

## Orientation: Business Analytics

### Plan d'études 2018-2019

	Language	Semester	Professeur	Credits	Hours	Evaluation	Total ECTS
<b>MODULE 1 - 30 ECTS</b>							
<b>Compulsory (18 ECTS)</b>							
Machine Learning in Business Analytics	E	4.1	Boldi M.-O.	6	4	E	18
Optimization Methods in Management	E	4.1	Oeuwray R.	6	4	E	
Quantitative Methods for Management (Compulsory for all)	E	4.1	Reboulleau J.	6	4	E	
<b>Elective (12 credits)</b>							
Competitive Strategy	E	4.1	Amer Maistriau E.	6	4	E	12
Ecology and Evolution	E	4.1	Lehmann L.	6	4	O	
Marketing Science	E	4.1	Christen M.	6	4	E	
Organizational Theory and Decision Making	E	4.1	Ch. Zehnder	6	4	E	
Organizational Theory and Decision Making	E	4.1	Ch. Zehnder	6	4	E	
Strategic Marketing	E	4.1	Lacoste S./Rege K.	6	4	P	

<b>MODULE 2 - 24 ECTS</b>								
<b>Compulsory (6 ECTS) - only for students in this orientation</b>								
Company Project in Business Analytics: compulsory course	E	4.2	Boldi M.-O.	6	4		6	
Advanced Data Analysis	E	4.2	Scheidegger S.	6	4	P		
Business Intelligence and Analyzing Big Data	E	4.2	Niemi T.	6	4	E	18	
Data-Driven Business	E	4.2	Marewski J.	6	4	P		
Financial Reporting and Corporate Governance	E	4.2	Doukakis L.	3	2	E		
Negotiations	E	4.2	Efferson Ch.	6	4	E		
Programming	E	4.2	Scheidegger S.	6	4	P		
Social Well Being	E	4.2	Petersen F.	6	4	P		
Conceptual Modelling for Business Analytics	E	5.1	Niemi T.	6	4	E		
Experimental Methods	E	5.1	Hakimov R.	6	4	P		
Fiscalité internationale	F	5.1	Danon R.	6	4	P		
Individual Behavior in the Digital Environment	E	5.1	Schlager T.	6	4	E		
Innovation Law	E	5.1	Junod V.	3	2	E		
La recherche dans tous ses états	F	5.1	D. Preissmann	3	P	P		
Normes comptables internationales (IFRS)	F	5.1	Barbe O.	3	2	E		
Or any course from the Master in Management within other orientations except the company project		4.2-5.1		18				
Total								24

<b>MODULE 3 - 36 ECTS</b>							
<b>BA orientation electives</b>							
Data Science in Business Analytics	E	4.2	Vatter Th.	6	4	P	36
Forecasting 1	E	4.2	Boldi M.-O. /Flores D.	3	2	?	
Forecasting 2	E	4.2	Boldi M.-O. /Flores D.	3	2	?	
Operations Strategy: Analytical Applications	E	4.2	De Treville S.	3	2	P	
Strategic Modelling	E	4.2	Van Ackere A.	6	4	E	
Supply-Chain Analytics	E	4.2	De Treville S.	6	4	E	
Survey Sampling	E	4.2	Wilhelm M.	3	2	E	
Computational Complexity	E	5.1	Duparc J.	6	4	?	
Data Analytics for Decision Making	E	5.1	Zuber J.	6	4	P	
Fraud and Business Process Analytics	E	5.1	Baumgartner M.	3	2	?	
Programming Tools in Data Science	E	5.1	Orso S.	6	4	P	
Supply Chain Management and its Latest Trends	E	5.1	Hameri A.-P.	6	4	E	
Text Mining	E	5.1	Boldi M.-O.	6	4	?	

<b>MODULE 4 - 30 ECTS</b>							
Semester 5.2: Master thesis	E/F	5.2		30			30

PROGRAMME'S STRUCTURE	
<b>MODULE 1 - 30 ECTS</b>	<b>ECTS</b>
Quantitative Methods for Management	6
Orientation-specific courses (compulsory)	12
Courses of other Orientations (electives)	12
<b>MODULE 2</b>	
1 Business Case	6
Elective courses	18
<b>MODULE 3</b>	
Orientation-specific elective courses	36
<b>MODULE 4 - 30 ECTS</b>	
Orientation-specific Master Thesis	30
Academic or internship master's thesis taking place at the last semester	
Regarding internship, the duration is minimum 3 months, maximum 6 months, can be extended to 12 months	
<b>Total ECTS</b>	<b>120</b>

ECTS: European Credit Transfer System