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## Syllabus for course "Entrepreneuship for engineers"

| Learning<br>outcomes          | <ul> <li>After completing this course, the students should be able to: <ul> <li>Understand the Fundamentals and specifics of Entrepreneurship</li> <li>Know the International and National legislative basis of the Entrepreneurship</li> <li>Understand the business ethic</li> <li>Know the procedures to develop an idea and startup a new technology-based company</li> <li>Develop the ability to translate a business idea into marketing and financial plans</li> <li>Communicate and Negotiate With Potential Business Partners and Other Stakeholders.</li> <li>Understand and systematically explore business environment and partnership</li> <li>Understand and systematically explore the important elements in managing companies and developing its human resources.</li> </ul> </li> </ul> |
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| Syllabus<br>(List of lessons) | 1 Fundamentals of Entrepreneurship   |
|                               | <ul> <li>Introduction to Technology Entrepreneurship and Technology Ventures;</li> <li>Attributes and Myths of Technology Entrepreneurs;</li> <li>Engineers as Entrepreneurs;</li> <li>Mindset of the Entrepreneur and Entrepreneurial Leader;</li> <li>Creating and Selling the Entrepreneurial Value Proposition;</li> <li>Specifics of business and startups;</li> <li>Team Building (students will work on specific business ideas chosen by them by creating teams among themselves).</li> </ul>  |
|                               | 2 International and National legislative basis in the area of e-ship   |
|                               | <ul> <li>Legal Forms of Entrepreneurial Activities</li> <li>Intellectual Property Law</li> <li>Contractual Law</li> <li>Taxes and Taxation</li> <li>Business Ethics And Negotiation</li> </ul>   |
|                               | 3 Idea Generation and Feasibility Analysis   |
|                               | <ul> <li>Entrepreneurial Idea Generation and Feasibility Analysis;</li> <li>Technology Commercialization Potential;</li> <li>Paths and Barriers from Idea to Market;</li> <li>Assessing and Presenting the Opportunity.</li> <li>Customer development</li> <li>Problem-Solution fit</li> <li>Business model generation</li> <li>Validation plan</li> </ul>   |
|                               | Assignment - Case Study And Analysis. (Students will work on specific business<br>ideas chosen by them (by creating teams among themselves). They should show why<br>they think that their idea will be successful. They should compare their idea with  |

|                      | already existing businesses. They should analyze why particular company /having similar idea like their/ is successful or not successful etc.).   |
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|                      | 5 Business Planning and Execution   |
|                      | <ul> <li>Business Structuring, Strategy and Management;</li> <li>Business modeling and business planning;</li> <li>Financial Analysis and Projections;</li> <li>Market and Competitive Analysis;</li> <li>Presenting a Clear, Concise, and Compelling Message (Opportunity);</li> <li>Intellectual Property Strategies for Technology Companies;</li> <li>Marketing, Sales and Distribution Strategies;</li> <li>Investment and Financial Strategies;</li> <li>Accessing to funding;</li> <li>Venture Growth and Value Harvesting.</li> </ul> |
|                      | 6 Project - business plan development   |
|                      | <ul> <li>Finalize the ideas in a Business Plan</li> <li>Articulate the goals of the new venture, develop a plan on how to reach to your customer, how to sell and pitch your offering, and determine the development time and resources needed to establish the company.</li> <li>live presentation of the project in the shape of an elevator pitch.</li> </ul>  |
|                      | Books on all the essential topics of entrepreneurship with some excellent case studies.   |
| Course<br>literature | <ul> <li>Launching New Ventures: An Entrepreneurial Approach, by Kathleen Allen (Cengage Learning, 2015).</li> <li>Technology Ventures: From Idea to Enterprise, 4th ed., by T. Byers, R. Dorf, and A.Nelson. (McGraw-Hill Press, 2015).</li> <li>Technology Entrepreneurship, T. Duening, R. Hisrich &amp; M. Lechter (Elsevier, 2015).</li> <li>Innovation &amp; Entrepreneurship, 3rd ed.", J. Bessant &amp; J. Tidd (J. Wiley &amp; Sons, 2015).</li> </ul>   |
|                      | <ul> <li>The Start-Up Owner's Manual, by S. Blank &amp; B. Dork (K&amp;S Ranch Publishers, 2012).</li> <li>Preparing Effective Business Plans, 2nd edition, by B. Barringer (Pearson Press, 2015).</li> <li>Books highlight the concept of the Business Model Canvas:</li> <li>"Business Model Generation, by A. Osterwalder &amp; Y. Pigneur (J.Wiley &amp; Sons, 2010).</li> <li>"Value Proposition Design, by A. Osterwalder, Y. Pigneur, G. Bernarda, and A. Smith (J.Wiley &amp; Sons, 2014).</li> </ul>                                 |