



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

KNOWLEDGE TRANSFER AND COMMERCIALIZATION OF RESEARCH RESULTS

### Course

Proposed by Discipline

-

Year/Semester

I/2

Type of studies

Course offered in

Doctoral School

English

Form of study

Requirements

full-time

compulsory

### Number of hours

Lecture

Tutorials

Projects/seminars

4

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

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Responsible for the course/lecturer:

### Prerequisites

Knowledge: lean canvas and business model canvas methodology, ways of intellectual property rights protection,

Skills: pointing potential areas of exploitation for research results.

Social competences: cooperation with members of other research teams or companies.

### Course objective

Learning basic rules and good practices in transfer of knowledge to the economic and social spheres. Gaining skills in commercialization of research results and know-how related to these results. Training in thinking and acting in the business-like way.

### Course-related learning outcomes

Knowledge

A PhD student who graduated from doctoral school knows and understands:



1. principles of publication of research work results, including regulations of the open access mode, [P8S\_WG/SzD\_W04]
2. economic, legal, ethical and other important conditions of research work, [P8S\_WK/SzD\_W06]
3. fundamental rules and regulations concerning the transfer of knowledge to the economic and social spheres, commercialization of research results and know-how related to these results. [P8S\_WK/SzD\_W07]

#### Skills

A PhD student who graduated from doctoral school can:

1. critically analyze and evaluate of research work results, expert opinions and other works of creative character, and evaluate their contribution to the development of knowledge, [P8S\_UW/SzD\_U02]
2. transfer results of research work to the economic and social spheres, [P8S\_UW/SzD\_U03]
3. plan and pursue scientific self-development and to be able to inspire and organize the development of others, [P8S\_UU/SzD\_U10]

#### Social competences

A PhD student who graduated from doctoral school is ready to:

1. fulfilling the social obligations of researchers and creators, [P8S\_KO/SzD\_K04]
2. think and act in the business-like way, [P8S\_KO/SzD\_K06]
3. maintain and develop the ethos of research and creative communities, including:
  - conducting independent scientific activity,
  - respecting the principle of public ownership of the results of scientific
  - activities, including the principles of intellectual property protection. [P8S\_KR/SzD\_K07]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

| PQF code      | Methods for verification of learning outcomes  | Assessment criteria  |
|---------------|--|--|
| W04, W06, W07 | Preparing a business model or pitch deck regarding market implementation of technology by a spin-off. Project will be done individually. Time given for the project will be at least 2 weeks | Consistency between different elements of the concept (offer, client, problem solved), understanding of client needs |
| U02, U03, U10 | Preparing a business model or pitch deck regarding market implementation of technology by a spin-off. Project will be done individually. Time given for the project will be at least 2 weeks | Consistency between different elements of the concept (offer, client, problem solved), understanding of client needs |



|               |  |  |
|---------------|--|--|
| K04, K06, K07 | Preparing a business model or pitch deck regarding market implementation of technology by a spin-off. Project will be done individually. Time given for the project will be at least 2 weeks | Consistency between different elements of the concept (offer, client, problem solved), understanding of client needs |
|---------------|--|--|

### Programme content

1. Commercialization of technology (What commercialization methods are possible? How to plan a commercialisation process? How does the commercialisation process proceed?).
2. Intellectual property in business (The importance of intellectual property for business organizations, When to use: secret know-how, patent, utility model, trademark?).
3. Development of innovative business (What are the stages of business development? How to build a culture of innovation in a company? What are the key team roles in a tech company? What forms of running a business are possible?).
4. Designing a business based on technology (How to formulate a business model according to the Business Model Canvas?, How to formulate a value proposition according to the Value Proposition Canvas?).
5. Developing a business with the participation of an investor (What are investors looking for and who are they investing in? How to present business to an investor? Pitch deck - what should a presentation contain? How to effectively attract an investor?).

### Teaching methods

Lecture: multimedia presentation including illustrations and examples.

Workshop: working in teams / preparation of a business model / discussion.

### Bibliography

#### Basic

1. <https://platform.strategyzer.com/training/crash-courses/business-model-basics>  
Access is free, requires registration.

#### Additional

1. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers  
Paperback – July 13, 2010, by Alexander Osterwalder (Author), Yves Pigneur (Author).

### Breakdown of average student's workload

|  | Hours | ECTS |
|--|-------|------|
| Total workload   | 25    | 1.0  |
| Classes requiring direct contact with the teacher  | 4     | 0.2  |
| Student's own work (literature studies, preparation for lectures, task development, consultations with the teacher) <sup>1</sup> | 21    | 0.8  |

<sup>1</sup> delete or add other activities as appropriate