Construction Management
College of Science, Engineering & Technology
Department of Interior Design & Construction Management
354 Wiecking Center  507-389-6385
www.mnsu.edu/dept/idcm

Chair: Scott Fee
Ryan Langemeier, C. Michael Lindstrom

The mission of the Department of Interior Design and Construction Management is to provide preparation for diverse employment opportunities following completion of the degree program. It provides graduates with the essential tools and competency levels for design, construction, planning, or restoration managerial careers.

The Construction Management Emphases provide students with opportunities to gain applied skills and knowledge in the areas of design, construction, planning, and management, allowing them to successfully pursue careers in small and large commercial, residential, and industrial environments.

It is the intent of the Department of Interior Design and Construction Management to offer two separate BS degrees: (1) a BS in Construction Management with a General Emphasis or an Emphasis in Facilities Planning and Management; and (2) a BS in Interior Design with a General Emphasis or an Emphasis in Historic Restoration and Preservation. The program division into two majors is currently pending MnSCU approval. Please contact the Department for information about courses required for the degree and Emphasis in which you are interested.

Admission to Major is granted by the College of Science, Engineering and Technology. Minimum University admission requirements are:
- A minimum of 32 earned semester credit hours.
- A minimum cumulative GPA of 2.00

Contact the CSET Advising Center for application procedures.

CONSTRUCTION MANAGEMENT BS
Core (41 credits):
CM 111 Intro to Design and Construction Management (1)
CM 212 Surveying and Site Planning (2)
CM 215 Fundamentals of Estimating (3)
CM 216 Construction Methods (3)
CM 248 Contract Documents (2)
CM 250 Mechanical and Electrical Systems (3)
CM 281 Architectural Graphics (4)
CM 413 Cost Estimating and Bidding (3)
CM 414 Computerized Estimating and Bidding (3)
CM 445 Construction Systems Management (3)
ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BLAW 476 Construction and Design Law (3)
COMS 101 Introduction to Microcomputers (3)
MET 424 Industrial & Construction Safety (2)

Recommended General Education:
BIOL 201 Ecology and Human Society (3)
ENG 101 Composition (4)
GEOG 100 Elements of Geography (3)
PHIL 120 Introduction to Ethics (3)
SOC 101 Introduction to Sociology (3)
SPEE 100 Fundamentals of Speech Communication (3)
URBS 100 Introduction to the City (3)

Completion of these General Education Courses does not entirely fulfill the GE requirements

Choose one of the following two Emphases, either GENERAL or FACILITIES PLANNING AND MANAGEMENT:

CONSTRUCTION MANAGEMENT GENERAL EMPHASIS

Required for Construction Management General Emphasis (14 credits):
CM 106 Construction Experience (1)
CM 311 Equipment Management (2)
CM 312 Found. & Conc. Structures (3)
CM 497 Internship (8)

Required Support Courses (25 credits):
BLAW 200 Legal, Political and Regulatory Environment of Business (3)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
MATH 115 Precalculus (4)
MGMT 200 Introduction to MIS (3)
MGMT 330 Principles of Management (3)
BED 345 Business Communications (3)

Select one of the following:
MGMT 440 Human Resource Management (3)
MGMT 482 Business, Society and Ethics (3)
FINA 362 Business Finance (3)

Required General Education (10 credits):
MATH 115 Pre-Calculus (4)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)

Completion of the above General Education courses does not completely satisfy General Education Requirements.

FACILITIES PLANNING AND MANAGEMENT EMPHASIS
This emphasis currently exceeds the minimum 128 credits required for graduation. Please contact an advisor for assistance with course selection.

Required for Facilities Planning and Management Emphasis (35 credits):
CM 282 Interior Design Portrait (4)
CM 283 Interior Design Lighting and Color (4)
CM 362 History of the Decorative Arts II (4)
CM 372 Interior Design Resources (4)
CM 480 Topics: I.D. Product Development (4)
CM 481 Interior Design Studio III (4)
CM 482 Interior Design Studio IV (4)
CM 483 Procedures and Practices in I.D. (4)
CM 497 Internship (3)

Required Support Courses (7-8 credits):
FINA 477 Real Estate (3)
MET 423 Ergonomics and Work Measure (2)

Select one of the following:
MET 407 Facility Planning (2)
RPLS 379 Management of Parks and Recreation Facilities (3)

POLICIES/INFORMATION

GPA Policy. A minimum grade of “C” is required in all courses.

P/N Grading Policy. All courses in the major must be taken for letter grade except where P/N is the only option.

For interior design students, the department reserves the right of acquisition and exhibition of work completed in the studios under the guidance of the
interior design faculty.

COURSE DESCRIPTIONS

CM 106 (1) Construction Experience
Construction Experience consists of at least 15 weeks of work in the construction industry and must precede the internship program. This credit may be waived for experience acquired prior to enrolling at Minnesota State University, Mankato.

CM 111 (1) Introduction to Design & Construction Management
Overview of academic preparation and career opportunities in the fields of: Construction Management; Facilities Planning and Management; Historic Restoration and Preservation; and Interior Design.

CM 212 (2) Surveying & Site Planning
Basic surveying as related to the layout of construction work sites, focusing on measurement of distances, angles, and elevations, and making selected computations.
Pre: MATH 115

CM 215 (3) Fundamentals of Estimating
Covers principles of quantity takeoff including identification of symbols and trigonometric computations of materials from construction blueprints. Includes commercial and residential types of construction plans.
Pre: MATH 115 (or concurrently), CM 111 and 281 (or concurrently)

CM 216 (3) Construction Methods
Processes utilized in material handling and installation are examined for their effect on managing design and construction projects. Scheduling concepts are studied for patterns to yield higher productivity in the project management process.
Pre: CM 111 (or concurrently)

CM 248 (2) Contract Documents
Basic understanding of the plans and specifications for construction projects. Emphasis on interpretation of bidding and contractual documents, conditions of the contract, technical specifications, quantity takeoffs, and the plans/working drawings.
Pre: CM 111 and 281 (or concurrently)

CM 250 (3) Mechanical & Electrical Systems
Design concepts of heating, plumbing, electrical and control systems are analyzed for attributes that affect the design and construction processes and the performance of completed structures.
Pre: CM 111 (or concurrently)

CM 311 (2) Equipment Management
Study of equipment used in the construction industry with emphasis on equipment selection and cost factors involved in owning and operating equipment.
Pre: CM 111 and 216

CM 312 (3) Foundations & Concrete Structures
Soil identification and testing methods are examined to identify design concepts and construction circumstances that can effect projects. Concrete design and workmanship principles are studied for their effect on quality and durability of the built environment. Foundation design principles are examined for their effect on scheduling, equipment selection and project success.
Pre: CM 216 (or concurrently)

CM 413 (3) Advanced Estimating and Bidding
Advanced application of procedures and theory in formulating estimates on highway, grading and utility projects. Study includes job selection, estimating production, compilation of costs, the final preparation of bids, and ethics in estimating and bidding.
Pre: CM 215, 216, 248 and 311 (Pre 311 waived for FP & M and HR & P)

CM 414 (3) Advanced Estimating and Scheduling
The process of construction estimating is extended by the use of computers together with specialized construction software packages to increase job productivity. Software utilized includes commonly used packages in the construction industry on workstations.

CM 445 (3) Construction Systems Management
This course encompasses an overview of the operations of a firm relevant to strategic management. Identified and analyzed are the positions and roles of construction management personnel and their interrelationship with key individuals external to the company. Global issues impacting management are discussed.
Pre: CM 413 (or concurrently), ACCT 210

CM 497 (1-9) Internship

CM 498 (1-6) Internship
Supervised work experience in design or design related field within private business, industry or a government agency.

CM 499 (1-4) Individual Study
An in-depth study on a topic of particular interest to the student. Project must be approved by project supervisor and department chairperson.