UDACITY

NANODEGREE PROGRAM SYLLABUS

UX Designer

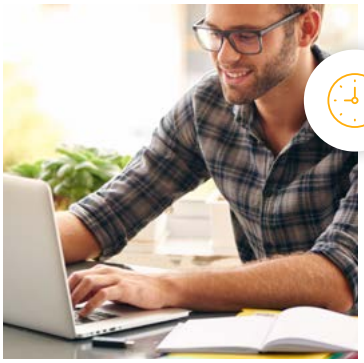
Overview

This Nanodegree program teaches the foundational skills all UX Designers use, whether they design mobile apps, desktop apps, or web platforms. It is ideal for students who want to understand how to create development-ready designs, and build a UX portfolio to start and succeed in a UX Designer role.

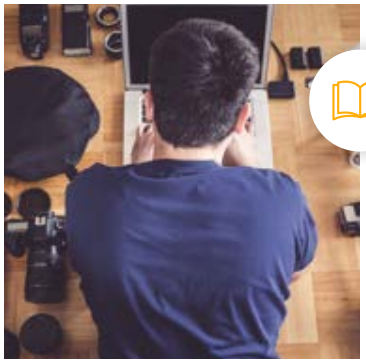
A graduate of this program will be able to:

- Understand the fundamentals of UX Design, including Neilsen's Heuristic Evaluation, quantitative and qualitative research methodologies, and the design psychology behind designing for humans
- Synthesize user research, frame design opportunities, run design sprints from ideation to prototype using Miro Board, and conduct usability tests to improve designs based on feedback
- Convert designs into a wireframe and low fidelity sketch using Figma, and then into a high-fidelity interactive design that can then be prepared for engineering handoff
- Incorporate visual design basics: information hierarchy, UI design patterns, visual hierarchy, as well as grid systems, typography, style guides, and basic design systems into your designs
- Measure design performance through qualitative analytics to improve a design based on data

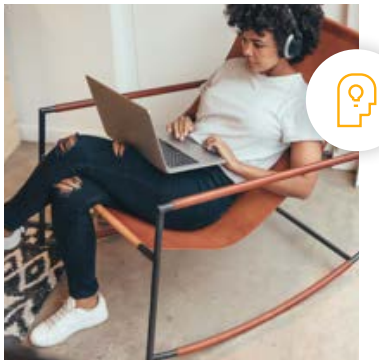
This program is comprised of 3 courses and 3 projects, as well as a Capstone. Each project you complete will be an opportunity to grow your UX portfolio, and will demonstrate to potential employers that you have skills in these areas.



Estimated Time:
3 Months at
10 hrs/week



Prerequisites:
No required
prerequisites



Flexible Learning:
Self-paced, so
you can learn on
the schedule that
works best for you.

Need Help?
udacity.com/advisor
Discuss this program
with an enrollment
advisor.

Course 1: UX Fundamentals & Design Research

Product design starts with understanding the needs of users, which is gathered through comprehensive research. Learn the core principles of human-centered design and how to appropriately scope a design problem. Understand how to empathize with users when performing user research, including how to conduct in-depth interviews and create quantitative surveys, and use research data to uncover opportunities. You'll then apply psychology to design sketches, keeping the end-user in mind.

Course Project
Formulate a Research Report

The first step to designing a great product is empathizing with users and uncovering their needs. In this project, you will develop a discussion guide, recruit research participants, and synthesize findings in the form of a research report. You'll validate your insights from interviews using surveys to get a comprehensive view of the topic you are researching. The goal of this project is to ask the right questions when interviewing users to understand their experiences in order to identify design opportunities, and create initial sketches that incorporate design psychology principles.

		LEARNING OUTCOMES
LESSON ONE	**Introduction to UX**	• Apply usability principles to heuristic evaluation of product designs • Use design principles to identify user-friendly vs. manipulative design solutions • Learn how to scope a research topic to select a design problem
LESSON TWO	**UX Research**	• Learn how to design and execute a UX research plan, including research goals, recruiting criteria, and scripts • See how to build empathy with users and construct questions needed to run a semi-structured user interview and survey study • Understand how to analyze quantitative data collected from the user interview using the affinity diagramming method
LESSON THREE	**Design for Humans**	• Learn how to appeal to human emotional and behavioral needs through design • Use design psychology principles to critique and iterate design sketches

Course 2: Concept to Low-Fidelity Prototyping

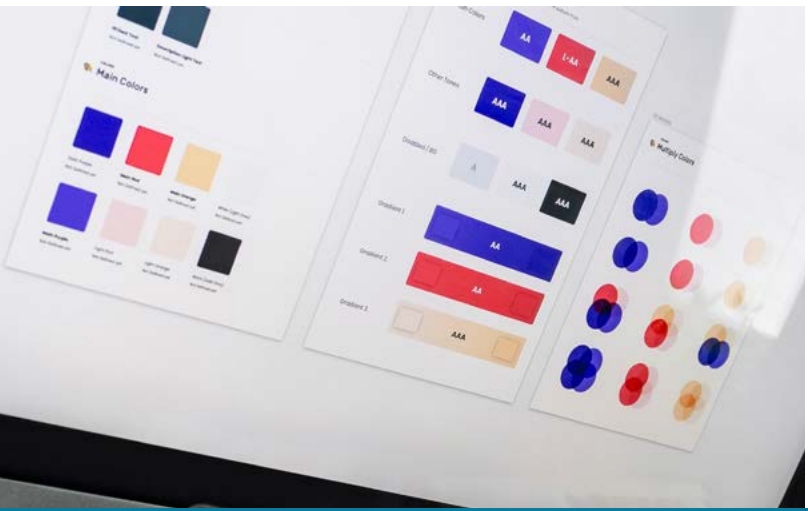
The best products have gone through rounds of iteration based on user research and feedback. Learn the process of a design sprint, and how to translate findings from research into a prototype that can be tested with users. Understand how to foster team collaboration and use divergent and convergent thinking to rapidly create testable prototypes. Apply user interface principles in the design of a clickable prototype, and conduct a usability test to gain valuable feedback from users that can be used in design iterations.

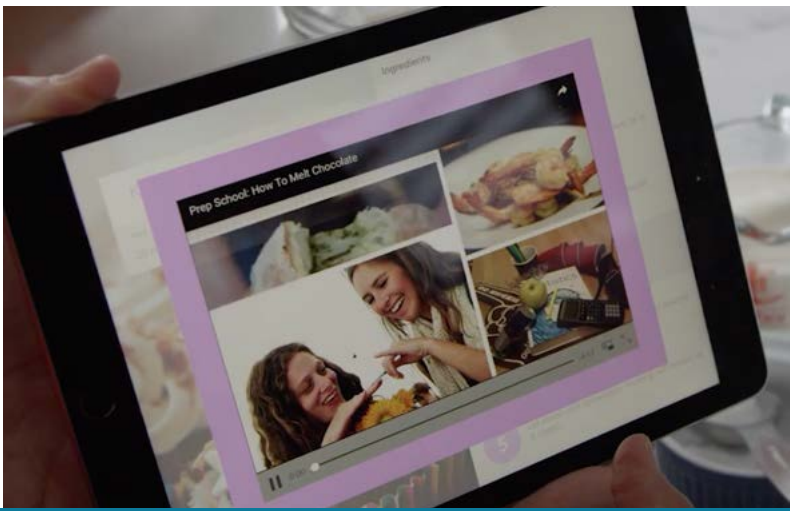
Course Project
Develop a Validated Low-Fidelity Prototype

Insights from research are inputs to the design sprint process of creating a validated design solution. In this project, you will take a product idea through the design sprint process to come up with a user-tested low-fidelity prototype of your solution. First, you'll set up the infrastructure to start the design sprint and synthesize research findings. Then, you'll go through ideation exercises to create paper sketches, and digital prototypes based off the paper sketches. Lastly, you'll conduct a usability test of your prototype with users to validate design assumptions, and create a second iteration of the prototype based on user feedback.

	LEARNING OUTCOMES	
LESSON ONE	**Define the Design Sprint**	• Learn how to apply the Double Diamond design process to create product concepts • Apply guerilla design sprints to collaboratively design with users • Understand how to facilitate collaborative work sessions to build a collective understanding of the user, source ideas, and obtain "buy-in" from various stakeholders
LESSON TWO	**Synthesis: Research to Features**	• Discover themes and opportunity areas from research • Learn how to define problems as opportunities • Understand collaborative ideation techniques and how to apply them to focus on the best ideas given the design scope • Learn how to prioritize ideas as design features based on a value-complexity matrix to create a minimum viable product
LESSON THREE	**UI Principles**	• Understand various user interface layouts at different levels of fidelity • Learn how to organize visuals and touchpoints so designs are user-friendly • Understand how to ensure designs are accessible to all populations with different user needs

LESSON FOUR	**Clickable Prototyping**	• Learn how to incorporate UI kits and components into a prototype • Understand the capabilities of prototyping tools for product design • Define users flow and user interactions to create a clickable prototype
LESSON FIVE	**Usability Testing**	• Understand how to design a digital journey map • Learn how to conduct in-person and remote usability tests to gather specific types of feedback on prototypes • Understand how to iterate on prototypes based on user feedback





Course 3: High-Fidelity Prototyping to Post-Launch Analysis

Once products have been tested for its effectiveness, they need to be enhanced for engagement. Learn advanced user interface principles to build interactive designs that are ready to be handed off to engineering for feedback. Understand how to solicit and integrate feedback from engineering to enhance the design before it is ready for development. Assess the engagement of the product through remote usability testing and other experimentation methods. Finally, you'll learn how to improve design and user experiences based on engagement data in order to increase key performance indicators.

Course Project
Create and Improve a High-Fidelity Design

A low-fidelity prototype allows you to validate that the core functionality of your solution addresses user needs, and the next step is to ensure the interface and experience of your solution engages and delights users as much as possible. In this project, you'll enhance a low-fidelity prototype through the application of a data-enhanced high-fidelity design by submitting a midterm and a final project. For the midterm project, you'll source visual design inspiration to develop a style guide and component library. Then, you'll use the style guide and component library to create a high-fidelity mockup of your low-fidelity prototype. For the final project, you'll improve the accessibility of your design and iterate the design based on engagement data and key performance indicators.

	LEARNING OUTCOMES	
LESSON ONE	**UI Design Basics**	• Learn how to recognize UI trends and apply various interaction and typography styles • Learn the value and process of annotating designs • Understand the components of a design system
LESSON TWO	**Building Interactive Designs**	• Learn how to find and use UI kits and plugins in a high-fidelity design • Learn how to source inspiration to generate the visual elements of a style guide • Apply design principles to generate high-fidelity mockups
LESSON THREE	**Preparing Design for Engineering Handoff**	• Understand the various levels of accessibility and how to incorporate them into a design • Understand how to build user stories and tasks flows that facilitate feedback from engineering • Learn how to adjust designs and export assets so they are production-ready for handoff to engineering

	LEARNING OUTCOMES	
LESSON FOUR	**Improving Design Performance**	• Understand the key performance indicators that drive an engaging design • Learn how to use remote testing tools and techniques to collect and make sense of data • Learn how to optimize designs using engagement data

Capstone: UX Portfolio Design

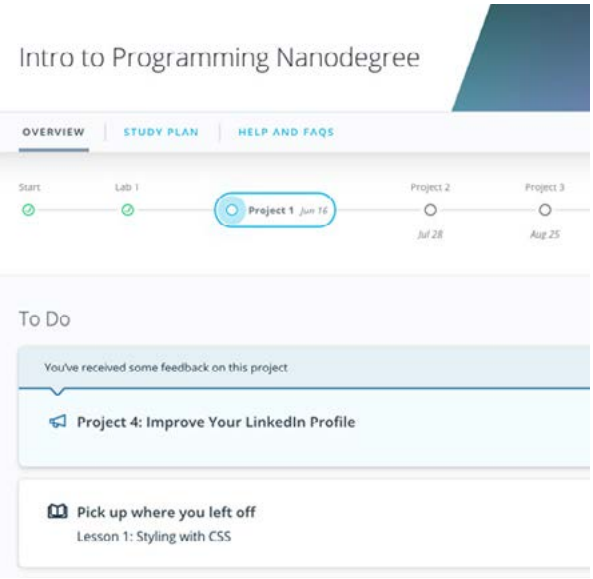
UX Designers demonstrate their skills by showcasing their designs and processes in a portfolio. Understand what should and shouldn't be included in a portfolio, as well as the key components that appeal to target audiences. Learn how to organize previous work and communicate it online, keeping the audience and your career objectives in mind. Apply storytelling and branding frameworks to create a personal profile that conveys a unique value proposition. You'll also learn best practices for maintaining and updating a UX portfolio.

Capstone Project
Build a UX Portfolio Case Study

A UX portfolio is the tool that UX Designers use to display their abilities and experience to the world. In this project, you will apply portfolio design and personal branding best practices to create a starter portfolio that consists of projects completed in this Nanodegree program. First, you'll reflect and document the process you went through to complete your projects. Then, you'll organize assets and notes in a way that visualizes the steps you took to complete these projects. Lastly, you'll develop an accompanying "About Me" page that conveys what makes you unique as a UX professional.

	LEARNING OUTCOMES	
PART ONE	**Introduction to Portfolio Design**	• Understand the purpose of a portfolio for storytelling • Learn the key components of a UX portfolio and how to avoid pitfalls when creating one • Understand ways to get inspired and prepared before building a UX portfolio
PART TWO	**Building a Starter Portfolio**	• Learn how to select and create a prototype of a project case study • Learn how to finalize and prepare content of a project case study to be displayed online • Understand how to design for the portfolio experience and update a UX portfolio based on industry best practices

Our Classroom Experience

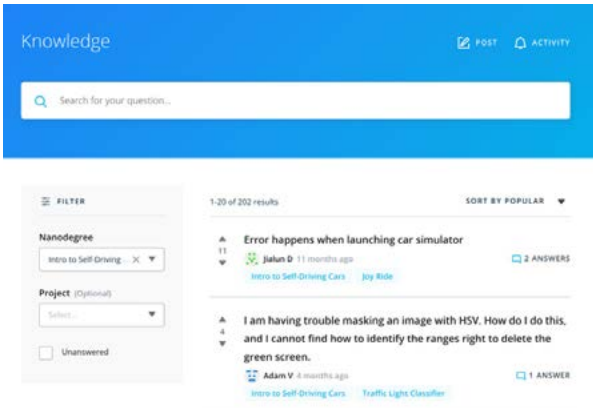


REAL-WORLD PROJECTS

Build your skills through industry-relevant projects. Get personalized feedback from our network of 900+ project reviewers. Our simple interface makes it easy to submit your projects as often as you need and receive unlimited feedback on your work.

KNOWLEDGE

Find answers to your questions with Knowledge, our proprietary wiki. Search questions asked by other students, connect with technical mentors, and discover in real-time how to solve the challenges that you encounter.

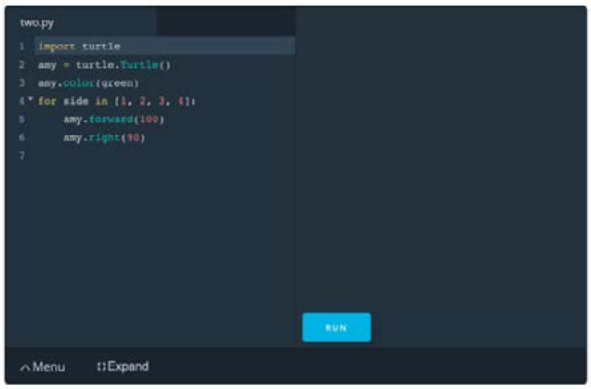


WORKSPACES

See your code in action. Check the output and quality of your code by running them on workspaces that are a part of our classroom.

QUIZZES

Check your understanding of concepts learned in the program by answering simple and auto-graded quizzes. Easily go back to the lessons to brush up on concepts anytime you get an answer wrong.



CUSTOM STUDY PLANS

Create a custom study plan to suit your personal needs and use this plan to keep track of your progress toward your goal.

PROGRESS TRACKER

Stay on track to complete your Nanodegree program with useful milestone reminders.

Learn with the Best

Shuang Liu

UX DESIGNER, GOOGLE

Shuang has enjoyed working in UX design across a variety of domains at Google, from YouTube, to technical cloud platforms. She is particularly interested in bringing a human touch to products. She received her Master's in Human Computer Interaction from The University of Michigan.

Gabriel Ruttner

CO-FOUNDER & CTO, FEATHER DOCS

Gabe leads product, UX, and engineering for machine learning products at early-stage startups. His last company built UX research tools for designers at Fortune 500 companies. He holds degrees from Cornell University and Stony Brook University.

Michael Dedrick

UX DESIGNER, GOOGLE

Michael is a UX Designer for Google after leading design at a Blockchain startup and working at a partnership with Apple and IBM. He is committed to connecting with clients and users—and bringing their vision to life. He has a design background from Sheridan, Toronto Film School, and OCAD University.

Melissa Hui

FOUNDER, CONTEXT LEAP

Melissa is the founder of Context Leap, an SF-based organizational and leadership transformation agency. With over a decade as a design and innovation strategist in the technology industry, she is dedicated to evolving the role of design in creating scalable and thoughtful human-centered experiences.

All Our Nanodegree Programs Include:

EXPERIENCED PROJECT REVIEWERS

REVIEWER SERVICES

- Personalized feedback & line by line code reviews
- 1600+ Reviewers with a 4.85/5 average rating
- 3 hour average project review turnaround time
- Unlimited submissions and feedback loops
- Practical tips and industry best practices
- Additional suggested resources to improve

TECHNICAL MENTOR SUPPORT

MENTORSHIP SERVICES

- Questions answered quickly by our team of technical mentors
- 1000+ Mentors with a 4.7/5 average rating
- Support for all your technical questions

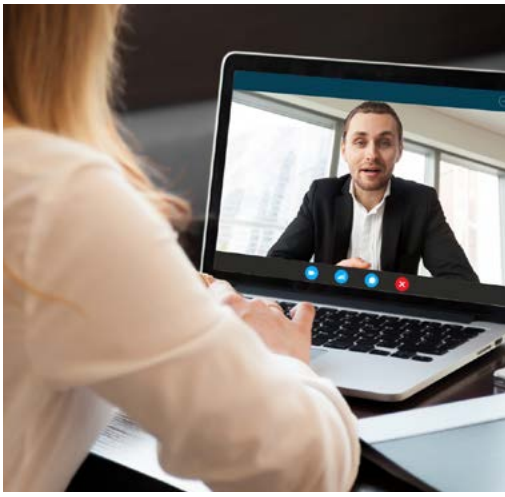
PERSONAL CAREER SERVICES

CAREER SUPPORT

- Resume support
- Github portfolio review
- LinkedIn profile optimization

Frequently Asked Questions

PROGRAM OVERVIEW



WHY SHOULD I ENROLL?

As products become more digital, there is an increasing need for people who can design the digital interaction with web-based platforms, digital interfaces, and mobile and desktop applications.

This program is intended for students who would like to have a significant impact on the overall user experience of digital products, from defining user interactions with a product to designing its look & feel, to understanding the entire design lifecycle, and how to effectively collaborate with engineers and product managers.

You'll learn how to conduct user research, apply design psychology, and create user interface layouts. You'll translate research into low-fidelity prototypes, and turn those into high-fidelity designs that are ready for engineering implementation. Along the way, you'll build a UX portfolio-ready case study that will demonstrate your design capabilities.

WHAT JOBS WILL THIS PROGRAM PREPARE ME FOR?

This program is designed to prepare individuals to work as Design or UX Researchers, UX Designers, Product Designers, Design Leads, Interaction Designers, Visual Designers, and more within teams and organizations focused on launching digital products, including web-based platforms, digital interfaces, and mobile and desktop applications.

There are also roles such as UX Writers, who help create human-centric communications, and UX or Design Strategy roles, which focus on using design as a strategic lens to solve overarching challenges.

HOW DO I KNOW IF THIS PROGRAM IS RIGHT FOR ME?

This program is intended for anyone who wants to gain fluency and understanding of digital product design. If you want to learn how to shape user experiences of software products and how to prepare design assets within a cross-functional team, this program is for you.

ENROLLMENT AND ADMISSION

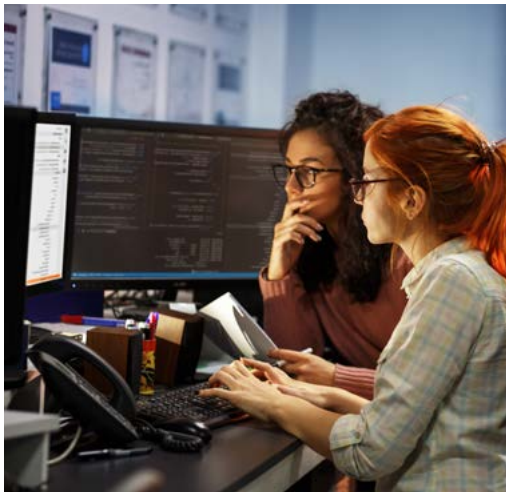
DO I NEED TO APPLY? WHAT ARE THE ADMISSION CRITERIA?

There is no application. This Nanodegree program accepts everyone, regardless of experience and specific background.

FAQs Continued

WHAT ARE THE PREREQUISITES FOR ENROLLMENT?

No prior experience with UX Design is required. You will need to be comfortable with basic computer skills, such as managing files, using third-party online programs, and navigating the Internet through an online browser.



TUITION AND TERM OF PROGRAM

HOW IS THIS NANODEGREE PROGRAM STRUCTURED?

The UX Designer Nanodegree program is comprised of content and curriculum to support three projects, and one capstone. We estimate that students can complete the program in three months, working ten hours per week.

Each project will be reviewed by the Udacity reviewer network. Feedback will be provided and if you do not pass the project, you will be asked to resubmit the project until it passes.

HOW LONG IS THIS NANODEGREE PROGRAM?

Access to this Nanodegree program runs for the length of time specified in the payment card on the Nanodegree program overview page. If you do not graduate within that time period, you will continue learning with month to month payments. See the **Terms of Use** for other policies around the terms of access to our Nanodegree programs.

SOFTWARE AND HARDWARE

WHAT SOFTWARE AND VERSIONS WILL I NEED IN THIS PROGRAM?

For this program, you will need a computer with a broadband internet connection, capable of installing various open-source design tools. Note: Most consumer computers on the market today meet these requirements. You will need administrative access to be able to install software on your computer.

This program uses web-based platforms including Google Suite (Slides, Gallery, & Docs), Figma, Miro, Mobbin, Zeplin, WebAIM, Whimsical, and Unbounce. You will have the option to use Keynote, PowerPoint, or Google Slides for your presentations. You will need to be able to communicate fluently and professionally in written and spoken English.