COURSE CARD

1. Basic information

Course name in English:	AI law
Course name in Polish:	Prawo Sztucznej Inteligencji
Number of hours:	30
Type of course:	Elective course
Form of course:	Lecture
Code of course:	
Course leader:	*Rafał Skibicki*
Faculty of the course leader:	Wydział Informatyki I Telekomunikacji
Email address of the course leader:	rafal.skibicki@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

To equip doctoral students with the competencies necessary for designing and deploying AI systems in accordance with legal and ethical requirements (*Legal & Ethics by Design*). The program focuses on the practical implementation of the EU AI Act, global regulatory differences, and training data management. Participants will learn to identify legal risks throughout the ML model lifecycle, prepare technical compliance documentation, and manage intellectual property issues in the context of generative models.

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	**Global AI Governance: EU vs. US & China:** Analiza porównawcza: unijne podejście oparte na ryzyku, amerykański model rynkowy i chińskie regulacje algorytmów.	4h	Select form
3	**The EU AI Act & National Implementation**: In-depth look at Regulation 2024/1689 and the role of national supervisory authorities. Defining roles: providers, deployers, and distributors.	7h	Select form
4	**Data as Input: Legal Aspects of Training Sets:** Legalities of web scraping, database protection, and GDPR compliance in machine learning workflows.	4h	Select form
5	**Machine Learning in Legal Processes:** Algorithmic decision-making, transparency requirements, and the concept of "Explainable AI" (XAI) in a legal context.	3h	Select form
6	**Legal Protection of AI Models & Outputs**: Legal status of model weights, architecture, and source code. Intellectual property rights in generative AI outputs and challenges of reverse engineering.	3h	Select form
7	**Data Correction & Machine Unlearning:** Legal requirements for data quality. The "Right to be Forgotten" in the context of removing data from trained models (Unlearning) and bias mitigation.	3h	Select form

8	**Liability for AI Systems:** Civil liability for damages (Product Liability) and the future of the AI Liability Directive.	3h	Select form

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	
	KNOWLEDGE. Doctoral student knows and understands:	
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
	SKILLS. Doctoral student is able to:	

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.	☐
	SOCIAL COMPETENCES. Doctoral student is ready to:	
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**:*
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.
***Secondary**:*
1. M. Hildenbrandt, Law for Computer Scientists and Other Folk, OUP 2020.
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. Villaronga, E. F. et al., *Humans forget, machines remember: Artificial intelligence and the right to be forgotten*, Computer Law & Security Review
4. https://eur-lex.europa.eu/homepage.html?locale=pl
5. https://www.edpb.europa.eu/our-work-tools/general-guidance/guidelines-recommendations-best-practices_en

9. Other remarks

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