**Course No:** CS-CC-XXX

**Course Title:** Introduction to IT Entrepreneurship (CC)

**Credits:** (6-2-4)[[1]](#footnote-1)

**Instructor:** Alexander Semenov (email: semenov.venture@mail.ru)

**Prerequisite courses:** none.

**Course outline:**

**The purpose** of the **Introduction to IT Entrepreneurship** program is to enable the course participants to study the fundamentals of entrepreneurship and business operations in context of the Russian and international environment and to study various aspects of the process of new IT business and startup founding. The course will give advanced competences in innovative IT idea commercialization especially in marketing and financial aspects and in startup creation.

**The objectives of the program**

* To form the basic knowledge of the principles of IT entrepreneurship.
* To provide the knowledge of business planning, marketing research and financial modeling for an IT startup.
* To master the key competences of an innovative idea commercialization and investor attracting.
* To learn the art of business strategy development for an IT startup.
* To learn how to create a business-model and financial spreadsheet of an IT project.

**After the completing the course the participants will obtain**

* Knowledge of the fundamental principles of entrepreneurship and business law and skills of use it in practice.
* Knowledge of the main business-models and types of IT companies.
* Knowledge of the main principles of the innovative IT project commercialization.
* Skills of the innovative project strategic and operational management.

**Required background knowledge:**

No special knowledge, starting with basics.

**Course Syllabus:**

**Part 1: January 20**

**Lectures 1, 2**

**The fundamental principles of IT entrepreneurship**

**INTRODUCTION**

The role of an entrepreneur and entrepreneurship in IT economy.

Differences between entrepreneurship and other types of a business management and economic activities.

The main entrepreneur’s competences.

The aspects of the entrepreneurship statutory regulation.

How to start a business.

Different types of the enterprise companies:

* Software Business
* Internet services
* eFinancial projects
* Infobusiness, e-learning.
* Companies in university ecosystem, research institutes, corporations.

Practical recommendations: which sectors are favorable for creation the IT company in Russia.

**Part 2: January 21**

**Lectures 3, 4**

**Product, market, business model of an IT project**

Business-model as the base of competitiveness and the innovation startup strategy. Parameters and metrics of business-model quality. Business model canvas.

Business ideas generation: how to create the concept suitable for opening of business. Methods of collective working on a business idea.

Mission of the company. Fast profit or company capitalization growth - what to choose? Building of the business "for the constant dividends" or " for sale".

Business model: initial development and testing.

Problem of business scaling. How to scale an IT business.

Key performance indicators as reflection of the purposes and tasks of a company, leader and certain employees.

The use of «roadmap» technology

* What is it?
* For what purpose it should be created?
* The steps of its creation.

Steve Blank’s Customer Development concept. Business-model evaluation. Importance of the consumers’ feedback. How to define the need of the business-model correction.

**Part 3: January 22**

**Lectures 5, 6, 7**

**Market advance – the main source of expenses**

Innovation’s life cycle. G. Moore’s Approach of "Crossing the Chasm" to a product introduction to the mass market. How to penetrate the Blue Ocean and skip the competitors?

Chris Anderson’s "Long tail" concept - organization of a large number of small diverse sales online.

Instruments of low budget market promotion of an IT product or service.

Outlining of a marketing plan and marketing budget of an IT startup.

**Laws of business and investment attraction**

Basic principles of creation of the modern innovative company.

Opening of the independent startup company. Investor attracting and involvement. Methods of communications with investors. Basics of Investor Relations:

* An object of the search.
* Methods of a search for the investor.
* VC and Seed market. Public grants in Russia.
* Negotiation with investors.
* Documentary registration of a deal with investors.
* Necessary documents for the investor.
* Venture and business angel investing principles. How to attract an IT investment in Russia.

**Part 4: February 10**

**Lectures 8, 9, 10**

**Financial plan of an IT startup**

* Business planning. The structure for a business plan. The business plan "for investors" and "for everyday life". Differences in approaches.
* Drawing up the financial model. Forecasting the financial indicators. P&L, Cash Flow, Balance Sheet. Main indicators of investment profitability, discount factors, NPV, IRR. Calculation of a discount rate. Calculation and justification of the investor’s or creditor’s benefits.
* Presentation for investors. Presenting skills.
* Standard criteria of the IT project attractiveness for investors.
* Intellectual property management.
* Business sale, investor’s "exit" from the IT project.

**Part 5: February 11-12**

**Lectures 13, 14, 15**

**Intracorporate IT startup**

Intra corporatestartup: the instruments of realization and financing startup within corporation:

* Key competences
* «Open innovations» principle
* The main methods of the «Open innovations» principle» realization
* How a corporation can help an internal entrepreneur

Using the methods of the «Open innovations» in the world's practice:

* Intel. Work with universities and research institutes and corporate venturing.
* IBM. From a full cycle of development of a product to participation in production chains.
* Siemens. Open policy of creation the development processes results.
* HP. Experimental environment of testing and prototyping.
* Cisco. External entrepreneurship spin In. Internal Entrepreneurship.
* Philips. Encouragement of external creation of knowledge.

**Part 6: March 2-3**

**Lectures 16, 17**

**Project management in commercialization of innovations**

Phases of innovation lifecycle project management:

* research activity
* R&D project
* Prototype
* trial production
* production manufacturing.

The Stage-Gate process:

* project concepts
* project business plan
* development
* testing and confirmation
* startup phase

**Part 7: March 4**

**FINAL PITCHING (Exam)**

**Textbooks:**

* Brealey R.A., Myers S.C. (2003) **Principles of Corporate Finance** - The McGraw−Hill Companies. (имеется русский перевод)
* Damodaran A. **Investment Valuation: Tools and Techniques for Determining the Value of Any Asset** (2012) – Wiley Finance. (имеется русский перевод)
* **Entrepreneurship** – Paperback Series, Harvard Business Review. (имеется русский перевод)
* Gompers Paul. A. and Lerner Josh (2001) **The Money of Invention** - Harvard Business School Press.
* Lerner Josh, Hardymon Felda, and Leamon Ann (2005): **A Casebook - Wiley Text Books**.
* Moore Geoffrey A. (1991) **Crossing the Chasm** - Harper Collins. (имеется русский перевод)
* Moore Geoffrey A. (1995) **Inside the Tornado** - Harper Collins. (имеется русский перевод)
* Ries Eric (2011). **The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses**. Crown Publishing. (имеется русский перевод)
* Timmons Jeffry. A., Spinelli Stephen (2007). **New Venture Creation**. **Entrepreneurship for the 21st Centur**y –McGraw-Hill.

**Course Delivery:**

The course will be given over the semester with 40 hours of frontal lectures and 20 hours of lab and exercises. The students will be asked to work on several assignments over the term. The assignments can be solved in the lab or individually at home, but specific deadline will be set for each of them. There is a final examination at the end of the course.

**Computer Resources:**

Laptops with any favorite operating system (Linux and/or Windows) with Microsoft Word, Excel, Power Point.

**Laboratory Exercises:**

Laboratory (practical) will be assigned after each lecture. The accelerator-type workshop is aimed at the introduction of modern innovative entrepreneurship culture, venture and individual private («business angel») capital attraction problem for the students. The workshop is based on the project approach as the core of the learning process in teamworking of the participants. The teams are given the task to develop an IT project concept, or to form a real startup. During the period of **two workshops per month** each team should make a description of their innovative project in a form of investment proposal for a venture investor or a business angel and test the business model in practice, and obtain the first traction metrics. A possibility for testing business ideas in real time will be also available during the course.

The workshop will give the students the opportunity to learn how to:

* work in teams on innovative business («start-up») concept (individual work is also allowed)
* write an investment proposal in PowerPoint;
* plan the strategy and marketing policies;
* test the idea in real time and get the proof of feasibility of the concept
* make a financial model in Excel for an innovative start-up;
* present the investment proposal orally.

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**Laboratory Resources:**

No laboratory resources are required for this course.

**Assessment:** Assignments (40%), Student presentations (20%), and Final Exam (40%).

1. (Credit-hours – Laboratory hours per week – Lecture hours per week) [↑](#footnote-ref-1)