Udacity

Program Type
Nanodegree program

Medium of Delivery
Online courses

Program Duration
4-6 months
(Nanodegree program)

Annual Participants
70,000 in Nanodegree
programs

Organization Type
For-profit

Year Established
2011

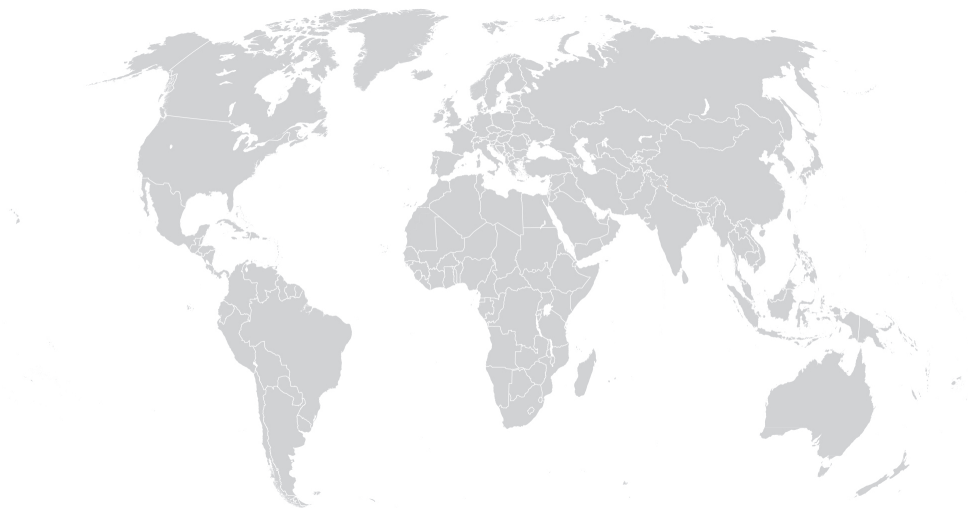**Average Fees per Participant**
USD 1,000 per
Nanodegree program

Number of Alumni
70,000 for Nanodegree
programs

UDACITY

Geographic Coverage

Present in 190 countries, except in countries with OFAC restrictions.

COMPANY OVERVIEW

Udacity is a for-profit MOOC provider that teaches industry-relevant programming skills and offers credentials endorsed by leading technology providers. Udacity courses give students the opportunity to learn advanced digital skills at a significantly lower cost and time period compared to traditional universities.

For more information, visit: **https://in.udacity.com/**

Mission statement

To democratize education by offering world-class higher education opportunities that are accessible, flexible, and economical.

> "We never start anything out of academic interest, we always start from the job and from the work and from the requirements"
>
> – Vice President of Learning, Udacity

Key Innovations

Udacity has developed features that differentiate it from other similar providers:

1. **Program Delivery:** Udacity programs are delivered through short courses and students are assessed through projects instead of examinations.

2. **Employment-focused Program Provision:** Udacity programs are geared towards job-readiness through strong career support and hiring partnerships with more than 200 companies that seek to recruit Nanodegree graduates.

3. **Unique Program Offering:** Udacity offers several high-profile courses that aren't offered by other online providers or traditional universities, such as artificial intelligence, self-driving cars, blockchain development, robotics, and flying cars.

Program Overview

Udacity is a global online education provider that offers technical and innovative courses for students ranging from absolute beginners to experienced professionals. The company aims to help learners develop the job-ready skills they need to secure employment or advance in their careers. Udacity's Nanodegree programs give students the option to complete a defined set of courses in a particular discipline and receive a certificate valued by Udacity partners and potential employers. Udacity also offers select individual courses within the Nanodegree programs for free, although these students only get access to the content and do not receive other perks of the programs, such as the opportunity to work on projects. Individual courses offered on the platform are all free of cost. Udacity also offers paid corporate training programs.

Program History

Udacity began as an experiment in online learning when Stanford University instructors Sebastian Thrun and Peter Norvig decided to offer their introduction to artificial

Photo © Udacity

10. Data analytics

11. Digital marketing

12. Cybersecurity

Business Model

Udacity is designed to be highly accessible through its web-based delivery. It maintains an industry-relevant curriculum developed with hiring partners. Udacity's program offerings can be used with select local partnerships to provide more targeted content. Industry-relevant curriculum that helps ensure future employment is vital in attracting learners to sign up for programs.

Udacity's revenue reached $70 million in 2017. The company has raised $160 million in four rounds of funding led by Bertelsmann and Andreesen Horowitz and other private equity firms. Udacity's revenue streams include its consumers, business enterprises, government and nonprofit customers, and hiring partners.

Fees vary based on course, program, and location. Nanodegree programs in the United States typically cost $999. Udacity has launched more than 15 scholarship programs since 2017 in partnership with Google, Lyft, AT&T, Facebook and other corporations that have benefited over 200,000 students from more than 150 countries.

PARTICIPANT SOURCING AND SELECTION

Target Segment and Pipeline Development

Udacity identified a large skill gap in advanced digital skills throughout the workforce. The company's founders anticipated that future technology jobs would require these skills and created a platform to help individuals gain the necessary expertise. The program focuses on building job-relevant skills from the first day through projects-based learning that emphasizes use in the real world. These are evaluated by experts in the technology industry.

intelligence course online for free. The course quickly gained traction and received over 160,000 student registrations from more than 190 countries. After several years of intensive iteration and experimentation, they refined Udacity's focus to career advancement through mastery of in-demand skills.

Types of Digital Skills Imparted

Udacity's course offerings cover everything from entry-level programs to highly-advanced and specialized programs, including:

1. Machine learning

2. Deep learning

3. Artificial intelligence

4. Computer vision

5. Autonomous systems

6. Virtual reality

7. Web development

8. Mobile app development

9. Data science

Udacity's Nanodegree programs are open to all learners except for the advanced programs. These have specific prerequisites to ensure the right fit and prevent drop-outs. The program targets students of various ages and educational backgrounds who are looking to develop technical skills to advance their career path. The majority of students are early to mid-career professionals from 24 to 35 years old. Early-career professionals often are looking to launch a new occupation in technology, while mid-to-late career professionals seek to enhance their skills within their current professions.

The majority of Udacity Nanodegree applicants first interact with the program by testing the content's free courses. Some students hear about the program through partner companies that help develop its course curriculum. Udacity also reaches out to companies directly to make them aware of its capabilities in advancing the skills of existing employees.

Application and Selection

Application Format

Most programs do not have a full application process. Applicants pay for a program and are granted admission immediately. The process differs for highly advanced courses, such as the self-driving car engineer program, where candidates must answer questions that test for a prerequisite skill levels and explain how the program is expected to benefit them. Individuals applying for scholarships must also fill out applications with similar questions. Applications are reviewed by the curriculum team responsible for the specific program's development. A team is designated to review scholarship applications.

Lead Time from Application to Program Start

Students in free, individual courses can access course materials immediately after signing up. Nanodegrees are term-based with each term lasting three to four months. The duration of Nanodegrees is typically one or two terms, with new cohorts starting every month.

Key Challenges and Solutions

Udacity has struggled to ensure students have enough prerequisite knowledge and technical ability to join advanced programs. Udacity addresses this challenge by categorizing programs into levels, such as entry-level or advanced. Advanced programs have clear qualifications and prerequisites that are tested as a part of the admissions process. Directing applicants to the right programs doubles as a retention strategy.

PROGRAM EXPERIENCE

Program Approach

Udacity creates its course content in partnership with leading industry experts so it is highly relevant within the technology sector. This makes program graduates more attractive for recruiters.

The standard program duration for free courses is between two weeks and four months. Some of these courses are self-paced, allowing students to complete lessons at their own pace. The Nanodegree programs are typically six to eight months and split into two terms. They have a pre-set timeline that applicants are required to follow.

Program material is provided exclusively online, comprising instructional videos and interactive online assignments. Students participate in project labs where they develop skills through complex projects that are built into the program and evaluated by experts in that field. They also have access to real-time online mentorship from Udacity staff. Experts in their network check in on a regular basis to keep students on track and provide technical skill support. Students may reach out to their mentors through the Udacity web platform. They also can use the platform to ask questions to peers or staff.

While Udacity is primarily an online platform, it has ventured into blended offerings for some programs. Team members in California, for example, developed the Udacity Connect initiative within the Nanodegree course. Udacity Connect requires the course instructor to meet with the cohort once

a week to conduct a workshop. It is offered in Cairo, Dubai, Saudi Arabia, and India.

Instructors

Program instructors have significant industry experience and most often are involved in the development of program content. The instructor selection process requires candidates to fill out an application form and complete a technical challenge to verify they have required skills.

Program Evolution

When Udacity was established in 2011, initial completion rates for its free courses were below 10 percent. The team altered its strategy and began offering paid online courses linked to strengthening employment options, using guidance from industry experts. The program has expanded to deliver more diverse, applied, hands-on coding instruction on the online-classroom platform, compared to the basic coding exercises and evaluations conducted earlier.

A core structural feature of the program is the emphasis on short instructional videos. The program has evolved to offer more modular content that is frequently updated to incorporate new technology learning. The program code is kept self-contained to allow for easy upgrades to programming language and the replacement of individual components.

Udacity has partnered with universities such as San Jose University and the Georgia Institute of Technology, as well as leading technology companies such as Google, to launch well-regarded Nanodegree programs recognized by employers. It has become part of employment initiatives that bring in over 200 hiring partners and career support to help students land their dream jobs. Making career support an incentive has helped increase pass rates beyond 50 people in some Nanodegree programs.

Udacity witnessed a growing demand in 2017 for its enterprise services. These include helping businesses meet their growing needs for tech-savvy workers by training their employees and job candidates.

PROGRAM IMPACT

Udacity offers industry-relevant curriculum and effective career support to Nanodegree graduates, making the program attractive to both students and employers. Nanodegree graduates in the United States and Canada have reported average salary increases of 38 percent through their new jobs.

Learning Goals

Skills taught within the program vary by field and include software development, business and data analytics, data science, social media analytics, artificial intelligence, and machine learning. Udacity also teaches more niche courses such as cybersecurity, driverless cars, robotics, and virtual reality. Course training includes:

1. **Immersive Curriculum:** This curriculum focuses on hands-on learning, interactive content, and measurable progress.

2. **Supported Journey:** Students are provided with experienced mentors throughout the course, along with expert reviewers, and an engaged and dynamic student community.

3. **Real-world Projects:** Students are required to work on projects designed by industry experts, given actionable feedback by industry participants, and are trained to produce portfolio-ready results.

4. **Links to Industry:** Udacity's curriculum is built in collaboration with the world's most innovative organizations. Udacity works with over 100 global companies and ensures that its course content is relevant for meeting today's industry needs.

Employment Process

Students enrolled in Nanodegree programs benefit from personalized career support and assistance in accessing employment opportunities. Their career support training includes:

1. Resume feedback with an expert review on how to market oneself

2. Mock interview experience to practice behavioral and technical questions

3. Exposure to potential employers through Udacity's global talent program

4. Networking opportunities with Udacity alumni through forums and meetups

Students may apply to job openings on Udacity's career portal that lists exclusive opportunities at partner organizations. Udacity works closely with more than 200 partners including AT&T, BMW, Didi Chuxing, IBM Watson, Mercedes, NVIDIA, Samsung, SAP, and Uber. Nanodegree graduates benefit from fast-tracked consideration for open roles at partner companies, giving them a distinct advantage during their job search.

Learner Perspectives

"Udacity helped me to accomplish a complete life-altering career change from TV personality to Android Developer at eBay!"
        – Working at EBay

"Soon after completing Udacity's Intro to Programming Nanodegree program, I was able to start a new career in technology with AT&T."
        – Working at AT&T

"I was a teacher before I studied with Udacity. My studies helped me get accepted in a competitive bootcamp, which eventually led to a job at Amazon."
        – Working at Amazon Web Services

Employer Perspectives

"We've been blown away by the caliber of students we've seen from Udacity's existing Nanodegree programs, and we're looking forward to meeting this new generation of robotics engineers."

– Director of Engineering, Uber ATG

"We're proud to partner with Udacity on the Robotics Nanodegree program to hire the brightest minds who will help us create the brightest future."

– Vice President, Engineering and Technology,
Lockheed Martin

"We are excited to partner with Udacity to get access to a global pipeline of talented individuals prepared to kick off a career in digital marketing."

– Employer Branding, Zalando

OPERATIONS

Path to Scalability

Udacity has grown tremendously since it launched in 2011. The company's online delivery channel has made it possible to deliver courses in more than 190 countries. It has acquired students through partnerships with technology firms. Its up-to-date content helps attract individuals who want to apply their learning to real-life workforce needs. It has been able to quickly update and build on courses by keeping its curriculum content as modular as possible. Udacity is currently using online marketing channels to increase its reach and grow its student base.

KEY PEOPLE

Sebastian Thrun
Founder, President & Executive Chairman

Sebastian Thrun is a scientist, educator, inventor, and entrepreneur. He is also the founder of Google X, where he led projects including the self-driving car and Google glass. Previously, he led the Stanford Racing Team whose robot, "Stanley", won the DARPA Grand Challenge. Sebastian has been named the fifth Most Creative Person in Business (Fast Company), among the 50 Smartest People in Tech (Fortune), and highlighted in 50 Best Inventions of 2010 (Time). He is the first recipient of the inaugural Smithsonian American Ingenuity Award for Education.