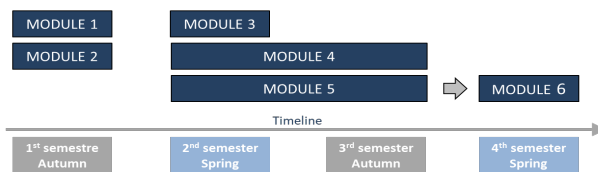


HEC Lausanne
MSc Management

Orientation : Business Analytics (BA)
 120 credits ECTS
 Study Plan 2023-2024

Structure of the Master



Courses	Professors	Semesters				ECTS	Lang	Eval
		1 st sem Autumn	2 nd sem Spring	3 rd sem Autumn	4 th sem Spring			
MODULE 1: Average set (≥4.0) of compulsory courses - 18 credits ECTS								
Quantitative Methods for Management - <i>all orientations</i>	Rebouleau J.	●				6	E	W
Data Science in Business Analytics - <i>BA orientation</i>	Vatter Th.	●				6	E	V
Optimization Methods in Management - <i>BA orientation</i>	Oeuvray R.	●				6	E	W
MODULE 2: Average set (≥4.0) of restricted elective courses - 12 credits ECTS								
Strategic Management - <i>SOL/BEE orientations</i>	Amer Maistriau E.	●				6	E	W
Organizational Theory and Decision Making - <i>SOL/BEE orientations</i>	Grieder M.	●				6	E	W
Genes, Populations and Evolution - <i>BEE orientation</i>	Lehmann L.	●				6	E	O
Marketing Science - <i>MKT orientation</i>	Christen M.	●				6	E	W
Strategic Marketing - <i>MKT orientation</i>	Engeler I.	●				6	E	V
MODULE 3: Restricted elective courses - 6 credits ECTS								
Algorithms for Business Intell. and Digital Marketing (<i>for BA only</i>)	Vuillon L.		●			6	E	W
Analytics in Action: Operations Management through Simulation (<i>for BA only</i>)	Hayek A.		●			6	E	V
MODULE 4: Optional courses - 18 credits ECTS								
Advanced Data Analysis	Scheidegger S.		●			6	E	V
Advanced Programming	Scheidegger S.		●			6	E	V
Advanced Project Management & Outsourcing in a Digital Era	Bienz P.		●			6	E	V
Innovation Law	Junod V.		●			3	E	W
Bargaining and Negotiations	Efferson C.		●			6	E	W
Social Well Being	Petersen F.		●			6	E	W
Sustainable Innovation Challenge	Petty J.		●			3	E	V
Advanced issues in International and European Tax Law	Danon R.			●		3	E	W
Entrepreneurship, Innovation and Control Systems	Davila A.			●		3	E	W
La recherche dans tous ses états	Preissmann D.			●		3	F	V
Normes comptables internationales (IFRS)	Bianchi A.			●		3	F	W
Module 4 can be any course listed above and any course listed under Module 5 of other orientations (and are not listed below). Company projects for other orientations are not open unless otherwise stated in SOL and BEE curriculums.								
MODULE 5: Optional courses in the orientation - 36 credits ECTS								
Analytics in Operations Management	Lurkin V.		●			3	E	W/V
Forecasting I	Baumgartner M.		●			3	E	W
Forecasting II	Chavez V.		●			3	E	V
Machine Learning in Business Analytics	Boldi M.-O.		●			6	E	V
Multicriteria Decision Analysis	Thiérmard M.		●			3	E	V
Supply Chain Network Design and Planning	Stauffer G.		●			6	E	W/V
Sustainable Logistics	Gallay O.		●			6	E	W/V
Fraud and Business Process Analytics	Baumgartner M.			●		3	E	V
Programming Tools in Data Science	Orso S.			●		6	E	V
Collaborations with Companies in Data Science	Boldi M.-O.			●		9	E	V
Risk Analytics	Chavez V.			●		6	E	V
Supply Chain Management and its Latest Trends	Hameri A.-P.			●		6	E	W
Text Mining	Baumgartner M.			●		3	E	W/V
MODULE 6: Master thesis - 30 credits ECTS								
SUBMODULE 6.1: Writing a thesis								
The Art of Writing a Master's Thesis	Philippe D.			●		3	E	W
SUBMODULE 6.2: Master thesis								
Thesis (Research or Internship)	Choose your thesis director				●	27	E/F	W-O

Thesis Information

1. Internships must be full time or at least 80% for a minimum of 12 weeks.
2. Only students having acquired 90 ECTS credits from Modules 1 to 5 are allowed to present their thesis.
3. [Research thesis guidelines here.](#)
4. [Internship thesis guidelines here.](#)

Legend:

ECTS: Credits

Lang: Teaching language (F: French; E: English)

Eval: Type of evaluation (W: Written exam; O: Oral exam; V: Validation(s) only)

MKT: Marketing orientation **BEE:** Behavior, Economics and Evolution orientation

BA: Business Analytics orientation **SOL:** Strategy, Organization and Leadership orientation

General Information:

1. [Read the 2023-2024 Study Regulation](#)
2. Courses are delivered face-to-face on campus
3. Students can change orientation as long as they have completed the 12 credits ECTS of Module 2 corresponding to the new orientation. The request must be sent by email to hecmaster@unil.ch by the end of the first week of the spring semester (1st academic year).
4. The pandemic has shown us that circumstances beyond our control may require us to make adjustments to study plans during the academic year.