## **Course title: Product Development and Management**

Course code: 21038
ECTS credits: 6

Requirements: None

#### **Basic information**

Level of studies: Undergraduate applied studies

Year of study: 3

Trimester: 8

Goal: Acquisition of knowledge related to product development process for various types of ICT hardware devices and software applications. Developing and applying skills needed in new ventures, especially those related to business model building and customer discovery (i.e., segmenting markets, interviewing customers, defining customer value propositions). The focus is on B2B or B2C digital products, however many of the concepts covered can be applied to non-digital product roles.

Outcome: Students should be able to develop basic product management skills by using a learning-by-doing approach, to understand what it is like to work in fast-paced ICT firms, to apply academic knowledge in an industrial setting including feature enhancement of devices/services and to define a technical specification based on customer requirement.

## Contents of the course

Theoretical instruction

- 1. Problem solving in creative way
- 2. Development based on objectives
- 3. Achievement measurement and key performance indicators
- 4. Basic trends in ICT technologies and markets
- 5. Product development methods, Agile / Scrum
- 6. User testing
- 7. Product roadmapping
- 8. Techno-economic analysis
- 9. Decision making theory and skills
- 10. Team roles and management by knowledge

Practical instruction (Problem solving sessions/Lab work/Practical training)

1. Project based work in teams

- 2. Product planning
- 3. Talking to customers
- 4. Testing product ideas
- 5. Canvas business model
- 6. Customer discovery plan
- 7. Communicating product vision & testing prototype

#### **Textbooks and References**

- 1. A.Sugaris, Product Development and Management, Compiled lecture notes, 2019
- 2. A.Sugaris, Simulation Model for Digital Broadcasting Technologies Efficiency Estimation, Doctoral Dissertation, Faculty of Electrical Engineering, University of Belgrade, 2012
- 3. K.Ulrich, S. Eppinger, Product Design and Development, McGraw-Hill Education, 2011
- 4. GFA Consulting Group, Product development and positioning, EU and Ministry of education, science and technology development Republic of Serbia, 2013.
- 5. B.Williams, R. Hummelbrunner, Systems Concepts in Action, Stanford Business Book, 2010

# Number of active classes (weekly)

Lectures: 4

Practical classes: 2

Other types of classes:

# Grading (maximum number of points: 100)

**Pre-exam obligations: Points** 

Activities during lectures: 10

Activities on practical excersises: 40

Seminary work: 20

Colloquium:

**Final exam: Points** 

Written exam: 30

Oral exam:

### Lecturer

Aleksandar Sugaris, PhD

## Associate