



M.S. Facilities Management

100% Online Accredited Degree Program

PURDUE SCHOOL OF ENGINEERING AND TECHNOLOGY AT IUPUI

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REQUIRED COURSES

FMGT 51000 Introduction to Facilities Planning and Management

Schedule: Fall

Prerequisite: none

An overview of the planning process for facilities is covered including: space planning; facilities layout; engineering systems integration; site selection; compliance with ADA requirements; sustainability; and LEED certification. Additionally, topics related to organizational concepts and management of the facility function will be discussed including: management functions; how facility management fits into the organization structure; professional conduct and certification of facility professionals; outsourcing and contracts; and risk management.

FMGT 51500 Introduction to Facilities Engineering Systems

Schedule: Fall

Prerequisite: none

This course introduces and examines the design criteria, operation, safety, maintenance, testing and assessment of building engineering systems. The inter-relationships of fire protection, HVAC/R, electrical distribution, plumbing, lighting, acoustics, telecommunication and energy management are examined.

FMGT 52000 Energy Management for Buildings

Schedule: Spring

Prerequisite: Introduction to Facilities Engineering Systems or equivalent

This course introduces practical procedures to select options in order to operate and maintain commercial buildings to reduce building system energy costs and to help meet environmental standards.

FMGT 52500 Management of IT, Telecommunications, and Video Infrastructure

Schedule: Spring

Prerequisite: Introduction to Facilities Engineering Systems or equivalent

This course is the study telecommunications and IT technology, including voice, data, and video. Topics include digital communications, standards and protocols, Ethernet, local and wide area networks, fiber optics, voice, and network video technologies.

OLS 57100 Advanced Project Management

Schedule: Summer

Prerequisite: None

Role of the project officer; systems and techniques for planning, scheduling, monitoring, reporting and completing projects; total quality management; project team management; contract management and logistics; community relations; crisis management; consensus building; and public policy.

IET 53000 Facilities Contract Management

Schedule: Fall

Prerequisite: Introduction to Facilities Planning and Management or equivalent

This course will teach you the basics of contracts. The purpose of the course is not to teach you how to write contracts (that is what lawyers do). Instead, you will learn key principles of contract law so that you can better understand how an agreement is made and what terms become part of that agreement. Knowledge from this course will help the facility manager navigate the contractual process, from negotiating terms to dealing with potential disputes. Areas of focus will include real estate contracts, negotiations, managing risks and disputes, and the uniform commercial code. An emphasis will also be placed on contracts related to construction projects.

FMGT 53500 Quality and Productivity in Industry and Technology

Schedule: Fall

Prerequisite: IET 150 or equivalent statistics course.

This course exams the process optimization utilizing contemporary quality and systems engineering methodologies, specifically Six Sigma, Lean, Toyota Production System (TPS) and Constraint Management. Direct application of

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principles to an industry field project is required. This course covers optimization and management of production, service and transactional processes.

FMGT 54000 Facilities Maintenance and Operation

Schedule: Spring

Prerequisite: Introduction to Facilities Engineering Systems or equivalent

Topics of this course include: infrastructure management; maintenance influence on life-cycle cost; preventive and predictive maintenance programs; maintenance management software tools; and interaction with trade craftsmen.

FMGT 54500 Financial Aspects of Facilities Management

Schedule: Spring

Prerequisite: Facilities Contract Management or equivalent

Financial analysis and reporting, concepts and methods of accounting, budgeting and evaluation of projects are examined. The role of the facility manager in corporate earnings and valuations is covered and financial aspects of managing a facility over its life-cycle are examined.

FMGT 59800 Facilities Management Capstone

Schedule: Fall/Spring/ Summer

Prerequisite: Final semester of study

Independent study of a special problem under the guidance of a member of the staff.

RECOMMENDED ELECTIVES

FMGT 55500 Healthcare Facilities Management

Schedule: periodic/elective

Prerequisite: none

This course will provide an overview of hospital layout and associated building elements along with code compliance and functionality. Discussion includes operating rooms, medical/surgical units, OB/labor and delivery, radiology/MRI/CT/emergency department, electrical systems, plumbing systems, medical gas systems, HVAC, fire protection, telecommunications/network, and maintenance/regulatory requirements.

FMGT 56000 Emergency Management for Facilities Personnel

Schedule: periodic/elective

Prerequisite: none

This course encompasses a broad survey of emergency management topics relevant to facility managers and related personnel. Issues such as mitigation, preparedness, response and recovery, planning, risk assessment, life safety and regulations, natural disasters and terrorism will be discussed, and opportunities for personalized planning through applied exercises will be utilized to provide enhanced understanding to the student.

Note: Some classes may be listed in the schedule at TECH 58100 until permanent numbers are approved.