



IDE 402

Senior Innovation III: Venture Planning and Pitch

Charles V. Schaefer, Jr. School of Engineering and Science
Spring 2025

Overview

This course supports students in advancing their senior projects by transforming their ideas, designs, or research into fully developed innovations. In IDE 402, students will focus on creating a comprehensive business plan and preparing to compete in the Ansary Entrepreneurship Competition. The course emphasizes the strategic development of a business case, demonstrating each project's potential for real -world impact. Senior Innovation is closely linked to Senior Design, ensuring that the entrepreneurial value of each project is fully realized.

Introduction to Course

Students across various disciplines will engage in the process of refining their innovations into viable business opportunities. This course emphasizes the identification and articulation of entrepreneurial value, as well as the strategic development of a business plan. Through a variety of exercises, students will define their market strategy, develop a business model, and articulate their business idea to various stakeholders, including potential investors. The course is designed to foster an

entrepreneurial mindset that prepares students for the challenges of bringing their innovations to market.

Learning Goals

After taking this course, students will be able to:

- **Develop a Viable Business Opportunity:** Clearly define and articulate a business opportunity based on their project, aligning it with market needs and customer demands.
- **Create a Comprehensive Business Plan:** Develop a detailed business plan that outlines the project's value proposition, market potential, revenue model, and operational strategy.
- **Effectively Communicate and Present:** Confidently present their business idea to potential investors and stakeholders, both in oral pitch and written plan formats.
- **Analyze Market Potential and Competitiveness:** Assess the market size, competition, and potential for success, ensuring that their project is positioned for real-world impact.
- **Cultivate an Entrepreneurial Mindset:** Apply innovative thinking and problem-solving skills to navigate the complexities of bringing a product or service to market.

Pedagogy

This course is designed to be highly interactive and practical, focusing on the strategic development of a business plan and preparing for the Ansary Entrepreneurship Competition. Each session will begin with a focused lecture that introduces key concepts and strategies related to business planning, market analysis, and pitching to investors. Following the lecture, the class will transition into a workshop format, where teams will collaborate on assignments directly related to their projects. This hands-on approach allows students to apply what they've learned in real-time, fostering a deeper understanding through practical experience.

During workshop sessions, the instructor will engage with each team, offering guidance, answering questions, and helping to refine business strategies. This interaction not only addresses specific challenges but also builds rapport and

encourages a dynamic, collaborative learning environment. By the end of the course, students will have developed a comprehensive business plan and pitch, receiving constructive feedback that will prepare them for the Ansary Entrepreneurship Competition and their future careers.

Required Text(s)

No textbook is required. All materials used in this course are provided on Canvas.

Assignments

The course assignments consist of several deliverables:

- 1. Business Model Canvas**

- Develop a business model that clearly articulates how you will deliver proposed value to customers, considering market needs and operational strategy.

- 2. Revenue Model**

- Assess and articulate the most effective ways in which revenue can be generated by your business, ensuring sustainability and profitability.

- 3. Lean Canvas**

- Develop a Lean Canvas model to define and articulate your minimally viable product (MVP), focusing on solving critical problems for your target market.

- 4. Market Potential**

- Define the market size and identify the segment that can be reasonably acquired, analyzing competition and positioning your project for success.

- 5. Executive Summary**

- Create a concise, one-page executive summary that outlines the key points of your business plan, highlighting the most compelling aspects of your project.

- 6. Business Plan**

- Develop a comprehensive business plan that details how your business will operate, generate profit, and scale, including a

thorough analysis of market trends, customer segments, and financial projections.

7. Business Pitch

- Develop and deliver a polished, three-minute pitch that effectively communicates to investors why your business and your team are worthy of their investment. This pitch will be crucial in the Ansary Entrepreneurship Competition.

Career-Defining Learning and High -Stakes Competition

IDE 402 is designed to equip students with the skills and knowledge necessary for successful careers in innovation and entrepreneurship. The course culminates in the Ansary Entrepreneurship Competition, where students have the opportunity to compete for significant cash prizes—\$10,000 for first place, \$5,000 for second, and \$2,500 for third. Beyond the financial rewards, excelling in this competition is a prestigious achievement that will enhance your resume and demonstrate your ability to innovate, lead, and bring ideas to market.

How IDE 402 Prepares All Disciplines to Compete

1. **Tailored Business Strategy Development:** Students learn to create business strategies that highlight the unique strengths of their projects, ensuring competitiveness regardless of discipline.
2. **Market Segmentation and Strategy:** The course teaches students how to identify and target the most suitable market segments, making their innovations relevant and competitive across different fields.
3. **Entrepreneurial Mindset and Innovation:** The course fosters an entrepreneurial mindset that is adaptable to any field, encouraging creative problem-solving and innovation that can stand out in the competition.
4. **Comprehensive Project Management:** Students develop robust project management skills, ensuring that their projects are well-planned, executed, and presented, regardless of their technical background.
5. **Effective Stakeholder Communication:** Emphasis is placed on clear and persuasive communication, enabling students to effectively convey the value of their projects to a variety of stakeholders, including competition judges.

6. **Patent and Intellectual Property Awareness:** Students gain knowledge of patent searches and intellectual property, which can give them a competitive edge by protecting and strategically positioning their innovations.

Attendance Policy

Attendance is crucial in this course due to its workshop-based format, where team collaboration and participation are vital for success. Each student's presence is essential not only for their own learning but also for the success and morale of their project team. To ensure students remain engaged and accountable to their teams, the following attendance policy will be enforced:

- **Unexcused Absences:** For every unexcused absence, a student's final course grade will be reduced by one full letter grade. This means:
 - 2 unexcused absence: Final grade drops by one letter (e.g., A to B)
 - 4 unexcused absences: Final grade drops by two letters (e.g., A to C)
 - 5 or more unexcused absences: Automatic course failure
- **Excused Absences:** Excused absences must be documented and approved by the instructor in advance whenever possible. Examples of valid reasons for an excused absence include medical emergencies, family emergencies, religious observances, institutional responsibilities, legal obligations, or pre-approved academic or professional opportunities. It is the student's responsibility to communicate with the instructor and provide appropriate documentation.
- **Accountability to Teammates:** By being absent, you not only miss out on valuable learning experiences but also hinder your team's progress. Your teammates rely on your contributions to move the project forward, and your absence can lead to delays, lower team morale, and reduced overall project quality.
- **Solo Work for Missed Classes:** Students who miss a class, whether the absence is excused or unexcused, will be assigned solo work to make up for the missed class time. This work will be designed to ensure that the student can independently cover the material and contribute effectively to their team upon their return.

- **Instructor Discretion:** Instructors reserve the right to determine the validity of excused absences and to make necessary grade adjustments based on attendance. Frequent absences, even if excused, may still impact a student's ability to succeed in the course and could lead to further academic consequences. Instructors may also require that any missed work due to an excused absence be completed within a reasonable timeframe.

Ethical Conduct

Enrollment into the undergraduate class of Stevens Institute of Technology signifies a student's commitment to the Honor System. It is the responsibility of each student to become acquainted with and to uphold the ideals set forth in the Honor System Constitution. Specific student responsibilities include:

- Maintaining honesty and fair play in all aspects of academic life at Stevens.
- Writing and signing the pledge, in full, on all submitted academic work.
- Reporting any suspected violations to an Honor Board member or to the Dean of Student Development.
- Cooperating with the Honor Board during investigations and hearings.

Pledge of the Honor System

The pledge signifies that the work submitted by a student is indeed his/her own. There is one designated pledge to be used for tests, homework assignments, lab reports, and computer projects. The pledge shall be written in full and signed by the student on all submitted academic work. Any references used (including texts, tutors, classmates, etc.) should be listed below the written pledge:

"I pledge my honor that I have abided by the Stevens Honor System."

Please note that assignments in this class may be submitted to www.turnitin.com, a web-based anti-plagiarism system, for an evaluation of their originality.