Design (DSGN)

#### 1

# **DESIGN (DSGN)**

# DSGN 10 3 units

# **Survey and Mapping**

#### 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This course introduces the theory and practice of plane surveying, including the use of instruments for measuring distances, angles, and elevations. Students learn proper field procedures for basic surveying which include taking field notes, taping and EDM, leveling, bearings and azimuths, topography, and mapping.

Transferable to CSU Only

#### DSGN 11 3 units

#### **Design Management Trends**

#### 54 hours lecture

Grading: letter grade.

This course discusses trends in construction and design management such as emerging technologies, practice methodologies and problem-solving.

Transferable to CSU Only

# DSGN 20 3 units

# **Space Planning**

## 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This course overviews residential and commercial programming design principles and explores concepts such as circulation design and space proximities. Students will gain a basic understanding of programmatic communication tools, drawing techniques, and associated codes for the creation of architectural spaces.

Transferable to CSU Only

# DSGN 30 3 units

# Visualizations for Interiors

# 36 hours lecture, 54 hours laboratory

Recommended Preparation: ARCHT 20 or ARCHT 61.

Grading: letter grade.

This course introduces drawing strategies and visual communication methods for the development of interior and exterior spaces. Two-dimensional and three-dimensional drawing methodologies are explored as both traditional hand sketching and digital graphic development. Transferable to CSU Only

#### DSGN 31 3 units

#### Visualizations for Industrial Design

## 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This course is a comprehensive introduction to the fundamentals of traditional perspective drawing and rendering theory and techniques, using traditional drawing techniques still used today in the industrial and product design industry.

Transferable to CSU Only

# DSGN 40 3 units Materials of Interiors

#### 54 hours lecture

Grading: letter grade.

This lecture course introduces analysis and research of critical issues affecting the selection and application of interior finish materials. Sources and materials used by interior designers in the development of a design project are presented. Materials available in the market for furniture, finishes, and equipment and their costs, maintenance, and environmental impact are analyzed and discussed.

Transferable to CSU Only

#### DSGN 50 3 units

## **Design Materials and Tools**

#### 54 hours lecture, 54 hours laboratory

Grading: letter grade.

Introduction to the study of fabrication and 3D design. Students will investigate a wide range of materials, tools, and techniques specific to design as they apply to the package, product, and environmental design. Transferable to CSU Only

#### DSGN 51 3 units

#### **Lighting Design**

#### 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This course introduces architectural lighting techniques such as luminaire sources and types, regulations, and technical terminology. Students determine how to apply lighting strategies to practical situations for residential and commercial interiors and train students to draw lighting plans, write specifications and create study models. Transferable to CSU Only

# DSGN 52 3 units

# **Building Code and Systems**

#### 54 hours lecture

Grading: letter grade.

Students are introduced to basic elements of construction and building systems, including power distribution systems, mechanical systems, energy management, ceiling systems, flooring systems and the impact of local building codes on the interior design process. Emphasis is placed on the interaction between interior and architectural design ideas and the construction methods.

Transferable to CSU Only

#### DSGN 53 3 units

# **Industrial Prototyping**

#### 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This course introduces students to product development, focusing on model-making techniques, color and material studies, and visual models for industrial design. Students will develop their ideas and creativity using a series of physical and digital models to express their design concepts. Transferable to CSU Only

#### DSGN 54 3 units

#### **Design Methodologies**

# 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This introductory course aims to expose you to the mindset, skillset, and toolset associated with industrial design. It does so through guided applications to framing and solving problems in design, business and engineering. Specifically, you will learn approaches to noticing and observing, framing and reframing, imagining and designing, and experimenting and testing, as well as for critique and reflection. Transferable to CSU Only

#### DSGN 60 1.5 units

Solidworks 1

## 18 hours lecture, 36 hours laboratory

Grading: letter grade.

This introductory course is the foundation of your advancement in SolidWorks. After this course, students will be able to successfully build and use Parts, Assemblies, and Drawing Layouts.

Transferable to CSU Only

#### DSGN 61 1.5 units

Solidworks 2

#### 18 hours lecture, 36 hours laboratory

Prerequisite: DSGN 60 or DSGN 660.

Grading: letter grade.

This course will teach practical methods to design plastic and metal parts with moderate to complex shapes in Solidworks. Real-life industry examples will be used and discussed to demonstrate how to apply software commands.

Transferable to CSU Only

# DSGN 71 3 units

# Industrial Design Studio I

# 36 hours lecture, 54 hours laboratory

Grading: letter grade.

This introductory Industrial Design Studio will introduce you to the fundamental concepts, ideas, and methods involved with the human activity called Design, as well as the skills and tools needed to communicate them verbally, two-dimensionally and three-dimensionally. Students will explore, analyze and give shape to the objects within the human ecology and challenge themselves and existing paradigms by searching unlikely places for insight and inspiration.

Transferable to CSU Only

# DSGN 72 3 units

# Industrial Design Studio II

# 36 hours lecture, 54 hours laboratory

Prerequisite: DSGN 71. Grading: letter grade.

This intermediate Industrial Design studio class will introduce students to the pipeline of creating a product from the ground up. Throughout the semester students will work on idea generation, prototyping, packaging, marketing, and evaluating their designs. Knowledge from the previous and current courses within the industrial design curriculum will be leveraged, from human factors to modeling and prototyping.

Transferable to CSU Only

#### DSGN 73 3 units

#### Industrial Design Studio III

# 36 hours lecture, 54 hours laboratory

Prerequisite: DSGN 71. Grading: letter grade.

This project-specific studio will address real-world needs, parameters, and research as it applies to market trends and industry-focused development. Companies and entrepreneurs will be invited to submit industry or need-specific project briefs to the studio, which will become the project for the semester. The students will experience first-hand the challenges of designing, building, and testing within a real-life, interdisciplinary framework.

Transferable to CSU Only

# DSGN 601 0 units Photoshop for Designers

## 18 hours lecture, 36 hours laboratory

Grading: non graded.

In this course, students learn the basic use of Adobe Photoshop as a graphic design tool, focusing on the skills needed to create a quality portfolio to become a confident design professional.

# DSGN 602 0 units Illustrator for Designers

#### 18 hours lecture, 36 hours laboratory

Grading: non graded.

In this course, students learn the basic use of Adobe Illustrator as a graphic design tool, focusing on the skills needed to create quality vector-based drawings necessary in the design profession.

# DSGN 603 0 units

# InDesign for Designers

#### 18 hours lecture, 36 hours laboratory

Grading: non graded.

In this course, students learn the basic use of Adobe InDesign as a graphic design tool, focusing on the skills needed to create a quality portfolios and graphic books for the design profession.

#### DSGN 660 0 units

Solidworks 1

## 18 hours lecture, 36 hours laboratory

Grading: non graded.

This introductory course introduces students to the foundation of SolidWorks. After this course, students can successfully build and use Parts, Assemblies, and Drawing Layouts.

#### DSGN 661 0 units

Solidworks 2

# 18 hours lecture, 36 hours laboratory

Prerequisite: DSGN 60 or DSGN 660.

Grading: non graded.

This course will teach practical methods to design plastic and metal parts with moderate to complex shapes in Solidworks. Real-life industry examples will be used and discussed to demonstrate how to apply software commands.