Faculty of Economic Sciences, University of Warsaw

Master's Programme Curriculum

Field of study: Data Science and Business Analytics - full-time studies

Academic year 2025/2026

For those students, who did not get respective credits during undergraduate studies (obligation to complete in the first year):

Occupational Safety and Health (OSH) (there is a possibility of using credits received within the last five years at selected UW faculties)	hours	4	ECTS	0,5	
Intellectual Property Protection (IPP)	hours	6	ECTS	0,5	

	Course name	Course type	hours	year				Total	Form of
No			/ ECTS				I	Hours/ECTS	credit
			, ====	1	2	3	4	Credits	
Α	General Courses								
4	General elective course (OGUN)	Lecture/	hours		30	30		60	Consults.
1	humanistic profile	Seminar	ECTS		3	3		6	Credit
	Total of hours in the group of courses	classes		0	30	30	0	60	
	ECTS of credits in the group of courses			0	3	3	0	6	
В	Core courses								
			hours	45				45	
2	Applied Microeconomics	Lecture	ECTS	5				5	Exam
		Lecture	2013	30					
		Practical	hours					45	
3	Applied Macroeconomics	classes		15					Exam
		0.00000		_				_	
			ECTS	5				5	
		Lecture	hours		30			60	
4	Advanced Econometrics	Practical	nours		30			- 60	Exam
		classes	ECTS		6			6	
	Applied Finance	Lecture	hours			30		45	Exam
5		Practical	hours			15		43	
		classes	ECTS			5		5	
	Total of hours in the group of courses			90	60	45	0	195	
	ECTS of credits in the group of courses			10	6	5	0	21	
С	Field -of study courses								
6	R: intro / data cleaning and imputation R / basics of visualisation	Practical	hours	30				30	Exam
Ů		classes	ECTS	3				3	
7	Python and SQL: intro / SQL platforms	Practical	hours	30				30	Test/Project
,	Fytholi and SQL. Intro / SQL platforms	classes	ECTS	4				4	
		Lecture	hours		30			45	Exam
8	Algorithms for Data Science	Practical	hours		15			45	
		classes	ECTS		6			6	
9	Statistics and Exploratory Data Analysis	Practical	hours	30				30	Evam/Project
9	Statistics and Exploratory Data Analysis	classes	ECTS	5				5	Exam/Project
10	Introduction to Data Science	Lastura	hours	15				15	Exam
10	Introduction to Data Science	Lecture	ECTS	3				3	
4.4		Practical	hours	30				30	5
11	Unsupervised Learning	classes	ECTS	3				3	Project
					15			15	Exam/Project
4.0	NA/ahaananina and Gaai Jaka Ji G	Practical	hours						
12	Webscraping and Social Media Scraping	Practical classes						3	zxam, roject
			ECTS		3				
	Webscraping and Social Media Scraping Advanced Programming in R	classes	ECTS hours		3 30			3 30 5	Exam
13	Advanced Programming in R	classes Practical	ECTS hours ECTS		3			30 5	Exam
13		classes Practical classes	ECTS hours		3 30 5			30	
13	Advanced Programming in R Machine Learning 1: classification methods	classes Practical classes Practical classes	hours ECTS hours ECTS ECTS		3 30 5 30	30		30 5 30 4	Exam
13	Advanced Programming in R	classes Practical classes Practical classes Practical	hours ECTS hours ECTS hours ECTS		3 30 5 30	30		30 5 30 4 30	Exam
13	Advanced Programming in R Machine Learning 1: classification methods	classes Practical classes Practical classes	ECTS hours ECTS hours ECTS hours ECTS		3 30 5 30	6		30 5 30 4 30 6	Exam
13 14 15	Advanced Programming in R Machine Learning 1: classification methods	classes Practical classes Practical classes Practical	hours ECTS hours ECTS hours ECTS		3 30 5 30			30 5 30 4 30	Exam

		Practical	hours			15		15	
17	Big Data Analytics	classes	ECTS			2		2	Credit
	Machine Learning 2: predictive models,	Classes	hours			30		30	
18		Practical	Hours			30		30	Project
10	deep learning, neuron network	classes	ECTS			4		4	Project
19		Practical	hours				30	30	
19	Reproducible Research	classes	ECTS				4	4	Project
20		Seminar	hours				30	30	Credit
20	Elective course (economics and finance)	classes	ECTS				3	3	Credit
24	Elective course (IT to als)	Practical	hours				30	30	Constitu
21	Elective course (IT tools)	classes	ECTS				3	3	Credit
22	Elective source (quantitative methods)	Seminar	hours				60	60	Crodit
22	Elective course (quantitative methods)	classes	ECTS				6	6	Credit
	Total of hours in the group of courses		hours	135	120	105	150	510	
	ECTS of credits in the group of courses		ECTS	18	18	16	16	68	
D	Soft skills courses								
22	Communication and A. i	Seminar	hours	30				30	Connelit
23	Communication and Autopresentation	classes	ECTS	2				2	Credit
24		Seminar	hours			30		30	
24	Negotiations Understanding Business	classes	ECTS			3		3	Exam
			hours				30	30	
25		Lecture	ECTS				3	3	Project
	Total of hours in the group of courses		hours	30	0	30	30	90	
	ECTS of credits in the group of courses		ECTS	2	0	3	3	8	
D	Master Thesis Seminar								
			hours		30	30	30	90	
26	Master Thesis Seminar	Seminar	ECTS		3	3	11	17	Credit
	Total of hours in the group of courses		hours	0	30	30	30	90	
	ECTS of credits in the group of courses		ECTS	0	3	3	11	17	
	Total of hours		hours	255	240	240	210	945	
	TOTAL of ECTS		ECTS	30	30	30	30	120	