

# SUSTAINABLE URBANISM

---

## Overview

Within the broad scope of the field of Urban Studies, the Sustainable Urbanism Program in the Tulane School of Architecture and Built Environment focuses on the transdisciplinary and multidisciplinary fields of knowledge that contribute to our understanding of the practices, processes, impacts, and values of urbanization at the intersection of human behavior, the physical built environment, and environmental ecology.

The program offers undergraduate students the opportunity to obtain either a major or a minor. It deploys required core courses in theory and practice developed specifically for the program as well as courses from the School's other programs in Architecture, Design, Preservation, Social Innovation and Social Entrepreneurship, and Sustainable Real Estate.

## Programs

### Undergraduate

#### Major

- Sustainable Urbanism, BS (<https://catalog.tulane.edu/architecture/sustainable-urbanism/sustainable-urbanism-bs/>)

#### Minor

- Sustainable Urbanism Minor (<https://catalog.tulane.edu/architecture/sustainable-urbanism/sustainable-urbanism-minor/>)

## Courses

### **SURB 2311 Introduction to Graphics and Mapping (3)**

This course provides students with representational skills to illustrate key geographic and physical attributes as well as socio-economic conditions of urban environments that may further or impede sustainability. Lectures introduce students to census-based data sets that provide social statistics concerning urban populations. Maps and other sources for environmental urban data are explored for their utility in depicting urbanscapes. As students learn to source urban data, they also learn to appraise that data with concepts of bias, standpoint theory, and critical geography in mind. Through hands-on weekly exercises and assignments, students gain facility with geographic information systems (GIS) and digital software applications. They use these tools not only to create visual representations but also to analyze and evaluate urban conditions. During the last quarter of the semester, students generate their own analytical question(s) about a selected urban case study and employ the data sources with which they have become familiar to illustrate an evaluative framework for sustainability assessment.

### **SURB 2710 Introduction to Sustainable Urbanism (3)**

How shall we create cities that nourish healthy, safe, prosperous, and just lives for all citizens? This course introduces students to the study of cities, the practices of building them, and the evaluation of those practices, considering especially their benefits and detriments. Focusing on major developments in 20th- and 21st-century urban studies, students consider the evolution of foundational concepts such as "city," "urban," "urbanism," "urbanization," and "sustainability." They interrogate varying approaches to meeting the needs of city dwellers and structuring the urban environment, such as providing for housing, commerce, civic and recreational space, transportation, and water, waste, and energy infrastructure. They explore prominent themes that have emerged in urban studies, including racial segregation, ghetto formation, citizen participation, cultural placemaking, economic and cultural globalization, social equity, immigration and migration, and climate precarity. To understand and evaluate urban dynamics and design solutions, students read historical, descriptive, and analytical studies and engage in discussions, individual presentations, group projects, and hands-on activities. In its focus on sustainable urbanism, the course emphasizes perspectives that recognize the interconnectedness of natural and human systems and approaches that foster environmental and social wellbeing.

### **SURB 2720 Issues for the 21st Century City (3)**

Building on the foundational SURB 2710, "Introduction to Sustainable Urbanism," this course deepens students' understanding of urban transformations—both planned and informal—from the late 19th century to the present. Students undertake in-depth analyses of global case studies to engage critically with contemporary urban challenges. The course follows a topical approach to investigating the ways in which urban development policies and design practices address such concerns as housing insecurity, disaster preparedness and resilience, climate and political migration, alternative energy solutions, urban agriculture and wildlife interface, and cultural identity and heritage preservation. Also emphasized are the role of digital technology in urban governance and social equity, gentrification as an outcome of capital investment and globalization, and the complexities that result from unplanned and unregulated growth. Assignments include research projects that allow students to explore contemporary urban issues of their choice in cities they select. Emphasizing research methodologies that expose the complex patterns of urban growth, and with an eye toward future city-making, this course equips students to thoughtfully navigate and contribute to the evolving discourse on 21st-century urbanism.

**SURB 2890 Service Learning (0)**

Students complete a service activity in the community in conjunction with the content of a three-credit co-requisite course. Course may be repeated up to unlimited credit hours.

**Course Limit:** 10

**SURB 2930 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 3011 Introduction to Urban Design/Lab (4)**

This course introduces students to fundamental urban design considerations. To that end, students will learn to manipulate basic software applications for representing physical elements of cities at multiple scales, from the block to the neighborhood, the district, and even to the metropolitan region. Students produce figure-ground studies through hands-on exercises examining in two dimensions the spatial relationships among buildings, streets, and open spaces that configure cities. They learn to analyze these relationships from a variety of perspectives that address such urban sustainability and environmental justice concerns as scale, density, function, zoning, land use, mobility, and environmental precarity and safety. Sourcing base maps that provide geographical data for their explorations, students create design analyses in response to instructor assignments focusing on local investigations. Through site visits, they learn descriptive skills that include sketching, photographic documentation, and observational field notes. Lectures and assigned readings emphasize the urban developmental history of New Orleans as well as comparative urban histories of other US cities. Students undertake critical analyses of contemporary urban designs not only in the US but also abroad that provide best-practice precedents for their assignments.

**SURB 4011 Sustainable Urbanism Studio I (4)**

This course provides advanced study for students majoring in the Sustainable Urbanism Program who want to concentrate on urban design considerations. The studio's purview expands beyond that of the prerequisite SURB 3011 (Introduction to Urban Design/Lab) to study the wide-ranging interrelationships of urban functional districts and infrastructural systems. With foundational perspectives of ecological sustainability and social equality, students in this project-based course analyze contemporary developmental plans for US and international cities. They learn to employ software applications to create 3-D representations of sectors in the urban matrix—commercial, residential, institutional, and recreational—and the systems that serve them—water, wastewater, energy, transportation, telecommunications, and digital. Working in small groups, students produce design proposals in response to instructor assignments; they also generate one large-scale individual project. Research in urban social, economic, and environmental data is brought to bear throughout the semester to address such urban justice issues as housing, digital resource access, and mobility. The studio aspires to engage design and planning concerns in a city other than New Orleans, working with a community partner(s) over several semesters to achieve continuity and assess recommendations. Students create deliverables to share with the studio's partner that include graphic presentations and narrative reports

**Prerequisite(s):** SURB 3011.

**SURB 4110 Global Urbanism: Theory & Practice (3)**

Global Urbanism studies 20th- & 21st-century theories of urbanism and urban planning projects advanced toward creating positive change in cities. The course engages "theory"—descriptive, explanatory, and future inceptive ideas—concerning the relationship of the built environment to urban experience. It also investigates "practice" especially pertaining to ideas about and efforts toward shaping the physical form of cities. The course's purview of both theory and practice ranges globally, geographically across the Western and Eastern hemispheres and socio-politically across the Global North and South.

**SURB 4321 Advanced Urban Graphics and Mapping (3)**

For students who have taken SURB 2311, Introduction to Urban Graphics & Mapping, SURB 4321 offers advanced work in graphic analysis addressed to such urban issues as infrastructure management and accessibility, climate adaptation and equity, and housing justice. Together with the Sustainable Urbanism Studio, this elective course is suggested for those who want to concentrate on urban design considerations within the Sustainable Urbanism major. The skills in using digital tools to undertake urban spatial analysis and data visualization that were developed in SURB 2311 are strengthened, and students not only source but also prepare the data—through cleaning and transforming processes—on which they base urban evaluations. SURB 4321 is project focused, introducing more advanced digital modeling tools beyond those learned in SURB 3011, Introduction to Urban Design/Lab. Students' projects represent, analyze, and evaluate patterns in the urban landscape with the goal of informing design and policy decisions around such critical urban challenges as resource scarcity, environmental degradation and disaster, and sprawl and congestion. During the semester, students can expect to undertake at least one large, complex analytical project.

**Prerequisite(s):** SURB 2311.

**SURB 4890 Service Learning (0)**

Students complete a service activity in the community in conjunction with the content of a co-requisite course. Course may be repeated up to unlimited credit hours.

**Course Limit:** 10

**SURB 4930 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4931 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4932 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4933 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4934 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4935 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4936 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4937 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4938 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99

**SURB 4939 Special Topics (0-4)**

Special topics course as designed by visiting or permanent faculty. For description, consult the department. Course may be repeated up to unlimited credit hours under separate title.

**Maximum Hours:** 99