Description of the course

Code course	Course name	AI IN BUSINESS
IBF/O/I/NS/B1.23		SI W BIZNESIE

Language	English
Academic Year	2024/2025

Direction of study	International Business and Finance
Level of education (study)	Level 1
Profile of education (study)	General academic
Form of study	Extramural
Semester / semesters	5

Belonging to a course groups	B1-Compulsory courses specific to the field of study
Course status	Compulsory

Form of classes, hours, ECTS points	Form of classes	Number of hours	Number of ECTS points
	Lecture	10 [h]	4 ECTS
	Exercises	15 [h]	
	Seminar	[h]	

Relationship of subject	with profile of education (study)	Related to conducted scientific activity in the field of economics and finance	ECTS
	with qualifications	--	ECTS
	with discipline	Economics and Finance	4 ECTS

Form of teaching	traditional - classes organized at the University
The criterion for the selection of students	All students of International Business and Finance

Unit running course	Department of Computer Science and Teleinformatics
Coordinator	Dr Jacek Wołoszyn
Faculty www address	http://weif.uniwersytetradom.pl
E-mail, phone number of coordinator	jacek.woloszyn@uthrad.pl (48) 361-7850

COURSE OUTCOMES, METHODS OF TEACHING AND VERIFICATION OF THE EFFECTS OF EDUCATION

Purpose of the course:	The course aims to familiarize students with the issues of artificial intelligence and artificial intelligence algorithms for data analysis.
Course teaching content:	The course content is related to conducted scientific research.

	Lecture content:
	During the lectures, the student learns about the theory of artificial intelligence. Presented are artificial intelligence algorithms for data analysis such as: LogisticRegression, KNN, DummyClassificator, RandomForest, Xboost, DecisionTree and. (W1,U1, K1) **Exercises content:** During the exercises, students write Python programs using learned artificial intelligence algorithms. (W1,U1, K1)
Method of teaching:	*instructional methods (lecture including multimedia techniques); practical methods (demonstration, analytical exercises)*
Grading criteria, criteria for assessing learning outcomes, method of calculating the final grade:	*The condition for passing the course is achieving all the required learning outcomes specified for the course.* Obtaining a positive grade from exercises and lectures. Writing a program of activities and passing a test from studies.

Education effects for the course in relation to the direction effects and form of classes				Verification methods of learning outcomes (form check)	
Number of education effect	Description effects of education for the subject (PEU) Student who has completed the course (W) knows and understands/(U) is able to /(K) is ready to:	Directional learning effect (KEU)	Form of realization of teaching	Examination form	Form check
W1	Knows and understands to an advanced degree the techniques and tools for obtaining, processing and analyzing data relevant to describing phenomena in the area of business and international finance	K_W05	Lecture, exercises	Pass with a grade	Written program/written test
U1	He can analyze and forecast processes and phenomena in business and international finance using standard methods and tools in the social sciences field, including advanced information and communication techniques.	K_U02	Lecture, exercises	Pass with a grade	Written program/written test
K1	He is ready to critically evaluate his knowledge and recognize the importance of expertise in solving cognitive and practical problems.	K_K01	Lecture, exercises	Pass with a grade	Written program/written test

Recommended reading, literature supplement, teaching aids

1. *Fenner M, Machine Learning with Python for Everyone, Pearson Education, Inc, publishing as Addison-Wesley Professional, Copyright © 2020*
2. *Goodrich M, Tamassia R, Goldwasser M, Data Structures and   Algorithms in Python, Wiley 2013*
3. *Hearty J, Advanced Machine Learning with Python, Packt Publishing 2016.Idris I, Python Data Analysis, Packt Publishing 2014*
4. *Rothman D, Artificial Intelligence By Example, Packt Publishing 2020*
5. *Smith D, Hands-On Artificial Intelligence for Begginers, Packt Publishing 2018*

A detailed list of additional literature, web sources and teaching aids will be provided by a teacher during the first class

Student workload needed to achieve the assumed learning outcomes - balance of ECTS points

Participation in classes, activities	Student's working hours [h]		
	Other hours. Contact (IGK)	Classes without a teacher – student's own work (ZBN)	Classes
Participation in Lectures/ Seminars	X	X	10[h]
Participation in Exercises/Laboratories	X	X	15[h]
Participation in the Consultation	5[h]	X	X
Preparing to lectures/ exercises/seminars Preparation for an examination	X	70[h]	X
Summary of student's workload	5[h]/ 0,2ECTS	70 [h]/ 2,8 ECTS	25[h]/ 1,0 ECTS
Points of ECTS for subject	100 [h] / 4 ECTS		

Additional information and remarks
For students with special needs, including those with disabilities and chronic illnesses, the methods and forms of verifying learning outcomes specified above (in the course syllabus) are appropriately adjusted to meet the individual needs of these students. "The detailed rules and rights of students with special needs, including those with disabilities and chronic illnesses, regarding participation, assessment, and examinations, are specified in the Study Regulations, Study Rules, and Procedures for Ensuring Accessibility of the Educational Process for Students with Special Needs, including those with disabilities and chronic illnesses."