

Curriculum

THE PROGRAM

The program is designed around the core innovation and entrepreneurship curriculum. Depending on their course of study, students will have the option to supplement their coursework with mentoring before and after program completion. Also, the program offers opportunities for students to improve their practical skills through a choice of technical electives or independent study projects in mobile applications development, big data, digital signal processing and more. The goal is to provide a range of topics and experiences that will complement the core innovation and entrepreneurship curriculum.

THE EXPERIENCE

Early in the semester, students present ideas and opportunities for new startup ventures and form teams. By the end of the semester students must develop a prototype, investigate markets and customers through an intensive “lean start-up” process, and explore various business models. Students develop a deep understanding of innovation and the entrepreneurial process and how to effectively launch and scale a new venture. This program incorporates:

- classroom education in the form of lectures, case studies, and exercises from top faculty in entrepreneurship, innovation and related disciplines, drawing upon expertise in business, technology, design, leadership, finance, and law;
- numerous guest lectures and speakers, including entrepreneurs, angel investors and venture capitalists, attorneys, investment bankers, marketers and branding experts, social media experts, and others who bring their startup-building expertise into the classroom
- deep immersion into the local start-up ecosystem with numerous visits to companies ranging from early stage startups and accelerators to large enterprises

THE SPECIFICS

The foundation and structure for this program is laid in the classroom. However, much of the activity and learning takes place outside of the classroom as students

and teams build demos and prototypes, interact with customers, and evaluate funding alternatives, experience team dynamics, investigate partnerships, and develop and test various go to market strategies. More specifically, during this program students will experience and perform a broad variety of activities in a very hands-on manner, including:

- identify and screen promising opportunities,
- experiment with "design thinking" and rapid prototyping,
- create a minimum viable product and/or demo to share with the marketplace,
- undertake early "customer discovery" activities,
- learn about recruiting a team, team dynamics and culture setting,
- understand the role of "failure" in developing products, customers, and new ventures in general, and how best learn from and build upon failures to attain long-term success,
- learn core principles of effective branding and how to apply them,
- develop an understanding of competitive positioning of products and companies,
- develop an understanding of how and when "value" - as defined by the market in funding and M&A activities - is created over the life of an early-stage venture and implications for entrepreneurs in building a strategy for funding and liquidity,
- develop an understanding of how to "pitch" a new venture to investors and other stakeholders, including the development of key tools and skills,
- gain insights, tools and skills in effective leadership and communication in early-stage ventures and as companies grow,
- develop an understanding of marketing and go-to-market strategies and tactics,
- learn about financial models and business models, and the implications of these on building and funding new ventures,
- develop an understanding of intellectual property protection of various types ranging from patents to copyrights to trade secrets,
- gain knowledge of broader legal issues ranging from entity formation and types to strategies to limit the liabilities of organizations and entrepreneurs,
- gain a deeper understanding of the many ways that startup ventures can succeed and fail, including identification of early warning signs, the implications of such signals, and options for corrective action.

At the conclusion of this program each student team presents their venture to a panel of experienced entrepreneurs and investors, replicating the real world process that startup ventures undertake in Silicon Valley to launch their company and obtain funding for growth. In previous offerings of this and similar programs some of the student teams have gone on to obtain angel and venture funding, matriculate to prestigious incubator accelerator programs, launch successful products and services, build scalable and sustainable enterprises, including some ventures that have been acquired or held initial public stock offerings.

THE CORE

THEORY AND PRACTICE OF INNOVATION AND ENTREPRENEURSHIP – AN APPLIED APPROACH

This module represents the core of The Silicon Valley Innovation and Entrepreneurship Program, and it is in these sessions where most topics are initially introduced, to be investigated further in the workshop and also in site visits and with guest speakers. Current theory and practices will be introduced and integrated with hands-on activities and exercises that address innovation, startup formation, and the growth of early-stage ventures, incorporating best practices and teaching from UC Berkeley and across Silicon Valley regarding how successful ventures are conceived, launched and accelerated.

Students explore methods to launch, build and evolve new ventures with activities and learning based around new business ventures that they will be developing. Fast iteration and accelerated development are actively investigated incorporating “lean-startup” methodologies and activities. These business activities will be coordinated and integrated with deeper technology and product development activities and teachings offered in related classes and curriculum.

Each week, every team will provide an update of the activities they have undertaken and progress they have made since the prior session. Typically the instructor will introduce the topic for that session, provide comments and often lead a discussion, linking our discussion with reading assignments, videos, activities, sites visits, and other content and experience. Students sometimes break up into smaller working groups and also provide consulting and feedback to one another. Students are expected to make progress with their products/services/technology and their overall venture every week during the semester, with interim deliverables and presentations required to encourage and assess progress.

Students are assessed on the progress that they and their team make with their venture over the course of the semester, recognizing that each team may start at a

slightly different place. There are also individual assessments on class participation, interim deliverables, and their performance as consultants and clients to one another. In some instances ventures may progress relatively quickly while others may encounter problems with their product, business model, product/market fit, selling model, or others. Instances of failure such as this are common in Silicon Valley and an inherent element of the entrepreneurial process. When situations such as this occur during the semester then “failing fast,” incorporating those insights and learning, and developing a more promising “Plan B” will likely occur with some ventures and teams. How well the student navigates these issues and responds to adversity and changing conditions counts toward their overall evaluation.

Each class member is expected to contribute actively in the discussions and presentation critiques. Students must be willing to discuss their project in-depth and openly with others in the class including students, mentors and instructor(s); with these discussions taking place within the informal “NDA of the classroom” (nondisclosure agreement). This includes sharing failures and challenges, along with their responses to those types of events. Students will also act as consultants to one another, and also will be clients as a part of this consulting process, with learning expected on both ends of this consultant-to-client exchange.

ENTREPRENEURSHIP AND INNOVATION WORKSHOP

This workshop session meets once a week and is tightly integrated with the core curriculum coursework. The workshop provides a less formal and highly interactive environment to investigate issues in more depth and accelerate the development and evolution of the venture projects, also providing an environment for additional investigation of related issues. Workshop leader Whitney Hischer has taught numerous workshop programs such as this and will provide complimentary insights, perspectives and knowledge.

THE SILICON VALLEY ECOSYSTEM - IMMERSION, CULTURE, AND INSIGHT

Students meet with and hear from dynamic innovators in Silicon Valley both on campus at UC Berkeley and also during site visits throughout the Bay Area. Speakers share their successes and equally importantly their failures and how they responded to those failures. This course serves to put students in the “Silicon Valley” frame of mind and connected into the ecosystem. The speakers and topics will often share new perspectives on issues that the students are facing in their hands-on course work and projects in the core curriculum as they form teams, develop their MVPs (minimum viable products), create go-to-market plans, interact with potential customers and partners, and learn about the requirements to build a scalable startup venture. In addition to speakers coming to UC Berkeley, site visits

may also include trips to incubators and accelerators, venture capital firms, funding events, conferences or events, and more.

LEARNING OUTSIDE THE CLASSROOM

In addition to class and workshop attendance and work outside the classroom, students are also expected to attend a variety of entrepreneur and startup-oriented activities both on and off campus. These events strongly reinforce the material presented in class and will encourage greater and more personal initiative and immersion into the San Francisco/Silicon Valley entrepreneurial ecosystem and environment. These types of group events, presentations, hackathons, “meet-ups,” and other events are extremely common in the Bay Area.