

# DEPARTMENT OF INDUSTRIAL & ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE

### INDUSTRIAL TECHNOLOGY MAJOR

### FACILITIES MANAGEMENT OPTION

The Facilities Management option incorporates a combination of technical and management components designed to prepare students to coordinate physical workplaces, integrating people and the work of the organization to provide a safe, healthy, and efficient work environment. This program incorporates hands-on experiences and management-related theory to prepare students to supervise and coordinate a team of specialists and consultants such as architects, engineers, communications contractors, and construction/maintenance contractors.

## CURRICULUM CHECKLIST

### UNIVERSITY STUDIES (53 hours)

___ UI 100 First Year Seminar	3
___ Artistic Expression	3
___ Literary Expression	3
___ Oral Expression	3
___ EN 100 English Composition	3
___ Written Expression	3
___ Behavioral Systems	3
___ Living Systems	3
___ MA 134 College Algebra (Logical Systems)	3
___ PH 120/020 Introductory Physics I (Physical Systems)	5
___ Development of a Major Civilization	3
___ MN 220 Engineering Economic Analysis (Economic Systems)	3
___ Political Systems	3
___ SW 207 Understanding Cult & Soc Diversity (Social Systems)	3
___ UI 3xx Interdisciplinary University Studies Course (UI319 recommended)	3
___ UI 3xx Interdisciplinary University Studies Course	3
___ UI 410 Manufacturing Research in a Global Society (Senior Seminar)	3
___ WP003 Writing Proficiency Test (to be taken after completing 75 hours)	0
___ MAPP Academic Proficiency & Progress Test (to be taken after completing 75 hours)	0
___ CL001 ___ CL002 ___ CL003 ___ CL004 Career Linkages Requirements	0

### INDUSTRIAL TECHNOLOGY CORE

**(26 Hours, not counting 17 hours included in University Studies section)**

___ CH 181/081/001 Basic Principles of Chemistry or PH121/021 Introductory Physics II	5
___ IM 102 Technical Communication	3
___ IM 301 Industrial Safety	3
___ IM 311 Statistical Process Control	3
___ IM 419 Industrial Supervision	3
___ IM 506 Projects in IET	3
___ MA 133 Plane Trigonometry	3
___ MN 260 Technical Computer Programming Applications	3

**IT required courses included in University Studies section above: MA134, MN220, PH120, SW207, and UI410**

### FACILITIES MANAGEMENT OPTION (42 Hours)

___ AC 221 Financial Accounting	3
___ CM 126 Computer Aided Architectural Drafting	3
___ CM 226 Residential Architecture Drafting and Design	3
___ CM 310 Construction Building Codes	3
___ CM 315 Construction Contracts and Legal Issues	3
___ CM 325 Building Mechanical & Electrical Systems	3
___ CM 330 Construction Planning & Scheduling	3
___ CM 410 Construction Project Administration	3
___ CM 510 Building Information Modeling	3
___ ET 470 Energy Management	3
___ FM 504 Facilities Management	3
___ FM 554 Facilities Operation and Supervision	3
___ IM 317 Internship	3
___ MA 139 Applied Calculus	3

**EXAMPLE PROGRAM OF STUDY**  
**BS - Industrial Technology major - Facilities Management option**

**FRESHMAN FALL SEMESTER (15 hrs)**

EN 100 English Comp  
IM 102 Technical Communication  
MA 134 College Algebra  
CM 126 Computer Aided Architectural Drafting  
UI 100 First Year Seminar  
CL001 Career Linkages 1<sup>st</sup> Requirement

**FRESHMAN SPRING SEMESTER (15 hrs)**

MA 133 Plane Trigonometry  
CM 226 Residential Arch. Drafting & Design  
Literary Expression  
Oral Expression  
Written Expression  
CL002 Career Linkages 2<sup>nd</sup> Requirement

**SOPHOMORE FALL SEMESTER (17 hrs)**

CH 181/081/001 Basic Principles of Chemistry  
CM 310 Construction Building Codes  
IM 301 Industrial Safety  
MA 139 Applied Calculus  
Artistic Expression

**SOPHOMORE SPRING SEMESTER (17 hrs)**

AC 221 Financial Accounting  
CM 510 Building Information Modeling  
PH 120/020 Introductory Physics I  
SW 207 Understanding Cult. & Soc. Diversity  
(Social Systems)  
Behavioral Systems

**JUNIOR FALL SEMESTER (15 hrs)**

CM 315 Construction Contracts & Legal Issues  
CM 325 Building Mechanical & Electrical Systems  
CM 330 Construction Planning & Scheduling  
MN260 Tech Comp Program Appl  
Living Systems  
CL003 Career Linkages 3<sup>rd</sup> Requirement

**JUNIOR SPRING SEMESTER (12 hrs)**

FM554 Facilities Operation & Supervision  
IM 311 Statistical Process Control  
IM 317 Industrial Internship  
MN 220 Engineering Economic Analysis  
WP003 Writing Proficiency Test  
MAPP Academic Proficiency & Progress Test

**SENIOR FALL SEMESTER (15 hrs)**

ET 470 Energy Management  
FM 504 Facilities Management  
IM 506 Projects in IET  
UI 3xx (UI 319 recommended)  
Political Systems  
CL004 Career Linkages 4<sup>th</sup> Requirement

**SENIOR SPRING SEMESTER (15 hrs)**

CM 410 Construction Project Administration  
IM 419 Industrial Supervision  
UI 3xx (University Studies)  
UI 410 Manufacturing Research Global Society  
Developments of a Major Civilization

**121 Hours**

**Notes:**

- This proposed rotation is suggested. You will need to meet with your advisor every semester for advising and discussions about your progress and plans.
- Course prerequisites and rotations can change. Even if you fall under an older option of a major, changes in prerequisites apply to all students. For current prerequisites and course rotation, check with the Department of Industrial and Engineering Technology or the Polytechnic Studies Advising Center.
- An internship is required – the summer after your junior year is a good time
- For course descriptions, see the latest undergraduate bulletin OR [www.semo.edu/bulletin](http://www.semo.edu/bulletin)
- Visit <http://www.semo.edu/ustudies/handbook/index.htm> for information on the University Studies program
- For information on Career Linkages, visit <http://www.semo.edu/careerlinkages/students/index.htm>