Faculty of Economic Sciences, University of Warsaw

Master's Programme Curriculum

Field of study: **Data Science and Business Analytics**

Academic year 2020/2021

21.04.2020

No	Course code	Course name	Course type	hours / ECTS	year I 1	year I 2	year II 3	year II 4	Total Hours/ECTS Credits	Form of credit
A	**General Courses**									
1	university offer	General elective course (OGUN)	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	hours	45				**45**	exam
				ECTS	5				**5**	
4	2400-DS1AE	Advanced Econometrics	lecture	hours		30			**60**	exam
			lab	hours		30				
				ECTS		6			**6**	
5	2400-DS2AF	Applied Finance	lecture	hours			30		**45**	exam
			lab	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	hours		30			**45**	exam
			lab	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*	

No	Course code	Course name	Course type	hours / ECTS	year				Total Hours/ECTS Credits	Form of credit
					I		II			
					1	2	3	4		
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	3	**9**	
27		Preparation of the thesis for the diploma examination	own work	hours		0	0	0	**0**	
				ECTS				8	**8**	
		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**	

Only for those students, who did not complete course during the first degree

Occupational Safety and Health (OSH)	*godz.*	4	*ECTS* 0,5
Intellectual Property Protection	*godz.*	6	*ECTS* 0,5