# Sutardja Center for Entrepreneurship & Technology

## Spring 2021 Classes

Undergraduate and graduate students from **all majors are welcome** in SCET classes. See the SCET website for additional information on each of our classes and refer to the Academic Guide for class schedule details. All SCET classes can also be applied towards the SCET **Certificate in Entrepreneurship & Technology.**

### A. Richard Newton Lecture Series

INDENG 95 / 195 / 295 (1 unit)
Instructor: Victoria Howell

This lecture series features a selection of distinguished innovators and highly accomplished industry speakers who share their unique insights on industry developments, leadership, and innovation accumulated through experience in their careers. The course serves as a discovery course for topics at the intersection of technology innovation and entrepreneurship and is a requirement for two of the tracks to complete the SCET Certificate in Entrepreneurship & Technology.

### Applied Data Science with Venture Applications: Data-X

INDENG 135 / 290-005 (3 units)
Instructors: Ikhlaq Sidhu, Arash Nourian, Ed Henrich

Today, the world is literally reinventing itself with Data and AI. However, learning a set of 'related theories' and being able to 'make it work' are not the same. And, in areas as important as Artificial Intelligence, Data Science, and Machine Learning, if we collectively cannot actually implement and create, then we'll reduce our competitive advantage, economic strength, and even national/global security. The Data-X framework is designed to bridge the gap between theory and practice by exposing students to state-of-the-art implementation techniques and mindsets. This highly-applied course surveys a variety of key concepts and tools that are useful for designing and building data science, AI, and Machine Learning applications and systems.

### AltMeat: Product Design of Plant-Based Foods Challenge Lab

INDENG 185-003 (4 units)
Instructor: Ricardo San Martin

The market for plant-based products is expected to grow rapidly in the coming years as more consumers seek alternatives to meat, dairy, seafood, as well as plant-based food ingredients. This class is a hub where students closely interact with entrepreneurs, companies, venture capitalists and plant-based organizations, acquiring a holistic view of the plant-based food space. Students learn the principles of food science applied to the design and production of plant-based foods. Working in teams, they'll tackle industry challenges to design real novel plant-based products. Emphasis is given to the design of healthy, minimally processed foods, based on locally available raw materials. Graduates of the program have created new companies and/or work in leading plant-based companies.

### Product Management

INDENG 186 (3 units)
Instructor: Ken Sandy

Product Managers play an increasingly critical role in modern technology companies. In this course, students will learn essential Product Management skills by putting theory into practice, on a product or idea of your choosing. You will learn techniques to accelerate product success and avoid common mistakes. You will work in a team comprising of students from engineering, design, business and other backgrounds. Experience a live development of a product within the context of a product development process. Learn common methods used in product management. Gain experience needed to work as product managers in real life environments.

### Deplastify the Planet

INDENG 190E-001 / 290-001 (3 units)
Instructor: Mathieu Aguesse

The world is drowning in plastic that we've created, most of which takes hundreds of years to decompose. To solve this problem, we must find ways to replace or at least reduce plastic in manufacturing, to reuse, recycle or re-purpose plastic currently in use, to rescue discarded plastic from oceans or landfills, and to dispose of plastic responsibly. For this course, we find companies that want to achieve the same and will partner around this problem. Each company prepares a "deplastify challenge" based on their own business, and will be given student teams that work together to develop an entrepreneurial solution. Supported by representatives from their partner companies, students will work to understand the industry and challenge, then design prototypes and pitch their final solutions.

### DeCal: Decode Silicon Valley Startup Success

INDENG 198-002 (2 units)

We teach start-up intelligence. Our curriculum consists of guest speakers from top entrepreneurs and investors in Bay area and also hands-on assignments and projects to help students build their portfolio. As a result, this course will prepare students for starting up their own company or join an early-stage start-up. However, students can enroll in the course even if they aren't planning on starting up, lots of concepts and skills about entrepreneurship are highly transferable to other aspects of career development.

### Innovation-X: Future of Industry Startup Lab

INDENG 190E-002 / 290-002 (3 units)
Instructors: Ikhlaq Sidhu, Aleks Gollu

Innovation-X is an advanced venture project course where students will learn about the future of key industries and emerging technologies with project tracks in mobile network applications, 5G and Artificial Intelligence, Future of Work, Reimagining Education, Future of Entertainment, Re-Evaluating the Supply Chain, Advanced Manufacturing 4.0 and more. Leveraging advancements in AI, AR/VR, IoT, faster/better connections, students in the course will imagine the future, develop new concepts, and deliver MVP implementations of startup venture projects. Students will work with highly experienced mentors, experts and executives from these industry areas. Projects will focus on "Innovation That Matters" to work on future-focused venture projects that have the potential to make a large impact on industry and society. Note: The Innovating 5G/AI course has been expanded to allow for new project tracks in emerging innovation areas.

### Building with Blockchain for Web 3.0

INDENG 190E-003 / 290-003 (3 units)
Instructor: Luke Kowalski

Come learn why Marc Andreessen, creator of the modern web browser, says blockchain is "the most important invention since the internet itself." The Web 3.0 movement strives for a next generation of the Internet and protocols building with blockchain technology are leading this movement. In this course, students will work in teams directly with three leading protocols to build a prototype around a use case of students' choice, following our theme of Web 3.0. Students will have access to developer support from these protocols throughout the course, and the course will provide technical and entrepreneurial training through the instructor, mentors and guest lecturers. Students will learn about and understand the motivation behind Web 3.0 and blockchain, dive into and build on these emerging blockchain protocols, and gain practical skills while building functional prototypes.

### Build a Startup: Real Applications of Artificial Intelligence

INDENG 190E-004 (3 units)
Instructor: Luke Kowalski

Artificial Intelligence and Machine Learning (AI/ML) breakthroughs are changing the world, pervading every facet of business and society, and creating unprecedented opportunities for startups to create value. In this class, students will form teams, get exposed to AI opportunities from top AI founders & executives, receive mentorship from leading technologists to apply the latest in AI, take learnings to prototype AI startups, and pitch your startup to leading VCs for funding.

### Technology Entrepreneurship

INDENG 191 (3 units)
Instructor: Naeem Zafar

This experiential learning course, designed for upper-level undergraduates & graduate students, introduces key entrepreneurial concepts relevant to the high-technology world. Students are guided through how to take ideas to real products and start companies. Topics include the entrepreneurial process, customer discovery process, conducting market research, funding, entrepreneurial finance and creation of the material for investors. Students undertake intensive study of actual business situations through case studies, lectures and class discussions. Several guest speakers (entrepreneurs, investors, lawyers) are invited to speak to the class throughout the semester. The final outcome will be a short business plan, Executive Summary and team presentations to a panel of investors (VCs).

### Innovating Through Crisis

INDENG 185-002 (4 units)
Instructor: Ken Singer

Pandemics...Economic meltdowns...Wildfires...Hurricanes...Climate Change. Crisis is the new normal. Innovation is the answer. In order to thrive in this new normal, you must be prepared to lead in the creation of new solutions to emerging problems. It is not enough that you know how to run a regression model, write code, design a building, deconstruct language, write an essay, or create a financial model. You must be able to identify systemic problems hidden from view and develop financially and environmentally sustainable solutions. In this Challenge Lab, you will work with industry veterans to create technology solutions to the societal problems that have emerged from today's crises. Students in previous Challenge Labs have turned their projects into industry leading startups like Eko and PrimeRoots.

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