Doctor of Sustainable Urbanism

The Doctor of Sustainable Urbanism (DrSU) is a post-professional applied research degree intended to prepare professionals and advanced urban design students for careers in multidisciplinary, evidence-based, sustainable urban design and planning practice and teaching. The program is based on a close working relationship between doctoral students and their faculty advisers, who work together to develop a detailed course of study that takes full advantage of the resources available at Washington University and through our collaborative partners from around the country and the world.

This individualized program allows each doctoral student to pursue their particular research interests while ensuring the development of the necessary research competencies and the broadening of the student's knowledge in sustainable urbanism. Much of the program's course work and independent reading and study is focused on preparing students for their two-part general examination. The nature of this preparation varies widely depending upon the candidate's background and research interests. Overall, the exam is a platform for the student to demonstrate a broad knowledge of evidenced-based research methods, the multidisciplinary frameworks of sustainable urbanism, the best practices for sustainable urbanism, and the technical knowledge base and skills necessary for implementing sustainability at a multiscale level in the city.

Students learn a holistic and integrative methodological approach to sustainability thinking that involves complex social, cultural, political, economic and scientific issues as they are applied to a wide range of urban contexts and spatial patterns and conditions. Students use statistical and visual analytical tools, including quantitative and qualitative research methods, geographical information systems (GIS), and techniques to analyze data sets and construct holistic research models. They also learn to construct the research reports and performance measurement systems necessary to clearly demonstrate evidence of a more sustainable city. Leadership skills are developed to ensure that students can engage an informed, involved citizenry in creative problem solving to achieve responsible individual and cooperative actions toward a society that is more sustainable and resilient. Students are encouraged to develop their own refined ethical framework and set of values that shape sustainable cities, which at a minimum would include economic, social and place equity; environmental and cultural justice; intergenerational equity; and management and stewardship of the urban environment.

Teaching is another important component of each doctoral student's course of study. Students often are given substantial teaching responsibilities, particularly in the introductory courses offered by the urban design faculty. In recent years, students have served as assistants in instruction and instructors in theory courses such as Metropolitan Development, Metropolitan Sustainability, Metropolitan Urbanism, Public Space and City Life, and Informal Cities; they have also worked in a number of urban design studios, including the Global Urbanism Studio, which has engaged cities such as Shanghai, Tokyo, Singapore, Mexico City, Johannesburg and Dubai. Students also have the opportunity to work as research associates with faculty to enrich their academic experience and develop research project experience.

The DrSU degree prepares graduates for research-oriented positions in nonprofit organizations, community design and research centers, and government agencies as well as for faculty positions at colleges and universities focused on applied research in sustainability and urban design.

Website: http://samfoxschool.wustl.edu/programs/drsu

Faculty

The core faculty for the Doctor of Sustainable Urbanism program draws from an accomplished set of educators throughout Washington University.

Program Chair

John Hoal
Professor and Chair of Urban Design
PhD, Washington University

Program Standing Committee

John Hoal (http://samfoxschool.wustl.edu/portfolios/faculty/john_hoal)
Professor and Chair of Urban Design
PhD, Washington University

Eric Mumford (http://samfoxschool.wustl.edu/portfolios/faculty/eric_mumford)
Rebecca and John Voyles Professor of Architecture
PhD, Princeton University

Linda C. Samuels (http://www.samfoxschool.wustl.edu/portfolios/linda_samuels)
Associate Professor
PhD, University of California, Los Angeles

Hongxi Yin (http://samfoxschool.wustl.edu/directory/10636)
InCEES Associate Professor
PhD, Carnegie Mellon University

Ex Officio

Heather Woofter
Director, College of Architecture and Graduate School of Architecture & Urban Design
Sam and Marilyn Fox Professor
MArch, Harvard University
Faculty for required and elective courses are drawn from all departments within the university, representing the interdisciplinary nature of the program.

**Degree Requirements**

**Doctor of Sustainable Urbanism**

To earn the Doctor of Sustainable Urbanism from the Sam Fox School of Design & Visual Arts, a student must complete 72 units of graduate work. Students will typically complete the program in four years, but they may complete the program in as few as three years or as many as five years.

Of the total 72 units, 48 units represent course work to be completed in residence at Washington University, including required and approved elective seminars and courses. Thereafter, 24 units of dissertation research and writing may be completed at Washington University or off-site if approved by the program chair. In order to graduate, students must do the following:

1. Maintain satisfactory academic progress and standing
2. Pass the General Examination
3. Fulfill residency and enrollment requirements
4. Demonstrate competency in teaching at the basic and advanced levels
5. Write, submit and defend an acceptable dissertation in sustainable urbanism

**Curricular Structure**

The Doctor of Sustainable Urbanism consists of six academic semesters (three academic years) of required study:

**Year One**

*Semester One (12 units):*

1. Theories and Methods of Historical Research
2. Advanced Seminar in Urban Sustainability I
3. Directed Readings in Sustainable Urbanism I
4. Elective (approved by the academic adviser)

*Semester Two (12 units):*

1. Theories and Methods of Architecture, Landscape and Urbanism Research
2. Advanced Seminar in Urban Sustainability II
3. Directed Readings in Sustainable Urbanism II
4. Elective (approved by the academic adviser)

**Year Two**

*Semester Three (12 units):*

1. Methods of Sustainable Urbanism Research
2. Directed Research in Sustainable Urbanism I

3. Elective (approved by the academic adviser)
4. Elective (approved by the academic adviser)

*Semester Four (12 units):*

1. Urban Morphology and Metabolism Research Methods
2. Directed Research in Sustainable Urbanism II
3. Elective (approved by the academic adviser)
4. Elective (approved by the academic adviser)

General Examination (must be completed before the student is admitted to doctoral candidacy)

**Year Three**

*Semester Five (12 units):*

1. Dissertation

*Semester Six (12 units):*

1. Dissertation

Dissertation Defense*

* Students have a maximum of five calendar years, dated from their first registration in the Doctor of Sustainable Urbanism program, to complete all degree requirements.

**Courses**

For a list of available courses, please refer to the Courses (http://bulletin.wustl.edu/grad/architecture/#courses) section of the Graduate School of Architecture & Urban Design in this Bulletin.