

Field of study : **MATEMATYKA (MATHEMATICS)**

Profile of study: General academic

degree studies: I

Mode of study: Full-time programme

Speciality: **Financial Mathematics**

For a year 2019/2020

YEAR	SEMESTER	COURSES	Course details							
			CODE	Hours				Form of assessment	ECTS	
				Lectures	Tutorials / Seminars	Computer labs	Apprenticeship, others			Total
I	1	Introduction to Mathematics	AAOLEM		28			28	Z	2
	1	Logic and Set Theory	LMOLEM	28	28			56	E	6
	1	Mathematical Analysis 1	AM1LEM	42	42			84	E	8
	1	Linear Algebra with Geometry 1	AG1LEM	42	42			84	E	7
	1	Application Software	ASOENG			28		28	Z	2
	1	Mathematics of Banking	BMOLEM	28	28			56	Z	6
	<b>Semester 1 total:</b>							<b>Hours: 336</b>	<b>p. ECTS: 31</b>	
	2	Mathematical Analysis 2	AM2LEM	42	42			84	E	10
	2	Linear Algebra with Geometry 2	AG2LEM	42	28			70	E	8
	2	Elements of Discrete Mathematics	EDOLEM		28			28	Z	3
	2	Introduction to Programming	POOLEM			28		28	Z	3
	2	Elements of Descriptive Statistics	ESOLEM	14		14		28	Z	2
	2	Introduction to Insurance	WUOLEM	28				28	Z	2
	2	Classes from group I		28				28	Z	2
<b>Semester 2 total:</b>							<b>Hours: 294</b>	<b>p. ECTS: 30</b>		
II	3	Mathematical Analysis 3	AM3LEM	24	28			52	Z	5
	3	Probability Theory 1	RP1LEM	24	28			52	E	5
	3	Introduction to Measure and Integral Theory	TCOLEM		14			14	Z	1
	3	Financial Instruments	IFOLEM	14	28			42	Z	4
	3	Classes from group S		7				7	Z	1
	3	Classes from group III			42			42	Z/E	4
	3	Classes from group IV		min	42			42	Z/E	5
	3	Electives		min	20			20	Z	5
	3	Physical Education 1	PE1ENG				30	30	Z	0
	<b>Semester 3 total:</b>							<b>Hours (min): 301</b>	<b>p. ECTS: 30</b>	
	4	Mathematical Analysis 4	AM4LEM	28	28			56	E	6
	4	Differential Equations	RROLEM	28	28			56	E	6
	4	Probability Theory 2	RP2LEM	28	28			56	E	6
	4	Portfolio Analysis	APOLEM	28		28		56	E	5
4	Pricing in Discrete Market Models	DROLEM	28	28			56	Z	5	
4	Classes from group I		28				28	Z	2	
4	Physical Education 2	PE2ENG				30	30	Z	0	
<b>Semester 4 total:</b>							<b>Hours (min): 338</b>	<b>p. ECTS: 30</b>		
III	5	Bachelor Seminar 1 and Preparation for BAP	SS1ELM*		28			28	Z	3
	5	Introduction to Stochastic Processes	WPOLEM	28	28			56	Z	5
	5	Statistics	STOLEM	28	28			56	E	6
	5	Computer Aided Calculations (M)	KWOLEM			28		28	Z	2
	5	Classes from group II		7				7	Z	1
	5	Classes from group III			42			42	Z/E	4
	5	Classes from group IV		min	42			42	Z/E	5
	5	Electives		min	20			20	Z/E	5
	<b>Semester 5 total:</b>							<b>Hours (min): 279</b>	<b>p. ECTS: 31</b>	
	6	Bachelor Seminar 2 and Preparation for BAP	SS2ELM*		28			28	Z	9
	6	Financial engineering	FEOLEM	28		28		56	Z	5
	6	Team Project	PZOLEM		14			14	Z	2
	6	Apprenticeship	QZOLEM				120	120	Z	4
	6	Risk of Financial Investments	RF0OLEM	28	28			56	E	5
6	Non-Life Insurance	UMOLEM	28	28			56	E	5	
<b>Semester 6 total:</b>							<b>Hours (min): 330</b>	<b>p. ECTS: 30</b>		
<b>TOTAL THROUGHOUT THE STUDIES:</b>							<b>Hours (min): 1878</b>	<b>p. ECTS: 182</b>		

Classes from group:

I	2 / 4	Capital Market	RKOLEM	28			28	Z	2
	4 / 2	Macroeconomics	MKOLEM	28			28	Z	2
II	3 / 5	e.g. Intellectual Property Protection	OIOLEM	7			7	Z	1
	5 / 3	e.g. Fundamentals of Entrepreneurship	PPOLEM	7			7	Z	1
III	3 / 5	Algebra	ALOLEM	22	22		44	E	4
	5 / 3	Introduction to Topology	TOOLEM	20	28		48	Z	4
IV	3 / 5	Foundations of Databases (M)	BDOLEM	28		28	56	Z	5
	5 / 3	Microeconomics	MIOLEM	28	14		42	E	5

Study programme approved by the Council of the Faculty of Mathematics and Computer Science on 15.05.2019 and 24.03.2024

Mandatory courses not included in the study programme:

- Health and Safety Training on the e-learning platform,
- Copyright Training on the e-learning platform.

Library Training from 2021/2022

IV semester - the meeting at which the topics of the proposed diploma thesis will be presented