

DIGITAL TECHNOLOGY & PRACTICE (TECH)

TECH 3090 - Milstein Summer Program (2 Credits)

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023, Summer 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5010 - Values at Play in Digital Technologies (1 Credit)

Digital technologies raise important ethical questions. Although the focus is often on how ethical issues arise from ways people and organizations use these technologies, there is growing recognition that ethical values and actions are associated with the design and development of digital systems and devices—that the question of ethics must be addressed long before a product hits the market or sees widespread adoption. This course module introduces students to ethical thinking in the design and development of technical systems. With basic readings and introductory lectures, it provides students with a background in how to think about ethical values as a dimension of design and development. It adopts a framework known as Values at Play as a heuristic paradigm for putting these ideas into practice. Students are encouraged to apply this learning to their own projects.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5020 - PiTech Studio Seminar (1 Credit)

The Pitech elective is primarily a survey course, designed to expose students to an array of cross-sector and multi-disciplinary efforts at the intersection of technology and positive social change, including socially responsible businesses, impact investing, philanthropy, and technology-driven innovations in the non profit and public sectors. The course will also offer practical guidance and tools for building social enterprise, impact-driven business, using technology to deliver essential services, and for those who are especially concerned with principles of responsible innovation. The course will feature fireside chat guests from leading practitioners in the space. Previous guests have included executives, founders, funders, investors, and leaders from the Ford Foundation, Blue Meridian, Girls Who Code, Data & Society, Omidyar Network, The White House, The Global Impact Investing Network, and more.

Last Four Terms Offered: Spring 2025, Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5110 - Early Adopters (1 Credit)

Explore and learn a set of methodologies that support identifying and onboarding early adopters as customers for a new product built at a startup company, corporation, or project that expects to reach large scale. Students will complete the class with a set of tools and examples of real contracts, frameworks, and system and process designs that can be used to help support them in acquiring their first customer. In addition to the tools to support customer acquisition, students will make an attempt at acquiring their first customer for a real or hypothetical startup that is being built in the Studio at Cornell Tech.

Prerequisites: TECH 5900.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5111 - Don't Sell Sand in the Desert (1 Credit)

This course will take you through a deep dive into identifying effective go-to-market strategies: how to pick the one(s) to test, how to implement, how to assess success, and how to pivot as necessary. The GTM strategy is the gateway to the future of your company's marketing and sales efforts and a misstep here can cost you time, money, or your business. We will pressure test every element and find the flaws now, not when you are already in the market. This course will include case studies, current real-world examples, lots of in-class teamwork and exercises, and guest lecturers with practical experience. We will work on your projects so that you can make real progress in this critical area.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5120 - Building and Leading New Venture Teams (1 Credit)

The goal of this course will be to provide students with the insights and tools necessary to assemble and lead a team towards success in their early stage venture. We will take you out of your comfort zone in order to solve many of the problems that founders face - hopefully before they happen! There will be learnings and conversations around the mechanics of a startup including; founders agreements, equity splits and vesting, roles and responsibilities, and compiling an advisory board. However the primary focus of this course will center around the people you should or should not choose to embark on this journey with you. We will discuss finding and working with; co-founders, first employees, subcontractors, and even family! Also how to hire and retain for specific skill sets such as technology, handling conflict, and the creation of culture, all while building a team. Upon completion of this course you will have gained the ability to identify behaviors of success in people and to harness those behaviors as you provide team leadership enabling their participation in sustaining the culture, and ultimately the growth and success of your new venture. Learnings will also be gained directly from the real world, specifically the Instructor's experience with; investing in and building and sustaining growth within early stage ventures.

Prerequisites: TECH 5900.

Last Four Terms Offered: Spring 2024, Spring 2023

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5130 - Thinking Like a Venture Capitalist (1 Credit)

In this course, students will be tasked with thinking like venture capitalists. We'll simulate a typical Monday Partner Meeting where we will debate and make potential investments. We will think about ways to help existing portfolio companies in various situations, and ultimately create a new venture fund from the ground up. The course will involve lots of discussion and exposure to real-life situations facing VCs today.

Last Four Terms Offered: Spring 2025, Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5140 - Motivation Blueprint (1 Credit)

The Spring studio elective focuses on the science behind motivation, human behavior, and work. Students will engage in reading and discussion of research articles and contemporary perspectives, and apply the principles to real-world examples. By the end of the course, students will have valuable insights and practical strategies to empower themselves, their teams, stakeholders, and customers. The final deliverable will be a customized assignment based on each student's unique challenges and goals.

Last Four Terms Offered: Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5141 - Digital Innovation in Retail (1 Credit)

Last Four Terms Offered: Spring 2025

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5200 - Product Management (1 Credit)

This hands-on course helps students learn about and develop product management (PM) skills by putting those skills immediately to use in the context of in class-scenarios and other projects at Cornell Tech they might be working on (Startup Studio, Specialization, etc.). In each class, students learn about a different aspect of product management, product design, or technology development, and practice applying it in a group setting. By the end of the semester, students will have developed and practiced many of the fundamental product management skills required to develop new technology products.

Prerequisites: TECH 5900.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5205 - Breaking into Product Management (1 Credit)

This course offers a practical exploration of the product management field and its contemporary expectations and responsibilities. Students will get the opportunity to apply modern frameworks and techniques to product management assignments. Pulling from her experience at tech companies like Audible, Spotify, SoundCloud and AOL, Jori will give students a behind the scenes look into product management today and provide coaching opportunities to break into one of the most coveted roles in tech. The course involves hands-on assignments tied to studio work. Whether students are aspiring product managers or simply curious to learn more, this course equips them with the knowledge and practical experience needed to start exploring product management as a career path. Upon completion of the course, students will be well-versed in the product management field and equipped with tools to begin searching for a career in product management.

Last Four Terms Offered: Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5220 - Visual and Interaction Design for Digital Products (1 Credit)

Visual and Interaction Design for Digital Products introduces students to the concepts, methods, techniques, and theory of visual design in the context of creating digital products. Students will analyze examples, past and present, of form in relationship to content on web and mobile. From there, they will learn and practice basic principles for typography, color, and composition through prototyping, visual iteration, and critique. Brand elements, UX principles, accessibility, user research, and design systems will be discussed. You will not be a full-fledged, full-stack digital product designer at the conclusion of this seven-session course. You will, however, understand better how and why we should care about how people experience our products, and how seemingly arbitrary design decisions are in fact not arbitrary, and have consequences. We will be both working at the micro-scale (typography, color, form) and at the macro- scale (design patterns, accessibility, ethics) towards this understanding. You will understand better what makes a good designer, so that you're not just relying on job titles to figure out who knows what. We will also work towards habits of seeing and critique that will make you a better collaborator with other disciplines.

Prerequisites: TECH 5900.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020, Spring 2019

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5230 - Data Storytelling to Add Value and Build Better (1 Credit)

Studies suggest that stories are 22 times more influential than facts and figures alone. In this course, we'll break down the steps required to move from data to information to influence in the context of real world problems of your choice. Gathering data is one thing but how to use it is another thing entirely. Using data from user research, social media, and the public web, along with simple open source technologies, you will learn techniques to garner more meaningful insights while building a compelling narrative. At the end of this course, you will feel better equipped to focus on what matters, open people's minds & change behavior using data in simple and intuitive ways. Master this art because like the Native American proverb says, those who tell the stories, rule the world.

Enrollment Information: Enrollment limited to: Cornell Tech Student.

Last Four Terms Offered: Spring 2022, Spring 2021

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5240 - Branding for Products (1 Credit)

This course is designed to help students understand the strategic and practical aspects of designing a brand and an interface. We will cover the principles of brand strategy and brand design, user experience and interface design (UX/UI), and how to build a brand for the customer of the 21st century.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2022, Spring 2021

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5250 - Applied Technopoetics (1 Credit)

As artists use technology to make art, can we technologists use art to make technology? Compounding philosophy, literary theory, art, invention and entrepreneurship, we consider how artistic practices may be used to vitalize technological works with meaning and effect. You will apply these practices to whatever projects you are working on, whether digital products, tech startups or side quests - be prepared to share aha moments with the class.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5260 - User Experience Research (1 Credit)

Learn the basics of User Experience Research and its role in the successful product development cycle. This hands-on course will cover a variety of User Research techniques and how to effectively employ them at each stage of the product development cycle: ideation, prototyping and testing, launch, and beyond. In addition, the topics will include participant recruiting, ethical research, survey methodology, and usability evaluations.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5270 - Practical Introduction to Security and Privacy (1 Credit)

A broad survey of current computer security and data privacy topics from a practical perspective, focusing on attacks, defenses, technological and human factors, design principles, and best practices.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5271 - Red Teaming 101 (1 Credit)

Technology is neither good nor bad, nor is it neutral. It is Kranzberg's First Law that will guide this highly interactive and non-technical introduction to redteaming, the practice of testing products through the point of view of an adversary rather than that of an average consumer. Participants will work both individually and in groups to discover unintended and possibly harmful behaviors for popular digital tools, inhabiting the mindset of a scammer, a malicious state actor, or a troll. Participants should leave this course with a product-agnostic framework that helps them find possible abuse vectors before threat actors get to it.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5280 - Productizing Machine Learning (1 Credit)

This course will equip attendees with a basic playbook for turning artificial intelligence and machine learning technologies into great products and businesses. This course is for anyone who wants to work on such products, whether they intend to become a product manager, startup founder, product attorney, or anything else. Everybody is welcome in this course and diverse perspectives are valued and appreciated. Any Cornell Tech student can succeed in this class; no prior ML experience or expertise is required and there is no coding involved.

Enrollment Information: Enrollment limited to: full time students enrolled at Cornell Tech.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023

Learning Outcomes:

- Demonstrate fundamental understanding of the baseline process for productizing machine learning.
- Demonstrate the ability to critically adapt or revise the baseline process for productizing machine learning when applying it to a new target problem.
- Demonstrate fundamental understanding of common industry tools and processes for productizing machine learning.
- Demonstrate ability to thoughtfully map readings, lectures, and in-class comments and questions from classmates onto a new target problem chosen by student.

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5290 - Crisis Management in Tech (1 Credit)

A crisis can strike at any time, and it can have major impacts on a business, its reputation, and its customers. This course prepares future tech industry leaders to navigate crises. Each session dives into real-world case studies encompassing data breaches, product failures, regulatory incidents, service disruptions, cybersecurity attacks, and more. Through in-depth analysis and practical applications, students explore the multifaceted landscape of tech crises, crafting actionable crisis management plans. This course arms participants with a comprehensive playbook, honing their abilities to mitigate risks, lead during crises, and learn from incidents, ensuring preparedness and resilience in the ever-evolving tech sphere.

Last Four Terms Offered: Spring 2025, Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5900 - Product Studio (4 Credits)

The world is transformed by builders – individuals who combine engineering, business, design, and leadership skills to build new products, services, and business models. The Cornell Tech studio trains you to become a world-class builder. Product studio teaches a systematic process for finding something that is worth building. We learn how to do user and industry research, systematically identify new opportunities, select amongst them, and validate opportunities by designing experiments and prototypes. The class is taught in an experiential studio format, i.e. all skills are learned by applying them in building a real world product to address a validated need. Participants assemble teams with the requisite skills and receive extensive feedback on their work from their peers and industry professionals. Some participants go on to further develop these products and launch them as full-time startup founders, or product champions within established companies.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5910 - Startup Studio (3 Credits)

Students cofound their own startups, developing their ideas, products, and pitches, learning to create and tell a compelling startup story, and test their product with users. Students participate in three 24-hour Maker Days where they focus on developing their product and final presentation at the end of the semester.

Prerequisites: TECH 5100, TECH 5900.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5920 - BigCo Studio (3 Credits)

Most people who work in the tech industry will start and perhaps spend their careers in established companies. The companies we call BigCos have complex org structures, unique market dynamics, and different ways of getting things done. In this class, students will learn how to successfully navigate the opportunities and challenges of a BigCo and build products in a complex environment at scale from practitioners with extensive experience and prominent guest speakers. Students will also learn about how business development, M&A, and other corporate activities complement and sometimes compete with larger strategic initiatives. Students will work in teams matched with a real-world opportunity and advisor from a BigCo. Teams will build and pitch a product in three sprints culminating in a final presentation and demo.

Prerequisites: TECH 5900.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5930 - PiTech Impact Studio (3 Credits)

Public Interest Tech is defined by the deployment of technological expertise in service of the common good, often with a focus on under-resourced communities and needs. This course will address how leaders might use digital technology to: ? Assist communities in adapting and deploying digital tools to meet local public health priorities, such as food insecurity, social isolation, and healthcare access. ? Support public school systems in addressing pedagogical, equity, and privacy gaps of the software platforms they depend upon. ? Enable community participation in data collection and decision making ? Collaborate with stakeholders to apply digital tools and models in support of a more equitable and effective criminal justice system. ? Advise local policy makers on the externalities of emerging safety and surveillance technologies.

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Spring 2023, Spring 2022, Spring 2021

Schedule of Classes (<https://classes.cornell.edu/>)

TECH 5999 - Independent Study (1-4 Credits)

Enrollment Information: Enrollment limited to: Cornell Tech students.

Last Four Terms Offered: Spring 2025, Fall 2024, Summer 2024, Spring 2024

Schedule of Classes (<https://classes.cornell.edu/>)