

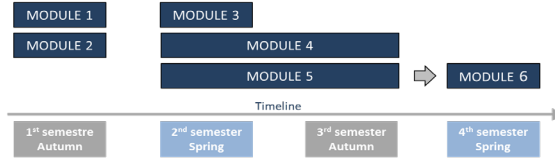
HEC Lausanne
MSc Management

Orientation : Business Analytics (BA)

120 credits ECTS

Study Plan 2024-2025

Structure of the Master



Courses	Professors	Semesters				ECTS	Language	Types of Evaluation	Exam duration
		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									
Statistical Methods for Management - <i>all orientations</i>	Boldi M.-O.	●				6	E	VCN + ENEP	120
Data Science in Business Analytics - <i>BA orientation</i>	Shemendyuk A.	●				6	E	VCN	N/A
Optimization Methods in Management - <i>BA orientation</i>	Oeuvray R.	●				6	E	E	120
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	ENEP	120
Organizational Theory and Decision Making - <i>SOL/BEE orientations</i>	Grieder M.	●				6	E	VCN + ENEP	120
Genes, Populations and Evolution - <i>BEE orientation</i>	Lehmann L.	●				6	E	O	15
Marketing Science - <i>MKT orientation</i>	Clegg M.	●				6	E	VCN + ENEP	120
Strategic Marketing - <i>MKT orientation</i>	Engeler I.	●				6	E	VCN + ENEP	120
MODULE 3: Restricted elective courses - 6 credits ECTS									
Algorithms for Business Intell. and Digital Marketing (<i>for BA only</i>)	Vuillon L.		●			6	E	VCN	N/A
Analytics in Action: Operations Management through Simulation (<i>for BA only</i>)	Hayek A.		●			6	E	VCN	N/A
MODULE 4: Optional courses - 18 credits ECTS									
Advanced Project Management & Outsourcing in a Digital Era	Bienz P.		●			6	E	VCN	N/A
Innovation Law	Junod V.		●			3	E	VCN	N/A
Bargaining and Negotiations	Efferson C.		●			6	E	VCN + ENEP	120
Social Well Being	Petersen F.		●			6	E	VCN	N/A
Advanced Data Analysis (Aut25)	Scheidegger S.			●		6	E	VCN	N/A
Advanced issues in International and European Tax Law	Danon R.			●		3	E	E	120
Datascience and Advanced Programming (Aut25)	Scheidegger S.			●		6	E	VCN	N/A
Entrepreneurship, Innovation and Control Systems	Davila A.			●		3	E	VCN	N/A
La recherche dans tous ses états	Preissmann D.			●		3	F	VCN	N/A
Normes comptables internationales (IFRS)	Bianchi A.			●		3	F	ENEP	120
Strategic Pricing	Christen M.			●		3	E	VCN	N/A
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									
AI Tools for Business Innovation: Projects in Creation and Design	Shemendyuk A.		●			3	E	VCN	N/A
Production Planning and Scheduling	Lurkin V.		●			6	E	VCN	N/A
Forecasting I	Baumgartner M.		●			3	E	VCN	N/A
Forecasting II	Aviolat F.		●			3	E	VCN	N/A
Machine Learning in Business Analytics	Boldi M.-O.		●			6	E	VCN	N/A
Multicriteria Decision Analysis	Thiémond M.		●			3	E	VCN	N/A
Supply Chain Network Design and Planning	Stauffer G.		●			6	E	VCN	N/A
Sustainable Logistics	Gallay O.		●			6	E	VCN	N/A
Deep Learning (Aut 25)	Vatter Th.			●		3	E	TBD	TBD
Data Analytics and Software Tools in Companies	Baumgartner M.			●		3	E	VCN	N/A
Knowledge Graphs and Generative AI	Vuillon L.			●		6	E	VCN	N/A
Programming Tools in Data Science	Orso S.			●		6	E	VCN	N/A
Risk Analytics	Aviola F.			●		6	E	VCN	N/A
Supply Chain Management and its Latest Trends	Hameri A.-P.			●		6	E	VCN + E	120
Text Mining	Baumgartner M.			●		3	E	VCN	N/A
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	VCN	N/A
SUBMODULE 6.2: Master thesis									
Thesis (Research or Internship)	Choose your thesis director				●	27	E/F	M	N/A

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

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

Type of Evaluation: E: Examen écrit; ENEP: Examen numérique en présentiel; O: Examen oral; VCN: Validation continue notée; M: Mémoire VCN+E: Validation continue notée et examen écrit; VCN+O: Validation continue notée et examen oral; VCN+ENEP: Validation continue notée et examen numérique en présentiel

Exam duration: per minute (N/A: non applicable; TBD: to be determined)

MKT: Marketing orientation

BEE: Behavior, Economics and Evolution orientation

BA: Business Analytics orientation

SOL: Strategy, Organization and Leadership orientation

General Information:

[1. Read the 2024-2025 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 the following adjustments to study plans during the academic year:

- possibility to switch from one teaching mode to another (face-to-face <-> distance learning, synchronous <-> asynchronous, switch to co-modal teaching where it was not foreseen at the beginning).
- adaptation of assessment without leading to derogations from the study regulations (oral <-> written, examination <-> validation, individual work <-> group work, practical work <-> theoretical work, in-person assessment <-> online assessment, etc.)
- alternative or shifted modalities for courses, internships, practical work, fieldwork and camps that could not take place or courses that could no longer take place in the form initially planned.

Students are invited to consult regularly the study plans, syllabi and their email.