DOUBLE DEGREE in

ECONOMICS & Big Data (Research)

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 Behaviour and Business Cycles	5
LECON 2112 Advanced Microeconomics II: Game Theory and Information Economics	5
LECON 2122 Advanced Macroeconomics II : Growth, Dynamics and Policy	5
1 research seminar among the following - ECONM 653 Research Seminar I : Microeconomics - LECON 2161 Advanced macroeconomics III - LECON 2603 Econometrics Workshop	5
- LECON2131 Advanced Econometrics	5
- 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 - LECON 2604 Advanced International Trade - LECON 2601 Advanced Econometrics II - Time Series Econometrics - LECON 2602 Advanced Econometrics II - Microeconometrics - 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	15
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 Optimisation 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	Querying, 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/thesis	30	8
Master Seminar 2nd semester/thesis	30	12

Total	**60**