

Faculty of Economic Sciences, University of Warsaw
Master's Programme Curriculum
Field of study: **Quantitative Finance** - 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 | | |
| General Courses | | | | | | | | | | |
| 1 | university offer | General elective course (OGUN) | wykł. | hours | 30 | | | 30 | 60 | Credit |
| | | humanistic profile | | ECTS | 3 | | | 3 | 6 | |
| | | Total of hours in the group of courses | | | 30 | 0 | 0 | 30 | 60 | |
| | | ECTS of credits in the group of courses | | | 3 | 0 | 0 | 3 | 6 | |
| Core courses | | | | | | | | | | |
| 3 | 2400-QFU2AMA | Advanced Macroeconomics | lecture | hours | | | 30 | | 30 | written exam |
| | | | | ECTS | | | 3 | | 3 | |
| 4 | 2400-QFU1STE | Statistics & Econometrics | lecture | hours | 30 | | | | 30 | written exam |
| | | | | ECTS | 2 | | | | 2 | |
| 5 | 2400-QFU1IQF | Introduction to Quantitative Finance | lecture | hours | 30 | | | | 30 | written exam |
| | | | | ECTS | 3 | | | | 3 | |
| 6 | 2400-QFU1MMF | Mathematical Methods in Finance | lecture | hours | 30 | | | | 60 | written exam |
| | | | lab. | hours | 30 | | | | | |
| | | | ECTS | 6 | | | | 6 | | |
| 7 | 2400-QFU1TSA | Time Series Analysis | lecture | hours | | 30 | | | 60 | written exam |
| | | | lab. | hours | | 30 | | | | |
| | | | ECTS | | 6 | | | 6 | | |
| 8 | 2400-QFU2FEC | Quantitative Strategies. High Frequency Data | lecture | hours | | | 30 | | 60 | written exam |
| | | | lab. | hours | | | 30 | | | |
| | | | ECTS | | | 6 | | 6 | | |
| | | Total of hours in the group of courses | | | 120 | 60 | 90 | 0 | 270 | |
| | | ECTS of credits in the group of courses | | | 11 | 6 | 9 | 0 | 26 | |
| C | Field -of study courses | | | | | | | | | |
| 9 | 2400-QFU1FSA | Financial Statement Analysis | lecture | hours | 30 | | | | 45 | written exam |
| | | | lab. | hours | 15 | | | | | |
| | | | ECTS | 6 | | | | 6 | | |
| 10 | 2400-QFU1ESL | Ethical Standards and Financial Law | lecture | hours | 30 | | | | 30 | written exam |
| | | | | ECTS | 3 | | | | 3 | |
| 11 | 2400-QFU1AIS | Asset Allocation and Investment Strategies | seminar | hours | 30 | | | | 30 | written exam |
| | | | | ECTS | 3 | | | | 3 | |
| 12 | 2400-QFU1MLI | Machine Learning in Finance I | lecture | hours | 15 | | | | 30 | written exam |
| | | | lab. | hours | 15 | | | | | |
| | | | ECTS | 4 | | | | 4 | | |
| 14 | 2400-QFU1EFI | Equity and Fixed Income | lecture | hours | | 30 | | | 45 | written exam |
| | | | lab. | hours | | 15 | | | | |
| | | | ECTS | | 5 | | | 5 | | |
| 15 | 2400-QFU1DVM | Derivatives Markets | lecture | hours | | 30 | | | 45 | written exam |
| | | | lab. | hours | | 15 | | | | |
| | | | ECTS | | 4 | | | 4 | | |
| 16 | 2400-QFU1CFN | Corporate Finance | lecture | hours | | 30 | | | 45 | written exam |
| | | | lab. | hours | | 15 | | | | |
| | | | ECTS | | 4 | | | 4 | | |
| 17 | 2400-QFU1CF | Computational Finance | lab. | hours | | 30 | | | 30 | written exam |
| | | | | ECTS | | 5 | | | 5 | |
| 18 | 2400-QFU1RR | Reproducible Research | lab. | hours | | 30 | | | 30 | Credit |
| | | | | ECTS | | 3 | | | 3 | |
| 19 | 2400-QFU2RAM | Risk Analysis and Modelling I | seminar | hours | | | 30 | | 30 | written exam |
| | | | | ECTS | | | 5 | | 5 | |
| 20 | 2400-QFU2C1 | C++ in Quantitative Finance I | lab | hours | | | 30 | | 30 | written exam |
| | | | | ECTS | | | 4 | | 4 | |
| 21 | 2400-QFU2TPRO | Theory and practice of option pricing | lecture | hours | | | 30 | | 30 | written exam |
| | | | | ECTS | | | 6 | | 6 | |
| 22 | 2400-QFU1MLII | Machine Learning in Finance II | lab | hours | | | 30 | | 30 | written exam |
| | | | | ECTS | | | 3 | | 3 | |
| 23 | 2400-QFU2RAMb | Risk Analysis and Modelling II | seminar | hours | | | | 30 | 30 | written exam |
| | | | | ECTS | | | | 4 | 4 | |
| 24 | 2400-QFU2C2 | C++ in Quantitative Finance II | lab | hours | | | | 30 | 30 | written exam |
| | | | | ECTS | | | | 4 | 4 | |

| | | | | | | | | | | |
|----|---|--|---------|-------|-----|-----|-----|-----|-----|--------|
| 25 | 2400-QFU2EFM | Empirics of Financial Markets | seminar | hours | | | | 30 | 30 | Credit |
| | | | | ECTS | | | | 4 | 4 | |
| 26 | 2400-QFU2TSA | Automatic Transactional Systems | lab | hours | | | | 30 | 30 | Credit |
| | | | | ECTS | | | | 4 | 4 | |
| | | 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 | 2400-SU2TS..... | 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 | |