DOUBLE DEGREE STUDY PROGRAM FOR UCLouvain-UNamur STUDENTS

[I.] FIRST YEAR AT UCLouvain-UNamur

Master en sciences économiques, orientation générale,
à finalité approfondie (ECON2MA)

SECOND YEAR AT SGH

Master in Advanced Analytics — Big Data

FIRST YEAR AT UCLouvain-UNamur

Master en sciences économiques, orientation générale, à finalité approfondie (ECON2MA)

| Course | ECTS | |
|---|------|--|
| LECON 2111 Advanced Microeconomics I: Individual Decision and General Equilibrium | 5 | |
| LECON 2121 Advanced Macroeconomics I: Intertemporal Behavior and Business Cycles | 5 | |
| LECON 2112 Advanced Microeconomics II: Game theory and Information Economics | 5 | |
| LECON 2122 Advanced Macroeconomics II: Growth, Dynamics and Policy | | |
| 1 research seminar among the following | | |
| | 5 | |
| - ECONM 653 Research Seminar I : Microeconomics | | |
| - LECON 2161 Advanced macroeconomics III | | |
| - LECON 2603 Econometrics Workshop | 5 | |
| - LECON2131 Advanced Econometrics | | |
| - LECON2065 History of Economic Thought | 5 | |
| 3 advanced elective courses among | | |
| - LECON 2608 Advanced Labour Economics | | |
| - LECON 2610 Industrial Organisation | | |
| - LECON 2069 Ethics and Social Choice (biannual course - taught in 2024-2025) | | |
| - LECON2600 Dynamic Methods in Economics | 1 | |
| - LECON 2604 Advanced International Trade | | |
| - LECON 2601 Advanced Econometrics II - Time Series Econometrics | 15 | |
| - LECON 2602 Advanced Econometrics II - Microeconometrics | | |
| - LECON 2605 Capital Markets Theory (not taught in 2024-2025) | | |
| - LECON 2655 Population and Family economics | | |
| - LECON 2609 Game Theory | | |
| - LECON 2607 Public Economics | | |
| - ECONM654 Advanced Monetary Economics | | |
| - ECONM652 Advanced Development Economics | | |
| + Courses from Advanced Master in Economics-KUL | 1.0 | |
| Other Electives | 10 | |
| Total | 60 | |

SECOND YEAR AT SGH

Advanced Analytics - Big Data

Graded, obligatory courses without ECTS credits:

(249980-D) Library Training (e-learning),

(249960-D) Training on Fundamentals of Intellectual Property Protection (e-learning),

(249990-D) Training on Occupational Health and Safety (e-learning).

Basic courses SMMB-AAB

| Course code | Course title | Hours | ECTS |
|-------------|--------------|-------|------|
| 210111 | Business Law | 30 | 4,5 |

Major courses SMMB-AAB at least 35.5 ECTS

| Course code | Course title | Hours | ECTS |
|-------------|--|-------|------|
| 229091 | Advanced Business Analytics, Data Imputation Techniques | 30 | 4,5 |
| 222801 | Advanced Optimization Methods | 60 | 6,0 |
| 220521 | Basic R Programming | 16 | 1,5 |
| 223091 | Big Data | 30 | 3,0 |
| 224391 | Cloud Computing | 30 | 3,0 |
| 220311 | Credit Scoring - Business Process Automation | 30 | 3,0 |
| 220551 | Cybersecurity | 30 | 4,5 |
| 223121 | Data Mining | 30 | 3,0 |
| 223061 | Databases Build and Exploitation | 30 | 3,0 |
| 229081 | Duration Analysis | 30 | 3,0 |
| 220541 | Python Programming | 30 | 3,0 |
| 223101 | Querrying, Data Presentation, Data Visualisation and Reporting | 30 | 3,0 |
| 222891 | Real-Time Analytics | 30 | 3,0 |
| 223491 | Statistical Learning Methods | 45 | 6,0 |

| | Hours | ECTS |
|--|-------|------|
| Master Seminar 1st semester | 30 | 8 |
| Master Seminar 2nd semester, including Master Thesis | 30 | 12 |

| | | 5 |
|-------|--|----|
| Total | | 60 |