

## Business courses

### **7240 Real Estate I**

Provides in-depth exposure to the dynamics of the real estate development process including ground-up development and re-development. Topics covered include market analysis, site acquisition, due diligence, zoning, entitlements, approvals, site planning, building design, construction, financing, leasing, ongoing management and disposition and related property laws. Additional topics include analysis and evaluation of the similarities and differences of traditional real estate product types. Emphasis is on concise analysis and decision making. The course will utilize experiential teaching methodologies by creating diverse teams of students to analyze and solve real development cases in Central Ohio. Students will be required to make a group presentation of their development proposal.

### **7240 Real Estate II**

Provides an overview of real estate valuation and advanced fundamentals of real estate finance. It will cover topics fundamental to the valuation of real estate, including the process, procedures and valuation methods. The course focuses on the valuation of income-producing properties. Advanced topics in valuation are presented. Topics include real estate capital markets, equity vehicles (REITs) securitization and the proliferation of securitized debt (MBS, CMBS and CDO) and mortgage-related instruments (mortgage derivatives). It emphasizes a conceptual framework for decision making in the uncertain environment of real estate markets.

### **5402 Real Estate Valuation**

This real estate valuation and financial modeling course will cover existing income producing property as well as ground up construction. Topics include market analysis, comparable valuation, income valuation, cost valuation, real estate finance, expense reimbursements, budget development, and pro-forma modeling. The course will utilize Argus DCF, the industry accepted real estate specific financial modeling software.

### **3400 Introduction to Real Estate**

Provides a basic overview of the Real Estate Industry. Topics covered include finance, law, property management, land planning and acquisition, urban economics and green development.

### **4410 Real Estate Finance**

Fundamentals of Real Estate Analysis: Particular focus is on sources and methods of obtaining funds, project feasibility, valuation of distressed assets, appraisal and municipal finance.

### **4411 Real Estate Management**

Examines Property Management for all types of Real Estate Assets. Topics include finance, acquisition, construction, budgets, sales and marketing, leasing, negotiation and environmental issues.

### **4412 Real Estate Law**

Examines the major legal and ethical aspects of real estate transactions, contracts, brokerage, leases and environmental law.

### **4413 Real Estate Planning & Development**

Provides a comprehensive look at the development process, from identifying an opportunity through to the finished product. Teams will work on a current site-based development case study that will encourage real world applications to real estate theory and strategic collaboration.

## City and Regional Planning Courses

### **CRPLAN 2110: Creating Innovative Cities and Regions**

Successful cities rely on innovation to keep them forward moving. Emerging trends and unmet market needs are studied to generate innovative planning solutions.

**CRPLAN 3100: Analyzing the City**

Spatial, economic, and demographic tools aid in forecasting the future of cities and regions. These tools serve as a foundation for imagining the future.

**CRPLAN 3400: Planning for Sustainable Economic Development**

Understand the intersection of economics, the environment, and development in order to use planning tools to promote sustainable economic development.

**CRPLAN 3600: Land Development**

This course examines the various aspects of land development in the U.S. context. The land development process often begins with an idea to create a new community or development. However, in order for any development to be successful, the project must be economically viable and attractive to consumers. Developers and planners need to understand the local market, and developers will need to target buyers if they want to create a successful project. It is necessary for those involved in the land development process to understand the market demand for specific types of projects. Students in this course will be required to create a proposal for development of a site in the Columbus area, figuring out and considering all factors of the land development process including market analysis, financing the project, site planning, engineering and implementation.

**CRPLAN 5001 - Introduction to GIS**

Introduction to the basic principles of geographic information systems and their use in spatial analysis and information management.

**CRPLAN 6010: Innovation in City and Regional Planning**

Successful cities are innovative and forward thinking. Challenges students to focus on generation of truly innovative ideas to improve cities and regions.

**CRPLAN 6400: Site Planning and Development**

Effective site planning can lead to the development of a strong community. Learn the design, environmental and infrastructure elements that are needed to generate a feasible development project.

**CRPLAN 6430: Urban Design**

Vibrant cities contribute to quality of life, through urban design and urban form. Site analysis, context sensitive design and impacts of design choices are explored.

**CRPLAN 6460: Real Estate Finance for Planners**

Realize plans by understanding the financial mechanisms to fund projects. Explore how public - private partnerships create opportunities for affordable housing, downtown revitalization, and neighborhood improvement.

## Engineering Courses

**CIVIL EN 540 Civil and Environmental Engineering Systems U G 4**

Basic concepts and methods of systems engineering and applications to civil engineering problems in transportation and water resources planning, structural design, and construction management.

**CIVIL EN 570 Transportation Engineering and Analysis U G 4**

Introduction to topics in transportation engineering and analysis; geometric design, traffic flow, freeway capacity, traffic signals, demand-performance equilibrium, pricing, and design under uncertainty.

**CIVIL EN 604 Terrain Analysis U G 4**

Principles and applications of photo pattern analysis, geologic and geomorphologic patterns, terrain studies, and land use suitability and capability mapping.

**CIVIL EN 607 Fundamentals of Geographic Information Systems U G 5**

Basic principles of geographic and land information systems and their use in spatial analysis and information management.

**CIVIL EN 685 Deterministic Construction Estimating and Pricing U G 4**

Generally accepted models and methods of estimating and pricing; identification of causes of underestimating and under pricing.

**CIVIL EN 686 Construction Contracts and Claims U G 4**

Contract documents and specifications; formulation of contracts; offer, acceptance, breach, and damages; responsibilities and liabilities; claims; labor agreements.

**CIVIL EN 760 Civil and Environmental Engineering Planning U G 5**

Water resource planning process, benefit-cost analysis; environmental, economic, and social impacts of civil engineering projects; project selection; and case studies in water resources, transportation, and energy.

## Construction Systems Management Courses

**CONSYSM 3451: Scheduling Construction Projects**

Planning, scheduling and tracking of construction project elements including management of time, resources, cost and safety.

**CSM 4641: Construction Project Management**

This course focuses on the management of standard commercial/residential construction projects, including planning, resource management, schedule management, financial management, cost control, risk management, and labor relations. Completing projects on schedule, within budget and according to specifications is a constant focus. This course also introduces new management concepts and emerging information technology applications in construction.

**CSM 4642: Construction Control - Contracts and Documents**

The course looks at a systems approach to a complete set of construction documents. The basic elements, principles of and requirements for contracts and documents used in the construction industry to control commercial and residential projects will be discussed and applied. Among the topics for discussion will be the documents used to control a construction project, the contract delivery methods, contract payment methods, subcontractor and supply contracts, bidding procedures, negotiating claims, disputes and payments, administering contracts, controlling change, and monitoring quality control. Insurance, bonding and other responsibilities of owners and contractors will also be reviewed and practiced.

**CSM 5670: Green Building and Sustainable Construction**

The course provides students with the knowledge, skills and attitudes needed to understand, evaluate, select and adopt sustainable design and construction strategies and applications in the areas of site selection and land use, energy and water conservation, renewable energy systems, green building materials and products, construction waste management, indoor environmental quality and other environmental and economic issues related to sustainable built environments.

## Law Courses

**LAW 6112 – Property Law**

This course examines traditional and modern concepts of property, including ownership, the creation of interests held in personal and real property, the transfer of such interests, and private and public restrictions upon the use of property. While much of the course will focus on issues involving the possession, ownership, and use of land by private parties, topics covered may also include property rights in ideas, body parts, and other intangibles; zoning; protection of minority or economically disadvantaged groups; or eminent domain.

**LAW 8600: Real Estate Finance**

The course covers two major areas: real estate transactions and real estate finance. The transactions portion covers real estate contracts, rights and liabilities of real estate brokers and the recording acts. The finance portion examines advanced real estate financing, emphasizing mortgages, deeds of trust, installment land contracts, rights and remedies of borrowers and lenders, and contemporary financing innovations.

**LAW 8603: Real Estate Development**

The course will take a practical, "hands on" approach to the multi-faceted area of real estate development law. Case studies based on actual, "real world" projects will serve as the backdrop for our examination of the myriad of legal disciplines that a real estate development lawyer needs to master in order to be successful. Disciplines explored will range from traditional real estate topics such as the leasing, acquisition and conveyance of real property to tax, partnership, bankruptcy, environmental, finance, ethics and public policy considerations.

**LAW 8500 - Landlord/Tenant Law**

This course will provide a survey of residential landlord and tenant law with a primary focus on Ohio law. The course will briefly look at the federal law regarding fair housing and subsidized housing issues. The course will focus on practical applications of the law and will primarily be taught using problems, hypothetical scenarios and through role play. Students will be graded on participation, attendance and practice related written components.

**LAW 8609 - Commercial Leasing**

The course will be a focused study of the various business and legal considerations which drive the leasing of a commercial real estate project. We will examine the material provisions of a variety of lease documents, including office, industrial, retail and ground leases. The students will be given ample opportunity throughout the semester to review, negotiate, draft and revise the provisions of a commercial real estate lease.