for nourishing this attitude.
- Students will be provided reasonable equipment, access to the library, workshop, and computer facilities, supporting their ability to work in the building. The SAET will make every attempt to provide access to the workshop during studio hours, as well as, an expanded evening schedule. They may also expect appropriate furnishings and a reasonable level of comfort in the working environment.

Note: This Policy is not intended as a substitute for expectations and requirements of students and faculty as delineated, respectively, in The Fang (Florida A&M University Student Handbook). The Studio Culture Policy is expected to complement the School's "Classroom and Studio Use – Guidelines"

To save space repetitive information such as Grading Scale, University and SAET Policies were eliminated from the following syllabi. This information can be seen in the ARC 2161 Syllabus.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 2470 INTRODUCTION TO TECHNOLOGY OF ARCHITECTURE, 3 credits

Instructors:

Sang Bum Park, PhD, Adjunct
Email: Sang.park@fam.u.edu
Phone: 850-599-3979

Catalog Description:

The lecture course provides an introduction to the terminology and concepts relating to building systems, Facility System Technical Services (HVAC, electrical, plumbing, sanitation, waste water), transportation, construction practices, and sustainability. This course introduces themes that cut across technology areas such as how buildings respond to the natural and built environment, as well as, how building design affects organization effectiveness (strategic planning, human resources, financial management, information technology, communication, and security systems). An important goal of the course is to stress the fact that building systems are fundamentally designed to provide a comfortable environment for the human body with regards to space, air quality, temperature and lighting.

Prerequisites: None

Recommended Texts:

Allen, E. (2005). *How Buildings Work: The Natural Order of Architecture*. Oxford University Press

Suggested Readings:

The Facility Management Handbook by David G. Cotts
Technology for Facility Managers: The Impact of Cutting-Edge Technology on Facility Management, by IFMA Foundation

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

IFMA ACCREDITATION CRITERIA

- **5.2 Operations and Maintenance**
 - (5) Ancillary FM functions

- (6) Energy management
- (6b) Energy efficient strategies in facility operation AND MAINTENANCE
- (13) Evaluate the building structures and permanent interiors
- (16) Recommend and establish policies, practices and procedures for furniture and fixtures
- (17) Evaluate furniture and fixture performance
- **Competency 3c:** 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 3h:** The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)

COURSE GOALS AND OBJECTIVES:

Upon successful completion of this introductory course, students should be:

1. Aware of basic principles of sustainability in informing design decisions.
2. Aware of the basic principles of structural behavior.
3. Aware of the basic correlation between building envelop, site, and design on facility effectiveness.
4. Aware of life cycle cost analysis
5. Aware of basic principles of environmental systems including HVAC, acoustics, lighting, and plumbing.
6. Apply communication skills, such as drawing, sketching, model making, oral presentation, etc.
7. Apply a variety of presentation techniques, including digital to explain how buildings work

COURSE REQUIREMENTS (EXAMINATIONS, RESEARCH PAPERS, GROUP PROJECTS, ETC.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All projects will be individually assigned.

1. Assignment: Sustainability and Environmental Stewardship
2. Assignment: Operations and Maintenance
3. Assignment: Real Estate and Property
4. Assignment: Integration of Available Technologies for the facility manager

COURSE STRATEGIES/MODE OF DELIVERY

The course is delivered as a traditional lecture course with direct involvement of one instructor and several teaching assistants for approximately 45 students. Group demonstrations or tutorials and group review of work in progress and final results, form the basis of the teaching-learning experience. Case studies, seminars with outside professionals and site visit may enhance the learning experience.

To save space repetitive information such as Grading Scale, University and SAET Policies were eliminated from the following. This information can be seen in the ARC 2161 Syllabus.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 4610 ENVIRONMENTAL SYSTEMS IN ARCHITECTURE, 3 credits

Instructors:

Sang Bum Park, PhD, Adjunct
Email: Sang.park@fam.u.edu
Phone: 850-599-3979

Catalog Description:

Environmental Systems in Architecture provides an understanding of mechanical systems: thermal comfort, indoor air quality, active and passive climate control approaches, daylighting, acoustics, energy utilization, fire protection, sanitation systems, etc. Technical problems associated with providing quality environments for human habitation are also addressed.

Prerequisites: ARC 2470 Introduction to Technology of Architecture

Recommended Texts:

Kwok, Sein, Reynolds, and Grondzik (2006). *Mechanical and Electrical Equipment for Buildings*, 10th Edition, Joh Wiley & Sons

Suggested Readings:

The Facility Management Handbook by David G. Cotts
Technology for Facility Managers: The Impact of Cutting-Edge Technology on Facility Management, by IFMA Foundation

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

IFMA ACCREDITATION CRITERIA

- **5.2 Operations and Maintenance**
 - (6) Energy management
 - (6b) Energy efficient strategies in facility operation and maintenance

- (17) Evaluate furniture and fixture performance
- **Competency 3c:** 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 3h:** Competency 3 h: The student can demonstrate awareness of sustainable stewardship principles applied to the built environment. (ways of applying)

COURSE GOALS AND OBJECTIVES:

Upon successful completion of this introductory course, students should understand:

7. **Thermal Comfort Systems:** the techniques that people have developed to modify the thermal environment of buildings. This area includes heating, cooling, sustainability, energy conservation, etc.
8. **Environmental Quality Systems:** the provision of a healthful and safe environment for people to occupy.
9. **Lighting Systems:** those techniques that people have developed to illuminate their buildings so that they may engage in productive and creative endeavors.
10. **Acoustical Systems:** those techniques, primarily passive in nature, that people have developed to let them hear and be heard in their buildings.
11. **Water and Waste Systems:** those systems by which people bring water into their buildings and carry away human waste, and “grey” water.
12. **Movement, Life and Safety Systems:** the means that people have developed to provide access (vertical and horizontal) to their buildings to accommodate a variety of human abilities and activities in their buildings, and to protect human life, property and communities from fire and other hazards.
13. **Energy and Power Systems:** the various ways that people have developed to safely produce, distribute, use, and conserve energy to promote sustainable practices in their environments and buildings.

COURSE REQUIREMENTS (EXAMINATIONS, RESEARCH PAPERS, GROUP PROJECTS, ETC.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All projects will be individually assigned.

5. Project 1:	15%
6. Mid-term:	20%
7. Final Exam:	20%
8. Term Project	20%
a. Energy use analysis (5%)	
b. 1 st Submission & Presentation (10%)	
c. Final Submission (5%)	
9. In-class and Homework	15%
10. Participation/Attendance/Quizzes	10%

COURSE STRATEGIES/MODE OF DELIVERY

The course is delivered as a traditional lecture course with direct involvement of one instructor and several teaching assistants for approximately 45 students. Group demonstrations or tutorials and group review of work in progress and final results, form the basis of the teaching-learning experience. Case studies, seminars with outside professionals and site visit may enhance the learning experience.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 5018 Facility Management – 3 credits

Instructor:

Robert Goodwin, Registered Architect, Research Associate
Office: Walter L. Smith Architecture Office, B224
Email: robert.goodwin@famu.edu
Phone: (850) 599-8778;
Office Hours: T-Th. 1:00 - 3:00 PM others by appointment.

Catalog Description:

The course will introduce students to the professional roles of facility managers in acquiring new facilities and in managing and maintaining existing building stock. This course will also examine the impact of codes, ordinances, regulations, design standards, guidelines and approval processes and their effect on the character of the building process and product. Regulation of land use and property development; planning of building facilities; and anticipated outcomes resulting from regulation changes are explored.

Prerequisites:

Graduate Standing

Required texts:

Fennimore, J. (2014). *Sustainable Facility Management; Operational Strategies for Today*, Pearson.

Suggested readings:

Wiggins, J. (2014). *Facilities Manager's Desk reference: 2nd Edition*, WILEY Blackwell

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

Accreditation Criteria:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.1—Leadership and Management (Professional Practice)**
- **5.3—Project Management**

- **5.5—Finance and Business**
- **5.7—Quality**
- **5.11—Environmental Stewardship**
- **Competency 2a:** 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).
- **Competency 3e:** The student can interpret, apply, and recommend quality improvement programs. (ways of applying)
- **Competency 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be able to:

1. To introduce architect, contractor, and consultant selection strategies
2. To acquire skills in the management of the building delivery process from a client’s perspective
3. To acquire skills in energy analysis and use
4. To acquire skills in space need and effectiveness
5. To acquire skills in renovation and/or facility expansion
6. To acquire skills in facility maintenance planning

Course strategies/mode of delivery

This course provides a broad array of issues and strategies used in facilities management. We will have presentations and discussions by and with individuals who are FM professionals or who work directly with FM professionals.

Graduate students will be responsible for preparing and presenting lectures on the chapters from the text.

Assignments will be electronically/digitally prepared. Some projects will be individually and group assignments. Attendance & participation is 10% of the final grade.

Course Requirements (examinations, research papers, group projects, etc.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All projects will be individually assigned.

- Building delivery process (30%)
- Building Information Modeling (30%)
- Needs analysis (30%)
- Case Studies (10%)

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 5289 Facility Management Profession – 3 credits

Instructor:

Robert Goodwin, Registered Architect, Research Associate
Office: Walter L. Smith Architecture Office, B224
Email: robert.goodwin@famu.edu
Phone: (850) 599-8778;
Office Hours: T-Th. 1:00 - 3:00 PM others by appointment.

Catalog Description:

Facility management (FM) is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, planning, engineering, architecture, construction management, facility system technical services (HVAC, electrical, plumbing), business support services (financial management, IT, HR, Strategic Planning). The course is an overview of the facility management profession. It also introduces students to the diverse roles and responsibilities of facility managers in public and private organizations.

Prerequisites:

Graduate Standing

Required texts:

Fennimore, J. (2014). *Sustainable Facility Management; Operational Strategies for Today*, Pearson.

Suggested readings:

Wiggins, J. (2014). *Facilities Manager's Desk reference: 2nd Edition*, WILEY Blackwell

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

Accreditation Criteria:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.1—Leadership and Management (Professional Practice)**
 - (2) History of Facility Management

- (3) International Facility Management Issues
- (4) Facility Management industry structure
- (5) Concepts and responsibilities of the Facility Manager professionals and how they relate to other related professions
- **5.2—Operations and Maintenance**
 - (5) Ancillary Facility Management Functions
 - (5a) Food services
 - (5b) Transportation and fleet management
 - (5c) Warehouse operations
- **Competency 1a:** The student can explain the history, international practices, corporate organization and roles of the Facility Management profession. (ways of knowing)
- **Competency 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be able to:

14. Understand relevant applications of facility managers in the built environment
15. Knowledge of diversity of the profession
16. Knowledge of dispositions and expectations that are expected to have an impact on student’s professional careers
17. Apply oral, visual, graphic, and electronic communication skills

Course strategies/mode of delivery

The course is delivered as a traditional lab course with direct involvement of one instructor and several teaching assistants for approximately 45 students. Group computer demonstrations or tutorials, complemented with one-on-one teaching at the student computer station, and group review of work in progress and final results, form the basis of the teaching-learning experience. It is important that each student be prepared to electronically produce drawings and models of projects assigned in studio. This class provides ONLY limited opportunity to further development and improvements to the project design.

Course Requirements (examinations, research papers, group projects, etc.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All projects will be individually assigned.

- | | |
|---|-----|
| ● Assignment 1: Overview of Facility Management Professionals | 10% |
| ● Assignment 2: Facility Management Organizational Structure | 20% |
| ● Assignment 3: Overview of Role of FM in Master Planning | 20% |
| ● Assignment 4: Describe Your place in Facility Management | 20% |

All assignments, except 4, will be group assignments of 2-3 students each and will equal 70% of final grade. Quality of Oral Participation in group presentation will equal 10% and attendance & participation is 20% of the final grade. Graduate students are expected to have a more active roll in showing leadership in the class by assisting the delineation of the course material.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 5291 Principles of Space Planning – 3 credits

Instructor:

Eduardo Robles, M.Arch., Assoc Professor
Office: Walter L. Smith Arch B-311
Email: Eduardo.robles@fam.u.edu
Phone: (850) 412-7052
Office Hours: T, Th 12:30 – 2pm

Robert Goodwin, R.A., Research Associate
Office: Walter L. Smith Architecture Office, B224
Email: robert.goodwin@fam.u.edu
Phone: (850) 599-8778;
Office Hours: T-Th. 1:00 - 3:00 or by appointment

Catalog Description:

The course will introduce students to the professional roles of facility managers in acquiring new facilities and in managing and maintaining existing building stock. This course will also examine the impact of codes, ordinances, regulations, design standards, guidelines and approval processes and their effect on the character of the building process and product. Regulation of land use and property development; planning of building facilities; and anticipated outcomes resulting from regulation changes are explored.

Prerequisites:

Graduate Standing

Required texts:

The Facility Management Handbook by Kathy O. Roper, Richard P. Payant
Architecture: Form, Space, and Order by Francis D.K. Ching
Facility Planning: Principles, Technology, Guidelines by Jeffery E. Clark

Suggested readings:

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

Accreditation Criteria:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.3 Planning and Project Management**
 - (3) Basic building types and their affects on organizational functions
- **5.1 Leadership and Management (Professional Practice)**
 - (6) Create a mission for facility function
 - (8) Plan facility function activities
 - (9) Organize facility function
- **5.4 Communication**
 - (1) Comprehend financial, graphic and technical information and documents
- **5.9 Technology**
 - (1) Common FM and office application software
 - (2) FM technology systems and technology trends
- **Competency 2a:** 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).
- **Competency 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be able to:

1. Read, understand, and produce architectural drawings
2. Apply fundamental space planning principles.
3. Demonstrate basic design skills in reference to the planning and layout of a space reflective of the corporation's goals and objectives.
4. Team build and use a variety of presentation techniques.
5. Explore analytical techniques for the understanding of the nature of the design problem to be solved.
6. Demonstrate a strict sense of craftsmanship, discipline and work ethic.
7. Develop attitudes, values, and work habits appropriate to Facility Management

Course strategies/mode of delivery

This course provides a broad array of issues and strategies used in facilities management. We will have presentations and discussions by and with individuals who are FM professionals or who work directly with FM professionals.

Graduate students will be responsible for preparing and presenting lectures on the chapters from the text.

Assignments will be electronically/digitally prepared. Some projects will be individually and group assignments.

Attendance & participation is 10% of the final grade.

Course Requirements (examinations, research papers, group projects, etc.)

Assignments will be a combination of hard copy and electronically/digitally prepared. Architectural models may also be required. All projects will be individually assigned.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 6932 Masters Seminar – 3 credits

Instructor:

Robert Goodwin, Registered Architect, Research Associate
Office: Walter L. Smith Architecture Office, B224
Email: robert.goodwin@famu.edu
Phone: (850) 599-8778;
Office Hours: T-Th. 1:00 - 3:00 PM others by appointment.

Catalog Description:

Facility Management (FM) is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, planning, engineering, architecture, construction management, facility system technical services (HVAC, electrical, plumbing), business support services (financial management, IT, HR, Strategic Planning). In this course the students will demonstrate their understanding of the facility management profession with emphasis on core criteria of the program.

Prerequisites:

Graduate Standing

Required texts:

Fennimore, J. (2014). *Sustainable Facility Management; Operational Strategies for Today*, Pearson.

Suggested readings:

Wiggins, J. (2014). *Facilities Manager's Desk reference: 2nd Edition*, WILEY Blackwell

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

Accreditation Criteria:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.1—Leadership and Management (Professional Practice)**
- **5.3—Project Management**

- **5.5—Finance and Business**
- **5.7—Quality**
- **5.11—Environmental Stewardship**
- **Competency 2a:** 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).
- **Competency 3c:** 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 3e:** The student can interpret, apply, and recommend quality improvement programs. (ways of applying)
- **Competency 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be able to:

18. Apply relevant applications of building delivery systems and how it is affected by budget, schedule and personal
19. Know the effects of FM on the environment
20. Understand ongoing needs and cost of maintaining existing facilities and grounds
21. Understand the contributions of all the various professions that make up the entire FM organization
22. Apply oral, visual, graphic, and electronic communication skills

Course strategies/mode of delivery

The course is delivered as a traditional and hybrid online lecture course with direct involvement of the instructor and several guest speakers for approximately 75 minutes. This course provides an introduction to the broad array of issues and strategies used in facilities management. We will have presentations and discussions by and with individuals who are FM professionals or who work directly with FM professionals.

Course Requirements (examinations, research papers, group projects, etc.)

Assignments will be electronically/digitally prepared. Only printed assignments will be evaluated for grade. All projects will be individually assigned. Quality of Oral Participation in group presentation will equal 10% and attendance & participation is 20% of the final grade.

**FLORIDA A & M UNIVERSITY - SCHOOL OF ARCHITECTURE + ENGINEERING TECHNOLOGY
PROGRAM: MS FACILITY MANAGEMENT**

ARC 6949 Internship Coop – 3 credits

Instructor:

Robert Goodwin, Registered Architect, Research Associate
Office: Walter L. Smith Architecture Office, B224
Email: robert.goodwin@famu.edu
Phone: (850) 599-8778;
Office Hours: T-Th. 1:00 - 3:00 PM others by appointment.

Catalog Description:

Internship (10 weeks, 100 hours) in a facilities management-related position that exposes the student to facilities management activities; daily logs, weekly reports, monthly report and final report, and a completion letter are required.

Prerequisites:

Graduate Standing

Required texts:

None

Suggested readings:

Wiggins, J. (2014). *Facilities Manager's Desk reference: 2nd Edition*, WILEY Blackwell
Atkin, B. & Brooks, A. (2014). *Total Facilities Management*
Cotts, D., Roper, K., & Pavant, R. (2014). *The Facility Management Handbook*, Third Edition, Amacom.

SAET MISSION STATEMENT

The Mission of the School of Architecture & Engineering Technology is to provide an enlightened and enriched academic, intellectual, moral, cultural, ethical, technological, and student-centered environment, conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors within the fields of Architecture and Engineering Technology in an ever-evolving society. The School aspires to seek and support a faculty and staff of distinction dedicated to providing outstanding academic education at the undergraduate, graduate, and professional school levels, with a particular emphasis on integrity, creativity, and ethical conduct. The School is committed to motivational teaching, imaginative research, and meaningful community service. The School is also committed to cultural diversity by means of its course offerings, special programs, and recruitment efforts.

SAET VISION STATEMENT

The Florida A&M University School of Architecture + Engineering Technology (SAET) supports the University's vision statement by preparing our architecture, construction engineering technology, and electronic engineering technology graduates to address critical and emerging issues in a global multicultural society and, become contributing citizens and successful practitioners in private practice, government, or industry.

ACCREDITATION CRITERIA:

All required courses in the School of Architecture address National Architectural Accrediting Board (NAAB) or the International Facility Management Association (IFMA) performance criteria. This class addresses the student performance criteria listed below. (Subject to change)

- **5.1—Leadership and Management (Professional Practice)**
 - (7) Ability to lead the Facility Management Organization
 - (8) Lead, inspire, and influence the FM organization

- (9) Advocate for FM needs and priorities
- (10) Develop, implement and evaluate policies, procedures and practices for the FM organization
- (11) Clarify and communicate responsibilities and accountabilities
- (12) Resolve conflicts (organizational and personnel)
- (13) Organize and staff the FM organization
- **5.3—Project Management**
 - (9) Define and program projects (purpose, size, scope, schedule, budget, and user needs)
 - (10) Plan projects (resources, schedule and sequence)
 - (14) Manage / oversee projects (construction, relocation, renovation, organizational change)
 - (15) Evaluate project outcomes
- **Competency 2a:** 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).
- **Competency 3c:** 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 7a:** The student demonstrates written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry appropriate genre.

Course Goals and Objectives:

Upon successful completion of this introductory course, students should be:

23. Aware of relevant applications of computer systems that architects and facility managers are currently using
24. Understanding of basic computer programs supporting architectural design and facility management function
25. Understanding of applications that enhance the design, specifications, and procurement processes
26. Understanding of applications that are expected to have an impact on student's professional careers
27. Able to work in a collaborative environment with other students
28. Able to print digital design/graphics in a timely manner

Course Requirements (examinations, research papers, group projects, etc.)

The class will be offered in a hybrid online format using Blackboard. Blackboard is considered the classroom, through which all course information and assignments should be posted and submitted. However, forms that require a signature must be faxed or hand-delivered (i.e. Time Sheets, Orientation Forms, Evaluations, etc).

Assignments for Semester:

Weekly Reports: Six (6) Weekly Reports will be minimal required. 60%

Monthly Progress Report: Two (2) Monthly Reports will be required. 10%

Final Intern Report: A Report that will summarize your internship experiences. 20%

Internship Completion Letter: The Internship Completion Letter must be 10%

prepared on a business letter on company letterhead. This letter must be typed and addressed to the Faculty Internship Coordinator and certify the completion of the internship and all requirements. The completion letter must be prepared and signed by the student and signed by the supervisor. There must be a "Reviewed by:" block and comment space for the supervisor. Comments by the supervisor are welcome, but not required.

Course strategies/mode of delivery

The course is delivered as a hybrid online format using Blackboard.

E. Faculty Resumes in the MS FM Program (Required Courses)

Robert Goodwin, RA, Research Associate
Division of Architecture-School of Architecture + Engineering Technology

Courses Taught:

ARC 1274	Introduction To Facility Management
ARC 2470	Intro to Technology of Architecture
ARC 3324	Architectural Design 3.1
ARC 3325	Architectural Design 3.2
ARC 3463	Materials & Methods of Construction II
ARC 4010/5018	Facility Management (FM)
ARC 5286	Practice I
ARC 5288	Practice 2
ARC 5289	Facilities Management Professional (FM)
ARC 5363	Architectural Design 3
ARC 6932	Master's Seminar (FM)
ARC 6949	Internship / Coop (FM)

Educational Credentials:

Master of Architecture, Tuskegee Institute, 1976
Bachelor of Architecture Science, Tuskegee Institute, 1974

Teaching Experience:

Research Associate, Florida A&M University, 1996-present

Professional Experience:

Principal, Robert Goodwin, Architect, Tallahassee, FL., 2003- present
Principal, Goodwin & Goodwin Associates, P.A., Tallahassee, FL, 1997-2003
Director of Facilities Planning, Florida A&M University, Tallahassee, FL., 1986-1996
Facilities Planning Consultant to Vice President of Administration, Alabama A&M University, Huntsville, AL., 1986-2006
Project Manager, McKissack & McKissack Architects, Inc., Nashville, TN., 1979-1985
Draftsman/Project Manager, Harold Thompson Architects, Memphis, TN., 1977-1979

Licenses/Registration:

State of Florida, Architect State of Tennessee, Architect (Inactive)

Recent Commissions/Creative Works:

Little Salem PB Church, Fellowship Hall - 2016

Professional Memberships/ Service:

Faculty Advisor: Alpha Rho Chi Fraternity, "Seshait Chapter" Florida A&M University, Tallahassee, FL
Team Leader: Sustainability Institute "Indaba" focus team for "Better Building," FAMU Board member: School of Arts & Sciences, Tallahassee, FL

Cindy Marie Gipson, Instructor
School of Business & Industry

Courses Taught:

QMB 2100 Quantitative Methods for Business Decisions I (FM)

Educational Credentials:

Doctoral Candidate, Mathematics Education, Florida State University

MS Mathematics Education, Florida State University, May 1998

BS Mathematics Education, University of South Florida, December 1995

Teaching Experience:

Instructor, School of Business, Florida A&M University, May 2015-present

Visiting Instructor, School of Business, Florida A&M University, August 2014-May 2015

Adjunct Instructor, Florida A&M University, 8/2006-5/2014

Co-Instructor (Teaching Assistant), Florida State University, 8/2004-012/2004

Mathematics Instructor, Belle Vue Middle School, Leon County Public Schools, 6/2003-6/2005

Honors/Awards Distinctions:

Florida A&M University-Center for Disability Access and Resources (CEDAR)-Pace Setter Award (October 2010)

Florida Education Fund- McKnight Fellowship (2000-present)

Florida Association of Educational Opportunity Program Personnel (FAEOPP) Achiever (1999)

Inductee Pi Lambda Theta International Honor Society (1998-present)

Ronald E. McNair Scholar –University of South Florida (1993-1995)

Kappa Delta Pi Honor Society (1993-1995)

Sun Coast Area Teacher Training Center for Excellence Honors Program (1993-1995)

Licenses/Registration:

Clinical Teacher Training Certification (January 2005)

Teachers Ethics Training (Fall 2002)

College Teaching Certificate –PIE Workshop (Fall 2000)

Florida Teaching Certificate –Mathematics 6-12 (Through June 2008)

Grant Writing Course (Spring 1998)

Recent Commissions/Creative Works:

How to use Snap Shot. Leon County Schools. Belle Vue Middle School. (Jan 2005)

Women in the Sciences: Geometer Sketch Pad. Girls Inc. Florida State University. (Summer 2001)

Success in Mathematics-Beating Mathematics Anxiety. Presented to First Year Experience Course. Florida State University. (Fall 2000)

Professional Memberships/Service:

Member. Sisters of the Academy Institute-Founding Member (2001 to present)

Member. Pi Lambda Theta. (1998 to 2008)

UFF (FAMU) (2010 to present)

Rhonda Hammond, AIA, Adjunct Instructor
Division of Architecture-School of Architecture + Engineering Technology

Courses Taught:

ARC 1160 Computer Applications in Architecture (FM)
ARC 2161 Advanced Topics in Digital Architecture (FM)
ARC 2162 CADD for Architecture
ARC 3324 Architectural Design 3.1

Educational Credentials:

Master of Science in Architectural Studies with Concentration in Sustainable Design, University of Florida, 2013
Bachelor of Architecture, Florida A&M University, Tallahassee, FL, 1999
Bachelor of Science in Architectural Studies, Florida A&M University, Tallahassee, FL, 1999

Teaching Experience:

Adjunct Professor, Florida A&M University, 2015-Present

Professional Experience:

Hammond Design Group, LLC, Tallahassee, Florida
Project Manager and Managing Partner January 2006 – Present
Gilchrist Ross Crowe Architects, Tallahassee, Florida
Architectural Intern and Project Manager June 1999 – Dec 2005
Barnett Fronczak Architects, Tallahassee, Florida
Architectural Intern and CADD Technician May 1997 – May 1999
Mays Leroy Gray Architects, Tallahassee, Florida
Architectural Intern and Manual Draftsperson June 1993 – April 1997

Licenses/Registration:

State of Florida, Architect - AR97172

Recent Publications:

"BIM in Sustainable Design: Strategies for Retrofitting and Renovation", a paper presented at the annual conference for the International Society for Computing in Civil and Building Engineering (ISCCBE), Orlando, Florida, 2014
Hammond, R.S., (2014, June) "BIM in Sustainable Design: Strategies for Retrofitting and Renovation"
Paper published in the Conference Proceedings of the annual conference for the International Society for Computing in Civil and Building Engineering (ISCCBE), Orlando, Florida, 2014

Professional Memberships:

American Institute of Architects (AIA) – National and State
Tallahassee-Leon County Architectural Review Board Member 2-16 - 2018
US Green Building Council (USGBC) - national member and member of Florida Capital Region Chapter
National Association of Women in Construction (NAWIC)

Derek Gerard Holloman, Assistant Professor
Department of Accounting-School of Business & Industry

Courses Taught

ACG 2071 Managerial Accounting Principles (FM)
FIN 3403 Corporate Finance (FM)
Other Accounting: Financial Accounting Principles, Intermediate Accounting I
Financial Management, Financial Policy & Strategy, Financial Markets and Institutions

Educational Credentials

DBA, University of Grenoble Ecole de Management, fall 2008
MS Accounting, University of New Orleans, fall 2005
MBA-Finance, University of New Orleans, Fall 2002
BS Accounting, Southern University at New Orleans, fall 2000

Teaching Experience

Assistant Professor Accounting/Finance, School of Business & Industry, Florida A&M University, 2006-Present
Associate Professor Accounting, Southern University at New Orleans, 2005-2003

Professional Experience

Pre-Professional Law Program Director, Florida A&M University, 04/2010-7/2012
Director of Regulation, Florida Department of Business and Professional Regulation, 02/2002-06/2009
Deputy General Counsel, Florida Department of Business and Professional Regulation 02/2002-04/2006
Director of Legislative Affairs, Florida Department of Corrections, 1/2000-02/2002

License/Registrations

REG section of Certified Public Accountant Exam CPA (part 2 of 4)
BEC section of Certified Public Accountant Exam CPA (part 1 of 4)

Publications/Creative Works

- Holloman, D; Bates, I. and Collins, J. (2015, April) *Do Emotional Intelligence affect Learning Outcomes of Accounting Students*. Paper presented at the International Academy of Business and Public Administration Disciplines, Dallas, Texas.
- Holloman, D; Klieb, L. and Collins, J. (2013). *Corporate Spin-offs: Exploring the Knowledge Inherited from the Entrepreneurial Orientation of the Parent Company*, International Academy of Business and Public Administration Disciplines 7 (2) 211-221.
- Holloman, D; Klieb, L. and Bates, I (2012) "Corporate Spin-offs: Examining the effects on the Entrepreneurial Orientation Inheritance-Financial Performance Relationship." *Exploring the interpenetration of management, technology and innovation in the organisations*, Eds. Bernard CHAPELET, Michel LEBERRE; & Benoit AUBERT. France: Presses universitaires de Grenoble.
- Holloman, D; Klieb, L. and Collins, J. (2011, October) *Corporate Spin-offs: Exploring the Knowledge Inherited from the Entrepreneurial Orientation of the Parent Company*. Paper presented at the International Academy of Business and Public Administration Disciplines, Memphis, Tennessee.
- Holloman, D; Klieb, L. and Swirsky (2011, October). *Corporate Spin-Offs: An Investigation of the Inheritance of Corporate Entrepreneurship from the Parent Company*. Paper presented at the International Academy of Business and Economics, Las Vegas, Nevada

Professional Memberships

American Institute of Certified Public Accountants
National Association of Black Accountants
American Accounting Association

**Ronald Lumpkin, PhD, Director of Student Services, Associate Professor
Division of Architecture-School of Architecture + Engineering Technology**

Courses Taught:

ARC xxxx	Principles of Space Planning (FM)
ARC 1003	Orientation to Architecture
ARC 1160	Computer Applications in Architecture
ARC 1301/1302	Architecture Design 1.1 & 1.2
ARC 2161	Advanced Topics in Digital Design
ARC 2162	CAD for Architecture
ARC 4292/6292	Special Studies (Crime Prevention Design, K-12 Schools)
ARC 6949	Coop / Internship FM (FM)

Educational Credentials:

Doctor of Philosophy in Educational Leadership, 2013
Master of Architecture, Florida A&M University, 1984
Bachelor of Science in Architecture, Florida A&M University, 1980

Teaching Experience:

Director of Student Services, 2014-present
Coordinator of Recruitment & Retention & Assistant Professor, Florida A&M University, 1992-2013
Instructor, Florida A&M University, 1986-1992

Recent Publications:

Ronald Lumpkin, *From Gods Hands to My Hands*, USA: Xulon Press, 2008, ISBN 978-1-60477-121-3
School Buildings, and Socioeconomic Status, Race, Student Achievement, and *Journal of Intercultural Disciplines*, Volume XV Spring 2016.
Impact of Classroom Environments on Academic Achievement in University Students, Architecture Research Centers Consortium (ARCC), 2015
Chapter co-author: "Race and Gender in Architecture Education: A Distance Learning Model", *Space Unveiled: Invisible Cultures in the Design Studio*, London & New York: Routledge Taylor & Francis Group, 2014
Code Compliant School Buildings Boost Student Achievement, *SAGE Open*, 2014
"Diversity Awareness Survey", *Project Proceedings of the 102nd ACSA Annual Meeting: Globalizing Architecture, Flows and Disruptions*, 2014

Recent Presentations:

2011-Action Research Forum, Florida A&M University College of Education
"School Buildings, Socioeconomic, Race, and Student Achievement", National Association of African American Studies & Affiliates, Eastern Regional Conference, Tampa, FL 2015
"Impact of Classroom Environments on Academic Achievement in University Students", Architecture Research Centers Consortium (ARCC), Chicago 2015
"Pursuing Racial Diversity in IFMA Accredited Degree Programs", International Facility Management Association World Workplace, New Orleans, LA, September 2014
"Diversity Awareness Survey", Co-author Poster Presentation: Globalizing Architecture: 102nd Annual American Collegiate Schools of Architecture Meeting, Miami, FL April 2014
"Student Achievement Rises in New Code Compliant School Buildings", Global Science and Technology Forum, Architecture and Civil Engineering, Singapore, March 2014

Professional Memberships:

Florida Association of Teacher Educators
International Facility Management Association

Luke A. Nicholson, Professional Engineer, Visiting Assistant Professor
Division of Architecture-School of Architecture + Engineering Technology

Course Taught:

ARC 2501 Architecture Structures I
ARC 3551 Architectural Structures II
ARC 6278 Construction Management (FM)

Educational Credentials:

PhD Candidate Architecture, University of Florida
Master of Civil Engineering, University of Florida, 1987
BS Civil Engineering, University of Florida, 1986

Teaching Experience:

Visiting Assistant Professor and Research Associate, School of Architecture and Engineering Technology, Florida A&M University, 2013-Present
Assistant Professor and Program Coordinator, Building Construction Management Program, Engineering Technology, Tallahassee Community College, 2011-2013
Adjunct Professor, Department of Construction, Engineering and Design, Seminole Community College, 2005-2008
Adjunct Professor, M.E. Rinker Sr. School of Building Construction, University of Florida 2004-2005

Professional Experience:

Owner, Nicholson Construction Company, Tallahassee, Orlando, and Gainesville FL, 2000-present
Owner, Nicholson Builders Company, Laie, Hawaii, 1990-1999
Vice-President and Operations Manager, Kaco Contracting Company, Kilauea, Hawaii, 1987-1990

Licenses/Registration:

Licensed Professional Civil Engineer, State of Hawaii
Licensed General Contractor, State of Florida

Recent Research and Other Interests:

Triathlon participant
Basketball, skiing, and snowboarding

Recent Honors/Awards:

Florida Campus Compact STEM Service Learning Fellowship, 2011-2013
Tallahassee Community College Student Organization Faculty Advisor of the Year Award, TCC Student Builders Association, 2011-2012
Recipient, 3 TCC Foundation Innovation Grants: TCC Community Fitness Trail Signage, TCC Community Organic Garden Boxes, and TCC Community Fitness Trail, Phase 2, 2011-2012
University of Florida, Grinter Graduate Fellowship recipient, 1999-2003

Professional Memberships:

American Society of Civil Engineers
Tau Beta Pi National Engineering Society
American Society of Engineering Education
US Green Building Council (Florida Capitol Region Board of Directors)

Sang Bum Park, PhD, Research Associate
Division of Architecture-School of Architecture + Engineering Technology

Course Taught:

ARC 2470 Introduction to Technology of Architecture (FM)
ARC 4610 Environmental Systems in Architecture (FM)

Educational Credentials:

PhD, Architecture, University of Florida, May 2012
Master of Science, Environmental Engineering, Yonsei University, South Korea, Aug. 2001
Bachelor of Science, Industrial Environment and Health, Yonsei University, Aug. 1999

Teaching Experience:

Visiting Assistant Professor and Research Associate, School of Architecture and Engineering Technology, Florida A&M University, 2012-Present
Teaching Assistant, School of Architecture, University of Florida, 2008-2012

Professional Experience:

Project Manager, 4-Dimensions Engineering, Ltd., Seoul, South Korea 2007-2008
Acoustical Consultant, SOVICO Co., Seoul, South Korea 2002 - 2006

Licenses/Registration:

Certified Engineer Noise & Vibration, South Korea
Certified Engineer Industrial Safety, South Korea
Certified Engineer Industrial Hygiene Management, South Korea

Recent Research:

Acoustical evaluation of worship spaces - 2012-present
Impact of classroom environment on academic achievement in university students - 2014

Recent Publications:

Park, Sang Bum and Gary W. Siebein, "Soundscape Approach to Evaluate Outdoor Acoustic Spaces in Nature", *Noise Control Engr. J.*, 63(5), 478-493, 2015.
Park, Sang Bum, Ronald B. Lumpkin, Kathie Laurent, and Khari Peart, "Environmental Measurements of Classrooms at the Florida A & M University", ARCC 2015 conference proceedings. Vol. 2015, 434-441, 2015
Park, Sang Bum, "Spreading Acoustics to Architecture Programs", *Acoustics' 17 Boston*, 2017
Park, Sang Bum, Ronald B. Lumpkin, Kathie Laurent, and Khari Peart, "Environmental Measurements of Classrooms at the Florida A & M University", ARCC 2015.
Park, Sang Bum and Gary W. Siebein., "*A soundscape approach to qualitatively evaluate acoustic rooms in a natural setting.*" INTER-NOISE 2012.

Recent Honors/Awards:

Provost's Digital Learning Initiative Fellowship, FAMU, 2017
Robert B. Newman Medal for Merit in Architectural Acoustics, ASA, 2011

Professional Memberships:

Acoustical Society of America (ASA)
Institute of Noise Control Engineering (INCE)-USA
Architectural Research Centers Consortium (ARCC)

Johnston E. Osagie, DBA, Associate Professor
Department of Finance-School of Business & Industry

Courses Taught:

QMB 2100 Quantitative Methods for Business Decisions I (FM)
FIN 3403 Corporation Finance (FM)
Advanced Financial Management, Advanced Financial Institutions and Markets
Global Finance, Global Business, Finance Theory, Investment Portfolio Analysis

Educational Credentials:

Advanced Certificate in Personal Financial Planning, Texas Tech University, Lubbock, Texas, 2005
Doctor of Business Administration – Finance, US International University, San Diego, CA, 1991
MBA Finance, US International University, San Diego, CA, 1987
BS Accounting and Financial Management, US International University, San Diego, CA, 1985

Teaching Experience

Associate Professor of Finance, School of Business & Industry, Florida A&M University, 8/2007-present
Assistant Professor of Finance, School of Business & Industry, Florida A&M University, 8/2000- 8/2007
Assistant Professor of Finance, Alcorn State University, 8/1995-8/2000
Assistant Professor of Finance, Lincoln University, 8/1993-8/1995
Visiting Professor of Finance and Business, Chadron State College, 8/1991-6/1992

Professional Experience

Administrator/Co-trainer, Claiborne County Public Schools, 1998-1999
Administrator/Co-trainer, Minority Small Business Entrepreneurs, US Department of Housing & Urban Development, Kansas City, MO, 1992-1993
Mortgage Accountant, Wells Fargo Bank, San Diego, CA, 1989-1991

Recent Research and Other Interests

Osagie, J. E. and et al, (2016). “Monetary Intelligence and Behavioral Economics: The Enron Effect—Love of Money, Corporate Ethical Values, Corruption Perceptions Index (CPI), and Dishonesty Across 31 Geopolitical Entities.” *Journal of Business Ethics*

Osagie, J. E. and et al, (2012). “A Study on the Efficiency of Option Markets: Short-term Vs Long-term - An Implied Volatility Approach. Presented at the 2012 Annual Conference of World Finance & Banking Symposium. Shanghai, China.

Osagie, J. E. (2012). Participated in SBI Global Leadership Conference, Tallahassee, FL., April 18-20, 2012.

Osagie, J. E. (2007). “Readings in Theory of Finance” *ProQuest Information and Learning Company, Pearson Custom Publishing*

Osagie, J. E. (2003), “Practical Readings in Problems of Financial Management” *ProQuest Information and Learning Company, Pearson Custom Publishing*

Osagie, J. E. (2003). “Readings in Theory of Finance” *ProQuest Information and Learning Company, Pearson Custom Publishing*

Osagie, J. E. (2002). “Theory of Finance” *ProQuest Information and Learning Company, Pearson Custom Publishing*

Professional Memberships

Financial Management Association	Academy of Economics and Finance
Southern Finance Association	Academy of International Business
Southwest Finance Association	Association of the Third World Studies
Academy of Financial services	Society for the Advancement of Management Studies
Academy of Management	

Enn Ots, Registered Architect, Professor
Division of Architecture-School of Architecture + Engineering Technology

Courses Taught:

ARC 1050/5291	Design 1.1 (FM Principles of Space Planning)
ARC 2303	Architectural Design 2.1
ARC 2304	Architectural Design 2.2
ARC 3324	Architectural Design 3.1
ARC 3325	Architectural Design 3.2
ARC 4291	Special Studies Architecture 1 (Theory Elective)
ARC 4341	Architectural Design 4.1
ARC 5289	Facility Management Profession (FM)
ARC 6259	Program Theory & Practice
ARC 6624	New Tech Enclosed Buildings
ARC 6972	Thesis Studio

Educational Credentials:

Masters of Architecture, University of Manitoba, 1972
B.E.S. University of Manitoba, 1969

Teaching Experience:

Associate Professor, Florida A&M University, 1979 – 2013
Professor, Florida A&M University, 2013 - Present

Professional Experience:

BEC/Brian Awde Architects, Toronto, Ontario: 1972-1979
Enn Ots, Architect: 1985 - present

Licenses/Registration:

Architect, State of Florida

Recent Commissions/Creative Works:

Loft Conversion, Atlanta, GA 2016
Universal Design Conversion 2011
1905 Victorian house expansion, Atlanta, GA, 2009

Recent Research:

Appropriate Technology for Haiti Reconstruction – Joint project with Hope Builds and FAMU CESTA, 2010

Publications:

Ots, Enn, *Decoding Theoryspeak: An Illustrated Guide to Architectural Theory*, Abington, Oxon, England, Routledge, 2011. ISBN13: 978-0415-77830
Contributions to: Tom Porter, *Archispeak: An Illustrated Guide to Architectural Term*. London, Spon Press, 2004. ISBN 0-415-30012:
Contributions to: Beth Lewis, *Sustainaspeak: A Guide to Sustainable Design Terms*, Routledge, 2017

Sang Bum Park, PhD, Research Associate
Division of Architecture-School of Architecture + Engineering Technology

Course Taught:

ARC 2470 Introduction to Technology of Architecture
ARC 4610 Environmental Systems in Architecture

Educational Credentials:

PhD, Architecture, University of Florida, May 2012
Master of Science, Environmental Engineering, Yonsei University, South Korea, Aug. 2001
Bachelor of Science, Industrial Environment and Health, Yonsei University, Aug. 1999

Teaching Experience:

Visiting Assistant Professor and Research Associate, School of Architecture and Engineering Technology, Florida A&M University, 2012-Present
Teaching Assistant, School of Architecture, University of Florida, 2008-2012

Professional Experience:

Project Manager, 4-Dimensions Engineering, Ltd., Seoul, South Korea 2007-2008
Acoustical Consultant, SOVICO Co., Seoul, South Korea 2002 - 2006

Licenses/Registration:

Certified Engineer Noise & Vibration, South Korea
Certified Engineer Industrial Safety, South Korea
Certified Engineer Industrial Hygiene Management, South Korea

Recent Research:

Acoustical evaluation of worship spaces - 2012-present
Impact of classroom environment on academic achievement in university students - 2014

Recent Publications:

Park, Sang Bum and Gary W. Siebein, "Soundscape Approach to Evaluate Outdoor Acoustic Spaces in Nature", *Noise Control Engr. J.*, 63(5), 478-493, 2015.
Park, Sang Bum, Ronald B. Lumpkin, Kathie Laurent, and Khari Peart, "Environmental Measurements of Classrooms at the Florida A & M University", ARCC 2015 conference proceedings. Vol. 2015, 434-441, 2015
Park, Sang Bum, "Spreading Acoustics to Architecture Programs", *Acoustics' 17 Boston*, 2017
Park, Sang Bum, Ronald B. Lumpkin, Kathie Laurent, and Khari Peart, "Environmental Measurements of Classrooms at the Florida A & M University", ARCC 2015.
Park, Sang Bum and Gary W. Siebein., "*A soundscape approach to qualitatively evaluate acoustic rooms in a natural setting.*" INTER-NOISE 2012.

Recent Honors/Awards:

Provost's Digital Learning Initiative Fellowship, FAMU, 2017
Robert B. Newman Medal for Merit in Architectural Acoustics, ASA, 2011

Professional Memberships:

Acoustical Society of America (ASA)
Institute of Noise Control Engineering (INCE)-USA
Architectural Research Centers Consortium (ARCC)

Eduardo Robles, Associate Professor
Division of Architecture

Courses Taught:

ARC 1050/5291	Design 1.1 (FM Principles of Space Planning)
ARC 1301	Design 1.1
ARC 4242	Design 2.2
ARC 4291	Spec Studies (Study Trip)
ARC 4292	Architecture and Urbanism
ARC 4292	Spain and the Americas
ARC 4293	Art and Architecture
ARC 4293	Urban Design Issues
ARC 4342	Architectural Design 4.2
ARC 4293	Special Studies Arch III
ARC 4319	Design Analysis (Theory)
ARC 5364	Architectural Design 4
ARC 6357	Graduate Design 6.1
ARC 6971	Thesis/Masters Project

Educational Credentials:

Master of Architecture, Rice University, 1985
Master of Fine Arts, U.C. S

Teaching Experience:

Associate Professor, Florida A&M University, (SOA) 1996-Present
Assistant Professor, Florida A&M University, (SOA) 1994-1996
Visiting Professor, Rice University – 1986-1994

Recent Publications:

Plantation Houses of North Florida, Vitruvio, International Journal of Architectural Technology and Sustainability, June 2017
ReUso Congress proceedings, Scientific Committee and Co-Editor, Valencia, 2015
A History of Valencia: Florida State University's Heritage with Ignacio Messana and Juan Salazar, FSU International Programs, 2014

Current Research:

Plantation Houses of North Florida (History and construction of iconic plantations in Leon County).
Elche: The City and the Grove (The city of Elche in Spain and its relationship to the largest palm grove in Europe surrounding it).

Richard D. Schulerbrandt Gragg, Ph.D., Associate Professor of Environmental Science and Policy
School of the Environment

Courses Taught:

EVR 4036 Environmental Equity & Justice
EVR 4804 Environmental Toxicology & Human Health
EVR 5062 Principles of Occupational Health and Safety (FM)

Educational Credentials:

Ph. D., Pharmaceutical Sciences/Toxicology, Florida A&M University, 1994
M.S., Pharmacology, Florida A&M University, Tallahassee, FL, 1986
B.S., Biochemistry, SUNY Binghamton University, Binghamton, NY 1980

Teaching Experience:

Florida A&M University, Associate Professor 2011-present
Florida A&M University, Founding Director, Center for Environmental Equity and Justice, 1998

Publications/Creative Works:

- Gragg, R., Donnellan, L., Jennings, V., Mitchell, R., and Clayton Clark (August 2013). Science and Technology Leaders for a Sustainable Future. In P. Barlett and G. Chase (Eds.), *Re-imagining higher education: stories and strategies for sustainability* (49-56). Cambridge, MA: MIT Press
- Gragg, R., Donnellan, L., Jennings, V., Mitchell, R., and Clayton Clark (August 2013). Science and Technology Leaders for a Sustainable Future. In P. Barlett and G. Chase (Eds.), *Re-imagining higher education: stories and strategies for sustainability* (49-56). Cambridge, MA: MIT Press
- “The Sustainability Imperative at Florida A&M University. R. D. Schulerbrandt Gragg (2013). The ACUPCC Implementer, Issue 56 (<http://secondnature.org/blog/2013-05-07/sustainability-imperative-florida-am-university>). Second Nature, Boston, MA.
- Gragg, R., Donnellan, L., Jennings, V., Mitchell, R., and Clayton Clark (August 2013). Science and Technology Leaders for a Sustainable Future. In P. Barlett and G. Chase (Eds.), *Re-imagining higher education: stories and strategies for sustainability* (49-56). Cambridge, MA: MIT Press
- ‘ENVIRONMENTAL JUSTICE READER-II: A Survey and Review of Critical Issues in Disenfranchised and Vulnerable Communities in the Twenty-first Century’ (2012) *Johnson, G., Rainey-Brown, S.A., and Gragg, R.D.*, (Eds.) New York, NY, *Linus Publications, Inc.*
- ‘ENVIRONMENTAL JUSTICE READER-II: A Survey and Review of Critical Issues in Disenfranchised and Vulnerable Communities in the Twenty-first Century’ (2012) *Johnson, G., Rainey-Brown, S.A., and Gragg, R.D.*, (Eds.) New York, NY, *Linus Publications, Inc.*
- ‘How Cumulative Risks Warrant A Shift In Our Approach To Racial Health Disparities: The Case of Lead, Stress, and Hypertension’ (2011) Hicken M., Gragg, R., and Hu, H., *Health Affairs* 30(10), 1895-1901.
- ‘Promoting Environmental Justice Through Urban Green Space Access: A Synopsis’ (2011) Jennings, V., Johnson Gaither, C. and Gragg, R., *Environmental Justice* 5 (1), 1-7.
- ‘Citizen Mapping and Environmental Justice: Internet Applications for Research and Advocacy’ (2011) Jordan, L., Stallins, A., Stokes IV, S., Johnson, E., and Gragg, R., *Environmental Justice* 4 (3): 155-162 (doi:10.1089/env.2010.0048).
- ‘Imunomodulation in eastern oysters, *Crassostrea virginica*, exposed to a PAH-contaminated, microphytobenthic diatom’ (2010) Croxton, April N., Wikfors, Gary H., and Schulerbrandt Gragg, Richard D., *Aquatic Toxicology* 118– 119.
- ‘Evaluation of Initial Environmental Engineering Sustainability Course at a Minority Serving Institution’ (2011) Clark II, C.J. and Gragg III, R.S., *Sustainability*, 4(6): 297-302.
- ‘Social and Environmental Risk Factors for Hypertension in African Americans’ (2008). *Florida Public Health Review* 5, 64-72.

John P. R. Washington, II, Esq, Assistant Professor
Department of Accounting
School of Business & Industry

Courses Taught

BUL 4130 Legal Environment of Business
BUL 5323 Legal Environment of Business (FM)

Educational Credentials

Juris Doctor, University of Florida, 12/1994
Bachelor of Arts, Criminology, University of Florida, 5/1992

Teaching Experience

Assistant Dean of Admissions, College of Law, Florida A&M University, 7/2012- 1/2016
Adjunct Instructor, School of Business & Industry, Florida A&M University, 2009-Present

Professional Experience

Pre-Professional Law Program Director, Florida A&M University, 04/2010-7/2012
Director of Regulation, Florida Department of Business and Professional Regulation, 02/2002-06/2009
Deputy General Counsel, Florida Department of Business and Professional Regulation 02/2002-04/2006
Director of Legislative Affairs, Florida Department of Corrections, 1/2000-02/2002
Assistant Executive Director, State of Florida Correctional Privatization Commission, 10/1995-1/2000

License/Registrations

Florida Bar

Publications/Creative Works

Professional Memberships

Florida Bar, member in good standing since October 1995
American Bar Association
Academy of Legal Studies in Business

F. Summary of spring 2018 Student Graduate Exit Surveys (Typical)



*SCHOOL OF ARCHITECTURE AND ENGINEERING TECHNOLOGY
SUMMARY OF SPRING 2018 EXIT SURVEY RESULTS*

Florida Agricultural and Mechanical University (FAMU) exit survey is designed to capture graduating students' perceptions of their collegiate experiences and future plans. The survey specifically seeks respondents' perceptions of their experiences as it relates to learning outcomes, student support services, facilities, availability of services, major field of study, among other items deemed important to the university. This report provides a summary of data collected for the **Spring 2018 semester**. Over the course of this time period (**N=1,081**) students graduated from the university. Of this proportion, (**n=991**) students responded to the survey representing an overall response rate of **92%**. Students graduating from the **School of Architecture and Engineering Technology** accounted for **3%** or (**n=33**) of the total number of students who participated in the Spring 2018 exit survey. The data in the report represents a comprehensive summary of all items from the exit survey. Also included in this report are respondents' responses to open-ended items from the exit survey. **Please be advised that comments are authentic, meaning they reflect the voice of the participants. Furthermore, please exercise caution in sharing the contents of this report, as some comments may contain sensitive information.**

At the end of each semester, the Office of University Assessment will prepare a descriptive summary of the exit survey results aggregated at the Institutional level and disaggregated by Colleges and Schools. It is our hope that you will use this information to inform the decision-making processes in your College/School and ultimately to improve the overall student experience.

Prepared by Office of University Assessment
Florida Agricultural and Mechanical University
659 Ardelia Court
Phone: (850) 412-5265
E-mail: assessment@fam.u.edu

1. Age:



Answer	%	n
21-23 Years Old	39.39%	13
24-26 Years Old	48.48%	16
27-30 Years Old	3.03%	1
36 Years Old and Above	9.09%	3

2. Gender:



Answer	%	n
Male	48.48%	16
Female	51.52%	17

3. What is your RACE/ETHNICITY:



Answer	%	n
African American/Black	75.76%	25
Hispanic	9.09%	3
White	12.12%	4
Other (please specify)	3.03%	1

Other (please specify):

Bi-racial

4. What is your residency status?



Answer	%	n
Florida Resident	66.67%	22
Non-Florida Resident	24.24%	8
Non-Resident Alien/International Students	9.09%	3

5. What is your current school/college/institute:

Answer	%	n
School of Architecture and Engineering Technology	100.00%	33

6. Class Level



Answer	%	n
Undergraduate Student	75.76%	25
Graduate Student	24.24%	8

7. You indicated that you are a graduate student, from which university did you receive your undergraduate degree?

Answer	%	n
FAMU	75.00%	6
FSU	12.50%	1
OTHER COLLEGE or UNIVERSITY (please specify)	12.50%	1

OTHER COLLEGE or UNIVERSITY (please specify):
 Valdosta State University

8. Did you transfer to FAMU from another university?



Answer	%	n
Yes	30.30%	10
No	69.70%	23
Total	100%	33

9. You indicated that you transferred to FAMU from another university. Please select from the list below. If the institution you transferred from is not listed, please provide the full name of the institution that you transferred from in CAPITAL letters in the space provided below. For example, type HOWARD UNIVERSITY instead of Howard if you transferred from Howard University.

Answer	%	n
UWF	10.00%	1
OTHER (please specify)	90.00%	9

OTHER (please specify):

- TCC
- TCC
- TCC
- TCC
- NORTH WEST FLORIDA STATE COLLEGE
- UNIVERSITY OF THE BAHAMAS
- The College of The Bahamas
- College of the Bahamas
- State College of Florida

10. In which semester and year did you first enroll at FAMU?

Answer	%	n
Fall 2016	12.12%	4
Summer 2016	6.06%	2
Fall 2015	12.12%	4
Fall 2014	27.27%	9
Summer 2014	3.03%	1

Answer	%	n
Fall 2013	9.09%	3
Summer 2013	3.03%	1
Fall 2012	15.15%	5
Spring 2012	3.03%	1
Fall 2011	6.06%	2
Fall 2006	3.03%	1

11. What degree are you receiving?



Answer	%	n
Bachelor's	75.76%	25
Master's	24.24%	8

12. From what program are you graduating or receiving your degree? (e.g. Construction Engineering Technology)

School of Architecture and Engineering Technology:

Answer	%	n
04.0201 Bachelor of Science in Architectural Studies	42.42%	14
04.0201 Bachelor of Architecture	6.06%	2
04.0201 Master of Science in Architecture (Architecture)	3.03%	1
04.0201 Master of Science in Architecture (Facilities Management)	6.06%	2
04.0201 Master of Architecture	15.15%	5
15.0303 Bachelor of Science in Electronic Engineering Technology	21.21%	7
15.1001 Bachelor of Science in Construction Engineering Technology	6.06%	2

13. What is your cumulative GPA?

Mean Cumulative GPA for Graduates



Answer	%	n
2.0 to 2.49	15.15%	5
2.5 to 2.99	15.15%	5
3.0 to 3.49	39.39%	13
3.5 to 4.00	30.30%	10

Field	Minimum	Maximum	Mean	Std Deviation	Variance	n
13. What is your cumulative GPA?	1.00	4.00	2.85	1.02	1.04	33

14. Did you receive a scholarship or fellowship to attend FAMU?



Answer	%	n
Yes	39.39%	13
No	60.61%	20

15. You indicated that you received a scholarship or fellowship to attend FAMU. Please name only one of your major sources of scholarship aid.



The responses are below:

- Community College Transfers Scholarship
- Community College Transfer Scholarship
- School of Architecture Graduate Scholarship
- Presidential
- Architecture Scholarship
- Career Source
- Architecture Scholarship

The responses are below:

- FAMU Presidential DSA
- Architectural Scholarship
- Athletic scholarship
- Transfer Scholarship
- National Grant Ministry of Education
- Florida A&M University

16. Did you ever complete an internship at a for-profit company during your time at FAMU?



Answer	%	n
Yes	33.33%	11
No	66.67%	22

17. You indicated that you completed an internship at a for-profit company during your time at FAMU. Please indicate the name of the company where you did your internship (Name the one that is most related to your program of study).



- The responses are below:**
- ____ Allstate Construction, Bayside Engineering
 - ____ North American Properties - Southeast, Inc
 - ____ Hensel Phelps
 - ____ Hammond Design Group LLC
 - ____ Florida A & M University Facilities and Planning Department
 - ____ Northrop Grumman

- The responses are below:**
- ____ MLD Architects, LLC
 - ____ The United States Forest Service
 - ____ AECOM
 - ____ NASA
 - ____ Cosco & Associates, Inc.

18. Was the internship that you completed with a for-profit company:



Answer	%	n
Required as part of your academic program	27.27%	3
Self-initiated	72.73%	8

19. Did you ever complete an internship or research experience at a not-for-profit institution such as a government laboratory or university during your time at FAMU?



Answer	%	n
Yes	6.06%	2
No	93.94%	31

20. You indicated that you completed an internship or research experience at a non-for profit institution. Please indicate the name of the institution only if it is related to your program of study.

florida
 big humanity
 university
 bend state
 habitat

The responses are below:

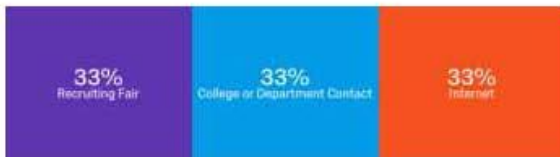
- Florida State University
- Habitat for Humanity, Big Bend

21. Was the internship that you completed with a not-for-profit institution:



Answer	%	n
Self-initiated	100.00%	2

22. You indicated that you completed an internship, how did you hear about it? (Check all that apply).



Answer	%	n
Recruiting Fair	33.33%	1
College or Department Contact	33.33%	1
Internet	33.33%	1

23. Please indicate how satisfied you are with the following processes at FAMU:

Question	Very Satisfied	n	Somewhat Satisfied	n	Somewhat Dissatisfied	n	Very Dissatisfied	n	No Opinion	n	Total
Registration Process	30.30%	10	54.55%	18	12.12%	4	3.03%	1	0.00%	0	33
Financial Aid Process	12.12%	4	36.36%	12	27.27%	9	21.21%	7	3.03%	1	33
Grade Reporting Process	39.39%	13	57.58%	19	0.00%	0	3.03%	1	0.00%	0	33
Academic Advisement Process	39.39%	13	45.45%	15	6.06%	2	9.09%	3	0.00%	0	33

24. Please rate how satisfied you are with each of the following on-campus facilities at FAMU:

Question	Very Satisfied	n	Somewhat Satisfied	n	Somewhat Dissatisfied	n	Very Dissatisfied	n	No Opinion	n	Total
Classroom Facilities	33.33%	11	48.48%	16	18.18%	6	0.00%	0	0.00%	0	33
Computing Facilities	24.24%	8	48.48%	16	21.21%	7	6.06%	2	0.00%	0	33
Dining Facilities	21.21%	7	57.58%	19	12.12%	4	0.00%	0	9.09%	3	33
Recreational Facilities	40.63%	13	56.25%	18	0.00%	0	0.00%	0	3.13%	1	32
University Bookstore	36.36%	12	57.58%	19	3.03%	1	0.00%	0	3.03%	1	33
University Library	45.45%	15	51.52%	17	0.00%	0	3.03%	1	0.00%	0	33
Fitness/Exercise Facilities	54.55%	18	39.39%	13	3.03%	1	0.00%	0	3.03%	1	33

25. Please rate how satisfied you are with each of the following customer services offered at FAMU:

Question	Very Satisfied	n	Somewhat Satisfied	n	Somewhat Dissatisfied	n	Very Dissatisfied	n	No Opinion	n	Total
Campus Police	42.42%	14	48.48%	16	0.00%	0	3.03%	1	6.06%	2	33
Office of Financial Aid	9.09%	3	33.33%	11	42.42%	14	12.12%	4	3.03%	1	33
Office of Food Services	24.24%	8	57.58%	19	6.06%	2	0.00%	0	12.12%	4	33
Housing Office	15.15%	5	39.39%	13	12.12%	4	3.03%	1	30.30%	10	33
Office of Parking Services	21.21%	7	27.27%	9	24.24%	8	21.21%	7	6.06%	2	33
Registrar's Office	42.42%	14	33.33%	11	18.18%	6	3.03%	1	3.03%	1	33
Your Major Program's Department Office	45.45%	15	42.42%	14	12.12%	4	0.00%	0	0.00%	0	33
Library Services	51.52%	17	42.42%	14	0.00%	0	3.03%	1	3.03%	1	33
FAMU Career Center	36.36%	12	42.42%	14	0.00%	0	0.00%	0	21.21%	7	33

26. Please rate how satisfied you are with each of the following at FAMU:

Question	Very Satisfied	n	Somewhat Satisfied	n	Somewhat Dissatisfied	n	Very Dissatisfied	n	No Opinion	n	Total
Availability to obtain desired classes	36.36%	12	54.55%	18	9.09%	3	0.00%	0	0.00%	0	33
Availability of student parking	18.18%	6	30.30%	10	15.15%	5	33.33%	11	3.03%	1	33
Size of classrooms	48.48%	16	51.52%	17	0.00%	0	0.00%	0	0.00%	0	33
Quality of food served on campus	21.21%	7	57.58%	19	9.09%	3	0.00%	0	12.12%	4	33
Quantity of food served on campus	24.24%	8	57.58%	19	6.06%	2	0.00%	0	12.12%	4	33
Student Government Association	18.75%	6	50.00%	16	6.25%	2	3.13%	1	21.88%	7	32
Your Campus Email Account	39.39%	13	54.55%	18	0.00%	0	3.03%	1	3.03%	1	33
Campus Radio Station	15.15%	5	45.45%	15	3.03%	1	0.00%	0	36.36%	12	33
The value of your FAMU degree	60.61%	20	33.33%	11	3.03%	1	0.00%	0	3.03%	1	33

27. In the space provided below, please list your comments or suggestions to improve campus life for students at Florida A&M University?



The responses are below:

Use more suggestive reason to urge students to get involved in the community.

There should be a desired location on campus where students are consistently active. Basically, a designated hangout spot where a lot of activity is going on and students are involved rather its studying, playing catch, or just hanging out. For example, just imagine having a "Cascade Park" on campus. I believe that would improve our campus life experience.

Better PAVED parking lots

Architecture students need more scholarship money the materials are very expensive. And we need better computer with higher graphic cards.

There should be more parking to accommodate students and awareness on certain things like life after graduation and financial counseling workshops

More student involvement with campus related activities and events. Provide more parking and persistent staff

Bring back the free planners for students in the career center. Have more acknowledgment for ALL majors. Electronic Engineering Technology isn't promoted well enough. Technology in the technology building (Benjamin Banneker) is outdated.

There is a lot needs to improve in the school a like as such teachers don't like to answer student question. a professor shouldn't retaliated to student in any shape of form.

Please stop constructing new buildings before constructing somewhere for students to park. Resources need to be used wisely.

More parking for students Better financial aid workers Keep track of money Improve Benjamin banaker classrooms

N/A

be more open to suggestions and more parking spaces

Campus life is great!!!

none

Create more parking

Student life and class sizes are great. Financial aid and registrar office can be greatly improved.

Do not limit financial grants grants to students especially if they really need it. Have more events on campus that can engaged the students.

Administration/Staff Availability in all positions should provide consistency...there are always a select few that are always available and performing the tasks for ALL. Never in any industry have I received a response of that's not my dept, and no other follow up to help. This would happen at the registrar's office and at the financial aid office, of which I visited A LOT. I also received a late fee for every semester while on financial aid, and NEVER received a refund after filling out the form SEVERAL times, and contacting the Dean of my dept. This is a fee that should not be assessed on any financial aid student, so the refund process is not required, since it is so difficult. Not to mention all the fees at the time of graduation, including a \$40 parking fee that I never acquired until now. Consistency is key, it delivers a fair opinion.

Access to facilities little later for school work.

Honestly Campus life is great at the moment, I have no suggestion.

Provide places to get food that is more towards the center of campus.

(Note: Respondents' responses are authentic, meaning that they have not been edited.)

28. Please indicate the extent to which you agree or disagree with each of the following statements:

Question	Strongly Agree	n	Somewhat Agree	n	Somewhat Disagree	n	Strongly Disagree	n	Total
FAMU has provided me with the skills to express ideas effectively both verbally and in writing.	48.48%	16	45.45%	15	6.06%	2	0.00%	0	33
My studies at FAMU have helped me to improve my ability to think critically about and analyze issues, and to creatively engage in problem solving.	54.55%	18	45.45%	15	0.00%	0	0.00%	0	33
FAMU has enhanced my ability to use technology to support classroom learning and to conduct research.	48.48%	16	39.39%	13	9.09%	3	3.03%	1	33
My studies at FAMU have provided me with the ability to work cooperatively to accomplish a common task.	57.58%	19	39.39%	13	3.03%	1	0.00%	0	33
FAMU has instilled in me a desire to adhere to high standards of academic integrity and personal conduct.	57.58%	19	42.42%	14	0.00%	0	0.00%	0	33
My experiences at FAMU have enhanced by desire to engage in the perpetual pursuit of knowledge.	57.58%	19	39.39%	13	3.03%	1	0.00%	0	33
FAMU has provided me with the ability to show consideration for differences among peoples.	66.67%	22	33.33%	11	0.00%	0	0.00%	0	33

29. To what extent do you agree or disagree with each of the following statements?

Question	Strongly Agree	n	Agree	n	Disagree	n	Strongly Disagree	n	Total
I have obtained a sense of competence in my major field of study.	63.64%	21	36.36%	12	0.00%	0	0.00%	0	33
I have acquired the ability to apply theoretical knowledge to practical situations.	63.64%	21	36.36%	12	0.00%	0	0.00%	0	33
I feel that my major field of study was intellectually challenging.	63.64%	21	30.30%	10	6.06%	2	0.00%	0	33
I feel that my major field of study was easily done academically.	39.39%	13	39.39%	13	18.18%	6	3.03%	1	33

30. In the space provided below, please provide any comment(s) or suggestion(s) to improve your area of academic program(s) at Florida A&M University.



The responses are below:
Promote more construction site visits for first and second year students
n/a
Advisement could be more available for students of Architecture
No changes! Academically, FAMU is GREAT!
n/a
Updated technology.
I learned a lot from classmates a certain teacher
This program is wonderful I think it deserves more recognition and attention
N/A
I actually like it but would want some design professors to have more patience
N/A
n/a
Get a handle over the computer programs and when the labs are open to the students.
The teachers are great and so are the class sizes. Just wish they taught more technology related to architecture.
Fund the stem programs more and more
Computer Room should be made available, and readily equipped during peak times of design deadlines. At critical times it was not, and please during week leading up to finals schedule activities in the ARC building accordingly so as not to interrupt those that are trying to study, and finalize designs. The design studio needs to be a more peaceful place to work, thankful however, for most professor understanding that it is not and not expecting students to reside there the entire time of studio.
Its Great.
None
Allow more time using lab equipment

(Note: Respondents' responses are authentic, meaning that they have not been edited.)

31. Please indicate to what extent the following items were important in your decision to attend FAMU:

Question	Very Important	n	Somewhat Important	n	Not so Important	n	Not Important	n	No Opinion	n	Total
Intercollegiate athletics (such as Football, Basketball, etc.).	30.30%	10	24.24%	8	27.27%	9	6.06%	2	12.12%	4	33
On-Campus Social Events.	36.36%	12	33.33%	11	18.18%	6	3.03%	1	9.09%	3	33
Student Clubs and Organizations.	39.39%	13	33.33%	11	12.12%	4	3.03%	1	12.12%	4	33
Reputation of the Degree Programs.	71.88%	23	21.88%	7	3.13%	1	0.00%	0	3.13%	1	32
Reputation of Florida A&M University.	69.70%	23	21.21%	7	3.03%	1	3.03%	1	3.03%	1	33
Family Legacy.	33.33%	11	27.27%	9	9.09%	3	21.21%	7	9.09%	3	33
Supportive campus environment.	59.38%	19	28.13%	9	3.13%	1	9.38%	3	0.00%	0	32

32. Which of the following programs have you participated in during your time at FAMU (Please select all that apply)?



Answer	%	n
Accelerated Program	10.26%	4
Cooperative Education	0.00%	0
Cross-registration	2.56%	1
Distance Learning	10.26%	4
Double Major	2.56%	1
Dual Enrollment	2.56%	1
Honors Program	12.82%	5

Answer	%	n
Independent Study	10.26%	4
Learning Community	2.56%	1
Study Abroad	2.56%	1
Teacher Certificate Program	0.00%	0
Weekend College	0.00%	0
None of the Above	43.59%	17

33. Would you recommend Florida A&M University to others who may be interested in your field of study?



Answer	%	n
Yes	93.94%	31
No	6.06%	2

34. You indicated that you would not recommend Florida A&M University to others who may be interested in your field of study. Please indicate why.

field
student
undergraduate
matter

The response is below:

The needs of undergraduate students do not matter in this field here.

(Note: Respondent's response is authentic, meaning that it has not been edited.)

35. What are your plans immediately following graduation (Please select all that apply)?



Answer	%	n
Attending undergraduate college full-time	3.28%	2
Attending graduate/professional school	21.31%	13
Working full-time	32.79%	20
Working part-time	4.92%	3
Participating in a post-baccalaureate program	1.64%	1
Participating in a community service organization	3.28%	2
Serving in the Armed Forces	1.64%	1
Attending a vocational training program	1.64%	1
Traveling	18.03%	11
Doing volunteer work	9.84%	6
Staying at home to be with or start a family	1.64%	1

36. How confident are you about your ability to find a job related to your major area of study after earning your degree from FAMU?



Answer	%	n
I have already accepted a job offer	42.42%	14
Very Confident	36.36%	12
Confident	18.18%	6
Somewhat Confident	3.03%	1

37. What sources did you use to obtain your current job contacts (Please check or select only those that apply)?

Answer	%	n
Academic Department	3.70%	1
Alumni	11.11%	3
FAMU Career Center	3.70%	1
Recruiting Fair	29.63%	8
Relatives and Friends	14.81%	4
Internship or Cooperative Assignment	14.81%	4
Internet Company Job Search Database (e.g. Microsoft.com)	7.41%	2
Internet-Federal/State Job Search Database (e.g. Myflorida)	3.70%	1
Internet General Job Search Database (e.g. Monster.com)	7.41%	2
Internet Other (please specify)	3.70%	1

Internet Other (please specify):

I was employed before starting classes at FAMU

38. (A) You indicated that you have already accepted a job offer. Please complete the following items related to your job offer.

Whom do you plan to work for after graduation?	What is your job title?
North American Properties - Southeast, Inc	Assistant Project Manager
Hensel Phelps	Field Engineer
Ellis, Rickett, and Associates Architects	Intern Architect
Finfrock	Professional Development Program
Northrop Grumman	Quality Engineer
Lockheed Martin	Systems engineer
Huntington Ingalls Inc	Electrical Engineer 1
CRA Architects	Draftsman
Gensler	Technical Designer
Huntington Ingalls Industries	Electrical Engineer
EMO Design/Build	Comptroller
Huntington Ingalls	Electrical Engineer
Cosco & Associates, Inc.	Intern Architect
Rhodes and Brito Architects	Project coordinator

38. (B) What will be your starting salary?



Answer	%	n
\$30,000-\$39,999	14.29%	2
\$40,000-\$49,999	14.29%	2
\$50,000-\$59,999	42.86%	6
\$60,000-\$69,999	28.57%	4

38. (C) Please select the state in which you will be employed?



Answer	%	n
Florida	57.14%	8
Georgia	14.29%	2
Mississippi	14.29%	2
Virginia	7.14%	1
North America	7.14%	1

38. (D) Is your new job related to your degree?



Answer	%	n
Yes	100.00%	14

Have you decided to pursue further studies?



Answer	%	n
Yes	54.55%	18
No	45.45%	15

39. You indicated that you have decided to pursue further study.

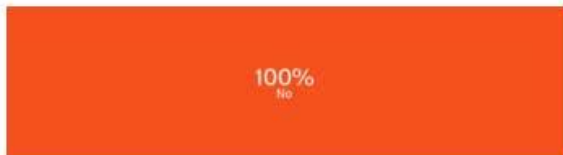
Question	0 (None)	n	1	n	2 - 3	n	4 - 5	n	6 or more	n	Total
How many graduate schools have you applied to?	47.06%	8	47.06%	8	5.88%	1	0.00%	0	0.00%	0	17
How many graduate schools have accepted you?	47.06%	8	47.06%	8	5.88%	1	0.00%	0	0.00%	0	17

40. When do you plan to start your graduate studies?



Answer	%	n
In Less than 1 Year	50.00%	9
Within 1 to 2 Years	38.89%	7
Within 2 to 5 Years	11.11%	2

41. Have you taken the GRE?



Answer	%	n
No	100.00%	18

41. (A) The following are the Verbal and Quantitative Reasoning scores reported on the GRE general test. The score scale is from 130-170 in 1 point increments.

No Responses

41. (B) The following is the Analytical Writing score reported on the GRE general test. The score scale is from 0-6 in half point increments.

No Responses

42. If you have been accepted into one or more graduate programs, have you decided which one you will attend?



Answer	%	n
Yes	55.56%	10
No	22.22%	4
I have been accepted, but I have not decided	22.22%	4

43. At what college or university are you MOST LIKELY to continue your studies?



The responses are below:

- TULANE
- Howard
- Florida Agriculture Mechanical University
- Florida A&M University
- Florida A&M University
- florida a and m university
- FAMU
- FAMU
- FAMU
- FAMU

44. Please indicate the type degree or academic program you will be enrolling in.



The responses are below:

- BArch Architecture
- Architecture
- Business Administration
- masters in architecture
- Bachelor of Architecture
- B. ARCH

The responses are below:

Graduate Program ARC
Masters in Architecture
Masters of Architecture
Masters of Science in Architecture

45. Please indicate area of planned study:

architecture
multidisciplinary

The responses are below:

residential
New Orleans
Management
Architecture
Architecture
Architecture
ARCHITECTURE
Architecture
Architecture
Architecture

46. Have you accepted a Post-Doctoral Appointment?

No Responses

47. You indicated that you have accepted a Post-Doctoral Appointment. Where will you serve your appointment?

No Responses

48. If you have any additional comments or suggestions on how we can best improve Florida A&M University for future students, please list them in the space provided below.



- The responses are below:**
- Provide more parking for students
 - N/A
 - Thanks for three WONDERFUL years!
 - n/a
 - N/A
 - honestly i think we are improving but famu needs less drama
 - N/A
 - N/A
 - Improve finical aid and registrar office.
 - Give them more money so they can graduate with less debt and will be more willing to give back to FAMU.
 - None

(Note: Respondents' responses are authentic, meaning that they have not been edited.)