Design (DES)

# **DESIGN (DES)**

#### DES 071 Industrial Design/London (3-6 Credits)

Design

#### DES 100 Selected Topics (1-6 Credits)

Design

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

### DES 101 Digital Tools for Designers I (3 Credits)

Design

Introduction to digital design software processes to create and manipulate vector and raster-based imagery and gain an understanding of publication software for layout and printed media.

Coreq: DES 103

Shared Competencies: Information Literacy and Technological Agility (https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/)

#### DES 102 Digital Tools for Designers II (3 Credits)

Design

Builds on the core concepts and skills learned in DES 101. This course introduces students to digital 3D rendering, motion graphics and basic online presence.

Prereq: DES 101 and 103; Coreq: CMD 104 or EDI 104 or FAS 104 or IND 104  $\,$ 

Shared Competencies: Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communicationskills/)

### DES 103 Analog Design Tools (3 Credits)

Design

This course introduces students to two and three-dimensional visualization methods for the design fields. These methods will include hand drawing as well as modeling with paper/card, wood and plastic. Coreq: DES 101

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

### DES 104 Fundamentals of Design (3 Credits)

Design

This course introduces students to the design process. Students will learn methods for ideation and realization of solutions to design problems, as well as practicing design presentation methods.

Prereq: DES 101 and DES 103 and Coreq: DES 102

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Information Literacy and Technological Agility (https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/)

## DES 113 History of Modern Design: 1850-Present (3 Credits) Design

Lectures, readings, discussion, and written assignments develop visual literacy, critical, and communication skills integral to understanding design within its historical, social, and cultural context.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Scientific Inquiry and Research Skills (https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/)

## DES 114 Design, Cultural Traditions and the Environment (3 Credits) Design

Evolution of exterior and interior architecture and decorative arts in relation to environment and mode of life throughout history. Traces design history through the lens of sustainable practices. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Scientific Inquiry and Research Skills (https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/)

#### DES 121 Design Odyssey (3 Credits)

Design

A gateway experience exploring the nature of design creativity and multidisciplinary problem solving.

## **DES 143 Visual Presentation and Drawing for Designers (3 Credits)** *Design*

Cross-listed with EDI 143

Drawing techniques in freehand sketching and rendered presentations for design practice. Problems in quick techniques and various media.

#### DES 144 Drafting for Designers (3 Credits)

Design

Cross-listed with EDI 144

Orthographic Drawing techniques and practices for designing. Shared Competencies: Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communicationskills/)

#### DES 145 Introductory Environmental Design I (3 Credits)

Design

Cross-listed with EDI 145

Concepts used in decision making and tools necessary for translating these concepts into visual statements.

## DES 146 Fundamentals of Environmental + Interior Design (3 Credits)

Cross-listed with EDI 104

Design relationships and coordinates as determinates of functional, structural, and aesthetic qualities of interior environments; the physical/cultural context and method for translating programmatic requirements into three-dimensional design decisions. Overview and application of elements and principles of design.

Prereq: (EDI 143 or ARI 231) and (EDI 145 or FND 115 or FND 117); Coreq: EDI 144

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

#### DES 182 Toy Design & Character Development (3 Credits)

Design

Cross-listed with ARI 182

Character development and toy design. 3-D studio course. Toys used as subject matter to develop aptitude with: spatial thinking, concept development, physical prototyping, use of basic mechanics, and woodworking tools and techniques.

#### DES 200 Selected Topics (1-6 Credits)

Design

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

#### DES 202 Contemporary Issues in Design (3 Credits)

Desiar

Overviews contemporary issues and trends in 21st century design.

#### DES 203 Design Thinking (3 Credits)

Design

This course will introduce students to the principles and practices of Design Thinking. We will focus on the application of design strategies to problems in businesses, organizations in a creative and strategic manner. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 221 Handweaving (3 Credits)

Desian

Use of the floor loom for exploration of making many kinds of cloth. Focus on color, pattern, texture, and a variety of interlacements of yarn.

#### DES 246 Analysis of Color for Production (3 Credits)

Design

Color theory for decorative design. Effect of color selection, media, and rendering techniques on production. Introduction to professional color received.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 248 Design Issues (3 Credits)

Design

Issues of design in relationship with sustainable systems, technology, organic design, the humanities, social sciences, and natural/physical sciences. Interaction between design and other disciplines. Shared Competencies: Civic and Global Responsibility (https://coursecatalog.syracuse.edu/shared-competencies/civic-and-global-responsibility/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

#### DES 252 Environmental Design II (3 Credits)

Design

Cross-listed with EDI 252

Medium-scale space planning, tenant development, interior design, and documentation for the humane work environment and public spaces. Corporate structure, sustainability, materials, lighting, and construction methods.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

#### DES 267 Textiles for Designers (3 Credits)

Design

Overview of important textile fibers, yearns, and fabric constructions related to end-use applications in design.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 270 Experience Credit (1-6 Credits)

Design

Participation in a discipline or subject related experience. Student must be evaluated by written or oral reports or an examination. Permission in advance with the consent of the department chairperson, instructor, and dean. Limited to those in good academic standing.

Repeatable

## DES 280 International Course (0-15 Credits)

Design

Offered through SUAbroad by educational institution outside the United States. Student registers for the course at the foreign institution and is graded according to that institution's practice. SUAbroad works with the S.U. academic department to assign the appropriate course level, title, and grade for the student's transcript.

Repeatable

#### DES 281 Design Symposium (1 Credit)

Design

Visiting professionals examine and discuss design disciplines. Repeatable 3 times for 3 credits maximum

#### DES 290 Independent Study (1-6 Credits)

Design

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

#### DES 300 Selected Topics (1-6 Credits)

Design

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

#### DES 302 Design Thinking & Ideas (3 Credits)

Design

Double-numbered with DES 602

Introduction of major theories and writings about design within a historical context. Provide students with a theoretical toolkit for exploring design and other creative work.

#### DES 303 Soft Goods Design and Production (3 Credits)

Design

Designer exploration of sewn products for production. Deconstruct/ construct, pattern, fabricate, prototype, and analyze user interface for soft sewn non-apparel product design.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Information Literacy and Technological Agility (https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/); Scientific Inquiry and Research Skills (https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/)

#### DES 304 Collaborative Design (3 Credits)

Design

Collaborative Design focuses on inquiry-based learning that involves groups of designers from diverse backgrounds and interests to work together to design innovative and transformative spaces, services, and products in project based environment.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 305 Digital Design Techniques I (3 Credits)

Design

Double-numbered with DES 605

Explores the capabilities of industry-standard design software to develop and preflight multi-page layouts for printed distribution, with precise control over typography and composition. Projects stress essential design and pre-press techniques applicable to all design disciplines. Additional work required of graduate students.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Information Literacy and Technological Agility (https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/)

#### DES 306 Digital Design Techniques II (3 Credits)

Design

Double-numbered with DES 606

Introduces students to the two central practices of today's designers, creating vector illustrations and manipulating digital imagery. Using industry-standard design software, assignments provide practical experience for generating professional illustrations and image-based work. Additional work required of graduate students.

## DES 307 Digital Design Techniques III (3 Credits)

Design

Double-numbered with DES 607

Introduces students to the industry-leading programming environment for producing interactive content on the web, smartphones, tablets, and televisions. Assignments provide practical experience for generating professional animated work.

## DES 310 Inclusive Design Intelligence ++ (3 Credits)

Design

Double-numbered with DES 610

Students you will gather insights to explore challenges and opportunities related to Intellectual Disability; gain empathy and insights through a series lectures, in-class exercises, field research, and immersive experiences. As an incubator for innovation, the goal is to envision, prototype and test ideas that will have a lasting quality of life impact. Additinoal work required for graduate students.

#### DES 312 Interior Furnishings (3 Credits)

Design

Double-numbered with DES 612

Design of decorative patterns for residential and commercial interior environments. Emphasis will be on the psychological effects of pattern and color. Specific repeats, rendering and presentation techniques for furnishing appropriate to end-use market production. Additional work required of graduate students.

## DES 314 History of the Bauhaus: Studies in Material Culture (3 Credits) Design

An overview of the Bauhaus, its important personalities, and its contribution to the development of twentieth-century design and architecture.

Prereq: DES 113 or HOA 106

#### DES 315 Digital Fabric Printing (3 Credits)

Design

Explores the color, scale and design benefits of digital printing. Student designs become the impetus for learning computer-aided repeat and layout systems of fabric design development for multiple applications.

#### DES 320 Wondering the Alphabet (3 Credits)

Design

A unique look into the English alphabet. This interesting collection of lectures and assignments reveals personal relationships of sounds and shapes the alphabet offers. Students explore creative writing and typographic communication in an unusual design context. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

## DES 321 Perceptions of Reality in the Digital Context (3 Credits) Design

Explores nature, money, power, ownership, friendship, and democracy in digital scenarios. The specific focus is online and networked situations.

# DES 322 Made In Italy: Business, Craftsmanship and Branding Success (3 Credits)

Design

Offered only in Florence. The class ¿Made in Italy¿ draws on developments and marketing trends in the Italian design industry and the production of luxury accessories. Special attention devoted to different aspects of traditional artisanship and specific marketing strategies to achieve success.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Scientific Inquiry and Research Skills (https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/)

## DES 324 Creative Problem Solving (3 Credits)

Design

Double-numbered with DES 624

Creative problem solving enhances knowledge concerning creativity, increases creative ability, and fosters problem-solving skills that are essential across disciplines. Students challenge cultural, social, and personal norms to achieve meaningful and 'different' solutions for small-and large-scale problems. Additional work required for graduate students. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Ethics and Integrity (https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/)

## DES 330 Revolution in Print: Design and Activism (3 Credits) Design

This course will examine how design and print media has informed social protest and activism in the United States.

#### DES 335 App Design and Prototyping (3 Credits)

Design

Double-numbered with DES 635

Planning, Design, and Digital prototyping of mobile devices (smart phones, tablets, watches) for multiple operating systems. User experience (UX) and User Interface (UI) best practices. Wireframes, flow mapping, and user testing for mobile operating systems. Additional work required for graduate students.

Repeatable 2 times for 6 credits maximum

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Information Literacy and Technological Agility (https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/); Scientific Inquiry and Research Skills (https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/)

#### DES 341 Fabrication Skills and Methods (3 Credits)

Design

Double-numbered with DES 641

Introduction to wood and metal shop construction techniques for design fabrication. Additional work required of graduate students. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 342 Computer Generated Fabrication (3 Credits)

Design

Double-numbered with DES 642

Introduction to computer generation construction techniques for design fabrication. Additional work required of graduate students.

### DES 352 Environmental Design Directed Research (3-6 Credits)

Desian

Cross-listed with EDI 352

Research for the design of interior environments: lighting, technology, furniture, materials, special populations, ergonomics, environmental and future needs.

Repeatable 2 times for 6 credits maximum

### DES 363 Design Innovation and Ideation (3 Credits)

Design

Double-numbered with DES 663

Design Innovation using non-linear and iterative processes. Uncover and iteratively address user needs, challenge assumptions, redefine problems. Value creation with a bias toward action to address both wicked and tame problems in industry and society. Identification and exploration of possibilities over problems as a path forward. Additional work required for graduate students.

Repeatable 2 times for 6 credits maximum

Shared Competencies: Communication Skills (https://

coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

### DES 380 International Course (1-12 Credits)

Design

Offered through SUAbroad by educational institution outside the United States. Student registers for the course at the foreign institution and is graded according to that institution's practice. SUAbroad works with the S.U. academic department to assign the appropriate course level, title, and grade for the student's transcript.

Repeatable

#### DES 390 Independent Study (1-6 Credits)

Design

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

#### DES 400 Selected Topics (1-6 Credits)

Design

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

## DES 431 Art Nouveau Design and Architecture: Studies in Material Culture (3 Credits)

Design

Double-numbered with DES 631

Introduction to the historical and social context that gave rise to Art Nouveau, its various manifestations, and the important practitioners and promoters of this movement in Europe and the United States.

Prereq: DES 113

#### DES 441 Design Research (3 Credits)

Desian

This course covers foundations of ethical design research with diverse methodologies. Focused on research sprints, students learn background knowledge application, protocol creation, data collection, analysis techniques, and deriving meaningful conclusions, ensuring research integrity and relevance.

Prereq: IND 481 and CMD 352

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

## DES 442 Capstone (3 Credits)

Design

Students conduct an immersive exploration about a design-related inquiry, producing evidence-based, socially impactful proposals for innovation and change. Students demonstrate readiness for leadership in design research and thinking.

Prereq: DES 441

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

### DES 450 Adaptive Design (3 Credits)

Design

Double-numbered with DES 650

Adaptive Design focuses on the creative relationships between people with disabilities, clinicians, and designers. This course centers on dialogue, interviewing, collaborative teaming, and co-design, creating custom solutions to meet specific needs for those in the disabled community. Additional work required for graduate students.

#### DES 451 Community Projects Studio (3 Credits)

Design

Focus on a community design project; residential, commercial, hospitality, institutional, retail and health care for the purpose of having the experience of working with real clients and developing collaborative skills.

Prereg: DES 451

Shared Competencies: Civic and Global Responsibility (https://coursecatalog.syracuse.edu/shared-competencies/civic-and-global-responsibility/); Ethics and Integrity (https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/)

#### DES 452 Branding and Marketing Works (3 Credits)

Design

Double-numbered with DES 652

Interdisciplinary design studio focused on branding and marketing. Additional work required of graduate students.

#### DES 470 Experience Credit (1-6 Credits)

Design

Participation in a discipline or subject related experience. Student must be evaluated by written or oral reports or an examination. Permission in advance with the consent of the department chairperson, instructor, and dean. Limited to those in good academic standing.

Repeatable

## DES 480 International Course (1-12 Credits)

Design

Offered through SUAbroad by educational institution outside the United States. Student registers for the course at the foreign institution and is graded according to that institution's practice. SUAbroad works with the S.U. academic department to assign the appropriate course level, title, and grade for the student's transcript.

Repeatable

### DES 481 Design for Production I (3 Credits)

Design

Examine how to develop and grow ideas to create a viable design product. Explore the necessary steps to make a design suitable for production.

#### DES 482 Design for Production II (3 Credits)

Design

Examine how to take designs and create prototypes. Explore branding of design products and necessary steps to make a product feasible.

Prereq: DES 481

#### DES 485 Multidisciplinary Design Studio (3 Credits)

Design

Project oriented design studio required of design and other majors admitted to the Florence Design Program.

Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/); Civic and Global Responsibility (https://coursecatalog.syracuse.edu/shared-competencies/civic-and-global-responsibility/); Communication Skills (https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/)

## DES 490 Independent Study (1-6 Credits)

Design

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

#### DES 500 Selected Topics (1-6 Credits)

Design

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

#### DES 547 Research Methods and Design (3 Credits)

Design

Introduction to methodologies, research design and application, and the foundations of ethical research.

#### DES 561 Furniture and Light Workshop (3 Credits)

Design

Design and development of experimental furniture and light fixtures. Experiences in prototype construction and industrial production methods. Shared Competencies: Critical and Creative Thinking (https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/)

#### DES 562 Advanced Detailing and Construction (3 Credits)

Design

Advance detailing and construction techniques, documentation, shop drawings, computer-aided construction methods for fabrication.

### DES 590 Independent Study (1-6 Credits)

Design

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable