

THE NEW SCHOOL

**PARSONS** × **Wallpaper\***

**PRODUCT DESIGN ESSENTIALS**



## COURSE OVERVIEW:

Product Design Essentials gives you an introduction to industrial design and product development and the diverse career opportunities it offers. Focusing on the integration of the design, manufacturing, and marketing components of the product creation process, the program combines interactive learning tools and real-world activities to create an engaging and fun education experience.

The course is guided by a design thinking that can be applied to any kind of product design. In this course, you'll see how to address a new project, focus on what's valuable to a user early in the process, frontload value, and motivate your team on testable narratives about the user to deliver real physical solutions. We also explore fundamental methods, technology, materials, and processes at the forefront of the design process and learn how to transform research insights into tangible prototypes and iterate on a concept up to its final, manufactured version.

The course is built on compelling video lessons taught by Parsons' world-renowned faculty, while experts and insiders from throughout the industry offer expertise into the field and their own career trajectories, giving students key insights into various career paths in industrial design. Throughout, a sequence of activities and assignments builds students' skills in and understanding of the modern tools and methods for product design and development and building brand strategies. All the elements of the program work together to explore the many ways practitioners combine art, science, and technology to create innovative products and services.

Students of product design often pursue careers in industrial design, product development, manufacturing, furniture design, humanitarian and service design, health design, and toy design. Product Design Essentials ultimately helps students understand how to develop fundamental skills and effective communication strategies geared towards practitioners and decision-makers throughout the field.

## FIVE COURSE MODULES:

- EXPLORE (PROJECT FOUNDATIONS)
- SKETCH (BEGINNING THE DESIGN)
- DEVELOP (FOCUS AND TEST THE DESIGN)
- DELIVERY (FINALIZE PRODUCT AND MANUFACTURING)
- POST-PRODUCTION (RESULTS AND REVIEW)

Each course module is broken into several shorter video lessons that you complete at your own pace. Assignments and hands-on projects reinforce key knowledge and help build career skills.

## STUDENT BENEFITS:

1. Competence with a set of tools and methods for product design and development
2. Enhanced team working skills
3. Certificate of completion (non-credit) from Parsons
4. Learn directly from leading academic and industry experts
5. Real industry scenario assignments
6. 100% online and self-paced



## **MODULE 1:** **EXPLORE (PROJECT FOUNDATIONS)**

Every project is different - it can originate as an idea or invention of yours or your boss' it could come from a client or brand; or it may be born from the requirements of a manufacturer who can only produce certain things in certain ways. A project's beginning depends on the source and the amount of innovation expected and the first thing designers need to do is scope out the project, to define what you're going to do and outline your approach to the project. Learn to ask the right questions to understand the user, market, production options; to establish user needs, goals and criteria; and to anticipate risks and roadblocks.

### **KEY CONCEPTS:**

- HOW TO START - WHERE DO IDEAS COME FROM?
- ESTABLISHING THE OPPORTUNITY LANDSCAPE
- COMPETITIVE ANALYSIS
- PRODUCT POSITIONING
- MINIMUM VIABLE AUDIENCE
- NEEDS VS. SOLUTIONS
- DESIGN THINKING
- VALUE ASSESSMENT (SOCIAL, ECOLOGIC, ECONOMIC)
- RESEARCH (ETHNOGRAPHIC, USER NEEDS, MARKET TRENDS)
- UNDERSTANDING CLIENTS' NEEDS
- OUTLINING PROJECT GOALS AND REQUIREMENTS
- IDENTIFYING TARGET USERS

## MODULE 2: SKETCH (BEGINNING THE DESIGN)

The next phase of product design is expansive. The team takes the research and raw ideas and generates a wide spectrum of ideas to create a broad field of options from which to choose. Designs at this stage show variations on form and function, in materials and processes, and perhaps even of target users and customers. Rough sketches and models allow a design to be tested and expanded, as well as presented to users and the client for feedback. This phase of the process concludes with the selection of one product design to move forward into development.

### KEY CONCEPTS:

- INSPIRATION AND IDEATION
- BRAINSTORMING
- MOOD BOARDS
- SKETCHING AND DESIGN VISUALIZATION
- 3D SKETCHES AND MOCK-UPS
- USES AND USER SCENARIOS
- CRADLE TO CRADLE DESIGN
- VETTING IDEAS - DECIDING ON THE IDEA AND PATH
- USER OBSERVATION (QUALITATIVE AND QUANTITATIVE) AND CO-CREATION
- GAINING STAKEHOLDER BUY-IN
- ORGANIZATIONAL PLANNING (MILESTONES, BENCHMARKS, TIMELINE)
- ASSEMBLING A TEAM



## **MODULE 3:** **DEVELOP (FOCUS AND TEST THE DESIGN)**

Having selected a concept and chosen a path, the next step is to refine and perfect the design - define its form and dimensions, explore colors and graphics, choose materials, solve basic engineering issues and resolve production obstacles. With this work done, take the complete working sketch, generate a digital 3D model, and create a functional prototype of your product design to be used for testing with users, the client, manufacturers, and for health and safety requirements. Now is also the time to look ahead to a product's life out in the market and in users' hands, and think about packaging, instructions, graphics, advertising narrative and other elements.

### **KEY CONCEPTS:**

- DEVELOPING FORM
- CHOOSING MATERIALS
- SUSTAINABLE MATERIALS AND PROCESSES
- PRODUCTION REQUIREMENTS
- CAD AND COMPUTER MODELING
- RENDERING
- PROTOTYPING AND PROTOTYPE TESTING
- DOCUMENTATION
- STORYBOARDING
- PACKAGING
- PRODUCT GRAPHICS AND UX
- PRODUCT INSTRUCTIONS

## **MODULE 4:** **DELIVERY (FINALIZE PRODUCT AND MANUFACTURING)**

With a tested and refined prototype, the design will be ready for production. In order to hand over the design to a manufacturer, all the product specifications will need to be finalized and put into precise documentation which will communicate the specifications during fabrication. A designer must clearly communicate how every individual piece of the product looks and works. Finalizing the engineering details plays a crucial role in product development, but marketing, sales, and costing are also pivotal - a successful product is the result of insights from all sectors.

### **KEY CONCEPTS:**

- TWEAKING USER EXPERIENCE
- FINDING A MANUFACTURING PARTNER
- PRODUCTION PROCESS
- COST DELIBERATIONS
- FINAL PRODUCT SPECIFICATIONS
- MECHANICS AND ELECTRONICS
- PARTS AND ASSEMBLY
- VALUE ENGINEERING
- HEALTH AND SAFETY TESTING
- INTELLECTUAL PROPERTY PROTECTION (COPYRIGHT, PATENT, ETC.)
- MARKETING AND DISTRIBUTION PLANS



## **MODULE 5:** **POST PRODUCTION (RESULTS AND REVIEW)**

After the design is in production, you need to look back to move forward. Look back at the entire process: What went right? What went wrong? What should we do differently next time? Did we get the results we wanted? What worked well? The wealth of insights available to analyze post-project should help you in the next project: revising documentation, refining metrics, and revamp marketing and promotion. This review process prepares you for a simple question for everything: what's next? Next for the client, next for you, next for the profession, what's the next project? Every project, every design moves you forward as a designer and a crucial part of this reflection concerns your own professionalization.

### **KEY CONCEPTS:**

- REVIEW SUCCESS AND WEAKNESS
- IMPROVING THE PRODUCT FOR ITS NEXT GENERATION
- SCOUTING NEW PROJECTS
- LINE OR BRAND EXTENSION
- NETWORKING
- TRADE SHOWS
- PROFESSIONAL ORGANIZATIONS
- YOUR STORY AND SOCIAL MEDIA
- SKILLS FOR THE FUTURE
- MARKET OF THE FUTURE
- BUSINESS OF THE FUTURE

## ENROLLMENT DETAILS

### How do I apply for Product Design Essentials?

The application for Product Design Essentials is entirely online and only takes a few minutes to complete. You can apply here: <https://www.yellowbrick.co/apply/?program=product-design>

### How much does the program cost?

The cost of the entire program, which includes all five course modules, related activities, and a Parsons (The New School) Certificate of Completion upon finishing, is \$999. There are also installment payment plans available, starting as low as \$99/month. Complete pricing will be sent to you upon acceptance into the program.

To receive your Parsons Certificate of Completion, you'll need to have all installments paid in full and have successfully completed all program requirements.

### What payment methods and currencies do you accept?

We accept almost any type of credit or debit card. So if you have a Visa, MasterCard, American Express, JCB, or Discover card, we'll accept it. If you're enrolling outside the United States, tuition will be charged in your local currency at the prevailing currency exchange rate.

### Is there financial aid available?

No, financial aid is not offered for Product Design Essentials. However, there are payment plans available, starting as low as \$99/month. And Yellowbrick also offers a scholarship program. You can apply for a Yellowbrick scholarship here: <https://www.yellowbrick.co/scholarship-application/>

### What is your cancellation policy?

You can withdraw from a course hassle-free and at no-cost within 24 hours of enrollment. After 24 hours, you have up to 7 calendar days to withdraw and get a full refund, minus a \$100 cancellation fee. No refunds will be issued for enrollments past 7 days.

### How do I begin the program?

Once we have received your tuition payment, your spot in our program is secured. You will receive a welcome email that has your login instructions, and you can begin immediately. The program is 100% online and self-paced, so you can complete it on your schedule.



## THE PROGRAM

### **Are there any prerequisites, age requirements, or restrictions?**

Students must be at least 13 to enroll. There are no other prerequisites. All you need is a passion for product design and learning.

### **What do I get when I complete the program?**

Students who successfully complete the program will earn a Certificate of Completion in Product Design Essentials from Parsons. Product Design Essentials is a non-credit program.

### **How long do I have to complete the program?**

With your enrollment, you will have unlimited access to the full program for one year from the date you enroll. For almost all of our students, one year is more than enough time to work through the programs and fully absorb the content.

### **What if I need more time?**

For those that need more time to complete the program, you will have an option to pay a low monthly fee to continue your access to the program materials.

### **Can I download course videos or materials?**

Class videos or materials are not downloadable. However, once enrolled, you will have unlimited access to all videos and materials for 12 months.

### **What can I expect to accomplish by the end of this course?**

Product Design Essentials is designed for students at any stage of their academic or professional experience and with the potential for many different outcomes. In other words, what you can expect to accomplish after completing this program depends on...you!

In more general terms, our students usually identify two main takeaways after completing the program. First, they have a significantly greater understanding of how the product design industry and related careers work. Second, with the Certificate of Completion from Parsons on their resume, they differentiate themselves from the rest of the pack.

### **What type of people enroll in Product Design Essentials?**

People with all levels of experience, and in all stages of their career, benefit from enrolling in Product Design Essentials. But you will have something in common with all of our students — a passion for product design and a desire to build a successful career doing what you love! Our students might already be working in the industry and looking to get ahead, or working in a different industry looking to switch careers. They might aspire to start their own business and be looking to build skills and gain valuable experience that will set them apart in a hyper-competitive industry. They might be your future professional and personal network in the design world. They might be like you — a future leader in the industry!

### **Where do I find the program materials?**

All program materials can be found online. You can access and review the materials whenever you like through the course login page, which you'll receive once you enroll — all you need is an internet-connected device.

### **Which devices can I use to watch the class videos and access other program materials?**

You can access the program on your computer, tablet, or smartphone. Desktop or laptop computers tend to provide the best experience.

### **When and where do the classes meet?**

Whenever you like — the program is entirely online, self-paced, and on-demand. That means you can study and access the program lessons whenever and wherever you can connect to the Internet.

### **How much time do I need to dedicate to the program?**

It varies from person to person, but be prepared to work hard and to dedicate about 30-40 hours in total. Remember, you have a full year to complete the program so you can pace yourself over 12 months!

### **After I complete the certificate in Product Design Essentials, what comes next?**

This certificate lays the groundwork for you to pursue your goals in whatever aspect of the design industry you feel passionate about. If you find that you want to learn even more about a specific area, Parsons offers a number of in-person and online program options.

### **Who is Yellowbrick and why are they involved?**

Our mission at Yellowbrick is to empower the next generation of talent to find their passion and build a career doing what they love. We strive to deliver on this vision by partnering with top-tier universities and world-class global brands to provide students with unparalleled online educational experiences and inspiring career opportunities.