

Entrepreneurship and Innovation (ENTR)

ENTR 1201. The Entrepreneurial Universe. (4 Hours)

Introduces students to the world of entrepreneurship. Covers the importance of entrepreneurship, the characteristics of entrepreneurs, and the entrepreneurship process. Describes entrepreneurship in its various forms, including startup growth ventures, entrepreneurship in small and medium enterprises, and microbusinesses.

ENTR 1990. Elective. (1-4 Hours)

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENTR 2206. Global Social Enterprise. (4 Hours)

Designed to provide students with an in-depth exposure to entrepreneurship in the social sector, a rapidly growing segment of the global economy. Uses the case method to expose students to leading entrepreneurs who have developed and implemented business models to solve social problems such as extreme poverty, disease, illiteracy, and economic and social dislocation. Focuses on uniquely creative and driven people who have dedicated their lives to making a difference in the lives of others through values-based entrepreneurship.

ENTR 2215. Understanding Family Enterprise. (4 Hours)

Covers business, personal, and family issues found in family owned and managed companies, including management of the business, succession planning, entitlement, hiring, nonfamily employees, boards of advisors and directors, compensation, managing conflict, and communications. Designed for individuals who plan to enter into the management of a family business. Focuses on small and midsize firms with annual revenue of \$5 million to \$500 million.

ENTR 2301. Innovation!. (4 Hours)

Designed for students across the entire University who wish to learn about innovation—the creative process, the different types of innovation, how innovations are created, and how innovations can be transformed into commercial reality either as new products or new services and either in startups, existing corporations, and nonprofit entities. Offers students an opportunity to obtain the fundamental insight needed to understand the innovation process and to become a player in it.

Attribute(s): NUpath Creative Express/Innov

ENTR 2302. Innovation Through Applied Learning. (4 Hours)

Explores the creative process, the different types of innovation, how innovations are created, and how innovations can be transformed into commercial reality by exploring real-life situations and examples. Offers students an opportunity to obtain the fundamental insight needed to understand the innovation process by experiencing it firsthand.

ENTR 2303. Marketing Strategies for Startups. (4 Hours)

Designed to help aspiring and serious entrepreneurship students to generate and evaluate robust marketing opportunities that may serve as the foundation for a new venture. Once a new opportunity has been vetted, students then have an opportunity to work on developing an entrepreneurial marketing plan. Covers methods for recognizing, discovering, or creating opportunities and validating those opportunities. One of the biggest challenges entrepreneurs face is coming up with the right opportunity for a new venture. This is an applied and experiential course involving field research. Two key deliverables are the opportunity assessment project and the entrepreneurial marketing plan.

ENTR 2304. Industry Disruption and Corporate Transformation. (4 Hours)

Offers students an opportunity to learn several interrelated frameworks, concepts, and the language necessary to understand and analyze the origin and implications of industry disruptions and the difficulties experienced by incumbent firms as they seek to respond to the changes. Geared toward students who want to become innovation leaders in established companies and lead projects to create and launch new products or services, as well as students who plan to start their own businesses, particularly in high-technology sectors.

ENTR 2414. Social Responsibility of Business in an Age of Inequality. (4 Hours)

Studies how businesses can be agents for social good, both locally and around the world. In an era of growing social and economic inequality both in the United States and globally, many “enlightened” businesses are reconsidering their roles in creating opportunity for disadvantaged or marginalized people and communities. Focuses on businesses that have the resources to invest in innovative social responsibility programs that address the impact of rising social and economic inequality. Considers the tension between the single-minded notion of maximizing profit for investors and serving a broader stakeholder community. The role of entrepreneurship and entrepreneurial thinking plays a key role in student learning. This is an integrative course that includes areas such as business policy, governance, strategy, and decision making.

ENTR 2990. Elective. (1-4 Hours)

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENTR 3217. Global Family Business Leadership. (4 Hours)

Offers students an opportunity to develop an understanding of the nuanced challenges facing entrepreneurial leaders in different cultural settings. While family businesses have been found to be both numerically and economically significant in most countries, these enterprises worldwide share many common issues. However, there are differences that emanate from specific institutional and cultural contexts. Understanding these differences and how they can affect leadership of a family business is increasingly important for stewards of family businesses in a global marketplace. Understanding the nature of international differences and appreciating the opportunities they offer for growth-oriented family business leaders is especially important as family businesses face unique barriers to international expansion. Required participation in spring break international field project.

Prerequisite(s): ENTR 3215 (may be taken concurrently) with a minimum grade of D- or ENTR 2215 (may be taken concurrently) with a minimum grade of D-

ENTR 3220. International Entrepreneurship and Innovation Consulting. (4 Hours)

Offers students an opportunity to learn the principles and methods of consulting to growing companies and social enterprises abroad. This is done through a set of frameworks that focus on customer segmentation, product or service requirements, product-line and service strategy, business model design, and then internationalization strategy. Working in teams, students apply these frameworks to local companies in different business sectors and then prepare to apply them to client companies in their follow-on designated destination country. The final part of the course is preparation for the international field studies. This includes an introduction to effective methods for management consulting, including goal setting, team organization, and client management.

ENTR 3302. Managing and Growing the Family Business. (4 Hours)

Covers the issues and practices of successful multigeneration family businesses, including family values and culture, managing conflict, sibling rivalry, entitlement, hiring family and nonfamily employees, management of the family business, facilitating growth and change, and succession planning.

ENTR 3305. Business Model Innovation for Entrepreneurs. (4 Hours)

Considers dynamic entrepreneurial startup strategy from three perspectives: positioning of the venture within a dynamic, evolving industrial ecosystem that includes major companies, startups, and universities at various parts of the value-chain; different sources of innovation, including open innovation and industry-wide technology platforms; and business model design and implementation. Explores startup strategy from these perspectives using case studies and web-based company research projects and then asks students to develop their own strategy for a startup using the frameworks studied in class.

ENTR 3306. Global Entrepreneurship. (4 Hours)

Offers an opportunity to learn how entrepreneurs start, finance, and manage small businesses. Includes a field experience in South Africa, which involves identifying startups and small business for assistance in developing a business plan and seeking debt and/or equity financing. Students have an opportunity to consider the unique challenges encountered by entrepreneurs in economically disadvantaged communities and the additional challenges presented by South Africa's history of racism and its current struggles with HIV/AIDS. Teaches students the basic concepts and tools associated with small business management, such as preparing financial models and a written business plan and investment presentation, with the goal that they can provide meaningful consulting assistance to township entrepreneurs.

ENTR 3308. Business Economic History of South Africa. (4 Hours)

Covers the economic history of modern South Africa through lectures from faculty at the partner university in South Africa and also from the Northeastern professor. Includes the country's transition from apartheid to its present economic and political situation. Offers an opportunity to learn how South Africa has managed to overcome the struggles of its recent past and become one of the leading emerging economies of the world with a flourishing business community. Includes readings in and study of modern South African economics, law, history, politics, and culture.

ENTR 3330. Design Thinking for Startups. (4 Hours)

Focuses on how small teams can develop new products and services in a startup environment by applying design thinking methodology. Applies the management concept of lean, agile development to concept creation, customer research, prototype development, and market validation. Offers students an opportunity to apply these skills to their own new product or service ideas and develop prototypes during the semester. Students are assessed not only for the quality of their ideas and project execution but also for their ability to work in small teams, with limited resources, as in a traditional startup experience.

ENTR 3335. Product Innovation and Portfolio Management. (4 Hours)

Covers the intersection of project management, product development, and product portfolio management. Focuses on how large corporations develop, manage, and commercialize new products and services. Explores the unique attributes of different industries, such as internet platform-based firms, service-based firms, traditional manufacturing firms, and healthcare.

ENTR 3401. Consulting Operations & Growth in SMEs. (4 Hours)

Offers teams of students an opportunity to consult with owners of small- and medium-sized enterprises (SMEs) to develop project proposals and perform field casework specific to the needs of their SME clients. A highlight of this course is the SME consulting project. Through the project and course material, covers how to manage an SME from the day-to-day operations to strategic planning for growth. Exposes students to a variety of ways that an SME can achieve profitability and growth by generating lasting customer relationships, offering exemplary service, managing cash flow, implementing marketing strategies, and developing new and retooled products/services to reach new markets.

ENTR 3520. Impact Investing and Social Finance. (4 Hours)

Explores impact investing, a transformative way to work with money to achieve a more inclusive and sustainable economy. Large investors are entering the world of impact investing, a rapidly emerging space where social and ecological effects of finance are championed over maximizing shareholder value. New investment vehicles such as social impact bonds and Web exchanges are changing the role of financing institutions to better serve the needs of low-income populations around the world. Applies interdisciplinary frameworks, tools, and cases, with hands-on teamwork and guest speakers, to critically examine the field. Offers students an opportunity to learn to develop and test concepts that integrate social responsibility, sustainability, and mutual accountability into current financial and economic systems while expanding social capital markets.

ENTR 3990. Elective. (1-4 Hours)

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENTR 4225. Growth, Acquisitions, and Alliances. (4 Hours)

Analyzes whether, why, and how multibusiness corporations expand their operations into new business areas by questioning decisions to grow organically or through mechanisms such as acquisitions or alliances. Uses rigorous case-based discussions, expert readings, and major current events to discuss issues related to the choice of make, buy, or partner. Evaluates how these different corporate entrepreneurial strategies are used to help firms be more competitive and innovative.

ENTR 4414. Bridging Conflict, Creating Diversity. (4 Hours)

Offers students a unique opportunity to serve as management and marketing consultants to early stage startups. Students work with entrepreneurs from diverse backgrounds (e.g., ethnic, social, religious, demographic) with experience operating a joint startup. Focuses on development of conflict resolution and leadership development skills that may be needed when cofounders of a startup come from diverse backgrounds. Students experience firsthand some of the challenges that entrepreneurs face, as well as support entrepreneurs' efforts as problem solvers and collaborate to learn about entrepreneurship and marketing.

ENTR 4501. Entrepreneurship Seminar. (4 Hours)

Designed as an advanced course for students who are studying entrepreneurship. Covers the issues raised when creating a technology venture that goes through multiple rounds of financing in order to become a successful large company. Topics include managing growth, writing business plans, raising money, and formulating exit strategies. Focuses on projects to obtain venture financing from venture capitalists, angels, and corporate investors.

ENTR 4503. Owner and Family Managed Business Seminar. (4 Hours)

Designed for advanced students interested in launching a new venture or growing an existing business venture. Includes developing a business plan, strategy development for small- to medium-sized enterprises, sales forecasting, pro forma development, debt financing, and service developments. Sponsored by the Center for Family Business, focuses on obtaining a bank loan to start a business or to grow an existing small- to medium-sized venture.

ENTR 4504. Corporate Innovation Seminar. (4 Hours)

Offers students an opportunity to experience corporate innovation in the classroom. Corporate innovation involves an enterprise experimenting with modern practices, technology, strategies, and opportunities to make its existing business model more competitive in the current marketplace. Students, as a class, represent a specific firm and tackle these corporate innovation challenges by adopting a culture that embraces new technology and actively seeks out ways to enhance the firm's business model. With this proactive approach to corporate innovation, the students can visualize how enterprises can remain agile in the face of rising competition. The goal is to learn how corporations may even identify new opportunities before any startup has a chance to establish itself in the market.

Prerequisite(s): ENTR 2301 with a minimum grade of D-

ENTR 4505. Entrepreneurial Venture Growth Strategies. (4 Hours)

Focuses on helping technology ventures define and improve their strategies and tactics to achieve external funding. Studies frameworks for developing a growth-focused product and service strategy; techniques to grow and evolve a startup team, creating scalable business models; and early stage, successive-round venture finance. Working in teams, students must apply these methods to improve the business plans for early stage technology ventures and to create new financial projections and investor packages for early stage ventures, with specific assessments of customer focus and needs, intellectual property, new product-line and technology strategy, and business model design. Company projects include the fields of web services, IT, healthcare, and life sciences. The course is a practicum on how to get new venture concepts funded and scaled from the perspective of entrepreneur and investor.

ENTR 4506. Seminar in Social Innovation and Entrepreneurship. (4 Hours)

Focuses on a single developing region. Offers an opportunity to analyze the role of socially-driven entrepreneurship or "social impact enterprises" (SIEs) in alleviating poverty and its symptoms (for example, disease, illiteracy and chronic unemployment) in that country. Students have an opportunity to study the history, politics, and development of the country, with an emphasis on the role that private-sector initiatives have played and hope to play in addressing widespread poverty and with a focus on the failures and successes in economic and business development, economic growth, and poverty alleviation. Offers students an opportunity to develop a plan for a micro-investment strategy focused on these and/or similar businesses and organizations having a significant social impact in a developing country.

ENTR 4510. Management Consulting Abroad. (4 Hours)

Offers an intensive field consulting program with local ventures in different countries. Designed to have students experience firsthand the challenges that entrepreneurs confront internationalizing products and services as well as core product management issues. In some cases, students work in cross-culture consulting teams with local stakeholders. Projects vary widely but typically involve assessment of current product line and services strategy, marketing approaches, and how these must be adapted for foreign markets, including the United States. This is a field consulting course with heavy client engagement, requiring detailed written and oral communications for the client.

Prerequisite(s): ENTR 2301 (may be taken concurrently) with a minimum grade of D- or ENTR 3220 (may be taken concurrently) with a minimum grade of D-

Attribute(s): NUPATH Creative Express/Innov, NUPATH Integration Experience

ENTR 4983. Special Topics in Entrepreneurship. (4 Hours)

Covers special topics in entrepreneurship. May be repeated once.

ENTR 4990. Elective. (1-4 Hours)

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENTR 4992. Directed Study. (1-4 Hours)

Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. May be repeated without limit.

ENTR 4993. Independent Study. (1-4 Hours)

Allows students who have received approval to undertake independent study in lieu of any course required in the various concentrations. Students present proposals to an Independent Studies Committee for evaluation and approval. Every proposal requires a detailed outline of the objectives and plan of study and must be accompanied by a supporting statement from the supervising faculty member under whose direction the study takes place. A copy of the final report prepared by the student is presented to the appropriate Independent Studies Committee. Further information about the Independent Studies Program can be obtained from concentration coordinators. May be repeated without limit.

ENTR 5000. New Venture Development. (1-4 Hours)

Pairs students with entrepreneurs and faculty in a mentorship capacity. This experiential learning is designed to accelerate entrepreneurial projects. Uses classroom learning to enhance project value proposition, market opportunity, technology development level, financials, go-to-market-strategy, and pitches.

ENTR 6200. Enterprise Growth and Innovation. (3 Hours)

Explores the challenges and processes for harnessing technological innovation for new-business development. Integrates technology strategy, innovation in marketing, product development, and organization design for the purpose of enterprise growth. Through readings, cases, and exercises, studies how firms from different industries gain competitive advantage through distinctive products and services, and leverage their technologies and skills into new emerging markets. Also focuses on processes for conceiving, financing, and organizing new ventures.

ENTR 6210. Managing Operations in Early Stage Ventures. (3 Hours)

Stresses the operating problems of managing small businesses. Case studies develop analytical approaches for appraising the risks and rewards of potential growth opportunities as well as operating problems. Problems range from locating, evaluating, marketing, and financing a small company to the survival and growth of more established businesses. Guest speakers and entrepreneurs provide pertinent business perspectives to in-class activities.

ENTR 6211. Entrepreneurship: Services and Retail Business Creation. (3 Hours)

Covers the issues surrounding the creation of a new business in the service and retail sectors. Emphasizes issues relating to the startup, growth, and operation of business ventures in these areas. Topics include developing a business plan for startup, market positioning, services design, operations management, sales forecasting, cash flow management, and venture financing with a heavy emphasis on debt financing. Students are asked to develop business plans for services and retail ventures of their own choosing as the class project. Requires prior completion of 9 SH of MBA core courses.

ENTR 6212. Business Planning for New Ventures. (3 Hours)

Gives students the opportunity to build a complete business plan for new high-potential ventures. Covers all aspects of the planning process, from the point of view of both the prospective entrepreneur and the potential investor. Explores the demands of the entrepreneurial career through reading, self-assessment exercises, and group projects. Guest speakers from startup companies, law firms, and venture capital firms provide a window on current experiences in the small-business world. Recommended for prospective entrepreneurs as well as others who may become involved with new ventures.

ENTR 6214. Social Enterprise. (3 Hours)

Designed to provide students with an in-depth exposure to entrepreneurship in the social sector, a rapidly growing segment of the global economy. Uses the case method to expose students to leading entrepreneurs who have developed and implemented business models to solve social problems such as extreme poverty, disease, illiteracy, and economic and social dislocation. Focuses on uniquely creative and driven people who have dedicated their lives to making a difference in the lives of others through values-based entrepreneurship.

ENTR 6216. Global Social Entrepreneurship and Innovation. (3 Hours)

Explores using innovation to build and create value in the larger global context. Examines some of the latest innovation practices: (1) to build and create value within emerging economies, (2) to facilitate social entrepreneurship, (3) to promote sustainable development, and (4) to build and create value at the bottom of the pyramid. Exposes students to what successful entrepreneurs must learn to balance business demands with the larger need for innovative thinking. Stresses the application of successful practices to generate results. Topics include creating and sharing knowledge and intellectual property, exploiting systems and networks, redefining disruptive innovation, and the steps necessary to make innovation and entrepreneurship happen in a variety of global contexts. Uses real-life examples and case studies to illustrate successful practices.

ENTR 6217. Lean Innovation. (3 Hours)

Explores how corporate venturing and entrepreneurial teams can quickly and effectively bring new concepts to market. Demonstrates how small technical teams can quickly investigate opportunity spaces, develop and select concepts, and translate these into prototypes. Other topics include industrial design thinking, project teams, prototyping, and commercialization of design. Explores the challenges and solutions to managing a technology-based product within an established corporation and details frameworks on how innovative projects can be inexpensively tested and deployed within the organization.

ENTR 6218. Business Model Design and Innovation. (3 Hours)

Introduces major topics in the modern understanding of business models: their essence and role in securing competitive advantage, key components and design of business models, business model change and innovation, technology commercialization through sustaining business models, financial representation of a business model, and validation of developed business models.

ENTR 6219. Financing Ventures from Early Stage to Exit. (3 Hours)

Introduces students to the financing process for ventures from early stage to exit. Exposes students to various financing options, which may include crowdsourcing, the American JOBS Act, and foreign-sourced capital, as well as different types of debt and equity financing. Offers students an opportunity to learn about analyzing financial aspects of term sheets, including valuation methodologies and other financing documents.

ENTR 6220. Family Business Leadership and Governance. (3 Hours)

Explores the unique challenges and strengths of family firms. Uses a learning framework with particular emphasis upon the insights and lessons learned by successful family business leaders. Offers students an opportunity to heighten their awareness of themselves concerning their roles in the family firm and their future career plans, as well as to develop key leadership skills associated with strategic planning and implantation within family enterprises. Explores particular functional issues unique to family firms in the areas of marketing, finance, control and human resource management, as well as family and business governance. Restricted to business students only.

ENTR 6222. Competing in Dynamic, Innovation-Driven Markets. (3 Hours)

Reviews the key theories and tools needed to understand how technological change creates new markets and prompts new business models, how technology-based firms can outcompete rivals in fast-growing markets characterized by high uncertainty, and how the evolution of technology in an industry affects the type of firm capabilities needed to succeed over time.

ENTR 6224. Intellectual Property and Other Legal Aspects of Business and Innovation. (3 Hours)

Introduces the major areas of the legal environment for innovation and new ventures and their relationship to early stage decisions and product and business development. Analyzes the nature, practical impact, and competitive usefulness of laws in the areas of intellectual property, contracts, employment, e-commerce, regulatory compliance, and entity formation. Offers students an opportunity to integrate and apply their understanding of legal, financial, business, technology, and ethical factors; sharpen their analytic skills; and use their skills and understanding to recognize opportunities for adding value and managing risk.

ENTR 6225. Acquisitions, Alliances, and Growth. (3 Hours)

Offers students an opportunity to analyze whether, why, and how multibusiness corporations expand their operations into new business areas by questioning decisions to grow globally through mechanisms such as acquisitions or alliances. Uses rigorous case-based discussions, expert readings, and major current events to discuss issues related to the choice of make, buy, or partner. Offers students an opportunity to evaluate how these different corporate entrepreneurial strategies are used to help firms be more competitive and innovative.

ENTR 6230. Platform Innovation. (3 Hours)

Provides a business perspective on how to design and optimize platform-based business models for growth, value creation, and innovation and a practical analytical toolkit of theories, concepts, and frameworks. Uses case studies from various industries. Many of today's growth enterprises and startups are organized as platforms. Platforms facilitate other actors and support interactions among a wider "ecosystem" of users, services, suppliers, etc., and they have potential for massive growth and value creation. High returns to successful platform business models lead companies to learn to act like platforms. Technology trends toward digitization, big data, automation, etc., accelerate these trends. Aimed at people looking to work within existing companies or those interested in starting or growing new platforms.

ENTR 6318. Innovating and Creating Futures. (2 Hours)

Introduces a number of entrepreneurship and innovation topics, including innovation and entrepreneurship as a value-creating activity for economies and firms; types of innovation (technological, process, products, business models); fundamentals of product development (design thinking, rapid prototyping, ethnography); startup creation and articulating a value proposition; the role and traits of the entrepreneur; maximizing odds of success and minimizing odds of failure; growing the startup and creating a market; finding or creating the right niche; pivoting and judo strategy; lean startup approach; innovation in established firms and resistance to change; organizational inertia; business model change; and technological discontinuities.

ENTR 6320. Innovation, Entrepreneurship, and Dynamic Competition. (3 Hours)

Explores the life cycle of industries and their effects on the dynamics of competition, including the creation of industries and the role of startups and proliferation of designs; the half-truth of entry timing advantage; design competition, emergence of dominant designs, and implication for firm strategy and industry structure; the onset of maturity: the role of process innovation and incremental product changes; technological discontinuities, challenges for incumbents, and opportunities for new entrants; the hybrid trap and how incumbents often miss the mark during times of industry transformation; the rise of platform disruptions and winner-take-all dynamics; the sociocognitive dimension of industry evolution: product categories and framing; and best practices for managing innovation in startups and established firms. Taught through a combination of cases, vignettes, and interactive lectures.

ENTR 6962. Elective. (1-4 Hours)

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENTR 7976. Directed Study. (1-4 Hours)

Offers independent work under the direction of members of the department on chosen topics. May be repeated without limit.