Course Unit Descriptor

Study Programme: Engineering Management

Course Unit Title: High tech entrepreneurship

Course Unit Code: IM1221

Name of Lecturer(s): Jelena Borocki

Type and Level of Studies: bachelor

Course Status (compulsory/elective): elective

Semester (winter/ summer): summer

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 5

Prerequisites: none

Course Aims:.

This course provides a systematic and practical framework for the development of new high-technology ventures, especially companies from information and communication industry. Students will develop their competencies in area of (1) technological and business changes in high-technology industry; (2) creating and defining conceptual frames and tools for creating and improving level of entrepreneurship in area of high-tech companies; (3) synthesis of knowledge and skills necessary to work in high-tech companies.

Learning Outcomes:

Students will gain the following competencies to: (1) understand basic concepts about high-technology companies and how to define an appropriate business and marketing model for high-technology products; (2) analyze opportunities for a particular high-tech company on a new and newly developed markets; (3) create strategic marketing plan which integrate the level of company's technology development with customer demands, (4) understand different areas about high technologies.

Syllabus.

Fundamentals of technology entrepreneurship and critical areas of the entrepreneurship process: creating a successful startup and transforming it into a sustainable business, validating an idea and taking it to market, evaluation of new ideas, forming high-performance teams, and financing a technology-based startup. The Art of the Start. Choosing an appropriate business model - Canvas model and Lean startup; creating and leading change. Creating an appropriate organizational structure of high-technology companies. Providing capital: venture capital funds, credit, research projects and partnerships, business angels, crowdsourcing, crowdfunding. The role of leadership in high-tech companies. How to protect intellectual property rights. New Venture Value Proposition. Innovation through Structured Creativity. Business perspective of managing advanced technology in industry: strategic context of advanced technology; analytical financial tools used to estimate its potential value; legal concepts important in its management; interpersonal issues related to leading and advocating on behalf of advanced technology. Innovation ecosystem.

Required Reading:

Relevant literature in English, tbd

Weekly Contact Hours:2	**Lectures: 3**	**Practical work: 0**

Teaching Methods:

Lectures; Auditory exercises; Consultations. Assigned project task is developed through team effort. In the last few weeks of the semester public presentations is organized for the most successful project solutions. Discussion of results achieved. The defense of the project is written. The final exam is oral. Assessment mark is based on the success of the defense project assignment and final oral examination.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			