Study Programme

Academic year 2025-2026

Faculty of Economics and Business Administration

Master of Science in Business Engineering (Double Degree) -- Data Analytics

Language of instruction: English

Programme version 2

1 General Courses

Subscribe to the 1 module from the following list. Subject to approval by the faculty.

1.1 With the Master in Service Engineering and Management (University of Porto)   120 credits

1.1.1 First year (Ghent University)   60 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000442	Strategic Management	6		1	A:1	180
		Johan Verrue -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
2	F000896	Technology for the Circular Economy	5		1	A:2	150
		Ramon Ganigué -- Department of Biotechnology					
		Indicative price: € 0					
3	F000124	System Dynamics	5		1	A:1	150
		Mia Loccufier -- Department of Electromechanical, Systems and Metal Engineering					
		Indicative price: € 6					
4	F000700	Managing Service Organisations	4		1	B:2	120
		Kaat De Pourcq -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 10					
5	F000799	Social Media and Web Analytics	6		1	A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
6	F000712	Analytical Customer Relationship Management	6		1	A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
7	F000942	Machine Learning	6		1	A:1	180
		Dries Benoit -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
8	F000941	Simulation Modelling and Analysis	4		1	A:2	120
		Broos Maenhout -- Department of Business Informatics and Operations Management					
		Indicative price: € 52					
9	F000801	Predictive and Prescriptive Analytics	6		1	A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
10	F000802	Big Data	6		1	A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					

1.1.1.1 Elective: Master in Business Engineering Data Analytics

Subscribe to 6 credit units from module 3, distributed over the first standard learning path as follows: 6 credit units in year 1.
Elective Course of the master in Business Engineering Data Analytics
(https://studiekiezer.ugent.be/master-of-science-in-business-engineering-data-analytics-en/programma)

1.1.2 Second year - first semester (University of Porto)   30 credits

Subscribe to 30 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session	Study

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F001038	Business Process Modeling	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
2	F001039	Programming	5	2	A:1	150
		External Lecturer -- University of Porto					
		Indicative price: unknown					
3	F001040	Human Computer Interaction	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
4	F001041	Creativity	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
5	F001042	Decision Support Systems	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
6	F001043	New Service Development and Design	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
7	F001044	Information Systems Architecture	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
8	F001045	Customer Relationship Management	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					
9	F001046	Technology Entrepreneurship Lab	6	2	A:1	180
		External Lecturer -- University of Porto					
		Indicative price: unknown					

1.1.3 Second year - second semester (Ghent University) 30 credits

1.1.3.1 Master's Dissertation

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000612	Master's Dissertation	24	2	A:J	720
		Indicative price: € 0					

1.1.3.2 Elective: Master in Business Engineering Data Analytics

Subscribe to 6 credit units from module 3, distributed over the first standard learning path as follows: 6 credit units in year 2.
Elective Course of the master in Business Engineering Data Analytics
(https://studiekiezer.ugent.be/master-of-science-in-business-engineering-data-analytics-en/programma)

1.2 With the Master of Innovation and Technology Management, University of Tartu 120 credits

1.2.1 First year - first semester (University of Tartu) 30 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F001065	Innovation Management	6	1	A:1	180
		External Lecturer -- University of Tartu					
		Indicative price: unknown					
2	F001066	Business Analysis	6	1	A:1	180
		External Lecturer -- University of Tartu					
		Indicative price: unknown					
3	F001067	Innovative Organization and Entrepreneurship	6	1	A:1	180
		External Lecturer -- University of Tartu					
		Indicative price: unknown					
4	F001068	Requirement Engineering	6	1	A:1	180
		External Lecturer -- University of Tartu					
		Indicative price: unknown					
5	F001069	Business Growth Strategies	6	1	A:1	180
		External Lecturer -- University of Tartu					
		Indicative price: unknown					

1.2.2 First year - second semester (Ghent University) 30 credits

Nr	Course		CRDT	Ref	MT1	Session	Study

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000896	Technology for the Circular Economy	5	1		A:2	150
		Ramon Ganigué -- Department of Biotechnology					
		Indicative price: € 0					
2	F000671	Human Resources Management	5	1		A:2	150
		Dirk Buyens -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 70					
3	F000799	Social Media and Web Analytics	6	1		A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
4	F000941	Simulation Modelling and Analysis	4	1		A:2	120
		Broos Maenhout -- Department of Business Informatics and Operations Management					
		Indicative price: € 52					

1.2.2.1 Elective: Master in Business Engineering Data Analytics

Subscribe to 10 credit units from module 3, distributed over the first standard learning path as follows: 10 credit units in year 1.
Elective Course of the master in Business Engineering Data Analytics
(https://studiekiezer.ugent.be/master-of-science-in-business-engineering-data-analytics-en/programma)

1.2.3 Second year (Ghent University)   60 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000700	Managing Service Organisations	4	2		B:2	120
		Kaat De Pourcq -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 10					
2	F000704	Financing High Tech Entrepreneurial Companies	4	2		B:1	120
		Miguel Meuleman -- Department of Accounting, Corporate Finance and Taxation					
		Indicative price: € 0					
3	F000712	Analytical Customer Relationship Management	6	2		A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
4	F000942	Machine Learning	6	2		A:1	180
		Dries Benoit -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
5	F000801	Predictive and Prescriptive Analytics	6	2		A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					
6	F000802	Big Data	6	2		A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					
		Indicative price: € 0					

1.2.3.1 Master's dissertation

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000612	Master's Dissertation	24	2		A:J	720
		Indicative price: € 0					

1.2.3.2 Elective: Master in Business Engineering Data Analytics

Subscribe to 4 credit units from module 3, distributed over the first standard learning path as follows: 4 credit units in year 2.
Elective Course of the master in Business Engineering Data Analytics
(https://studiekiezer.ugent.be/master-of-science-in-business-engineering-data-analytics-en/programma)

Programme related study costs
None

Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the cours name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Kroatian/Serbian	zh: Chinese
cs: Czech	el: Greek	fr: French	nl: Dutch	pt: Portuguese	sl: Slovene	
da: Danish	en: English	it: Italian	no: Norwegian	ru: Russian	sv: Swedish	

Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2.
When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.
When a semester is shown in brackets, the course in not offered this year in the specific offering.
The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually	c: annually, from 2026-2027	f: annually, from 2027-2028	i: annually, from 2028-2029
b: tri-annually	d: bi-annually, from 2026-2027	g: bi-annually, from 2027-2028	j: bi-annually, from 2028-2029
	e: tri-annually, from 2026-2027	h: tri-annually, from 2027-2028	k: tri-annually, from 2028-2029

Learning materials

The prices stated are indicative and subject to fluctuations.
The list of learning materials per course unit can be found in the course sheets.