CONCRETE INDUSTRY MANAGEMENT (CIM)

CIM 3330. Concrete Construction Methods.
This course covers forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing and curing concrete for cast-in-place foundations, pavements, slabs on ground, structural frames, and other structural members are studied. Other topics include waterproofing concrete foundations and erecting precast concrete members. Prerequisite: CIM 3420.

Grade Mode: Standard Letter
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

about Concrete Construction Methods

CIM 3340. Understanding the Concrete Construction System.
A detailed look at how the concrete construction industry works. The course includes a review of model building codes, building officials and their function, concrete industry codes and standards, concrete construction processes, quality assurance systems, contract documents, estimating, construction scheduling and concrete construction markets. Prerequisite: MATH 2328 and CIM 3420.

Grade Mode: Standard Letter
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

about Understanding the Concrete Construction System

CIM 3366. Applications of Concrete in Construction.
This course is a detailed study of the many uses of concrete in the construction of buildings, pavements and other facilities. Emphasis will be placed on the advantages, disadvantages, and unique problems faced by materials suppliers, contractors and design professionals when concrete is chosen for specific applications. Prerequisite: CIM 3330.

Grade Mode: Standard Letter
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

about Applications of Concrete in Construction

This course examines effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Concrete mixture proportioning calculations and statistical analysis of strength tests are also studied. Prerequisite: CSM 2342.

Grade Mode: Standard Letter
4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Lab Required

about Fundamentals of Concrete: Properties and Testing

CIM 4320. Issues in Concrete and Construction Industry.
This course involves a case study approach to critically analyze various historical and current events in the concrete and construction industry. Particular emphasis will be placed upon developing a managerial decision-making process incorporating ethical, legal, financial and other business perspectives. Prerequisites: CIM 3340, MGT 3303, FIN 3325, and BLAW 2361.

Grade Mode: Standard Letter
about Issues in Concrete and Construction Industry

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

CIM 4330. Management of Concrete Products – Ordering and Scheduling.
This course is designed to provide the student with a basic understanding of managing the ordering and delivery process common to all concrete products. Emphasis will be in planning, organizing and controlling at both the first-line supervisory and managerial levels. Prerequisites: CIM 3340 and MGT 3303.

Grade Mode: Standard Letter
about Management of Concrete Products – Ordering and Scheduling

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

CIM 4360. Concrete Problems: Diagnosis, Prevention and Dispute Resolution.
Course involves diagnosing/preventing problems related to concrete production, testing, construction and performance. Students learn to identify causes of fresh and hardened concrete problems, i.e. fast and slow setting, air content variations, low strength, cracking and scaling. Pre-job conferences and dispute resolution methods are examined. Prerequisite: CIM 3366.

Grade Mode: Standard Letter
about Concrete Problems: Diagnosis, Prevention and Dispute Resolution

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

CIM 4398. Capstone.
An intensive study of a problem(s) appropriate to the major/student’s career interests. Requires knowledge from previous technical/business coursework. Solution(s) for the problem(s) will be presented to an industry committee. Presentation must emphasize depth of analysis, completeness/effectiveness of solution, and presentation skills. Prerequisite: CIM 4330. (WI).

Grade Mode: Standard Letter
about Capstone

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing/Writing Intensive

CIM 5330. Advanced Concrete Technology.
The course will cover hydraulic cements, aggregates, admixtures, and mix design; concrete production, quality control, early-age properties and durability. Concrete distress examination, identification, prevention, and nondestructive testing; advanced concrete technology, high-strength and high performance concrete. Prerequisite: CIM 2342.

Grade Mode: Standard Letter
about Advanced Concrete Technology

3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.

about Advanced Concrete Technology

CIM 3330. Concrete Construction Methods.
This course covers forming, shoring, placing and reinforcing operations. Transporting, placing, consolidating, finishing, jointing and curing concrete for cast-in-place foundations, pavements, slabs on ground, structural frames, and other structural members are studied. Other topics include waterproofing concrete foundations and erecting precast concrete members. Prerequisite: CIM 3420.

Grade Mode: Standard Letter
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

about Senior Concrete Lab

CIM 4310. Senior Concrete Lab.
This course provides students with an opportunity to further develop their technical and laboratory knowledge and pursue a project of individual interest. A formal report/presentation will be required at the conclusion of the course. Prerequisites: CIM 3366 and CIM 3420 with grades of C or better.

Grade Mode: Standard Letter
3 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.

about Senior Concrete Lab

CIM 4320. Issues in Concrete and Construction Industry.
This course involves a case study approach to critically analyze various historical and current events in the concrete and construction industry. Particular emphasis will be placed upon developing a managerial decision-making process incorporating ethical, legal, financial and other business perspectives. Prerequisites: CIM 3340, MGT 3303, FIN 3325, and BLAW 2361.

Grade Mode: Standard Letter
about Issues in Concrete and Construction Industry

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
CIM 5340. Innovation Strategies for the Concrete Industry.
This course provides students a new set of tools for and experience in finding and developing innovative alternatives for addressing strategic business problems in concrete industry. Students will explore creativity from individual and team perspectives and identify innovation opportunities and roadblocks in organizational settings. Prerequisite: CIM 3340 and CIM 3366 or Instructor’s Approval.
Grade Mode: Standard Letter
about Innovation Strategies for the Concrete Industry
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.