

**DOUBLE DEGREE  
STUDY PROGRAM  
FOR SGH STUDENTS**

**[I.] FIRST YEAR AT SGH**

**Master in Advanced Analytics Big Data  
or Master in Analiza danych — Big Data**

**SECOND YEAR AT UC Louvain**

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

**FIRST 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
<del>210101</del>	<del>History of Economic Thought</del> – to be taken at UCLouvain-UNamur	<del>30</del>	<del>4,5</del>

**Econometrics**

Course code	Course title	ECTS
222051	Applied Econometrics	3,0
220341	Microeconometrics	3,0
or		
222061	Time Series Econometrics	6,0

**Major courses SMMB-AAB: 49,5 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	Querying, Data Presentation, Data Visualisation and Reporting	30	3,0
222891	Real-Time Analytics	30	3,0
223491	Statistical Learning Methods	45	6,0

<b>Total</b>	<b>60</b>
--------------	-----------

## SECOND YEAR AT UCLouvain

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

Courses	ECTS
<b>LECON 2111 Advanced Microeconomics I: Individual Decision and Gen. Equil.</b>	5
<b>LECON 2121 Advanced Macroeconomics I : Intertemporal Behavior and B Cycles</b>	5
<b>LECON 2112 Advanced Microeconomics II: Game theory and Inform. Economics</b>	5
<b>LECON 2122 Advanced Macroeconomics II : Growth, Dynamics and Policy</b>	5
<b>1 research seminar</b> among - LECON 2161 Advanced macroeconomics III - ECONM 653 Research Seminar I : Microeconomics - LECON 2603 Econometrics Workshop	5
<b>LECON2065 History of Economic Thought</b>	5
<b>LECON2131 Advanced Econometrics</b>	5
<b>1 advanced elective course</b> among "Advanced Economics Analysis I"* - 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 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	5
<b>LECON 2609 A /Thesis incl. attendance SGH Master seminar** – first semester</b>	8
<b>LECON 2609 B/Thesis/ incl. attendance SGH Master seminar** – second semester</b>	12
<b>Total</b>	<b>60</b>

\*Subject to changes from one year to another

\*\*Attended online/remotely. Replaces LECON2910A Séminaire de préparation au mémoire