



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Project management, communications and innovation protection in digital era [S2Teleinf2>ZPKiOlwEC]

Course

Field of study

Teleinformatics

Year/Semester

1/2

Area of study (specialization)

Artificial intelligence and machine learning

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 regarding 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 approaches 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 managements; 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 entrepreneurship 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 Successful Projects with PRINCE2, 2009

Ken Schwaber, Jeff Sutherland, The Scrum Guide, 2011 (online)

Additional:

M. Barszcz (red.), "Komerccjalizacja 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