

Faculty of Economic Sciences, University of Warsaw

Master's Programme Curriculum

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

Academic year 2024/2025

For those students, who did not get respective credits during undergraduate studies:

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

20.02.2024

No	Course code	Course name	Course type	hours / ECTS	year				Total Hours/ECTS Credits	Form of credit
					I		II			
					1	2	3	4		
A	General Courses									
1	university offer	General elective course (OGUN) humanistic profile	general classes	hours		30	30		60	Credit
				ECTS		3	3		6	
		Total of hours in the group of courses			0	30	30	0	60	
		ECTS of credits in the group of courses			0	3	3	0	6	
B	Core courses									
2	2400-DS1AMI	Applied Microeconomics	lecture	hours	45				45	exam
				ECTS	5				5	
3	2400-DS1AMA	Applied Macroeconomics	lecture lab	hours	30 15				45	exam
				ECTS	5				5	
4	2400-DS1AE	Advanced Econometrics	lecture lab	hours		30			60	exam
				ECTS		6			6	
5	2400-DS2AF	Applied Finance	lecture lab	hours			30		45	exam
				hours			15			
				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	
C	Field -of study courses									
6	2400-DS1R	R: intro / data cleaning and imputation R / basics of visualisation	lab	hours	30				30	exam
				ECTS	3				3	
7	2400-DS1SQL	Python and SQL: intro / SQL platforms	lab	hours	30				30	Credit
				ECTS	4				4	
8	2400-DS1AL	Algorithms for Data Science	lecture lab	hours		30			45	exam
				hours		15				
				ECTS		6			6	
9	2400-DS1ST	Statistics and Exploratory Data Analysis	lab	hours	30				30	Credit
				ECTS	5				5	
10	2400-DS1IDS	Introduction to Data Science	lecture	hours	15				15	exam
				ECTS	3				3	
11	2400-DS1UL	Unsupervised Learning	lab	hours	30				30	Credit
				ECTS	3				3	
12	2400-DS1WSMS	Webscraping and Social Media Scraping	lab	hours		15			15	Credit
				ECTS		3			3	
13	2400-DS1APR	Advanced Programming in R	lab	hours		30			30	exam
				ECTS		5			5	
14	2400-DS1ML1	Machine Learning 1: classification methods	lab	hours		30			30	Credit
				ECTS		4			4	
15	2400-DS2AV	Advanced Visualisation in R	lab	hours			30		30	Credit
				ECTS			6		6	
16	2400-DS2TMS	Text Mining and Social Media Mining	lab	hours			30		30	exam
				ECTS			4		4	
17	2400-DS2BDA	Big Data Analytics	lab	hours			15		15	Credit
				ECTS			2		2	
18	2400-DS2ML2	Machine Learning 2: predictive models, deep learning, neuron network	lab	hours			30		30	Credit
				ECTS			4		4	
19	2400-DS2RR	Reproducible Research	lab	hours				30	30	exam
				ECTS				4	4	
20	2400-DS2WWEF	Elective course (economics or finance)	discussion in lab	hours				30	30	Credit
				ECTS				3	3	
21	2400-DS2WWIT	Elective course (IT tools)	lab	hours				30	30	Credit
				ECTS				3	3	
22	2400-DS2WWQM	Elective course (quantitative methods)	discussion in lab	hours				60	60	Credit
				ECTS				6	6	
		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									
23	2400-DS1CA	Communication and Autopresentation	discussion	hours	30				30	credit
				ECTS	2				2	
24	2400-DS2NEG	Negotiations	discussion	hours			30		30	exam
				ECTS			3		3	
25	2400-DS2UB	Understanding Business	lecture	hours				30	30	Credit
				ECTS				3	3	
		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									
26	2400-SU2TS....	Master Thesis Seminar	seminar	hours		30	30	30	90	Credit
				ECTS		3	3	11	17	
		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	