Real Estate Development & Investment Certificates
Course Descriptions

CMGT – Construction Management Courses
REAL – Real Estate Courses

REAL 4000: Triple Bottom Line and the Built Environment
Offered: Fall
An exploration of the importance of real estate and the built environment through triple bottom line analysis of its social, environmental, and economic impacts. The course considers a "cradle to cradle" sustainability model that links the various phases, functions, and professions of real estate, project delivery, and asset/facility management to create holistic, value-generating solutions for society. Professional practices/skillsets associated with the many career options that engage the built environment are demonstrated.

REAL 4007: Real Estate Financial Analysis
Prereq: REAL 4407
Offered: Winter, Summer
Alternative analysis formats that can be applied to a wide array of real estate analysis issues; simulates working/decision-making environment; structured overview of analysis tools focused on specific facets of multidimensional real estate decision-making environment; applications in investment analysis, feasibility analysis, valuation, market analysis, and report writing and presentation.

REAL 4010: Real Estate Capital Markets
Prereq: REAL 4007
Offered: Spring, Summer (Online Synchronous Format)
This course exposes students to the commercial real estate capital markets; including real estate investment trusts (REITs) and commercial mortgage-backed securities (CMBS), plus institutional investors. The complexities of capital market products are discussed, students receive a greater understanding of the alternatives that are available. The class includes lectures, guest speakers, readings, class discussions, a major REIT analysis project, and case studies.

REAL 4210: Planning, Entitlements and Public Finance
Offered: Spring
Real estate development, place making, and community building require the combined efforts of the public, for-profit, and non-profit sectors. Participants in the real estate development process need to understand and appreciate the sometimes competing, and sometimes collaborative interests of governments, agencies, and the private developer. This course is designed to familiarize students with the overall context of urban planning and land use. Students will discover the variety of participants in the development process and will become familiar with the project entitlement process, zoning and land use regulation. Students will also examine public/private financing structures such as public-private-partnerships (P3s) and will become familiar with detailed calculations relating to Tax Incremental Financing (TIF) and Metropolitan Districts.
REAL 4337: Real Estate Securities/Syndications/Entrepreneurship  
Offered: Fall, Summer  
Introduces real estate securities with emphasis on private offerings, securities, registration requirements and exemptions, investor suitability, syndication, property acquisition, marketing the property, and tax and legal structure considerations.

REAL 4347: Management of Income Properties  
Offered: Fall  
Explore the complexities of managing apartments, condominiums, office buildings, industrial property and shopping centers. This course covers rental markets, development of rental schedules, leasing techniques and negotiations, repairs and maintenance, tenant relations, merchandising, selection and training of personnel, accounting, and owner relations.

REAL 4357: Corporate Real Estate & Management  
Offered: Spring  
This course provides a snapshot view of the corporate real estate life cycle and how to strategically plan and manage it. The course addresses key CRE issues including globalization, technology, sustainability and the enterprise business model. Within the framework of a corporate or agency structure, facility management is addressed as a distinct and critical component of successful performance. Topics include facility planning and forecasting, lease administration, space planning, allocation, and management, workplace planning, budgeting, and economic justification, real estate acquisition and disposal, sustainability management, construction project management, move, add, change (MAC) management, operations, maintenance and repair, technology management, emergency, security and life-safety management, and general administrative services.

REAL 4369: Real Estate Taxation  
Offered: Winter  
Tax factors affecting real estate investments; legal forms of ownership, depreciation, tax basis, tax impacts on exchanges, syndications, real estate securities, and other federal laws affecting real estate.

REAL 4400: Real Estate Principles & Practices  
Offered: Spring, Summer (Summer offered in an Online Synchronous Format)  
Principles of real estate, real estate industry and its markets; legal aspects of home ownership from consumer's point of view, including property rights, title concepts, deeds, purchase contracts, listing contracts, law of agency, environmental issues and disclosures, types of mortgages, basics of home loan finance, appraisal investment and tax benefits. Partially satisfies Colorado real estate broker licensing requirements.
REAL 4407: Income Property Finance
Offered: Fall, Spring
Conventional and alternative (creative) financing techniques, mortgage banking, law and markets, loan underwriting analysis, the impact of monetary and fiscal policies on the real estate and mortgage markets, emphasis on case studies and microcomputer applications.

REAL 4417: Income Property Valuation & Appraisal
Prereq: REAL 4407
Offered: Winter (Online synchronous)
Residential/Commercial appraising, including market cost and income approaches to value, gross rent multiplier analysis, neighborhood and site analysis; valuation of income properties including market cost and income approaches to value; capitalization theory and techniques, mortgage-equity analysis, and investment value concepts.

REAL 4467: Property Development & Feasibility
Prereq: REAL 4007 (If needed, can be taken at the same time as 4467)
Offered: Winter
Commercial real estate development analysis & feasibility includes economic base analysis, tenant demand analysis, development and construction cost analysis, lease-up analysis, financial feasibility, leasing and property management practices. 5 major property types, office, industrial, retail, apartment and hotel are covered.

REAL 4477: Income Property Investment
Prereq: REAL 4007
Offered: Fall (Online only), Summer
Comprehensive analytical framework for real estate investment decision-making, equity investment decisions via discounted cash flow, and risk analysis models and strategic planning concepts, structuring parameters to maximize rates of return while controlling downside risks; emphasis on theory, concept building, growth, sustainability and environmental issues and practical application to various types of investment properties.

REAL 4500: Argus Financial Analysis
Prereq: REAL 4007
Offered: Spring, Summer
The central focus of this course is to expose the real estate student to a broad array of analysis and presentation tools, with practical applications of the Argus software through interactive examples and case studies. The course covers applications in Investment Analysis, Lease Analysis, Valuation, Feasibility Analysis Budgeting, Report Writing and Presentation. It is assumed that the student understands basic real estate principles and financial analysis. $600 course fee.
REAL 4701 – Topics: CityCrafting – Scaling the Regeneration of Cities
Offered: Fall and Spring (both sections Online Synchronous Format)
CityCraft® is a process that has been in the making for more than 100 years over the course of three generations and is deeply rooted in the “Master Building” tradition. The course begins with the definition of Master Building at the building and community scale and its implications for the long-term sustainability of buildings and neighborhoods as well as the holistic health of human community. We will explore how the tradition of Master Building has been lost over time and the resulting implications of that loss for our society, including why our buildings and cities are no longer viable in the long term and harm the economic and social health of our communities. We will outline the CityCraft® process and the pathway forward to a 21st century Master Building tradition that requires integrated thinkers and holistic solutions for our buildings and neighborhoods. These solutions heal the social, economic and environmental fabric of our cities and address the most challenging economic, environmental and social justice issues of our time. This course will be directly connected to the CityCraft Integrated Research Center. We will use specific projects and issues identified for participants to allow them to test and apply what they are learning in the classroom, generating real world experience in applying the CityCraft® process as part of an ongoing CityCraft Center.

CMGT 4155: Sustainable Development/LEED
Offered: Fall
The course includes many case studies of historic and contemporary structures exemplifying various sustainability features. Emphasis will be placed on how LEED project certification influences the overall construction project. Topics will include LEED certification techniques for sustainable sites, water efficiency, energy & atmosphere, materials & resources, indoor environmental quality, innovation and design. The following topics will be covered from a LEED perspective: ventilation, air conditioning, heating, electrical lighting, energy efficiency, and building control systems. The student will study and analyze how management and LEED techniques are applied to current construction projects.

CMGT 4320: Introduction to Architectural Planning & Design Management
Offered: Fall* and Spring*
This course introduces students to the significant value that architecture brings to real estate and the built environment and the various services and professions associated with it. Students will be introduced to principles, protocols and the planning process related to the design function and the link between the architect’s vision and the finished physical structure. Students will be introduced to design thinking theory and application. Students will learn to read and interpret the various graphical and written construction documents, know how they are developed and what information they contain. Coverage of architectural, structural, mechanical, electrical, plumbing, and civil drawings and specifications. The business model for design services will be explored as well as the unique risks and challenges associated with managing the design throughout the various stages of development and construction. *Additional Lab 2 hrs/1xWk is also required. $30 Course fee.
CMGT 4410: Construction Building Systems
Offered: Fall*, Spring*
A survey of residential and commercial construction materials, means, and methods associated with the various structural and architectural systems used to design and construct buildings. Project plans and specifications will be incorporated to teach the basic sequencing and overall construction process. The influence of sustainability in construction will be introduced.
*Additional Lab 2 hrs/1xWk is also required. $85 Course fee.