Faculty of Economic Sciences, University of Warsaw
Master's Programme Curriculum
Field of study: Quantitative Finance - 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*

No	Course name	Course type	hours/ ECTS	Year I		Year II		total hours/ ECTS credits	Form of credit
				1	2	3	4		
A	**General Courses**								
1	General elective course (OGUN) humanistic profile	Lecture/ Seminar classes	hours	30			30	**60**	Credit
			ECTS	*3*			*3*	***6***	
2	Elective course (IT tools) - wybór z akrualnej oferty wydziału	Seminar classes	hours			*30*		***30***	Project
			ECTS			*3*		***3***	
	Total of hours in the group of courses			***30***	***0***	***30***	***30***	***90***	
	ECTS of credits in the group of courses			***3***	***0***	***3***	***3***	***9***	
B	**Core courses**								
3	Statistics & Econometrics	Lecture	hours	30				**30**	
			ECTS	*2*				***2***	Written exam
4	Introduction to Quantitative Finance	Lecture	hours	30				**30**	
			ECTS	*3*				***3***	Written exam
5	Mathematical Methods for Finance	Lecture	hours	30				**60**	Written exam
		Practical classes	hours	30					
			ECTS	*6*				***6***	
6	Time Series Analysis	Lecture	*hours*		*30*			***60***	Written exam, project
		Practical classes	*hours*		*30*				
			ECTS		*6*			***6***	
7	Quantitative Strategies. High Frequency Data	Lecture	*hours*			*30*		***60***	Written exam
		Practical classes	*hours*			*30*			
			ECTS			*6*		***6***	
	Total of hours in the group of courses			***120***	***60***	***60***	***0***	***240***	
	ECTS of credits in the group of courses			***11***	***6***	***6***	***0***	***23***	
C	**Field -of study courses**								
8	Financial Statement Analysis	Lecture	hours	30				**45**	Written exam
		Practical classes	hours	15					
			ECTS	*6*				*6*	
9	Ethical Standards and Financial Law	Lecture	hours	30				**30**	Written exam
			ECTS	*3*				*3*	
10	Asset Allocation and Investment Strategies	Seminar classes	hours	30				**30**	Written exam, project
			ECTS	*3*				*3*	
11	Machine Learning in Finance I	Lecture	hours	15					Written exam, project
		lab.	hours	15				**30**	
			ECTS	*4*				***4***	
12	Equity and Fixed Income	Lecture	*hours*		*30*			***45***	Written exam
		Practical classes	*hours*		*15*				
			ECTS		*5*			***5***	
13	Derivatives Markets	Lecture	*hours*		*30*			***45***	Written exam
		Practical classes	*hours*		*15*				
			ECTS		*4*			***4***	
14	Corporate Finance	Lecture	*hours*		*30*			***45***	Written exam
		Practical classes	*hours*		*15*				
			ECTS		*4*			***4***	
16	Computational Finance	Practical classes	*hours*		*30*			***30***	Practical exam, project
			ECTS		*5*			*5*	
17	Reproducible Research	Seminar classes	*hours*		*30*			***30***	Project
			ECTS		*3*			*3*	
18	Risk Analysis and Modelling I	Seminar classes	*hours*			*30*		***30***	Written exam
			ECTS			*5*		*5*	
19	C++ in Quantitative Finance I	Practical classes	*hours*			*30*		***30***	Written exam
			ECTS			*4*		*4*	
20	Theory and practice of option pricing	Practical classes	*hours*			*30*		***30***	Written exam
			ECTS			*6*		*6*	
21	Machine Learning in Finance II	Lab.	*hours*			*30*		***30***	Written exam
			ECTS			*3*		*3*	
22	Risk Analysis and Modelling II	Seminar classes	*hours*				*30*	***30***	Written exam
			ECTS				*4*	*4*	

23	C++ in Quantitative Finance II	Seminar classes	*hours*				*30*	***30***	Written exam
			ECTS				*4*	*4*	
25	Elective course (economics &finance) Students choose 1 out of 3 courses offered in the spring semester (1x30h): Advanced Macroeconomics, Empirics of Financial Markets, Venture Capital and Private Equity	Seminar classes	*hours*				*30*	***30***	Credit
			ECTS				*3*	*3*	
26	Algorithmic Trading System	Practical classes	*hours*				*30*	***30***	Written exam
			ECTS				*5*	*5*	
	Total of hours in the group of courses			***135***	***195***	***120***	***120***	***570***	
	ECTS of credits in the group of courses			***16***	***21***	***18***	***16***	***71***	
D	**Master Thesis Seminar**								
27	Master Thesis Seminar	Seminar			30	30	30	90	Credit
			ECTS		*3*	*3*	*11*	*17*	
	Total of hours in the group of courses			***0***	***30***	***30***	***30***	***90***	
	ECTS of credits in the group of courses			***0***	***3***	***3***	***11***	***17***	
	Total of hours			**285**	**285**	**240**	**180**	**990**	
	ECTS of credits			**30**	**30**	**30**	**30**	**120**	