

Technion - Israel Institute of TechnologyThe William M. Davidson Faculty of Industrial Engineering& Management



MBA- Focusing on the Management of Technology-Based Firms

Syllabus

Project in Entrepreneurship

Course Number: 099777

Number of credit points: 5

Mini-Semester: Academic Year: 2022

Time: Thursday, 17:30 – 21:30

Course Instructor: Dr. Barak Ben-Avinoam

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Office hours for students: By appointment.







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Course Objectives:

This course simulates the founding of a new venture around IP-based. Students will have a unique opportunity to experience a startup in the pre-seed phase, commonly considered to be the most difficult and critical phase in the life of the venture.

Starting from a basic idea, each 4-Students group will be asked to develop a pitch deck, a short business plan, and a financial model for the venture and present it in front of potential investors. The students will benefit from learning from experienced entrepreneurs, investors and practitioners through Zoom interviews.

Course Scope:

- Familiarize the student with the necessary steps to evaluate a new idea from patent search through idea validation and pivoting.
- Familiarize the student with possible business models and monetization possibilities.
- Familiarize the student with concept and tools in developing R&D, marketing and work plans.
- Present the student with go-to-market strategies.
- Provide the student with the tools needed to build a budget and financial projections for the venture.
- Provide the student with necessary tools for developing a business plan.
- Experiencing real-life dilemmas whereas decisions need to be taken despite uncertainties in the presence of limited resources and time constraints.
- Experiencing working as part of a founding team who is expected to deliver while competing other teams/ventures over funding, traction and resources.
- Improve presentation and pitching skills.
- Experiencing pitching in front of potential investors.

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Teaching Methods:

- Learning by doing will be used as the primary teaching method. Students will gain hands-on experience through the initiation of a real-life venture.
- In-class discussions and brain storming over common challenges and decision takings.
- Weekly meetings with the teaching team and/or interviews with industry experts from relevant areas.
- Lectures that will be given by the Course Instructor / Teaching Assistant / Guest speakers providing tools necessary for founding a new venture.

Course Content & Requirements:

Team assembly and idea selection -

Students need to form teams with <u>3-4</u> members and send the team's composition along with short bio of each member in the team <u>by March 4, 2021</u> to Dr. Ben-Avinoam and Na'ama.

All students should register on www.startupnationcentral.org and familiarize themselves with the Finder search engine. Students are strongly encouraged to create a venture around a Technion patent. The patent portfolio is searchable at http://t3.trdf.co.il/ Upon approval of the teams, a meeting can later be set with the relevant Technion Business Unit representative.

The list of approved projects will be announced by <u>Session 1</u>. Although, preference will be given the Technion's patent portfolio, students may propose to develop their own IP/Patent. Teams may do so, only upon specific <u>prior-approval</u> of the teaching team and as long as that such an idea is based an existing patent or at least is patentable. Projects in the field of mobile applications are not acceptable for this course.

Appropriate patents should allow short/mid-term commercialization (as opposed to basic research patents that require further research before they can be commercialized).

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Course Assignments – Verbal and Written:

I. 5 short in-class Presentations:

The teams will be asked to prepare and be ready to verbally present and discuss the following topics:

A 1-minute elevator pitch – Session #2

A 5-minute presentation on the venture (problem/solution/market) – Session #3

A 5-minute presentation on the venture's business model – Session #4

A 5-minute presentation on the venture's budget – Session #5

A 5-minute presentation on the venture's operations plan – Session #5

A 5-minute draft final presentation – Session #7

The presentations/pitch will be presented in class by one of the team members (each team member will be required to present at least once along the course).

II. Interview with a relevant person from the field:

Each team will choose a topic from the list available via Moodle, and present the class with a short pre-recorded interview with a person from the chosen field (e.g., you can interview a Chief Financial Officer of a company for the Budget class). You should strive to interview an interesting figure, with relevant questions which demonstrate your understanding of the essence of the chosen topic. An interview should last 15-20 minutes.

III. Final Course Presentation:

The final team presentation will be composed of a 10-slide presentation (not including title and thank you slides) that will be held during the last session of the course. Each team will have 15 minutes to pitch its venture to the investors.

IV. Investment Memo:

Following the final presentations each group will prepare and submit an investment memo recommending investment in one of the ventures (not including the venture they are a part of).







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Course Plan

Session	Date	Class Topic	Written Assignment Due
1	17.2.2022	Housekeeping, course intro. Ideation and patent search. Validation. Elevator Pitch.	Original Idea for the project
2	24.2.2022	Business Model Canvas 1: Customer, value proposition, revenue streams	Validation Board + Elevator Pitch
3	3.3.2022	Business Model Canvas 2: Resources, cost structure	
4	10.3.2022	Budget and Operations Plan	Business Model Canvas
5	24.3.2022	HR; ESOP	Budget and Operations Plan
6	31.3.2022	Term Sheet, Investment Memo	
7	28.4.2022	Term Sheet negotiations Simulation. Peer review of final projects	
8	12.5.2022	Pitch Event	Investor Presentations
N/A	14.6.2022		Due: Group Investment Memo

By the first session, all students should already have been assigned to teams and each team should have selected an initial idea for their project.

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Sessions Structure:

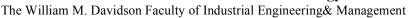
Each session will be divided into three sections:

The <u>first section</u> will be devoted to a short team presentation, in which each team will present to the class a short, pre-recorded Zoom interview with an industry expert in the field that is relevant to that particular lesson. The presentation will be in front of class followed by class feedback and discussion over common difficulties/issues.

The <u>second section</u> will be devoted to a theoretical overview of topics and tools relevant to that particular lesson – patents, technology, marketing, business models, financial planning, HR aspects and financing.

The <u>third section</u> will be devoted to peer review of the individual ventures. Teams will be asked to analyze and challenge the core assumptions of another team with the aim of helping that team improve their venture. This should also prepare teams to take and respond to live criticism of their venture which is a necessary skill in order to thrive in the VC environment.







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Student Assessment:

This course accredits 5 points and should be the main course taken during the mini semester. Accordingly, it is expected that EACH student will attend the weekly meetings and invest 10 hours per week either in team or individual work, during the entire period of the course.

The final grade will be based on the following elements*:

Assignments:	30%
Pre-recorded Interview:	10%
Investors Presentation**:	25%
Investment Memo:	25%
Personal contribution (Class discussions / Teamwork) ***:	10%

- * Attendance in 7 out of the 8 sessions is compulsory (throughout the entire session).
- ** Attending the last session is mandatory.
- *** Students who plan to miss a session should notify and receive the lecturer's approval, in advance.



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Recommended Readings:

- http://www.ted.com/talks/steven_johnson_where_good_ideas_come_from
- Scott Shane, "Finding Fertile Ground: Identifying Extraordinary Opportunities for New Ventures", Pearson Education, 2005.
- ❖ Kawasaki Guy, "The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything", Penguin Group, 2004.
- ❖ Ries Eric, "The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses", Crown Publishing, 2011.
- ❖ Magretta Joan, "Why business models matter", HBR, May 2002; 80(5):86-92, 133.
- ❖ Sinek Simon, "Start with Why: How Great Leaders Inspire Everyone to Take Action", Penguin Group, 2011.
- ❖ Dan Senor and Saul Singer, "Start-up Nation: The Story of Israel's Economic Miracle", Hachette Book Group, 2009.
- ❖ Van Aardt, Isa, "Entrepreneurship and New Venture Management", Oxford University Press, Cape Town South Africa (4th Edition), 2011.