

Product Design

Sophomore Year		Fall	Spring	Degree Requirements
PRDS200/201	Design Studio I/II	3.0	3.0	<i>Descriptions for courses listed in grey boxes are located in the Liberal Arts and Sciences section.</i>
PRDS220/221	Integrated Design I/II	2.0	2.0	
PRDS240/241	Forms & Structures I/II	2.0	2.0	
PRDS250/251	Visual Communication I/II	2.0	2.0	
PRDS270/271	Digital Design I/II	2.0	2.0	
*ENGL202	Sophomore English	3.0	—	
AHCS220	Contemporary Perspectives in Art and Design	3.0	—	
AHCS225	Product Design History	—	3.0	
*ILML 200	Integrated Learning Lecture	—	3.0	
Total Credits per Semester		17.0	17.0	

Junior Year		Fall	Spring
PRDS300/301	Design Studio III/IV	4.0	4.0
PRDS320/321	Integrated Design III/IV	2.0	2.0
PRDS370/371	Digital Design III/IV	2.0	2.0
PRDS385/386	Methods & Materials I/II	2.0	2.0
*ILMS300	Integrated Learning Studio	—	2.0
AHCS310	Art History Elective	—	3.0
	Advanced Topics in English or	3.0	—
*LIBS410/ENGL400	Liberal Studies Elective	—	—
NSCI319	Anatomy & Ergonomics	—	3.0
MATH136	Math for Artists & Designers	3.0	—
Total Credits per Semester		16.0	18.0

Senior Year		Fall	Spring
PRDS400/401	Design Studio V/VI	4.0	5.0
PRDS420/421	Integrated Design Studio V/VI	2.0	2.0
PRDS430/431	Professional Practice I/II	2.0	2.0
PRDS470/471	Digital Design V/VI	2.0	2.0
	Studio Elective	2.0	—
*SSCI 210	Social Science Elective	—	3.0
*LIBS 440	Liberal Studies Capstone Elective	3.0	—
LIBS235	Economics and Product Market	—	2.0
Total Credits per Semester		15.0	16.0

*These courses may be taken during the Fall or Spring Semester

Product Design

Course Descriptions

Design Studio I/II

PRDS200/201 3 credits/3 credits

These courses focus on developing the student's mastery of the elements of visual literacy and organizational principals as they apply to the product design and development process. The focus is on designing with intent through the meaningful manipulation of line, plane, volume, value, texture and color in 2D and 3D through a sequence of increasing complex projects and skill-building workshops. The second semester projects focus on the synthesis of culture, technology and design as a means of addressing social, economic and marketplace needs.

Integrated Design Studio I/II

PRDS220/221 2 credits/2 credits

These courses engage the student in developing their individual creative process through the exploration and manipulation of materials and methods to express a visual response to a theme or content. Through a series of demonstrations and hands-on projects, students are exposed to a variety of materials and methods as means to stimulate curiosity, exploration, invention and solution finding and developing a personal vision. Emphasis is placed on color theory, surface texture and form.

Forms And Structures I/II

PRDS240/241 2 credits/2 credits

The focus of this course of study is on the principles and elements of three-dimensional design as they relate to form and structure in product design. Sequential projects of varying complexity develop the student's aesthetic eye and solution finding skills through invention, construction and the application of the organizational principals that bring unity and visual solutions to objects and the space in which they reside. In class projects complement the main Design Studio I/II projects.

Co-requisite for PRDS 200/201 Design Studio

Visual Communication I/II

PRDS250/251 2 credits/2 credits

This is a project-based studio focused on developing hand-drawing skills as a core skill and primary means by which to engage in the process of ideation and communication. Students develop skills in both rapid visualization and more methodical drawing techniques. In-class exercises in sketching and rendering emphasize shape, perspective, dimensionality, and surface characteristics. Students explore the integration of varied media and techniques to foster their own personal vision and style. Course projects complement the main Design Studio I/II projects.

Co-requisite for PRDS 200/201 Design Studio

Digital Design I/II

PRDS270/271 2 credits/2 credits

These courses integrate 2D graphic design and 3D computer-aided-design (CAD) as a means to communicate ideas and as a process for design and digital modeling. The emphasis in Digital Design I is on 2-dimensional graphic design as a primary design tool to complement hand drawing skills and in the development and presentation of design concepts. Students learn to integrate typography, image manipulation, aesthetics, storytelling, and audience with intent to persuade. In Digital Design II, students are introduced to computer-aided-design (CAD) as a primary means to translate visual ideas into various types of technical drawings and three-dimensional renderings. Techniques include wire-frame models, orthogonal projection, pictorials auxiliary views, tolerances and applying textural surfaces. Students learn to prepare files for the rapid prototype technology, tabletop laser cutting and the CNC equipment to produce parts, sculptural and design effects automatically. In class projects complement the main Design Studio I/II projects.

Co-requisites: PRD200/201 Design Studio I/II.

Product Design


Design Studio III/IV

PRDS300/301 4 credits/4 credits

This course is divided into two separate studios – a hard-goods studio that focuses on durable products and a soft-goods studio that focuses on non-durable products. In the hard-goods studio students learn design and construction skills related to products that utilize hard or rigid materials. These products include; furniture design, home and office decor, consumer electronics, personal care products, and more. In the soft-goods studio students learn design and the fabrication skills related to products that utilize fabrics or flexible materials. These products include; shoe design, fashion accessories, home decor and other products. Both studios focus on ideation, creativity, and problem solving in the design process. Students explore design ideas, create concept drawings, and develop working prototype models. Emphasis is placed on the integration of culture, design, aesthetics, functionality, and technology. Consideration is given to emerging consumer trends, products, and product applications. Students are required to take one semester of each studio.

Co-requisites: PRD385/PRDS 386 Methods and Materials I/II

Integrated Design Studio III/IV

PRDS320/321 2 credits/2 credits 

This is an advanced course on the process of creativity that enhances the development of creative impulses, personal vision, problem solving and innovative thinking. Through a series of projects, students learn to think laterally and express their ideas through the integration of research, resource, art and design, color, texture, materials and methods and various technologies.

Digital Design III/IV

PRDS370/371 2 credits/2 credits

This is an advanced computer lab intended to build upon principles introduced in Digital Design II. They explore advanced 3D software applications to address industry standards in the industrial design process and presentation. Content focuses on the advanced design and use of computer program output information as a means to utilize computer-aided rapid prototyping technology and fabrication methods.

Co-requisites: PRD300/301 Design Studio III/IV.

Methods And Materials I/II

PRDS385/386 2 credits/2 credits

These courses are divided into two sections each related to the corresponding Design Studio areas of hard-goods design and soft-goods design. In the hard-goods course emphasis is placed on a basic understanding of mechanisms and the relationship between internal components, structure and form, and the means by which multiple parts (including digital technology) are integrated in the final product. Consideration is given to the relationship between design solutions and issues related to manufacturing feasibility, product cost, product performance, utility, sustainability and marketability. In the soft-goods course the focus on introducing the basics of sewing, pattern drafting, draping and other topics related to fashion trends, color, materials, processes and practices related to non-durable goods. Through lectures, field trips, and workshops, students comprehensively explore the characteristics, properties, and appropriate uses of materials for the mass production in both of these two broad areas of products. Students are required to take one semester of each studio.

Co-requisites: PRDS300/301 Design Studio III/IV

Design Studio V/VI

PRDS400/401 4 credits/5 credits

The emphasis in the first semester is on the development of advanced product design skills, through the application of a design methodology, the integration of strategic design and the user experience. Studio courses and projects are structured into two areas of focus; soft goods design and hard goods design. Students can elect to have a focus in one of these areas or can choose to take both both areas. Students engage in projects of varying complexity to explore the issues of user interface, technology, user experience and interaction design. In the second semester students have the opportunity to choose a product area and develop a thesis project that addresses a cultural, social, economic, marketplace or user need and demonstrates the culmination of their undergraduate training as a product designer.

Course Descriptions

Product Design

Course Descriptions

Integrated Design Studio V/VI

PRDS420/421 2 credits/2 credits 

These two-semester courses explore emerging technologies and interaction design based upon user experience research. Students engage in research and apply functional analysis techniques, task and user modeling methodologies that lead to strategic thinking in their designs. Emphasis is placed on developing a proficiency in communicating complex information in simple terms for client presentation and product development. In class projects complement the main Design Studio and thesis projects.

Co-requisites: PRDS 400/401 Design Studio V/VI.

Professional Practice I/II

PRDS430/431 2 credits/2 credits

These courses prepare students for the transition to the professional world. The first semester is a trans-disciplinary course between the Otis and Loyola Marymount University (LMU) campuses. Otis students and Loyola Marymount Entrepreneurial students share classes in entrepreneurial studies and strategic design and form collaborative teams to develop a product idea, service or business, with a marketing and business plan. The emphasis is on strategic thinking and entrepreneurial practices. In the second semester Otis students engage in a focused business course related to professional practices for designers and life-long learning skills. Discussion and class assignments address self-promotion, intellectual property rights, bidding and estimates, contractual agreements, taxes and billable expenses, client communications, business management, entrepreneurial and interpersonal skills, ethics, and professional codes.

Digital Design V/VI

PRDS470/471 2 credits/2 credits

Emphasis is placed on a full range of strategies and skills required to organize accumulated work into a market-ready professional portfolio and presentation. Students learn a variety of computer software skills that includes; advanced Illustrator and Photoshop, Flash, DreamWeaver, motion graphics, and typography. Emphasis is on developing a proficiency in tactical presentation strategies that deliver impact with visual and rhetorical force that will persuade the audience. In class projects complement the main Design Studio, thesis and Senior Show projects.