CONSTRUCTION MANAGEMENT BACHELOR OF SCIENCE - COMMERCIAL REAL ESTATE CONCENTRATION

Leading to a Bachelor of Science Degree in Construction Management with a Concentration in Commercial Real Estate

The concentration in Commercial Real Estate is a specialized track within the Construction Management program. Commercial real estate is the real property used by a company for its own operational purposes. It provides corporations with a productive environment to house employees, manufacture and distribute products, and provide services to the market. Commercial real estate touches all classes of property, land and buildings such as office facilities, data centers, manufacturing facilities, logistic centers, corporate headquarters, distribution facilities, retail stores, and hotels. A career in commercial real estate requires excellent communication skills, an analytical approach to problem solving and attention to detail.

Building on a practical core of oral and written communications, mathematics, science, and business principles, the Commercial Real Estate concentration introduces students to a wide range of real estate and management issues including construction, leasing, property evaluation, real estate financial analysis and real estate principles. An integral aspect of the concentration is the experience students gain through two semesters of cooperative employment in corporate real estate offices.

Program Educational Objectives

There are several goals of the Construction Management program:

- Maintain accreditation by the American Council of Construction Education (ACCE), which promotes, supports, and accredits construction education programs.
- Successfully place students in positions appropriate for college graduates in the construction industry.
- Maintain class sizes of no more than 30 students on average in each lecture and no more than 20 students on average in each lab.
- Provide Students with the knowledge and skills to succeed in supervisory and management roles in construction related fields.

Student Outcomes

The following are the learning outcomes that will be used to assess the Construction Management program.

- Create oral presentations appropriate to the construction discipline.
- Create written communications appropriate to the construction discipline.
- Create a construction project safety plan.
- Create construction project estimates.
- Create construction project schedules.
- Analyze professional decisions based upon ethical principles.
- Analyze construction documents for planning and management of construction processes.
- Analyze methods, materials, and equipment used on construction projects.
- Apply electronic-based technology to manage the construction process.
- Apply basic surveying techniques for construction layout and control.
- Understand construction risk management.
- Understand construction accounting and cost control.
- Understand construction quality assurance and control.
- Understand construction project control processes.
- Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
- Understand the legal implications of contract, common, and regulatory law to manage a construction project.
- Understand the basic principles of sustainable construction.
- Understand the basic principles of structural behavior.
- Understand the basic principles of mechanical, electrical, and piping systems.
- Understand the role of the construction manager as a member of different multidisciplinary project teams.

Credits for Degree: 133

This is a four-year program that begins in the fall of the student's first year and is planned to finish in the summer semester of the student's fourth year. Students in this track will be accepted into the Construction Management program. Prior to their sophomore year, students can formally elect to enter the Commercial Real Estate concentration.

Course	Title	Credits
Freshman Year		
Fall Semester		
CONM1000	INTRODUCTION TO CONSTRUCTION MANAGEMENT, FACILITIES MANAGEMENT & REAL ESTATE DEVELOPMENT	3
CONM1200	BUILDING CONSTRUCTION	4
CHEM1000	CHEMISTRY OF THE BUILT ENVIRONMENT	4
MATH1000	COLLEGE MATHEMATICS	4
English Sequence		4
	Credits	**19**
Spring Semester		
CMRE1500	PRINCIPLES OF COMMERCIAL REAL ESTATE	3
CONM1500	CONSTRUCTION GRAPHICS	3
MATH1500	PRECALCULUS	4
PHYS1000	COLLEGE PHYSICS I	4
English Sequence		4
	Credits	**18**
Sophomore Year		
Fall Semester		
CMRE2000	REAL ESTATE INVESTMENT	3
CONM2100	STATICS & STRENGTH OF MATERIALS	4
CONM2200	ESTIMATING	4
MGMT2700	FINANCIAL ACCOUNTING	3
ECON4102	PRINCIPLES OF ECONOMICS	4
	Credits	**18**

Course	Title	Credits
Spring Semester		
CMRE2400	PROPERTY MANAGEMENT FOR CORPORATE REAL ESTATE	3
CONM2500	BUILDING SYSTEMS	4
MATH1030	STATISTICS & APPLICATIONS	4
HSS Elective		4
	Credits	**15**
Summer Semester		
COOP3000	PRE CO-OP WORK TERM (OPTIONAL)	0
	Credits	**0**
Junior Year		
Fall Semester		
CMRE3000	REAL PROPERTY ANALYSIS	3
CONM3100	CONSTRUCTION PROJECT MANAGEMENT	4
CONM3201	CONSTRUCTION PROJECT SCHEDULING	4
MGMT3000	MANAGING & LEADING ORGANIZATIONS	4
	Credits	**15**
Spring Semester		
COOP3500	COOP EDUCATION 1	0
	Credits	**0**
Summer Semester		
CMFM2300	SPACE PLANNING	4
CMFM4200	ENERGY & SUSTAINABILITY	3
CMFM4600	PRINCIPLES OF REAL ESTATE FOR FACILITY MANAGERS	3
CONM3800	SPECIAL TOPICS IN CONSTRUCTION MANAGEMENT	3
PSYC4552	INDUSTRIAL ORGANIZATION PSYCHOLOGY	4
	Credits	**17**
Senior Year		
Fall Semester		
COOP4500	COOP EDUCATION 2	0
	Credits	**0**
Spring Semester		
CMRE4000	REAL PROPERTY SECURITIZATION	3
MGMT2065	INTRODUCTION TO ENTREPRENEURSHIP	3
MGMT4100	POWER & LEADERSHIP IN ORGANIZATIONS	4
MGMT4400	BUSINESS NEGOTIATION	3
HSS Elective		4
	Credits	**17**
Summer Semester		
CONM4650	BUSINESS, CONSTRUCTION LAW & GOVERNMENT REGULATIONS	3
CONM5500	SENIOR PROJECT CONSTRUCTION MANAGEMENT	4
MGMT3600	LABOR RELATIONS	3
HSS Elective		4
	Credits	**14**
	Total Credits	**133**

ENGL/HSS Note

Students are required to complete:

- At least one course in Humanities: CSAS, HSSI, HIST, HUMN, LITR and PHIL
- At least one course in the Social Sciences; CSAS, HSSI, COMM, ECON, ENVM, POLS, PSYC, and SOCL
- The remaining course from either the Humanities or Social Sciences category.

Students with a three English course sequence may use the third English course to satisfy a Humanities requirement.

A minimum of 28 credits total, including English, humanities, and social science credit, is required to complete the humanities and social sciences graduation requirement.

Of the five humanities and social science electives, BSCM students must include the following **HSS Directed Electives**:

Course	Title	Credits
ECON4102	PRINCIPLES OF ECONOMICS	4
PSYC4552	INDUSTRIAL ORGANIZATION PSYCHOLOGY	4