Study Programme

Academic year 2021-2022

Faculty of Economics and Business Administration

Master of Science in Business Engineering -- Data Analytics

Language of instruction: English

Programme version 7

1 General Courses — 50 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					
2	F000896	Technology for the Circular Economy	5	1		A:2	150
		Ramon Ganigué -- Department of Biotechnology					
3	F000671	Human Resources Management	5	1		A:2	150
		Dirk Buyens -- Department of Marketing, Innovation and Organisation					
4	F000124	System Dynamics	5	1		A:1	150
		Mia Loccufier -- Department of Electromechanical, Systems and Metal Engineering					
5	F000699	Business-to-business Marketing	6	1		A:1	180
		Steve Muylle -- Department of Marketing, Innovation and Organisation					
6	F000700	Managing Service Organisations	4	1		A:1	120
		Paul Gemmel -- Department of Marketing, Innovation and Organisation					
7	F000897	Enterprise Architecture	4	2		A:1	120
		Geert Poels -- Department of Business Informatics and Operations Management					
8	F000892	Innovation Management	3	2		A:2	90
		Katrien Verleye -- Department of Marketing, Innovation and Organisation					
9	F000778	Business Process Management	4	2		A:2	120
		Frederik Gailly -- Department of Business Informatics and Operations Management					
10	F000704	Financing High Tech Entrepreneurial Companies	4	2		B:1	120
		Miguel Meuleman -- Department of Accounting, Corporate Finance and Taxation					
11	F000891	Technology Entrepreneurship	4	2		A:1	120
		Johan Verrue -- Department of Marketing, Innovation and Organisation					

2 Courses Related to the Main Subject — 34 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000799	Social Media and Web Analytics	6	1		A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
2	F000712	Analytical Customer Relationship Management	6	1		A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					
3	F000942	Machine Learning	6	1		A:1	180
		Dries Benoit -- Department of Marketing, Innovation and Organisation					
4	F000941	Simulation Modelling and Analysis	4	1		A:2	120
		Broos Maenhout -- Department of Business Informatics and Operations Management					
5	F000801	Predictive and Prescriptive Analytics	6	2		A:2	180
		Matthias Bogaert -- Department of Marketing, Innovation and Organisation					
6	F000802	Big Data	6	2		A:1	180
		Dirk Van den Poel -- Department of Marketing, Innovation and Organisation					

3 Elective Courses — 12 credits

Subscribe to 12 credit units from no less than 1 and no more than 3 modules from the following list. Subject to approval by the faculty.
Distributed over the first standard learning path as 6 credit units in year 1 and 6 credit units in year 2, over the second standard learning path as 6 credit units in year 2 and 6 credit units in year 3.

3.1 Elective Advanced Courses

Subscribe to no more than 12 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000683	Investment Analysis *Michael Frömmel -- Department of Economics*	6			A:1	180
2	F000898	Business Valuation *Leentje Moortgat -- Department of Accounting, Corporate Finance and Taxation*	4			A:1	120
3	F000020	Management Accounting [nl] *Sophie Hoozée -- Department of Accounting, Corporate Finance and Taxation*	4			A:1	120
4	F000717	Financial Risk Management *Frank De Jonghe -- Department of Economics*	6			A:1	180
5	F000706	Advanced Production Management *Tarik Aouam -- Department of Business Informatics and Operations Management*	6			A:2	180
6	F000899	Quality Management *Dries Goossens -- Department of Business Informatics and Operations Management*	6			A:2	180
7	F000836	Decision Making for Business *Mario Vanhoucke -- Department of Business Informatics and Operations Management*	6			A:1	180
8	F000710	Supply Chain Management *Tarik Aouam -- Department of Business Informatics and Operations Management*	6			A:2	180
9	F000676	Econometrics: Time Series Analysis *Gerdie Everaert -- Department of Economics*	6			A:1	180
10	F000920	Networks in Socio-Economic Systems *Luis Enrique Correa da Rocha -- Department of Economics*	6			A:2	180
11	F000707	Project Management *Mario Vanhoucke -- Department of Business Informatics and Operations Management*	6			A:1	180
12	F000918	Deep Learning *Joni Dambre -- Department of Electronics and Information Systems*	6			A:2	180
13	F000889	Internship [nl, en] *Ignace De Beelde*	6			A:J	180
14	E016330	Artificial Intelligence *Aleksandra Pizurica -- Department of Telecommunications and Information Processing*	6			A:1	180
15	I002700	Clean Technology *Pieter Nachtergaele -- Department of Green Chemistry and Technology*	5			A:1	150
16	E065460	Rational Use of Materials *Tom Depover -- Department of Materials, Textiles and Chemical Engineering*	5			A:1	150
17	E004152	Heuristics and Search Methods *Sidharta Gautama -- Department of Industrial Systems Engineering and Product Design*	4			A:1	120
18	E076380	Methods Engineering and Work Measurement *Dieter Claeys -- Department of Industrial Systems Engineering and Product Design*	6			A:1	180
19	E018441	Advanced Databases [nl] *Antoon Bronselaer -- Department of Telecommunications and Information Processing*	6			A:1	180
20	E076340	Information Technology and Data Processing *Jan Aelterman -- Department of Telecommunications and Information Processing*	6			B:2	180
21	E004720	Network Modelling and Design *Mario Pickavet -- Department of Information Technology*	4			B:2	120
22	E076820	Project Management *Mario Vanhoucke -- Department of Business Informatics and Operations Management*	6			A:2	180
23	E060240	Quality Engineering and Industrial Statistics *Stijn De Vuyst -- Department of Industrial Systems Engineering and Product Design*	6			A:2	180
24	E011320	Queueing Theory *Joris Walraevens -- Department of Telecommunications and Information Processing*	6			B:1	180
25	E017822	Software Architecture *Frank Gielen -- Department of Information Technology*	4				120
26	E005770	Total Plant Automation *Johannes Cottyn -- Department of Industrial Systems Engineering and Product Design*	6			A:2	180

3.2 Elective General Courses

Subscribe to no more than 12 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000681	Economics of Banking	6			A:1	180
		Rudi Vander Vennet -- Department of Economics					
2	F000764	Economics of Financial Markets	6			A:1	180
		William De Vijlder -- Department of Economics					
3	F000687	Advanced Econometrics: Non-Linear Methods	6			A:2	180
		Gerdie Everaert -- Department of Economics					
4	F000118	Advanced Microeconomics: Game Theory and Asymmetric Information	6			A:1	180
		Dirk Van de gaer -- Department of Economics					
5	F000628	Microeconomics: Decision Theory	6			B:1	180
		Dirk Van de gaer -- Department of Economics					
6	F000196	Monetary Economics [nl]	5			A:1	150
		Gert Peersman -- Department of Economics					
7	F000935	Ecological Economics	6			A:2	180
		Brent Bleys -- Department of Economics					
8	F000653	Insurances [nl]	6			A:1	180
		Kristiaan Bernauw -- Department of Interdisciplinary Study of Law, Private Law and Business Law					
9	F000640	Audit	6			A:1	180
		Ignace De Beelde -- Department of Accounting, Corporate Finance and Taxation					
10	F000688	Management Control	6			A:2	180
		Sophie Hoozée -- Department of Accounting, Corporate Finance and Taxation					
11	F000852	Taxation [nl]	5			A:2	150
		Annelies Roggeman -- Department of Accounting, Corporate Finance and Taxation					
12	F000694	Advanced Financial Statement Analysis	6			A:1	180
		Heidi Vander Bauwhede -- Department of Accounting, Corporate Finance and Taxation					
13	F000696	Market Research Methods	6			A:1	180
		Patrick Van Kenhove -- Department of Marketing, Innovation and Organisation					
14	F000859	Corporate Social Responsibility [nl]	3			A:2	90
		Saskia Crucke -- Department of Marketing, Innovation and Organisation					
15	B001339	Law and Economics [nl]	3			A:2	90
		Ben Depoorter -- Department of Interdisciplinary Study of Law, Private Law and Business Law					
16	F000933	Environmental Economics [nl]	4			A:1	120
		Johan Albrecht -- Department of Economics					
17	E075310	Ethics, Engineering and Society [nl]	3			A:2	90
		Guido Pennings -- Department of Philosophy and Moral Sciences					
18	D012535	Health Economics [nl]	5			A:1	150
		Dominique Vandijck -- Department of Public Health and Primary Care					
19	H001977	Coaching and Diversity [nl]	3	UKV		A:J	90
		Elisabeth De Schauwer -- Department of Special Education					
20	D002354	Movement and Sports: Now and Later [nl]	3	UKV		A:2	90
		Veerle Segers -- Department of Movement and Sports Sciences					
21	K001339	Sustainability Thinking [nl]	5	UKV		A:J	150
		Thomas Block -- Department of Political Sciences					

3.3 Elective Courses Academic Teacher Education

Subscribe to no more than 12 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	H002169	Powerful Learning Environments [nl]	6			A:1	180
		Bram De Wever -- Department of Educational Studies					
2	H002196	Classroom Management and Reflection [nl]	4			A:2	120
		Melissa Tuytens -- Department of Educational Studies					
3	H002197	The Teacher within School and Society [nl]	4			A:1	120
		Melissa Tuytens -- Department of Educational Studies					
4	H002198	Psychology of Adolescence [nl]	4			A:1	120
		Wim Beyers -- Department of Developmental, Personality and Social Psychology					

4 Master's Dissertation — 24 credits

Nr	Course		CRDT	Ref	MT1	Session	Study

1   F000612   Master's Dissertation   24   2   A:J   720