Construction Management-CON (CON)

Courses

CON 101 Introduction to Construction Management Credits: 3 (0-0-0)
Course Description: Identify and understand relationships among participants in the construction process and its history.
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 131 Graphic Communications for Construction Credits: 2 (0-4-0)
Course Description: Reading technical drawings, 2D/3D visualization, manual drafting techniques, introduction to design software applications.
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 151 Construction Materials and Methods Credits: 3 (3-0-0)
Course Description: Materials and methods utilized in the design and construction of buildings.
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 251 Materials Testing and Processing Credits: 2 (1-2-0)
Course Description: Testing of construction materials for standards and quality. Conduct common quality tests and document the results.
Prerequisite: CON 151.
Registration Information: Must register for lecture and laboratory.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 251 Construction Surveying Credits: 3 (2-3-0)
Course Description: Surveying fundamentals to field of construction, building layout, measurement procedures, vertical controls, line and grade, surveying instrument operation.
Prerequisites: (CON 131 or INTD 166) and (MATH 125 or MATH 160).
Registration Information: Must register for lecture and laboratory.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

CON 265 Construction Estimating Credits: 3 (2-2-0)
Course Description: Integration of construction materials and methods into construction systems that will be incorporated in projects.
Prerequisites: CON 131 and CON 151.
Registration Information: Must register for lecture and laboratory.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 267 Construction Management Pre-Internship Credit: 1 (0-0-1)
Course Description: Skills and concepts related to successful internships within the construction management industry.
Prerequisite: None.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

CON 270 Introduction to Road Construction Credits: 3 (3-0-0)
Course Description: Steps necessary to construct a paved roadway from conception, land acquisition and finance through paving operations and trafficking.
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 270 Safety Management Credits: 2 (2-0-0)
Course Description: Safety management in construction, corporate, and institutional environments.
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 351 Construction Field Management Credits: 2 (1-2-0)
Course Description: Materials and methods used in construction, administrative and organizational planning used to complete a project.
Prerequisite: CON 251.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 352 Metal Fabrication for Construction Credits: 2 (1-2-0)
Course Description: Shaping, cutting, and joining of structural and non-structural metal. Emphasis on jobsite safety, economics, and efficiency.
Prerequisite: CON 251.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 359 Structures I Credits: 4 (4-0-0)
Course Description: Behavior of structural components and systems, overview of structural engineering analysis/design process.
Prerequisite: MATH 125.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 360 Electrical and Control Systems Credits: 3 (2-2-0)
Course Description: Electrical and control systems and their application in the construction industry.
Prerequisite: CON 265.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.
CON 365  Construction Estimating II  Credits: 3 (2-2-0)
Course Description: Industry-recognized methods for work item analysis, quantity surveying, resource estimating, and bid development using work breakdown structures.
Prerequisite: CON 265.
Registration Information: Must register for lecture and laboratory.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 366  Construction Equipment and Methods  Credits: 3 (2-2-0)
Course Description: Equipment/methods in heavy and highway construction; equipment selection, productivity, and costs. Infrastructure, tunneling, and trenchless technology.
Prerequisite: CON 261.
Registration Information: Must register for lecture and laboratory. Sections may be offered: Online.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 367  Construction Contracts/Project Administration  Credits: 3 (3-0-0)
Course Description: Utilization of field engineering systems and procedures to effectively meet project objectives.
Prerequisites: CON 265 and CON 351, may be taken concurrently.
Registration Information: Construction management majors and minors only.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 370  Asphalt Pavement Materials and Construction  Credits: 3 (2-2-0)
Course Description: Constituents of asphalt pavements; manufacture of asphalt cement, emulsions, and cutbacks; material properties and behavior.
Prerequisite: None.
Registration Information: Must register for lecture and laboratory.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 371  Mechanical and Plumbing Systems  Credits: 3 (3-0-0)
Course Description: Heating, ventilation, air conditioning, plumbing, and fire suppression with emphasis on design, operation, and interaction.
Prerequisite: CON 360, may be taken concurrently or INTD 276, may be taken concurrently.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 384  Supervised College Teaching  Credits: Var[1-5]
Course Description: 
Prerequisite: None.
Registration Information: A maximum of 10 combined credits for all 384 and 484 courses are counted towards graduation requirements.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 450  Travel Abroad-Sustainable Building  Credits: 3 (3-0-0)
Also Offered As: INTD 450.
Course Description: Major components of sustainable design and construction, energy, healthy buildings, natural resources and other environmental issues.
Prerequisite: None.
Registration Information: Credit not allowed for both CON 450 and INTD 450.
Term Offered: Summer.
Grade Mode: Traditional.
Special Course Fee: No.

CON 459  Structures II  Credits: 4 (4-0-0)
Course Description: Design of formwork, falsework, and shoring.
Prerequisite: CON 359.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 461  Construction Project Scheduling and Cost Control  Credits: 3 (2-2-0)
Course Description: Strategies and techniques for efficient scheduling of project activities and control of project costs; emphasis of Critical Path Method.
Prerequisite: CON 365, may be taken concurrently.
Registration Information: Construction management majors and minors only. Must register for lecture and laboratory. Sections may be offered: Online.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 462  Financial Management for Construction  Credits: 3 (3-0-0)
Course Description: Financial statements, financial ratios, applications of engineering economy, cash flow analysis, construction financing, and cost information systems.
Prerequisites: (ACT 205 or ACT 210, may be taken concurrently) and (MGT 305 or MGT 320).
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 464  Construction Leadership  Credits: 3 (1-0-2)
Course Description: Leading projects and people in a construction business and application of skills in a construction-based community service learning project.
Prerequisites: CON 365 and CON 367, may be taken concurrently.
Registration Information: Must register for lecture and recitation. Written consent of instructor.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.
CON 465 Construction Management Professional Practice Credits: 3 (1-0-2)  
Course Description: Professional practice using an understanding of the contractual and working relationships among all participants in the design/construction process.  
Prerequisites: (CON 461, may be taken concurrently) and (CON 487A or CON 487E or CON 487B).  
Registration Information: Construction management majors only. Must register for lecture and recitation.  
Terms Offered: Fall, Spring.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 471 Project Management for Mechanical Systems Credits: 3 (3-0-0)  
Course Description: Fundamental principles of mechanical systems. Presentation and practice of management principles relevant to mechanical projects.  
Prerequisites: CON 371 and CON 365, may be taken concurrently.  
Term Offered: Fall.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 476 Sustainable Practice-Design and Construction Credits: 3 (3-0-0)  
Course Description: Major components of sustainable design/construction: energy, healthy buildings, cultural, natural resources, use, other environment/economic issues.  
Prerequisite: None.  
Term Offered: Fall.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 477 Residential Aging-in-Place and Green Building Credits: 3 (3-0-0)  
Course Description: Aging-in-place and green building aspects of the residential construction market.  
Prerequisite: CON 265.  
Restriction:  
Term Offered: Spring.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 487A Internship: Construction Management I Credits: 6 (0-0-18)  
Course Description:  
Prerequisites: CON 267 and CON 367.  
Registration Information: OSHA 10-hour construction safety card.  
Terms Offered: Fall, Spring, Summer.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 487B Internship: Construction Management II Credits: 3 (0-0-9)  
Course Description:  
Prerequisites: CON 267 and CON 367.  
Registration Information: OSHA 10-hour construction safety card; 500 hours documented work experience.  
Terms Offered: Fall, Spring, Summer.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 495 Independent Study-Construction Management Credits: Var[1-18]  
Course Description:  
Prerequisite: None.  
Terms Offered: Fall, Spring, Summer.  
Grade Mode: Instructor Option.  
Special Course Fee: No.  

CON 496 Group Study-Construction Management Credits: Var[1-9]  
Course Description:  
Prerequisite: None.  
Terms Offered: Fall, Spring, Summer.  
Grade Mode: Instructor Option.  
Special Course Fee: No.  

CON 500 Models of Disciplined Inquiry Credits: 3 (3-0-0)  
Course Description: Models and methods of disciplined inquiry used in diverse organizations; applying disciplined inquiry methods to solve problems.  
Prerequisite: None.  
Registration Information: Admission to the construction management master's program.  
Term Offered: Fall.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 560 Applied Project Management Credits: 3 (3-0-0)  
Course Description: Project development, planning, and control relevant to construction, manufacturing, and technology education professionals.  
Prerequisite: None.  
Registration Information: Admission to the construction management master's program.  
Term Offered: Fall.  
Grade Mode: Traditional.  
Special Course Fee: No.  

CON 561 Applied Productivity Improvement Credits: 3 (3-0-0)  
Course Description: Existing and emerging tools for productivity enhancement in project and production environment.  
Prerequisite: None.  
Registration Information: Admission to the construction management master's program.  
Term Offered: Spring.  
Grade Mode: Traditional.  
Special Course Fee: No.
CON 562 Issues and Trends in Construction Management Credits: 3 (3-0-0)
Course Description: Current issues and trends related to management of technology in fields associated with manufacturing and construction industries.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

CON 565 Legal Aspects of Construction Process Credits: 3 (3-0-0)
Course Description: Common points of dispute; methods of avoiding disputes among owner, architect, engineer, and contractor.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 566 Advanced Construction Estimating Credits: 3 (3-0-0)
Course Description: Advanced estimating procedures dealing with special application and techniques in construction.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

CON 567 Preservation and Rehabilitation of Buildings Credits: 3 (3-0-0)
Course Description: Theory and applications of preservation technology used in the management and rehabilitation of historic and archaic buildings.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

CON 568 Construction Industry Institute Practices Credits: 3 (3-0-0)
Course Description: Senior executives from the Construction Industry Institute (CII) present best practices developed by CII over the last 25 years.
Prerequisite: CON 367.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

CON 569 Regulatory Impact on Construction Credits: 3 (3-0-0)
Course Description: Role government plays in the design and construction of the built environment.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 571 Facility Planning and Management Credits: 3 (3-0-0)
Course Description: Planning, organizing and managing large educational and/or commercial facilities.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 575 Managerial Decision Making for Constructors Credits: 3 (3-0-0)
Course Description: Construction and real estate development applications of multi-disciplinary managerial analysis and decision-making techniques.
Prerequisite: None.
Registration Information: Admission to the construction management master's program.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

CON 576 Sustainable Technology in Built Environments Credits: 3 (2-0-1)
Course Description: Major components of creating environmentally sustainable built environments.
Prerequisite: CON 476 or CON 450 or INTD 450.
Registration Information: Must register for lecture and recitation.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 577 Leadership of Sustainable Community Projects Credits: 3 (2-0-1)
Course Description: Learn and apply principles of sustainable construction management through leading and building service-learning projects.
Prerequisite: CON 476 or CON 450 or INTD 450.
Registration Information: Required background check.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

CON 590 Workshop Credits: Var[1-18]
Course Description:
Prerequisite: None.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 592 Seminar Credits: Var[1-18]
Course Description:
Prerequisite: None.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 684 Supervised College Teaching Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
CON 687 Internship  Credits: Var[1-6]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 6 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 695 Independent Study  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 696 Group Study  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 698 Research  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

CON 699 Thesis  Credits: Var[1-6]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.