

# SUSTAINABLE ENVIRONMENTS

## Master of Design in Sustainable Environments

The Master of Design in Sustainable Environments (M.Des.S.E.) is a post-professional degree that focuses on sustainable design strategies, systems and materials for environmental and product design. The program addresses ways to envision, make and remake landscapes, communities, buildings, objects and images that conserve resources, ameliorate ecological problems and promote social, political and economic justice. Graduate students can also pursue the following dual degrees that are offered in the College of Design: M Arch/M.Des.S.E., M CRP/ M.Des.S.E., and M L A/M.Des.S.E.

This three-semester, 35-credit graduate course of study offers opportunities to work on a variety of faculty-directed projects that may include funded research, community-based design work and theoretical investigations. The program addresses sustainable design at multiple scales, engaging both systems and artifacts.

Through this degree program, students will:

- gain awareness of individual professional roles and responsibilities for practices, technologies and methods of design for sustainability.
- learn to collaborate in a team-based, interdisciplinary design process, and
- acquire new knowledge, tools and strategies for sustainable design practices in the development of opportunities and markets for engineers, artists and designers.

The interdisciplinary degree is geared toward students who hold professional degrees in art, architecture, landscape architecture, interior design, graphic design, industrial design, planning and/or engineering.

Application information is available at:

<http://www.design.iastate.edu/sustainableenvironments.php>

**Courses primarily for graduate students, open to qualified undergraduates:**

### SUS E 501: Sustainable Design Studio I

(0-10) Cr. 5.

*Prereq: SUS E 521*

Addressing sustainable design at multiple scales of constructed and natural systems and artifacts, this studio engages multidisciplinary graduate students in a team-oriented, project-based learning environment. Faculty-directed projects will include theoretical investigations and applications of an interdisciplinary design process through brief readings and discussions.

### SUS E 502: Sustainable Design Studio II

(0-10) Cr. 5.

*Prereq: SUS E 501, SUS E 512, SUS E 531*

This advanced studio provides a community-based context for an interdisciplinary design team to work on a variety of faculty-directed projects including funded, basic, and applied research. Coursework addresses sustainable design at multiple scales, engaging both systems and artifacts. Field trips.

### SUS E 511: Sustainable Design Colloquium I

(3-0) Cr. 3.

*Prereq: Admission to MDSE program*

Study and discuss practices of sustainable design and design research. Investigate responsibilities, roles, technologies and methods for studying and advancing the art and science of designing sustainable environments.

### SUS E 512: Sustainable Design Colloquium II

(1-0) Cr. 1.

*Prereq: SUS E 511*

A graduate student-led seminar designed to foster the knowledge and skills to support innovation, entrepreneurship, and leadership in the field of sustainable design. Invitation of outside speakers.

### SUS E 521: Foundation of Sustainable Design

(3-0) Cr. 3.

*Prereq: Graduate standing or senior classification with instructor permission.*

Introduction to the broad frameworks and tools for implementing sustainability among a variety of environments, industries, and enterprises. Investigates the role and opportunity for sustainable design strategies.

### SUS E 531: Human Dimensions of Sustainability

(3-0) Cr. 3.

*Prereq: Graduate standing or senior classification with instructor permission.*

This seminar provides students from multiple disciplines with a grounding in designers' interactions with clients, consumers, communities, cultures, and biospheres. Through a review of literature and the production of new case studies in sustainable design, students discover and represent conditions in which products of design operate across scales, markets, social conditions, geographic domains, academic disciplines, and zones of professional responsibility.