MASTER OF SCIENCE IN SUSTAINABLE DESIGN (M.S.S.D.)

The School of Architecture and Planning’s mission, Building Stewardship, focuses on preparing architects and designers to assume a personal responsibility for the welfare of the world. We stress the interdependence of the words ‘building’ and ‘stewardship.’ Our Master of Science in Sustainable Design (M.S.S.D.) program is both a natural extension of this mission and a deepening of our commitment to the stewardship of the social, natural, and built environments. All courses, with the exception of thesis, are held in the evening to allow working professionals to participate in the program.*

The two-semester program provides students with an opportunity for full immersion into the theory and application of sustainable design and provides graduates with leadership skills in the field of sustainable design. Courses cover topical concerns such as sustainable design strategies, energy conservation and zero-energy design, embodied energy, material toxicity and Life Cycle Analysis, water conservation and management, as well as ethics and stewardship.

Two courses in Systems and Simulation define the core of the program in which students are introduced to a variety of simulation software that allow energy, light, and humidity to be modeled, analyzed, and adjusted as an integrated component of the design process. A range of elective courses within the School of Architecture and Planning and across the CUA campus are offered. The culmination of the program of studies is a thesis, which students may investigate through either a design studio or a more conventional written dissertation.

In addition to the regular faculty at the School of Architecture and Planning, a number of national and international practitioners, consultants, and experts in the field of sustainable design are invited to lecture and review student work on a regular basis.

The Master of Science in Sustainable Design is a post-professional degree and, as such, does not contribute to professional licensure.

Joint Degree: Master of Science in Sustainable Design/
Master of Architecture

Students may enroll simultaneously in the school’s accredited Master of Architecture (M.Arch. 2 or 3) program and the M.S.S.D. This allows students to obtain the two degrees sooner than they could acquire each independently. Students interested in pursuing the joint M.Arch./M.S.S.D. program should consult the appropriate program of study for tracking through the programs.
Year One

Fall
- ARPL537 Sustainable Design Strategies and Synergies 3
- ARPL734 Systems and Simulation 1 3
- ARPL761 M.C.R.P./M.S.S.D. Thesis Prep 3
- ARPL M.S.S.D. Elective 1 3
- ARPL M.S.S.D. Elective 2 3

Spring
- ARPL704 Written Thesis 6
- ARPL735 Materials and Assemblies 3
- ARPL736 Systems and Simulation 2 3
- ARPL783 Ethics and Stewardship 3 15

Year One: Total Credit Hours 30

Certificate in Sustainable Design

In addition to the full 30-credit hour degree program (M.S.S.D.), the School of Architecture and Planning offers a 12-credit hour Certificate in Sustainable Design. This program was developed to offer a wider range of programs for adult learning within the school and allows students to embark on a shorter program of study to suit their circumstances.

The choice of core courses allows students to select a “technical” (Systems and Simulation I and II*) or a “non-technical” (Sustainable Design Strategies, Ethics and Stewardship) track. Relevant electives are also offered.

Students enrolled in the certificate program take any three of the following core courses: Sustainable Design Strategies, Systems and Simulation 1, Systems and Simulation 2, Ethics and Stewardship, or Materials and Assemblies. One additional elective course completes the certificate requirements.

Students enrolled in the certificate program can transfer to the full program should they wish to do so.

*The Systems and Simulations courses have course prerequisites.