# COURSE DESCRIPTION CARD - SYLLABUS

Course name
Project managent, communications and innovation protection in digital era [S2Teleinf2>ZPKiOIwEC]

## Course

Field of study
Teleinformatics

Year/Semester
1/2

Area of study (specialization)
Intelligent control systems

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

## Number of hours

Lecture
90

Laboratory classes
0

Other
30

Tutorials
0

Projects/seminars
60

## Number of credit points

9,00

## Coordinators

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## Lecturers

## Prerequisites

Basic knowledge of multimedia communication. Engineering-level knowledge in the field of teleinformatics and its applications in the modern world. Student starting this module should have a basic knowledge regarding software engineering and basic knowledge regading IT tools.

## Course objective

The subject is designed to help students prepare to play the role of a leader/manager in IT projects. In achieving this goal, students become familiar with IT project management methodologies in a syncretic approach, principles of effective communication, issues related to entrepreneurship and marketing in the digital era, and legal aspects regarding the transfer of knowledge and technology.

## Course-related learning outcomes

Knowledge:
K2_W09 Has knowledge in selected areas of standardization, industrial property protection, copyright law, and the functioning of the patent system
K2_W07 Has knowledge of developmental trends and significant new achievements in the field of ICT
Has advanced and detailed knowledge related to selected approches used for project management especially PRINCE2 and Scrum,

Skills:
K2_U01 Is able to acquire information from literature, databases, and other sources; integrate the obtained information; interpret and critically evaluate it; draw conclusions; and formulate and thoroughly justify opinions
K2_U04 Can prepare and deliver presentations on project tasks or research and lead discussions related to the presented material
K2_U08 Can formulate design specifications for complex systems, ICT systems, considering legal aspects, including intellectual property protection, as well as other non-technical aspects, using available regulatory acts
K2_U12 Can observe and interpret legal and social factors in their surroundings
is able to - when formulating and solving engineering tasks - integrate IT knowledge with selected elements of management sciences (risk management) and psychology (theories of motivation),
is able to assess the relevancy of the methods and tools used to manage projects and see the limitation of those methods and tools,

Social competences:
K2_K01 Is ready to recognize the significance of knowledge in solving cognitive and practical problems and to critically evaluate received content
K2_K02 Is ready to fulfill social obligations
K2_K03 Is ready to inspire and organize activities for the benefit of the social environment
K2_K04 Is ready to take initiative in promoting the public interest
K2_K05 Is ready to think and act in an entrepreneurial manner

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture - written test, open question,
Laboratory - project
Rating scale: <=50% 2.0; 51%-60% 3.0; 61%-70% 3.5; 71%-80% 4.0; 81%-90% 4.5; 91%-100% 5.0

## Programme content

The course presents the foundations of project management strategies, ownership law, communications principles in the digital era and Intellectual Property Rights.

## Course topics

Lecture:
Protection of industrial property, including elements of the Industrial Property Law, Copyright, subject of protection, procedures, case studies.
Standardization in ICT, including de facto vs. standards de jure, main organizations, procedures, with particular emphasis on MPEG.
Commercialization of R&D results
Security in the era of digital communication
Networks and social media and their role in the modern world
Basics of entrepreneurship
Basics of marketing
Selected topics related to project management: classical methodologies and agile approaches; Formulating the goal of the project; Risk management; Team management in programming projects; Requirements managments; Quality and change management in an IT project; Planning in software development projects

Project:
Preparation of a case study (including presentation), e.g. commercialization path/strategy for a given solution, protection path/strategy for a given solution, cost estimate of patent proceedings depending on the selected area of protection.
Preparation of a case study (including presentation), e.g. development strategy of a start-up enterprise along with the development of marketing methods using modern Internet tools in the field of enterpreneurship and project management.

## Teaching methods

Hybrid lecture: traditional lecture with the addition of educational materials, problem lectures - case analysis, it is possible to invite speakers from industry or science
Project
Regular meetings with students to develop a case study (including presentation).

## Bibliography

Basic:
"Poradnik wynalazcy. Procedury zgłoszeniowe w systemie krajowym, europejskim, międzynarodowym", Urząd Patentowy Rzeczypospolitej Polskiej, Warszawa 2023, ISBN 978-83-65470-87-4
"Własność intelektualna dla przedsiębiorcy", Urząd Patentowy Rzeczypospolitej Polskiej, Warszawa 2021, ISBN 978-83-65470-69-0
OGC, Managing Sucessful Projects with PRINCE2, 2009
Ken Schwaber, Jeff Sutherland, The Scrum Guide, 2011 (online)

Additional:
M. Barszcz (red.), "Komercjalizacja B+R dla praktyków", Wyd. 3, Narodowe Centrum Badań i Rozwoju, Warszawa 2016, ISBN: 978-83-936422-5-0
PMI, Project Management Body of Knowledge

## Breakdown of average student's workload

| | Hours | ECTS |
|---|---|---|
| Total workload | 225 | 9,00 |
| Classes requiring direct contact with the teacher | 150 | 6,00 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 75 | 3,00 |