

FUA Career Program: Eco-Sustainable Design

Program Structure

Level I – Fall

Mission

The aim of the beginning level is to provide students with a basic comprehension of design, with reference to the Italian culture and lifestyle they will be introduced to basic classic and Eco-sustainable topics, concepts and design. Students will be taught to be aware of the concept of sustainability and to test their abilities and interests, in order to develop an understanding towards the interior design and its practices.

Core Courses

Project for a Sustainable Interior Design I Experiential Learning

This course provides students both Conceptual Frames and Analytical Tools for designing with sustainable materials focusing on simple methods consisting of a unique tool which guide the green novice or the design veteran in analyzing the sustainability of a wide range of products and materials. Through the practical experience, students explore the design process and create sustainable furniture, products or interior design from the analyzed materials. The tools and the emerging practices provided during the course help in evaluating and selecting materials for high-performance residential and commercial interior design build-outs, furnishings and green products.

Introduction to Computer Graphics

This computer graphics introductory course will cover the following topics: computer generated art, Adobe Photoshop, photo adjustments and effects, computer drawing, morphing and modeling in Photoshop and editing. Students will compile a personal portfolio, presenting it to the class at the end of the semester or session.

Design by Nature I

The objective of Environmental Design is to conjugate technology to the human biology and psychology needs. This course introduces students to the fundamentals of product design practice and gives the opportunity to increase their innovation knowledge with a perspective on how to meet human needs while considering sustainable principles. Students learn how to use natural inspiration to generate new ideas for product feature and optimize design and understand the strategic role of product design in the development of manufactured goods.

Technical Drawing and CAD

This is a course in which students are introduced to the general concepts of CAD (Computer Aided Design), emphasis is placed on two-dimensional drawing applications such as plans, sections, elevations and furniture. During the course students learn how to develop their projects through the use of the computer and how to control the final outcome in plotting their final drawings.

Introduction to Photoshop

Adobe Photoshop is the leading software for photographers, graphic designers, and bookmakers. Photoshop is powerful software that requires a dedicated focus in learning how best to use the program to its full potential. This course, with the guidance of experienced teachers, will introduce the student to the creative and professional issues of Photoshop. The course is designed for students who have had experience in photography, graphic design, architecture, illustration or bookmaking. The Photoshop Laboratory is equipped with the most up-to-date computers and peripherals.

Optional Course

Italian Language is offered as an optional program component offered when regular core courses are not in session. Italian language is offered during the January or September intersessions.

Level II – Spring

Mission

The aim of the Intermediate level is to deepen student's knowledge in Eco sustainability with special reference to the design and the development of computer 3d drawing and rendering skills. Students will study Interior design and receive detailed information on the green packaging techniques continuing the special projects and developing their skills in specific Eco-sustainable fields.

Core Courses

Project for a Sustainable Interior Design II Experiential Learning

This course provides students both Conceptual Frames and Analytical Tools for designing with sustainable materials focusing on simple methods consisting of a unique tool which guide the green novice or the design veteran in analyzing the sustainability of a wide range of products and materials. Through the practical experience, students explore the design process and create sustainable furniture, products or interior design from the analyzed materials. The tools and the emerging practices provided during the course help in evaluating and selecting materials for high-performance residential and commercial interior design build-outs, furnishings and green products.

Sustainable Life Cycle

In this course students understand how to make choices which lead to sustainability starting from ecological accounting and Life Cycle Assessment. The course teaches how to communicate that life cycle to consumers through visual communication, storytelling and information graphics. Students develop design alternatives, documenting impact, and communicating the results. Designs are followed from material creation through manufacturing, use and end of life; moreover innovative strategies for improvement are explored.

3D Computer Design and Rendering

In this course students will learn the concepts and techniques of creating, viewing and manipulating 3D models. Through the generation of drawings and perspectives, students develop an in-depth understanding of the modeling and rendering techniques used for creating objects, furniture and interior spaces.

Design by Nature II

The objective of Environmental Design is to conjugate technology to the human biology and psychology needs. This course introduces students to the fundamentals of product design practice and gives the opportunity to increase their innovation knowledge with a perspective on how to meet human needs while considering sustainable principles. Students acquire the motivations to invent and develop new ideas, learn tools and strategies utilized in the field of sustainable development with a focus on the ones that are directly applicable to sustainable product design. Relevant eco-design and sustainability strategies, such as alternative materials and technologies, are investigated and applied in specific assessments.

Green Packaging Design

Packages are handled every day and are the chief support of modern commerce, but on the other hand are the thirty per cent of our waste stream. This course is an essential analysis of packaging: from material selection to environmental impact, to consumer perception and market contest. At the course completion students will be able to look at a packaging problem objectively and be able to maximize a product's appeal while minimizing eco-impact generating innovative design.

Level III – Fall

Mission

The aim of this level is to deepen student's design skills, and their knowledge and evolution through the study of the most important marketing aspects. The study of graphic design techniques will be continued, and more challenging studies on sustainability are practiced. Students are introduced to the history of sustainability and learn how to manage the acquired information while working on their Portfolio.

Core Courses

Marketing and Design for a Sustainable Life Style

This is a highly interactive course in which is showed the way to sustainable, innovative, profitable and competitive products in the global marketplace. Focusing on strategies for using eco-design to obtain new products, concepts and business models this course satisfy the needs of opinion makers and designers involved in new product development, marketing and sustainability. Students understand how to market their eco-designs, and learn techniques for measuring their ability to reduce environmental impacts and build credibility for their efforts.

Sustainable Graphic Design for a Contemporary Green World Experiential Learning

This course explores sustainable graphic design through readings, exercises and projects. The objective is to apply various eco-design theories while exploring practical techniques and applications specific to graphic design. Students acquire new insight into the design process and the aesthetic and physical relationships between humans and nature,

as well as new techniques and tools such as life-cycle assessment and planning, sustainable design principles, process and material evaluations that incorporate sustainability into everyday design work.

History of Sustainability: a look to the past for a Future Vision

This course analyzes the Richard Buckminster Fuller work and how his designs are still far beyond our practice. He was part of the chain of Transcendentalists, which included Emerson and Thoreau. Buckminster Fuller, along with many others (including Ian McHarg, Victor Papanek, Paul McReady and John Todd), pioneered the sustainability field that is extremely up to date today. Students can develop skills in design inspiration discovering the farsightedness of these pioneers.

Systems Thinking Design

This course analyzes the today market and gives students the tools required to succeed in this dynamic transition. Systems thinking, languages of design, and product life cycles are strictly connected and form the solid foundation for innovative products. Theory is practiced through market specific projects.

Teaching Assistantship I

Level IV – Spring

Mission

The aim of the fourth level is to complete student's ability and to develop and control a project. An overview of worldwide sustainable studies and design will be provided, in order to allow students to compare different cultures and to develop their own style. The goal of this session for the student is to achieve and complete the Portfolio as the basis for demonstrating the ability of entering in a work environment.

Core Courses

Sustainable Community: a Way of Life

Prosperity and ecological health depend on one other; this is in the common sense the notion of sustainability that, like democracy, is an ideal, an organizing strategy and a future state. A sustainable world requires changes in the design of most of the things around us: our businesses, energy and materials use, product design, financial systems, how we build our cities and houses, and how we live day by day. In this course students critique and redesign an existing community space using elements of a more sustainable lifestyle.

Holistic Living and Permaculture Design

Permaculture Design uses holistic principles to design living systems that provide benefits without exhausting resources. Starting with observation and ending by approaching change, Permaculture Design brings a new appreciation for adversity; students study the principles of Permaculture Design and build examples, map environmental relationships and ecological requirements of their work.

Biomimicry: Nature as Inspiration for Designers

This course analyze the living systems which provides ample inspiration for sustainable design, gives students the basics of biological principles and supply a wealth of examples from the natural and designed worlds. The course provides powerful metaphors and methods for looking to nature as model, mentor, and measure in our designs.

Portfolio Development IV

This course gives students the opportunity to develop a personal portfolio of creative work. Working with professional design critics, students learn the fundamentals of assembling a portfolio for employment in the industry. Using Adobe Photoshop and Adobe Illustrator, they practice advanced rendering, theme pages, and print work. Areas of specialization are showcased.

Special Project in Eco-Sustainable Experiential Learning