

**DEPARTMENT OF INDUSTRIAL & ENGINEERING TECHNOLOGY  
BACHELOR OF SCIENCE  
INDUSTRIAL TECHNOLOGY MAJOR  
CONSTRUCTION MANAGEMENT & DESIGN OPTION**

The Construction Management and Design option incorporates a combination of technical and management components designed to prepare students for technically oriented mid-management positions in the construction industry. This program incorporates hands-on experiences and management-related theory to prepare students to communicate and function within the management, engineering, and production environments of the construction industry.

**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	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**

**CONSTRUCTION MANAGEMENT AND DESIGN OPTION (42 Hours)**

___ CM 126 Computer Aided Architectural Drafting	3
___ CM 226 Residential Architectural Drafting & Design	3
___ CM 243 Construction Methods and Materials	3
___ CM 310 Construction Building Codes	3
___ CM 315 Construction Contracts and Legal Issues	3
___ CM 320 Construction Cost Estimating	3
___ CM 322 Commercial Architectural Drafting & Design	3
___ CM 325 Building Mechanical & Electrical Systems	3
___ CM 330 Construction Planning & Scheduling	3
___ CM 343 Construction Surveying & Testing	3
___ CM 410 Construction Project Administration	3
___ IM 317 Internship	3
___ MA 139 Applied Calculus	3
___ MN 219 Statics and Strengths of Materials	3

## EXAMPLE PROGRAM OF STUDY

### BS - Industrial Technology major - Construction Management and Design option

#### FRESHMAN FALL SEMESTER (15 hrs)

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

#### FRESHMAN SPRING SEMESTER (15 hrs)

CM 243 Construction Methods & Materials  
MA 133 Plane Trigonometry  
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 (14 hrs)

CM 226 Residential Arch. Drafting & Design  
MN 260 Technical Computer Programming Appl.  
PH 120/020 Introductory Physics I  
SW 207 Understanding Cult. & Soc. Diversity  
(Social Systems)

#### JUNIOR FALL SEMESTER (15 hrs)

CM 315 Construction Contracts & Legal Issues  
CM 320 Construction Cost Estimating  
IM 311 Statistical Process Control  
Behavioral Systems  
Political Systems  
CL003 Career Linkages 3<sup>rd</sup> Requirement

#### JUNIOR SPRING SEMESTER (15 hrs)

CM 322 Commercial Arch. Drafting & Design  
CM 343 Construction Surveying & Testing  
IM 317 Industrial Internship (*usually summer*)  
MN 220 Engineering Economic Analysis  
MN 219 Statics & Strengths of Materials  
WP003 Writing Proficiency Test  
MAPP Academic Proficiency & Progress Test

#### SENIOR FALL SEMESTER (15 hrs)

CM 325 Building Mechanical & Electrical Systems  
CM 330 Construction Planning and Scheduling  
IM 506 Projects in IET  
UI 3xx (UI 319 recommended)  
Living 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>