TE - TECHNOLOGY ENTREPRENEURSHIP

TE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TE/)

Courses

TE 100 Introduction to Innovation, Leadership and Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/100/)

Students will learn about innovation, identify key attributes of innovation leadership, and practice innovation leadership personally and professionally. Students will identify opportunities and work in teams to address them, practicing leadership and followership and honing their written and verbal presentation skills. Students also complete a personal plan for continuing to develop their innovation leadership skills. Open to all majors.

TE 110 Communicating and Presenting in Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/110/)

Same as ENG 110. See ENG 110.

TE 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/198/)

Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. Approved for both Letter and S/U grading. May be repeated in the same or separate terms if topics vary.

TE 200 Introduction to Innovation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/200/)

Fundamental concepts of entrepreneurship, creativity and innovation will be explored within the context of new and existing businesses. Creative thinking and inventive problem solving will be emphasized. Prerequisite: Restricted to Innovation LLC students.

TE 230 Design Thinking/Need-Finding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/230/)

Same as ARTD 230. See ARTD 230.

TE 250 From Idea to Enterprise credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/250/)

Examines the fundamentals of technology entrepreneurship and addresses critical areas of the entrepreneurial process such as: problem and solution identification; validation of product-market fit; market assessment; team formation; product development; intellectual property; financing a technology-based startup. This class combines lecture, discussion & case studies, and is built around a hands-on group project leveraging the lean startup methodology from the National Science Foundation I-Corps program. The class is intended for all students of all disciplines interested in technology entrepreneurship.

TE 260 Communication for Tech Innovators credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/260/)

Explores the common characteristics of messages that motivate people to action. It follows the "Made to Stick" framework by Chip & Dan Heath and consists of brief and engaging exercises designed to hone those skills. This course is particularly valuable for technology innovators who must convey complex technical ideas in a simple, yet actionable way to their stakeholders.

TE 298 Special Topics I credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/298/)

Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

TE 333 Creativity, Innovation, Vision credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/333/)

Personal creativity enhancement via exploration of the nature of creativity, how creativity works, and how to envision what others may not. Practice of techniques and processes to enhance personal and group creativity and to nurture a creative lifestyle. Application to a major term project providing the opportunity to move an idea, product, process or service from vision to reality.

TE 350 Technology Venture Funding credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/350/)

Technology ventures are characterized by a need for significant upfront capital to fund engineering development efforts. This course will explore the ways that tech entrepreneurs can secure sufficient capital to bring their ideas to fruition including a detailed review of the difference between non-dilutive and equity funding and the multitude of funding sources that fit within these categories. Students will work in teams following the chronological progression of an early-stage technology venture and cover likely funding sources at each stage. In addition, we will cover company valuation, investment terms and potential pitfalls using real-world examples to illustrate the concepts.

TE 360 Lectures in Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/360/)

Fundamental concepts of entrepreneurship and commercialization of new technology in new and existing businesses. Guest speaker topics vary, but typically include: evaluation of technologies and business ideas in genera; commercializing new technologies; financing through private and public sources; legal issues; product development; marketing; international business issues. May be repeated in separate terms to a maximum of 2 hours, if topics vary; instructor approval required. Prerequisite: For undergraduate students only.

TE 390 Innovation and Engineering Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/390/)

Frames the engineering design process as a well-structured intellectual discipline that harnesses creative energy for effective innovation and problem solving. Students are expected to learn the tools and processes of engineering design in the context of multiple project proposals resulting in at least one viable project proposal by the end of the semester. Prerequisite: TE 250.

TE 398 Special Topics II credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/398/)

Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate term if topics vary.

TE 401 Developing Breakthrough Projects credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/401/)

Project-based exploration with teams of students working together in a large innovation and entrepreneurial context. Encourage development of innovative, leadership, and entrepreneurial skill sets, including financing, marketing, sales, operations, business plans, and management. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated.

TE 440 Engineering City Scholars credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/440/)

Fundamental concepts in entrepreneurship and data visualization for Chicago's local economy. Guest speaker topics vary but typically include: product design cycles across leading Chicago industries, challenges and impacts of growing and scaling businesses in the local economy, effects of regulation on Chicago businesses, market impacts on financing, and more. Students will explore how consistent engineering problems appear across multiple sectors of Chicago's economy and use data provided by the City of Chicago to analyze trends in Chicago's innovation ecosystem. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 6 undergraduate or graduate hours. Prerequisite: Restricted to Engineering City Scholars and Chicago MCS students.

TE 441 Engineering City Scholars: New Venture Creation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/441/)

Provides an in-depth exploration and application of the new venture creation process. Students will participate in the preliminary round of the UIUC/UC College New Venture Challenge and develop their own original business ideas. Student teams will present to a council of outside investors and entrepreneurs, obtain feedback on the viability of their venture ideas, and investigate the process of fundraising from both traditional and non-traditional sources of capital. 2 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 4 undergraduate hours. TE 441 begins earlier than the typical spring semester and lasts for 11 weeks. Refunds and deadlines may not follow the typical spring term dates. Please refer to the refund schedule for nonstandard courses on the Office of the Registrar's website. Class meets face-to-face at the Polsky Exchange North at 1452 E 53rd St. in Chicago, Illinois. Prerequisite: Restricted to Startup City Scholars students. Junior or senior standing required.

TE 450 Startups: Incorporation, Funding, Contracts, & Intellectual Property credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/450/)

Explores how legal tools may be used in the construction and successful operation of your company to deliver the next great product to market. Topics covered in the class include: issues with business formation, funding, intellectual property, non-disclosure agreements, contracts, and other corporate legal issues particularly impacting startups. 3 undergraduate hours. 3 graduate hours.

TE 460 Lectures in Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/460/)

Fundamental concepts of entrepreneurship and commercialization of new technology in new and existing engineering and high-tech businesses. Guest speaker topics vary, but typically include: evaluation of technologies and business ideas in general; commercializing new technologies; financing through private and public sources; legal issues; product development; marketing; international business issues. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms to a maximum of 2 hours, if topics vary; instructor approval required. Credit is not given for both TE 360 and TE 460.

TE 461 Technology Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/461/)

Critical factors affecting technology-based ventures: opportunity assessment; the entrepreneurial process; founders and team building; preparation of a business plan including market research, marketing and sales, finance, and manufacturing considerations. Students must have an idea for a new venture to participate in the course, and must be prepared to develop this new venture idea as part of the course. 3 undergraduate hours. 3 graduate hours.

TE 462 Leading Sustainable Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/462/)

Theories and process of change; systems thinking concerning change consequences; building coalitions and communities to support change; and implementing and managing projects effectively. Processes to plan, implement, manage, and sustain change with an organization through alignment of change strategies with organizational and individual concerns. 3 undergraduate hours. 3 graduate hours. Prerequisite: Restricted to undergrads with senior standing and graduate students.

TE 466 High-Tech Venture Marketing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/466/)

Cornerstone marketing concepts for innovators and engineers to enable analysis of products and technologies from a marketing perspective: engineering product development and adoption life cycle; objectives and strategies; marketing management; communication skills; sales process and tactics; special considerations for new high-tech engineering products and innovations. 2 undergraduate hours. 2 graduate hours. Credit is not given for both TE 466 and BADM 365.

TE 468 Transforming Marketing with AI credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/468/)

Cutting-edge use of artificial intelligence (AI) in marketing for technology ventures. How AI can revolutionize entrepreneurial marketing in targeting, personalization, content creation, analytics, optimization, customer service, sales, research, and ethics. Weekly examination of real-world case studies where leading companies harness the power of AI, supercharging their marketing efforts. Recognize how AI can be used to create more effective and efficient marketing campaigns in engineering entrepreneurship.

TE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/497/)

Advanced projects related to Technology Entrepreneurship. Approved for S/U grading only. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 3 undergraduate hours or 4 graduate hours in the same term if topics vary; may be repeated for an unlimited number of hours in separate terms. Prerequisite: Consent of instructor.

TE 498 Special Topics III credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/498/)

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TE 510 Advanced Creativity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/510/)

Exploration of concepts and theories in creativity and innovation with application of techniques and processes in order to enhance creativity skills. Emphasis on personalized learning objectives based on individual fields of study culminating in a major project with the opportunity to move a technical idea from vision to reality.

TE 560 Managing Advanced Technol I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/560/)

Business perspective of managing advanced technology in industry: strategic context of advanced technology; analytical financial tools used to estimate its potential value; legal concepts important in its management; interpersonal issues related to leading and advocating on behalf of advanced technology groups.

TE 565 Technol Innovation & Strategy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/565/)

Concepts and frameworks for analyzing how firms can create, commercialize and capture value from technology-based products and services. Business, commercialization, and management aspects of technology. Emphasis on reasons that existing firms or startups which have successfully commercialized products or services fail to sustain their success as technology changes and evolves.

TE 566 Finance for Engineering Mgmt credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/566/)

Cornerstone financial concepts for engineering management to enable analysis of engineering projects from a financial perspective: income statements; the balance sheet; cash flow statements; corporate organization; the time value of money; net present value; discounted cash flow analysis; portfolio theory.

TE 567 Venture Funded Startups credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/567/)

Concepts, tools, and language used by venture capitalists (VCs). Venture-scale opportunity assessment and articulation; venture capital financing and valuation; deal structure; term sheets; financial plans for startups; customer development and marketing; product iterations; sales execution. Prerequisite: TE 566.

TE 598 Special Topics IV credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/598/)

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