

Design (DES)

Courses

DES 025 (THTR 025) Costume Construction I 0,2 Credits

Introduction to the art of costume construction. Costume construction materials, techniques, tools and safety. Practical experience in executing costumes for the stage.

Attribute/Distribution: AL, HU, Q

DES 026 (THTR 026) Costume Construction II 0,2 Credits

Continuation of THTR 25 - Costume Construction I, including pattern drafting, fitting, crafts and accessories. Materials, methods and problem solving. Practical experience in executing costumes for the stage.

Attribute/Distribution: AL, HU, Q

DES 040 Product Design Introductory Studio 4 Credits

This studio course explores approaches to designing physical goods intended for mass production. Projects begin with words, then pictures, and finally objects. Each project builds upon what was learned while incorporating new design techniques and modes of research. A basic scaffolding to approach product design forms: 1) ideation, 2) moodboard, 3) form finding, 4) drawings, and 5) prototypes. Expansion and contraction of ideas at each phase through exploration and analysis is emphasized.

Prerequisites: ART 004

Attribute/Distribution: AL, CC, HU

DES 053 Graphic Design Introductory Studio 4 Credits

This course introduces graphic design through traditional and contemporary methods, integrating research, ideation, visual problem-solving, image-making, materiality, typography, layout, and composition. Assignments vary from individual to collaborative projects that foster design thinking, iterative process, and critical discussion. Emphasis is placed on formal and informal presentations, critique, studio citizenship, traditional hand skills and software-based skill development. The course also covers an introduction to print production and material. Students will discover how Graphic Design impacts businesses, shapes the economy, and supports communities.

Prerequisites: ART 003

Attribute/Distribution: AL, HU

DES 070 Web Design I 4 Credits

Introduction to the design and fabrication of web pages. Students will learn how to create pages using HTML and web fabrication software, with an emphasis on aesthetic and structure.

Prerequisites: ART 003

Attribute/Distribution: AL, HU

DES 072 (THTR 072) Textile Design I 4 Credits

Textile printing has brought about revolutionary changes in textile design. Textile Design utilizes digital photography, scanning, drawing and image editing software to create botanical and geometric patterns for textiles.

Attribute/Distribution: AL, HU

DES 073 Special Topics in Design 1-4 Credits

An introduction to methods and techniques of design studio. Designed to acquaint the student with general design elements, covering topics not covered in other specific studio course listings. Instructor permission required.

Repeat Status: Course may be repeated.

Attribute/Distribution: AL, HU, W

DES 079 (ASIA 079) Digital Bridges 2 Credits

Run as an independent study: research ancient Chinese bridges, gardens, and pavilions. Digitize images and website design. Create photographic documentation of the Bridge Project. Produce documentary from historical materials concerning history of Chinese students at Lehigh. Bridge Project students could continue project work in Shanghai and Beijing.

Repeat Status: Course may be repeated.

DES 080 Motion Graphics 4 Credits

Motion graphics takes art and design elements: shapes, objects, photographs, type and gives them movement. We explore effects techniques applied to stills, graphics and short video and work with abstract transformations in time. Prerequisite: Art 003 or permission of the instructor.

Prerequisites: ART 003

Attribute/Distribution: AL, HU

DES 087 (THTR 087) Performance Design 4 Credits

Introduction to the process of creating integrated designs in theatre production. The study and practice of the principles of visual representation, historical and conceptual research and the study of theatrical styles.

Attribute/Distribution: AL, CC, HU

DES 088 (THTR 088) Digital Rendering 4 Credits

Explore the use of modern technology to develop and communicate design ideas with speed, clarity, and visual punch. Strategies geared toward increasing the young designer's confidence in presenting artistic concepts. Learn the basics of Photoshop and SketchUp and then apply those skills in creative execution of scenic, costume, and lighting renderings.

Attribute/Distribution: AL, HU

DES 089 (THTR 089) Introduction to Fashion Design 4 Credits

An introduction to conceptual garment design. Research, devise, and develop collections of apparel and accessories. Basic elements of design, fashion theory, design processes, and rendering techniques.

Attribute/Distribution: AL, CC, HU

DES 111 (THTR 111) Sound Design 2 Credits

Introduction to the study of the techniques and equipment used for theatrical sound design. Elements include audio theory, script analysis, field recording and editing audio in digital audio workstations.

Attribute/Distribution: AL, HU

DES 129 (THTR 129, WGSS 129) History of Fashion and Style 4 Credits

Global trends in dress and culture from pre-history to today. The evolution of silhouette, garment forms and technology. The relationship of fashion to politics, art and behavior. Cultural and environmental influences on human adornment.

Attribute/Distribution: CC, HE, HU

DES 140 Digital Prototyping Studio 4 Credits

This class will focus on form making, from the relatively simple to complex organic modeling. The class also covers design for manufacturing with additive technologies and the production of digitally rendered images. Projects focus on the extension of a brand identity to influence the design of mass producible functional objects with a heavy emphasis on digital craft. Final project involves designing and prototyping a functional 3D printed product.

Prerequisites: DES 040

Attribute/Distribution: HU

DES 144 Furniture Prototyping Studio 4 Credits

Hands on studio class with an emphasis on joining, craft, material properties, structure, design planning, and ergonomics. Projects will primarily focus on working with wood but will also explore other materials. Through assignments students will gain experience in the development of both singular pieces and design prototypes intended for reproducibility.

Prerequisites: DES 040

Attribute/Distribution: AL, HU

DES 148 Furniture Design I 4 Credits

Design methodology, fabrication techniques, and methods of design presentation.

Attribute/Distribution: AL, HU

DES 153 Graphic Design Intermediate Studio 4 Credits

This Intermediate Studio reinforces students' approach to visual communication through increasingly multifaceted projects. Visual problem-solving, nuance, and attention to detail are stressed. Students will understand the importance of formal, contextual, historical, technical, aesthetic, and poetic elements of composition, and will learn to view typography as an expressive form that conveys emotional and intellectual significance. Students will be encouraged to develop their individual approach through exploration and experimentation that culminates in portfolio-ready work.

Prerequisites: DES 053

Attribute/Distribution: HU

DES 154 (THTR 154) Scene Painting 4 Credits

Study and practice of basic and advanced methods of painting for the theatre. Includes basic elements and principles of design, color theory, the influence of light, atmosphere and aesthetics for the theatre.

Attribute/Distribution: AL, HU

DES 155 (THTR 155) Model Building and Rendering 4 Credits

The art and practice of model building and rendering for the stage. Special techniques including scale furniture, soldering, acrylic painting and hand drafting.

Attribute/Distribution: AL

DES 172 (THTR 172) Textile Design II 4 Credits

Building on skills and concepts developed in Textile Design I, students will develop their own voice in textile, apparel and accessory design.

Prerequisites: DES 072 or THTR 072

Attribute/Distribution: HU

DES 173 Special Topics in Design 1-4 Credits

Directed projects in design with selected readings as required. Student must initiate contact with sponsoring professor. Instructor permission required.

Repeat Status: Course may be repeated.

Attribute/Distribution: AL, HU, Q, W

DES 182 (ART 182, THTR 182) Immersive Design: 3D World Building and Digital Interaction 4 Credits

This course explores immersive media design through creating interactive 3D environments that integrate art, technology, and storytelling. Students engage with contexts like Game Design, Virtual Reality, and Music Videos, focusing on user experience and 3D interfaces. Utilizing platforms like Unity/Unreal, students experiment with Cinema 4D, Blender, creative coding, Meta Quests for VR, and 3D scanning. Projects draw inspiration from interdisciplinary sources, including game design workflows, theatrical worldbuilding, site-specific art, critical cartography, Land Art, and contemporary design practices.

Prerequisites: CSE 004 or CSE 007 or CSE 012

Attribute/Distribution: AL, CC, HU, Q

DES 186 (THTR 186) Lighting Design 4 Credits

An introduction to the art and practice of lighting design for the theatre. Script analysis, research, and the interplay of lighting technology and design. Students will develop a sense of the dramatic while creating a portfolio of lighting designs.

Attribute/Distribution: AL, CC, HU

DES 188 (THTR 188) Scenic Design 4 Credits

An introduction to the art and practice of scenic design for the theatre. Script analysis, research, drafting and modeling techniques. Students will develop a sense of the dramatic while creating a portfolio of scenic designs.

Attribute/Distribution: AL, CC, HU

DES 189 (THTR 189) Costume Design 4 Credits

An introduction to the art and practice of costume design for the theatre. Script analysis, research, and rendering techniques. Students will develop a sense of the dramatic while creating a portfolio of costume designs.

Attribute/Distribution: AL, CC, HU

DES 230 Design History 4 Credits

An overview of design history from the late 19th century through the present, the course examines the evolving landscape of graphic, industrial, and product design from the arts and crafts movement through the digital age. Through critical investigation of key developments, debates, and theories in modern and contemporary design, it provides a window onto the changing relationship of designers and the design professions to industry, technology, society, and politics, and how design mediates both everyday and pressing global challenges.

Attribute/Distribution: HE, HU, W

DES 240 Professional Practice for Product Design 4 Credits

The course will aid students in the concept, layout, and preparation of a professional portfolio. Students will assess existing work, refine and expand projects, and produce new work in line with their individual professional goals. The course will also discuss issues related to professional practices, ethics, and current events in the design industry.

Prerequisites: DES 140 and DES 144

Attribute/Distribution: HU

DES 248 Furniture Design II 4 Credits

Advanced fabrication. Contemporary art issues and furniture history.

Repeat Status: Course may be repeated.

Prerequisites: DES 148

Attribute/Distribution: HU

DES 253 Graphic Design Advanced Studio 4 Credits

In this advanced studio students continue to develop their ability to undertake complex design problems with typography, imagery and visual narrative. Emphasis will shift from experimentation toward applied project work. This deeper dive studio course will prepare students to collaborate with designers and non-designers by providing tools for research, concept presentation and iteration. Readings, lectures, and critique serve to contextualize student work and will encourage students to hone their approach to articulation, craft and strategy.

Prerequisites: DES 153

Attribute/Distribution: HU

DES 272 (THTR 272) Advanced Textile Design Workshop 4 Credits

Building on skills and concepts developed in Digital Textile Design II, students work towards a maturing studio practice within an atmosphere of rigorous critique. Further exploration in the conceptual research and material tools of surface design in textiles developed in DES 072 and 172, with experimentation in broader media is encouraged. An expansion of knowledge of textiles and apparel in the 21st Century will inform the development of a design practice and portfolio. Prerequisite: DES 172 / THTR 172.

Repeat Status: Course may be repeated.

Prerequisites: DES 172 or THTR 172

Attribute/Distribution: HU

DES 300 Apprentice Teaching 1-4 Credits

Supervised participation in various aspects of the teaching of a course. Consent of instructor, department chairperson, and permission of the Dean required.

Repeat Status: Course may be repeated.

DES 348 Furniture Design III 4 Credits

Advanced fabrication, contemporary art issues and furniture history.

Prerequisites: DES 248

Attribute/Distribution: HU

DES 353 Graphic Design Portfolio and Professionalism 4 Credits

The course will aid students in the concept, layout, and preparation of a professional portfolio. Students will assess existing work, refine and expand projects, and produce new work in line with their individual professional goals. The course will also discuss issues related to professional practices, ethics, and current events in the design industry.

Prerequisites: DES 253

Attribute/Distribution: AL, HU, W

DES 370 Advanced Design Projects 1-4 Credits

Current topics in design, with selected readings, discussions, and studio work as required. Must have completed two 100-level Design courses. Consent of department required. Repeat Status: Course may be repeated. Attribute/Distribution: HU, W.

Repeat Status: Course may be repeated.

Attribute/Distribution: HU, W

DES 375 Design Internship 1-4 Credits

Practical experience following apprenticeship model. Requires approval of instructor and host prior to beginning of the term, with a memorandum of understanding outlining student work responsibilities and educational objectives for the experience.

Repeat Status: Course may be repeated.

Prerequisites: DES 040 or DES 053

Attribute/Distribution: ND

DES 385 Fusion: Design Practice 1-4 Credits

Fusion: Design Practice is a project-based studio that offers students the opportunity to harness the skills they learn in the classroom for real-world application, as important tools for inquiry, dialogue, and service in the community and world at large. Projects prioritize experiential learning in architectural, graphic, and product design, and related fields. Fusion students see design projects through from beginning to end, from research and design to construction and production, frequently working in collaboration with university and community partners.

Repeat Status: Course may be repeated.

Attribute/Distribution: HU

DES 389 Honors Project 1-8 Credits

Opportunity for undergraduate majors in Design to pursue a project for departmental honors. Department permission required.

Repeat Status: Course may be repeated.

Attribute/Distribution: W