

Orientation: Business Analytics

Plan d'études 2020-2021

	Language	Semester	Professeur	Credits	Hours	Evaluation	Total ECTS
MODULE 1 - 30 ECTS							
Compulsory (18 ECTS)							
Data Science in Business Analytics	E	Aut-1st	Vatter Th.	6	4	P	18
Optimization Methods in Management	E	Aut-1st	Ouvray R.	6	4	E	
Quantitative Methods for Management (Compulsory for all)	E	Aut-1st	Reboulleau J.	6	4	E	
Elective (12 credits)							
Competitive Strategy	E	Aut-1st	Amer Maistriau E.	6	4	E	12
Genes, Populations and Evolution	E	Aut-1st	Lehmann L.	6	4	O	
Marketing Science	E	Aut-1st	De Bellis E.	6	4	E	
Organizational Theory and Decision Making	E	Aut-1st	Ch. Zehnder	6	4	E	
Organizational Theory and Decision Making	E	Aut-1st	Ch. Zehnder	6	4	E	
Strategic Marketing	E	Aut-1st	Christen M.	6	4	P	

MODULE 2 - 24 ECTS								
Compulsory (6 ECTS) - only for students in this orientation								
Company Project in Business Analytics: compulsory course	E	Spring-2nd	Chavez V. / Boldi M.-O.	6	4		6	
Advanced Data Analysis	E	Spring-2nd	Scheidegger S.	6	4	P	24	
Innovation Law	E	Spring-2nd	Junod V.	3	2	E		
Negotiations	E	Spring-2nd	Efferson Ch.	6	4	E		
Programming	E	Spring-2nd	Scheidegger S.	6	4	P		
Project Management & Outsourcing in a Digital Era (MScM-MDE)	E	Spring-2nd	Bienz P.	6	4	P		
Social Well Being	E	Spring-2nd	Petersen F.	6	4	P		
Sustainable Innovation Challenge - <i>nombre limité d'étudiant·es</i>	E	Spring-2nd	Petty J.	3	2	P		
Experimental Methods	E	Aut-3rd	Hakimov R.	6	4	P		
Advanced issues in International and European Tax Law	F	Aut-3rd	Danon R.	3	2	P		
Individual Behavior in the Digital Environment	E	Aut-3rd	Schlager T.	6	4	E		
La recherche dans tous ses états (<i>ne sera pa donné en 2020</i>)	F	Aut-3rd	D. Preissmann	3		P		
Normes comptables internationales (IFRS)	F	Aut-3rd	Barbe O.	3	2	E		
Or any course from the Master in Management within other orientations except the company project		Spring-2nd/ Aut-3rd		18				
			Total					

MODULE 3 - 36 ECTS							
<i>BA orientation electives</i>							
Deep Learning	E	Spring-2nd	Rudnytskyi I.	3	2	P	36
Forecasting 1	E	Spring-2nd	Baumgartner M.	3	2	P	
Forecasting 2	E	Spring-2nd	Chavez V.	3	2	P	
Machine Learning in Business Analytics	E	Spring-2nd	Boldi M.-O.	6	4	2	
Strategic Modelling	E	Spring-2nd	Van Ackere A.	6	4	E	
Supply-Chain Analytics	E	Spring-2nd	De Treville S.	6	4	E	
Algorithms for Business Intelligence and Digital Marketing	E	Aut-3rd	Vuillon L.	3	2	E	
Computational Complexity I	E	Aut-3rd	Duparc J.	3	2	E	
Fraud and Business Process Analytics	E	Aut-3rd	Baumgartner M.	3	2	P	
Production Control	E	Aut-3rd	Gallay O.	3	2	?	
Programming Tools in Data Science	E	Aut-3rd	Orso S.	6	4	P	
Projets in Data Analytics for Decision Making	E	Aut-3rd	Zuber J.	6	4	P	
Risk Analytics	E	Aut-3rd	Chavez V.	3	2	?	
Supply Chain Management and its Latest Trends	E	Aut-3rd	Hameri A.-P.	6	4	E	
Text Mining	E	Aut-3rd	Boldi M.-O.	6	4	P	

MODULE 4 - 30 ECTS							
Semester 5.2: Master thesis	E/F	Spring-4th		30			30

PROGRAMME'S STRUCTURE	
MODULE 1 - 30 ECTS	ECTS
Quantitative Methods for Management	6
Orientation-specific courses (compulsory)	12
Courses of other Orientations (electives)	12
MODULE 2	
1 Business Case	6
Elective courses	18
MODULE 3	
Orientation-specific elective courses	36
MODULE 4 - 30 ECTS	
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	
Total ECTS	120

ECTS: European Credit Transfer System