

# SE: SE-Sustainable Interior Environments (MA)

---

## **SE 521 — Survey of Sustainable Architecture and Interior Design Historical Origins**

3 credits; 3 lecture hours

The course examines the historical relationship between man's built environment and nature, and how specific building techniques, particularly in vernacular structures, were developed in response to local climatic conditions. Special attention is given to the evolving layouts and organization of interiors, methods of providing climate controls, and lighting.

## **SE 541 — Pro-Seminar: Critical Research and writing, verbal and visual communication and presentation skills**

0 credits; 18 lecture hours

This intensive, two-weeks/six session pro-seminar functions as an introduction to the research-centered programs, and provides the necessary tools to critically evaluate sources of information, read analytically, organize articulate, and communicate ideas, chose appropriate forms of writing, and/or presentation for particular task or audiences.

## **SE 561 — Ecology and Human Impact**

1.5 credits; 1.5 lecture hours

The course explores the manner in which people interact with, and are affected by, their environments. Designers are charged with responsibility for the health, safety and welfare of those who use the spaces they design, and the course will examine how the work they do can assure more sustainable spaces.

## **SE 562 — Environmental Behavior Research - Concepts and Applications, Segment I**

3 credits; 3 lecture hours

This course enables students to ask the right questions and search for the answers so that the decisions they make that affect the state of the earth and its inhabitants are informed ones. Through the study of human ecology, students gain an understanding of humanity's impact on the biosphere.

## **SE 563 — Chemistry for Interior Environments: Seminar**

1.5 credits; 1.5 lecture hours

Students will develop an understanding of fundamental chemistry concepts through a series of research projects, lectures, and case studies related to materials and practices use in sustainable interior environments. These examinations include an extensive study of sustainable/green chemistry practices and toxins commonly found in interior environments.

## **SE 564 — Environmental Behavior Research: Research Methods-Segment II**

1.5 credits; 1.5 lecture hours

This course looks at the ways in which we can study human behavior in the designed environment. Students develop a toolbox of research approaches that can be used to examine design projects. We discuss observation, interviews, focus groups, and other scientific tools of experimentation as applied to real-world contexts.

## **SE 571 — Materials and Products for Sustainable Interior Environments**

3 credits; 3 lecture hours

The course looks at the most significant attributes of materials and products that affect interior spaces. Students expand their scope of consideration from the interior to include the impacts on the regional and global environments, and on the society at large, through the fundamental concepts of Life Cycle Assessment (LCA).

### **SE 581 — Graduate Seminar: Segment I-Fundamentals**

3 credits; 3 lecture hours

The Graduate Seminar functions as a research- and design-centered forum, which provides integration for all the courses throughout the program. This first of the four segments introduces the principles of sustainable development and prepares incoming students to address the challenges of implementing these principles in the design of interior environments.

### **SE 582 — Graduate Seminar: Segment II-Exploration**

3 credits; 3 lecture hours

Segment II of the Graduate Seminar is designed to support students in their decision-making process relating to the topic of their capstone project. Through site visits and interactions with professionals who employ sustainable design principles in their practice, class participants will study sustainable strategies for different sectors of the industry.

### **SE 631 — Sustainable Practice Today**

3 credits; 3 lecture hours

The 21st century's volatile economy, rapidly developing technologies, and changing political climate all demand the establishment of a well-structured sustainable organization or professional practice. This course guides students through the development of professional tools based on their personal goals and ethics in order to develop a sustainable design practice.

### **SE 661 — Universal Design and Ergonomics**

1.5 credits; 1.5 lecture hours

Class participants study, analyze, and learn how to utilize the principles of Universal Design, physical anthropology, physiology, and psychology to fit or suit human measurements, to address characteristics relative to the specific function and use of space or the operation of equipment, and to address the needs of specific populations.

### **SE 671 — Harvesting Daylight**

1.5 credits; 1.5 lecture hours

Daylight is an important component of sustainable design. This course consists of two distinct, interwoven parcels: the first addresses the physics and measurement of light along with the optical properties of materials and surfaces; the second addresses all of the aspects of daylight harvesting as both energized and non-energized components.

### **SE 672 — Integrated Environment Systems: Air, Sound, Light**

3 credits; 3 lecture hours

The course presents a comprehensive approach to the integrated design of the elements of indoor environmental quality. Taught by professionals specializing in indoor air, acoustics, and lighting, this course addresses complex and interconnected environmental system designs that minimize the use of natural resources, and provide for human safety, health and comfort.

### **SE 681 — Graduate Seminar: Segment III-Analysis: Directed Research**

3 credits; 3 lecture hours

The Graduate Seminar: Segment III supports students in the development of their capstone projects. It helps tailor tools for the particular application, and guides them through individual research process. Students identify an appropriate research methodology for the topic they selected, develop individualized tools, locate resources, and learn to organize and analyze information.

### **SE 682 — Graduate Seminar: Segment IV-Future of Sustainable Interiors**

3 credits; 3 lecture hours

The Graduate Seminar: Segment IV presents an opportunity for students to explore and discuss a variety of propositions for the future of sustainable interior environments. This student-driven forum provides conceptual continuity for the program graduates who will be taking on leadership roles as sustainable interior environment professionals and educators.

## **SE 691 — Capstone: Applied Research**

1.5 credits; 1.5 lecture hours

The course provides continuity in conceptual working methods, an opportunity for focusing and honing students' expertise, and the experience of working as a supportive collegial group that incorporates analytical feedback and shared resources. Students are evaluated on their ability to utilize methodologies and on their presentation skills.