SUSTAINABLE REAL ESTATE DEVELOPMENT (SRED)

SRED 1940  Transfer Coursework  (0-20)
Transfer coursework at the 1000 level. Departmental approval may be required.

Maximum Hours: 99

SRED 2010  Principles of Real Estate  (3)
Topics include concepts of real estate and its impact in the economy, the nature and description of real estate, real estate market sectors, land conveyance systems and acquisition, real estate Ownership and leasehold structures and risk management in real estate. There is also a field component, in which students identify and examine specific investment properties. The course ends by covering basic concepts regarding insurance and ownership risk management.

SRED 2020  Real Estate Transactions  (3)
This lecture course provides a foundational survey of the key actors, instruments, business models and laws shaping the purchasing, selling, leasing, devising, and development of real estate. The course is grounded in understanding the basic principles of contract and property law. Thereafter, these laws are understood within a variety of instruments ranging from deeds and leases to mortgages and UCC-1 financing statements. Beyond the mechanics of these instruments, students are exposed to a variety of closing and financing workflows and documentation associated with transacting residential and commercial properties. These processes will then be explored within the confines of due diligence, risk management and alternative dispute resolution techniques that are utilized to manage risk, uncertainty, and litigation liabilities. Beyond core transactions, students will be exposed to those laws, regulations and contracts that shape the development process within the public and private sectors. This will include a review of zoning and land use laws, fair housing and anti-discrimination laws, construction contracting, project delivery models, and public sector procurement, financing and subsidization. Through an understanding of the transactional and regulatory aspects of real estate, students are prepared for professional practices that must negotiate a variety of public and private interests.

SRED 2030  Real Estate Market Analysis & Finance  (3)
This is an introductory course that exposes students of all backgrounds to general principles of real estate market analysis and finance. The course will begin with a simple exploration of single family real estate developments and progress to more complex mixed-use developments. The principles of market analysis and deal financing will be taught on a level commensurate with the scale of each development type. The class is designed to help students to develop the skills needed to conduct a basic market analysis and build a financial pro forma for deal analysis. Topics include understanding real estate market analysis, approach to market analysis, introduction to finance, real estate finance basics, funding real estate investments, and pro forma building. Prerequisite(s): SRED 2010 or 2020 or RESM 3010 or 3020.

Prerequisite(s): SRED 2010, 2020, RESM 3010 or 3020.

SRED 2040  Fundamentals of Real Estate Development  (3)
This is an introductory course that exposes students of all backgrounds to the fundamentals of real estate development. Through a hands-on case study, students will learn how to conduct a thorough due diligence analysis, including market research, financial projections, and building programming. Students will also learn how to prepare a deal package to be used for presenting to banks, investors, and other parties. Prerequisite(s): SRED 2010 or 2020 or RESM 3010 or 3020.

Prerequisite(s): SRED 2010, 2020, RESM 3010 or 3020.

SRED 2050  Design & Real Estate  (4)
Design & Real Estate introduces students to the iterative design process with a focus on understanding space as it relates to the built environment. Students will analyze design problems at three scales: human scale, building scale, and urban scale and will synthesize creative solutions through two and three-dimensional medium. Students will also explore concepts in urban planning, building systems, and specific building program opportunities and challenges.

SRED 2940  Transfer Coursework  (0-20)
Transfer coursework at the 2000 level. Departmental approval may be required.

Maximum Hours: 99

SRED 3070  Design + Development Studio I  (4)
Design + Development Studio I is a preparatory studio for real estate students to build on previous 2D and 3D skills developed in the prerequisite course, ARCH 1012 or DESG 1005. Additionally, Studio I will prepare students for the Design & Development Studio II. Prerequisite(s): DESG 1005 or ARCH 1012.

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**SRED 3080 Design + Development Studio II (4)**

Design + Development Studio II is the final course in a series of design visualization courses for real estate students where they will work on a comprehensive studio project that includes both design and development issues. Prerequisite(s): SRED 3070 or ARCH 2021.

**Prerequisite(s):** SRED 3070 or ARCH 2021.

**SRED 3940 Transfer Coursework (0-20)**

Transfer coursework at the 3000 level. Departmental approval may be required.

**Maximum Hours:** 99

**SRED 4510 Climate Change Resilience & Adaptation (3)**

This course explores the basic tenets of climate change science as a foundation for further studies in the theories and models of resilience and adaptation in the social, natural and applied sciences. Through a critical reading and analysis of central bodies of literature, students are provided a conceptual and empirical basis for exploring applied practices and policies advanced in the name of climate change adaptation. The practice component of the course focuses on community resilience in urban planning and policy; technical resilience in civil and systems engineering and conservation ecology; multi-hazard risk assessment in disaster risk management; and adaptation mainstreaming in the public and private sectors. Positioned within an emerging field of study, this course identifies many of the key unanswered questions that are critical for future conceptual and empirical development. With a focus on environmental change and the built environment, students will develop a critical understanding of relevant public policies and institutions, design and engineering techniques, economic strategies, and planning models. While there are no prerequisites for this course, some interest and general familiarity with environmental studies is useful. Prerequisite(s): SRED 2010 or RESM 3010.

**SRED 4515 Sustainable Urban Development (4)**

This course is a practical, multidisciplinary experience in the realities of a large scale urban real estate development project. By working on teams having to address market and non-market forces, each team will have to address the challenges of managing the conflicting needs and wants of multiple stakeholders, just as they would in a real life development project.

**SRED 4520 Cities, Disasters & Decisions (3)**

This course teaches the multi-dimensional determinants of economic decision-making in cities during times of crisis, and offers students a road map to analyze and evaluate how those decisions relate to recovery outcomes. We will explore how certain cities approached previous catastrophic events and build a “context and factors” database to understand how specific urban, political, social and economic characteristics of cities interact to result in policy and individual decisions that impact recovery. Prerequisite(s): SRED 2010 or RESM 3010.

**SRED 4525 Comm RE Analysis with ARGUS (3)**

Prerequisite(s): SRED 2030 or 2040.

**SRED 4530 Infrastructure Planning & Financing (3)**

Prerequisite(s): SRED 2010 or 2020 or RESM 3010 or 3020.

**Prerequisite(s):** SRED 2010, 2020, RESM 3010 or 3020.

**SRED 4540 Building Performance & Benchmarking (3)**

This course explores methods used to verify and track building performance in order to reduce operating costs and make financing possible for energy efficiency and other capital improvements. Students will learn the appropriate metrics as well as technologies and methodologies used to measure and analyze energy and water consumption data, verify occupant comfort, and compare buildings against regional and national building databases. Students will learn how to analyze this data in order to make cost-effective investment decisions and also how benchmarking results can be used to help finance operational changes or building improvements. Finally, students will be made aware of public policy changes around the country that increasingly incentivize and in some cases require energy benchmarking and public reporting.

**SRED 4550 Community Development Finance (3)**

This course will examine current practices and new opportunities in sustainable community development that foster long-term benefits to surrounding neighborhoods. A specific focus of this study is to utilize market-based strategies to generate greater overall public benefit, and to identify key metrics to define and measure success. Students in this course will explore ways to evaluate local policies and requirements to effectively and efficiently meet local objectives. Students will study what types of development successfully promote and facilitate population and economic growth in certain cities and analyze why some urban areas continue to experience decline. Prerequisite(s): SRED 2030 or RESM 3030.

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SRED 4560 Real Estate Internship (1-3)
Open to upper level students in good standing, the Real Estate Internship course provides students with an opportunity to reinforce and expand their skills and knowledge through professional internship experiences during the course of their studies. Students must consult with the Real Estate Major Advisor to get approval for selected work assignment prior to registration. The course may be repeated for up to 6 credit hours but only 3 credit hours may count towards general Real Estate elective credit.

Course Limit: 2
Maximum Hours: 6

SRED 4570 Real Estate CPS Internship (1-3)
This course is for students pursuing an internship in Real Estate via the Public Service Internship Program managed by the Center for Public Service (CPS). The student must apply directly to CPS by the pre-determined deadline. If the internship is approved, CPS will coordinate registration with the Real Estate Program. Students must contact the Center for Public Service for additional information.

SRED 4910 Independent Study (1-6)
The Independent Study course gives upper-level undergraduate students an opportunity to work with a faculty advisor to pursue a personal academic interest with greater focus. Qualified students must develop a syllabus and schedule with the help of the faculty advisor. The course must be approved by the Real Estate Major Advisor prior to registration. Course may be repeated up to two times.

Course Limit: 2

SRED 4930 Special Topics (3)
Special Topics in Real Estate. These are newly developed courses or courses taught by visiting faculty. Title and content may vary by semester. See the Schedule of Classes for specific offerings. Course may be repeated unlimited times for credit.

Course Limit: 99

SRED 4940 Transfer Coursework (0-20)
Transfer coursework at the 4000 level. Departmental approval may be required.

Maximum Hours: 99

SRED 5980 Junior Year Abroad (0-20)
Semester Abroad. Courses may be repeated up to unlimited credit hours.

Maximum Hours: 99

SRED 5990 Junior Year Abroad (0-20)
Semester Abroad. Courses may be repeated up to unlimited credit hours.

Maximum Hours: 99

SRED 6100 Intro-Real Est Finance & Econ (3)
Corequisite(s): SRED 6110, SRED 6130 and SRED 6140.

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SRED 6110 Intro- Real Estate Arch & Dsgn (3)
Corequisite(s): SRED 6100, SRED 6130 and SRED 6140.

Corequisite(s): SRED 6100, SRED 6130 and SRED 6140.

SRED 6130 Intro to Sustainable Urbanism (3)
Corequisite(s): SRED 6100, SRED 6110 and SRED 6140.

Corequisite(s): SRED 6100, SRED 6110 and SRED 6140.

SRED 6140 Intro to Finance Products (3)
Corequisite(s): SRED 6100, SRED 6110 and SRED 6130.

Corequisite(s): SRED 6100, SRED 6110 and SRED 6130.
This course explores the basic tenets of climate change science as a foundation for further studies in the theories and models of resilience and adaptation in the social, natural and applied sciences. Through a critical reading and analysis of central bodies of literature, students are provided a conceptual and empirical basis for exploring applied practices and policies advanced in the name of climate change adaptation. The practice component of the course focuses on community resilience in urban planning and policy; technical resilience in civil and systems engineering and conservation ecology; multi-hazard risk assessment in disaster risk management; and adaptation mainstreaming in the public and private sectors. Positioned within an emerging field of study, this course identifies many of the key unanswered questions that are critical for future conceptual and empirical development. With a focus on environmental change and the built environment, students will develop a critical understanding of relevant public policies and institutions, design and engineering techniques, economic strategies, and planning models. While there are no prerequisites for this course, some interest and general familiarity with environmental studies is useful.

This course teaches the multi-dimensional determinants of economic decision-making in cities during times of crisis, and offers students a road map to analyze and evaluate how those decisions relate to recovery outcomes. We will explore how certain cities approached previous catastrophic events and build a “context and factors” database to understand how specific urban, political, social and economic characteristics of cities interact to result in policy and individual decisions that impact recovery.

The Special Topics course is used for new and onetime offerings in the Sustainable Real Estate Development Program. Course content will vary from semester to semester. Contact the program for information on particular offerings. Course may be repeated unlimited times for credit.