

FACILITIES MANAGEMENT (FM)

FM-625 Technology of Facility Design & Management - (3 Credits)

This course investigates how the computer can be effectively utilized to extend planning and management capability. The latest hardware and software available for facilities management are reviewed and evaluated, including applications in the area of space programming, inventory and allocation, equipment and maintenance cost tracking, lease management, budgets and growth projection. Students learn to determine tasks and to apply appropriate technology through problem solving exercises and hands-on experience. The course begins by having the Students simulate the planning process from the programming through delineation of major design considerations and quality standards. Through a combination of lectures, seminars, and group exercises in decision making and role playing, the student experiences the planning process as designer, owner, and manager, and examines the impact off the process on the final building product. This will form the basis of their project within an IWMS/ CAFM solution.

FM-631 Principles of Facilities Management - (3 Credits)

Introduces the role of the facilities manager and examines facilities management through forecasting and budgeting, architectural planning and design, maintenance and operations management and the integration of services. Basic principles of business management are discussed in the context of facilities management.

FM-632 Project Management - (3 Credits)

Covers project management from the concept phase through move-in, including budgeting and cost estimating, the delivery process, programming and space planning, selecting the design team, and managing construction and occupancy. Techniques for cost analysis, scheduling and procedures for contracting, construction coordination and the control of change orders are reviewed. The impact of scheduling on contractor claims is studied along with management reporting and feedback.

FM-633 Managerial Accounting and Finance - (3 Credits)

Covers aspects of accounting and finance of practical use to the facilities manager. Emphasis is on the understanding of financial language, statements and instruments, their application, and the use and interpretation of accounting data as a basis for analysis and decision-making.

FM-636 Facility Maintenance and Operations - (3 Credits)

Provides a comprehensive study of maintenance and operations management of environmental, communications, life/safety and security systems in buildings. Areas of study include advanced mechanical and electrical systems, evaluation and integration of systems, energy conservation, upgrading systems with tenants in place, preventative maintenance and implications of maintenance and operations for planning and design.

FM-646 Sustainable Construction Management - (3 Credits)

Sustainable Construction is no longer an option. Issues such as, global warming, high oil prices and a global economy has altered the construction industries, the Federal Government and the world's outlook on maintaining a sustainable environment. This course will equip students with the skills to manage sustainable construction projects.

FM-663 Real Estate Development - (3 Credits)

Focuses on economic development issues and the principles of real estate finance. Topics covered include property descriptions, an overview of the real estate development process and its participants, contract and closing procedures and tools and tax shelters. The roles played by the public and private sectors are examined with an emphasis on discerning the differences in perspective associated with each sector.

FM-690A Facilities Management Research - (1 Credit)

Students conduct independent research in advanced topics in facilities management under faculty direction. Projects result in reference texts for the Facilities Management library, papers for publication or grant publications for further study. Approval of the chairperson is necessary.

FM-690B Facilities Management Research - (2 Credits)

Students conduct independent research in advanced topics in facilities management under faculty direction. Projects result in reference texts for the Facilities Management library, papers for publication or grant publications for further study. Approval of the chairperson is necessary.

FM-690C Facilities Management Research - (3 Credits)

Students conduct independent research in advanced topics in facilities management under faculty direction. Projects result in reference texts for the Facilities Management library, papers for publication or grant publications for further study. Approval of the chairperson is necessary.

FM-722 BIM for Facilities Managers - (3 Credits)

The focus of this class is to learn the fundamental concept of Building Information Modeling (BIM), and how it relates to the field of Facilities Management. The student will be learning the basics of modeling through the revision of an existing office building. Thereafter we will use the office building. Thereafter we will use the office building as a source to generate an FM model that will be used throughout the course. Cutting edge software will be used to modify and harvest the embedded data from the building information model, which are then used to inform and plan the maintenance of the building.

FM-736 Infrastructure & Information Communications Technology - (3 Credits)

This course examines the impact of telecommunications technology on facilities planning & management. Topics include the design and implementation of local and wide area voice and data communications networks, client service applications, groupware and business communications systems for enhancing collaborative work. Key technical, policy and organizational issues pertaining to the effective deployment and use of telecommunications technologies in a managed facility will be explored.

FM-737 Facility Assessment & Strategic Planning - (3 Credits)

Focuses on strategies for management to anticipate and accommodate change in corporate wide facilities. Areas of discussion include the planning framework, establishing goals, developing linkage between business planning and facilities planning, methods for information gathering, building an information database, inventory and needs analysis, modeling techniques, developing an action policy and effective communication of facilities issues to senior management.

FM-771 Legal Issues - (3 Credits)

Students review business and building law as they pertain to the facilities manager, with particular focus on contracts, environmental and construction law, risk management, and insurance. Contracts are reviewed for consultants, construction and maintenance, procurement and purchasing agreements. The significance of key legal terms and clauses is examined as well as procedures and policy implications for dealing with construction claims and disputes, hazardous materials and multi-state facilities.

FM-798 Demonstration of Professional Competency - (4 Credits)

As a capstone requirement of the program, students demonstrate fulfillment of an approved scope of work showing the analytical capacities and creative skills expected of a professional in this field. The demonstration may involve original research, a work-related project or an extension of course-related work. Students must also register for co-requisite HMS-697A. Requisite courses:

FM-799 Demonstration in Progress - (0 Credits)

If the Thesis course is not completed in the initial semesters, students can continue working in FM-700 for no more than five semesters.

FM-9700 Internship - (0 Credits)

Students wishing to combine practical experience with facilities management study may apply for an internship with participating companies if they have a GPA of 3.0 and a second semester status. Students, in conjunction with the faculty advisor and employer, prepare a written description of the studies to be accomplished as part of their internship, and their relationship to the curriculum. The application must be approved by the faculty advisor, the chairperson, and the employer.

FM-9701 Internship - (1 Credit)

Students wishing to combine practical experience with facilities management study may apply for an internship with participating companies if they have a GPA of 3.0 and a second semester status. Students, in conjunction with the faculty advisor and employer, prepare a written description of the studies to be accomplished as part of their internship, and their relationship to the curriculum. The application must be approved by the faculty advisor, the chairperson, and the employer.

FM-9702 Internship - (2 Credits)

Students wishing to combine practical experience with facilities management study may apply for an internship with participating companies if they have a GPA of 3.0 and a second semester status. Students, in conjunction with the faculty advisor and employer, prepare a written description of the studies to be accomplished as part of their internship, and their relationship to the curriculum. The application must be approved by the faculty advisor, the chairperson, and the employer.

FM-9703 Internship - (3 Credits)

Students wishing to combine practical experience with facilities management study may apply for an internship with participating companies if they have a GPA of 3.0 and a second semester status. Students, in conjunction with the faculty advisor and employer, prepare a written description of the studies to be accomplished as part of their internship, and their relationship to the curriculum. The application must be approved by the faculty advisor, the chairperson, and the employer.