

Description of Construction Management Graduate Courses

CMP 810 Construction Systems

Semester: Fall of every year, Spring of every year

Credits: Total Credits: 1 Lab Hours: 2 1(0-2)

Restrictions: Open only to graduate students in the Construction Management major or Civil Engineering major or Interior Design major and Facilities Management major.

Not open to students with credit in: CMP 124 or CMP 210

Description: Construction materials and methods in the U.S. Steel and wood construction.

Semester Alias: BCM 810

CMP 811 Advanced Project Scheduling

Semester: Fall of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 2 Lab Hours: 2 3(2-2)

Description: Critical path analysis for effective and logical scheduling of construction projects. Identification of project activities and their relationships. Schedule development, analysis, and updating. Relationship of project costs and resources to the schedule. Effective communication of schedule information.

Semester Alias: BCM 811

CMP 815 Advanced Cost Estimating and Analysis

Semester: Fall of every year, Summer of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 2 Lab Hours: 2 3(2-2)

Description: Advanced estimation of construction project costs: direct and indirect, labor, material, quantity surveying, productivity, and equipment. Overhead and profit. Bidding. Role of contractor, owner, and architect or engineer. Computer-based estimating.

CMP 817 Construction Project Management & Information Systems

Semester: Spring of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 2 Lab Hours: 2 3(2-2)

Recommended Background: Background in estimating and scheduling required.

Not open to students with credit in: CMP 423

Description: Construction project administration, project controls, information generation and utilization for the management of construction projects. Integration of construction management software, and knowledge-based models.

Semester Alias: BCM 817

CMP 822 Contracts and Legal Issues in Construction

Semester: Spring of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 3 3(3-0)

Restrictions: Open to masters students or doctoral students in the Construction Management major or in the Interior Design and Facilities Management major or in the Civil Engineering major or in the Master in Urban and Regional Planning.

Description: Construction contracts and documents. Application of Michigan and federal case law to construction and development claims and litigation.

CMP 823 Advanced Construction Project Management

Semester: Fall of every year, Spring of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 3 3(3-0)

Recommended Background: CMP 411 and CMP 415

Restrictions: Open only to graduate students in the Construction Management major.

Description: Project management issues, services, and documentation. Bidding, cost accounting, scheduling. Project planning and controlling.

Semester Alias: BCM 823

CMP 831 Lean Construction Principles and Methods

Semester: Spring of every year

Credits: Total Credits: 3 Lecture/Recitation/Discussion Hours: 3 3(3-0)

Recommended Background: Some aspects of project management (scheduling, estimating), statistics, and probabilities.

Description: Origins and elements of lean production. Lean-based productivity improvement.

CMP 890 Special Problems

Semester: Fall of every year, Spring of every year, Summer of every year

Credits: Variable from 1 to 9

Reenrollment Information: A student may earn a maximum of 9 credits in all enrollments for this course.

Restrictions: Open to graduate students in the College of Agriculture and Natural Resources. Approval of department; application required.

Description: Individual study in land acquisition and development, design, construction, management, finance, marketing, and structural analysis.

Semester Alias: BCM 890

CMP 891 Advanced Topics in Building Construction Management

Semester: Fall of every year, Spring of every year, Summer of every year

Credits: Variable from 1 to 4

Reenrollment Information: A student may earn a maximum of 8 credits in all enrollments for this course.

Restrictions: Open only to graduate students in College of Agriculture and Natural Resources. Approval of department.

Description: Advanced topics in building construction management.

Semester Alias: BCM 891

CMP 892 Construction Management Research Seminar

Semester: Fall of every year

Credits: Total Credits: 2 Lecture/Recitation/Discussion Hours: 2 2(2-0)

Restrictions: Open only to graduate students in the College of Agriculture and Natural Resources or College of Engineering or College of Human Ecology.

Description: Current areas and topics of research in construction management. Resources of research results, analysis of existing research, and development of preliminary proposal.

Semester Alias: BCM 892

CMP 898 Master's Research

Semester: Fall of every year, Spring of every year, Summer of every year

Credits: Variable from 1 to 3

Reenrollment Information: A student may earn a maximum of 6 credits in all enrollments for this course.

Restrictions: Open only to master's students in the Construction Management major.

Description: Master's degree research paper.

Semester Alias: BCM 898

CMP 899 Master's Thesis Research

Semester: Fall of every year, Spring of every year, Summer of every year

Credits: Variable from 1 to 10

Reenrollment Information: A student may earn a maximum of 99 credits in all enrollments for this course.

Restrictions: Open only to master's students in the Construction Management major.

Description: Master's thesis research.

Semester Alias: BCM 899