



COURSE CARD

1. Basic information

Course name in English:	Intellectual Property, Data and IT Law for Engineers	
Course name in Polish:	Prawo własności intelektualnej, danych i IT dla inżynierów	
Number of hours:	30	
Type of course:	Elective course	
Form of course:	Lecture	
Code of course:		
Course leader:	<i>Martyna Mielniczuk-Skibicka</i>	
Faculty of the course leader:	Wydział Informatyki i Telekomunikacji	
Email address of the course leader:	Martyna.mielniczuk-skibicka@pwr.edu.pl	
Scientific discipline(s) assigned to the course (doctoral students representing the marked disciplines can participate in the course):	Architecture and urban planning	X
	Automation, electronic, electrical engineering and space technologies	X
	Information and communication technology	X
	Biomedical engineering	X
	Chemical engineering	X
	Civil engineering, geodesy and transport	X
	Materials engineering	X
	Mechanical engineering	X
	Environmental engineering, mining, and energy	X
	Mathematics	X
	Chemical sciences	X
	Physical sciences	X
	Management and quality studies	X

2. Objectives



The primary objective of this course is to equip doctoral students in the fields of science and technology with the legal competencies essential for the secure conduct of research and the effective commercialization of innovations. The course focuses on the practical application of regulations within the modern technology ecosystem. Particular emphasis will be placed on:

- **Intellectual Property Management:** focusing on software protection, patent procedures, and copyright law in academic research.
- **Data Security:** practical aspects of the GDPR (RODO), as well as the protection of undisclosed information and trade secrets.
- **New Regulatory Frameworks:** digital platform regulations and the emerging legal landscape for Artificial Intelligence (e.g., the EU AI Act).
- **Market Aspects:** consumer protection requirements within the design and development of mass-market products.

3. Content

Detailed information about the course content, including topics and form of classes.

No.	Topic	Number of hours	Form of classes
1	Introduction to Legal Systems: Basic concepts, hierarchy of laws, and enforcement mechanisms in territorial and cross-border contexts.	3h	Lecture
2	Intellectual Property & Copyright: In-depth analysis of software protection, databases, and scientific publications, including copyright transfer in B2B and employment contracts.	5h	Lecture
3	Patent Systems & Industrial Property: Practical guide to patenting procedures, invention eligibility, and protecting technical know-how in international markets.	3h	Lecture
4	Data Protection & GDPR: principles of data processing in R&D projects and "privacy by design" requirements for researchers.	4h	Lecture
5	Internet Platform Law & E-commerce: Regulations on electronic services and intermediary liability, including the Digital Services Act (DSA).	3h	Lecture
6	AI Law & Algorithmic Regulation: Analysis of the EU AI Act, liability for autonomous systems, and authorship of AI-generated content.	3h	Lecture



7	Consumer Protection in Mass Products: Legal requirements for product market entry, warranties, and safety standards for IoT and digital products.	2h	Lecture
8	Cybersecurity & Information Security: Legal frameworks for cybercrime prevention and incident reporting obligations for organizations.	3h	Lecture
9	IT Contracts & Technology Transfer: Case studies on software licensing (including Open Source) and commercialization agreements, with a focus on negotiating key contractual clauses.	4h	Lecture

4. Prerequisites

List of prerequisites relating to knowledge, skills and other competences for course participants.

No prerequisites are required.

5. Learning outcomes

List of learning outcomes at level 8 of the Polish Qualifications Framework assigned to the course (mark the learning outcomes in the last column).

Symbol	Learning outcome	
	<i>KNOWLEDGE. Doctoral student knows and understands:</i>	
SzD_W3	the main trends in the development of the scientific or artistic disciplines covered in the curricula;	☐
SzD_W4	research methodology;	☐
SzD_W5	the rules for the dissemination of scientific results, including in open access mode;	☐
SzD_W6	the fundamental dilemmas of modern civilization;	☐
SzD_W7	the legal and ethical conditions of scientific activity;	X
SzD_W8	the economic and other relevant conditions of scientific activity;	X



SzD_W9	basic principles of knowledge transfer to the economic and social spheres and commercialisation of results of scientific activity and know-how related to these results.	X
	<i>SKILLS. Doctoral student is able to:</i>	
SzD_U2	use knowledge from different fields of science or art to creatively identify, formulate and innovatively solve complex problems or perform research tasks, in particular: - define the purpose and subject of scientific research, formulate a research hypothesis, - develop research methods, techniques and tools, and use them creatively, - draw conclusions on the basis of scientific research; critically analyse and evaluate the results of scientific research, expertise and other creative work and their contribution to knowledge development; transfer the results of scientific activities to the economic and social spheres;	☐
SzD_U3	communicate on specialised topics to the extent that they enable an active participation in the international scientific community;	☐
SzD_U4	disseminate research results, including in popular forms;	X
SzD_U5	initiate debates and participate in a scientific discourse;	☐
SzD_U6	be able to speak a foreign language at B2 level of the Common European Framework of Reference for Languages to a level that enables them to participate in the international scientific and professional environment;	☐
SzD_U7	plan and implement an individual or collective research or creative activity, including in an international environment;	☐
SzD_U8	independently plan and act for one's own development and inspire and organize the development of others;	☐
SzD_U9	plan classes or groups of classes and implement them using modern methods and tools.	☐
	<i>SOCIAL COMPETENCES. Doctoral student is ready to:</i>	
SzD_K3	fulfilling the social obligations of researchers and creators, initiate public interest activities, thinking and acting in an entrepreneurial way;	X
SzD_K4	maintaining and developing the ethos of research and creative environments, including: - carrying out scientific activities in an independent manner, - respecting the principle of public ownership of research results, taking into account the principles of intellectual property protection.	☐



6. Evaluation

Short description of the method(s) used to evaluate the learning outcomes assigned to the course, e.g., exam, test, report, presentation, etc.

Exam or alternatively a report.

7. Teaching methods

Short description of the teaching methods used during the course, e.g., multimedia presentation, discussion, literature studies, developing written documents, own work, etc.

Lecture with discussion and analysis of real-world cases.

8. Literature

List of primary and secondary literature used to prepare the course and including additional knowledge for participants, e.g., books, textbooks, research papers, standards, web pages, etc.

Primary:

M. Hildenbrandt, Law for Computer Scientists and Other Folk, OUP 2020.

Secondary:

1. Smuha, N. A. (Ed.), *The Cambridge Handbook of the Law, Ethics and Policy of Artificial Intelligence*, Cambridge University Press (2025), Open Access via Cambridge Core.
2. M. Hildebrandt, A. De Bois, Law for Computer Scientists, Human-Centered Artificial Intelligence - Advanced Lectures,
https://cris.vub.be/ws/portalfiles/portal/96248893/978_3_031_24349_3_14.pdf
3. <https://eur-lex.europa.eu/homepage.html?locale=pl>
4. https://www.edpb.europa.eu/our-work-tools/general-guidance/guidelines-recommendations-best-practices_en
5. https://curia.europa.eu/jcms/jcms/j_6/en/
6. <https://ipkitten.blogspot.com/>
7. K. Klafkowska-Waśniowska, M. Malaga, I.B. Nestoruk, Rights of users in the Digital Single Market. Handbook, Poznań 2025.

9. Other remarks

Additional remarks, comments, (e.g., language of the course)

English