

Faculty of Sciences

Master of Science in Computer Science

Language of instruction: Dutch

Programme version 6

1 General Courses 60 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003241 Fundamentals of Programming Languages <i>Christophe Scholliers -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:1	165
2	C003758 Machine Learning [en] <i>Yvan Saeys -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:1	180
3	E017930 Parallel and Distributed Software Systems [en] <i>Filip De Turck -- Department of Information Technology</i>	6		1	A:1	180
4	C003349 Discrete Algorithms <i>Veerle Fack -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:2	165
5	C004072 Software Engineering Lab 3 <i>Sofie Van Gassen -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:2	180
6	E018520 Compilers [en] <i>Bjorn De Sutter -- Department of Electronics and Information Systems</i>	6		1	A:2	180
7	C004041 Data Visualization <i>Bart Mesuere -- Department of Mathematics, Computer Science and Statistics</i>	3		1	A:2	90
8	C000957 Intellectual Property Rights <i>Hendrik Vanhees -- Department of Interdisciplinary Study of Law, Private Law and Business Law</i>	3		1	A:2	90
9	C004073 Computer Graphics <i>Peter Lambert -- Department of Electronics and Information Systems</i>	6		2	A:1	180
10	C004074 Big Data Science <i>Bart Mesuere -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:2	165
11	C004075 Internship <i>Peter Dawyndt -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:2	180

2 Minors 30 credits

Subscribe to 1 minor from the following list.

2.1 Minor Research 30 credits

Subscribe to no less than 18 and no more than 30 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	E010310 Image Processing <i>Wilfried Philips -- Department of Telecommunications and Information Processing</i>	6			A:1	180
2	C000627 Computability and Complexity [en] <i>David Fernández-Duque -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6			A:1	165
3	E018921 Document Processing [en] <i>Antoon Bronselaer -- Department of Telecommunications and Information Processing</i>	4			A:1	120
4	C004011 Advanced Numerical Methods <i>Marnix Van Daele -- Department of Mathematics, Computer Science and Statistics</i>	6			A:1	180
5	E018441 Advanced Databases <i>Antoon Bronselaer -- Department of Telecommunications and Information Processing</i>	6			A:1	180
6	E019170 Internet of Things [en] <i>Jeroen Hoebeke -- Department of Information Technology</i>	6			A:1	180
7	E019370 Robotics [en] <i>Tony Belpaeme -- Department of Electronics and Information Systems</i>	6			A:1	180

8	E017941	Software Hacking and Protection [en] <i>Bjorn De Sutter -- Department of Electronics and Information Systems</i>	6	A:1	180
9	E018230	Recommender Systems [en] <i>Luc Martens -- Department of Information Technology</i>	6	A:2	180
10	C000145	Algorithmic Graph Theory <i>Gunnar Brinkmann -- Department of Mathematics, Computer Science and Statistics</i>	6	A:2	165
11	C001719	Capita Selecta in Soft Computing <i>Chris Cornelis -- Department of Mathematics, Computer Science and Statistics</i>	6	A:2 ^a	165
12	C003711	Computational Challenges in Bioinformatics [en] <i>Peter Dawyndt -- Department of Mathematics, Computer Science and Statistics</i>	6	A:2	180
13	C001026	Computer Algebra <i>Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6	A:2	165
14	E736020	Computer Vision <i>Peter Veelaert -- Department of Telecommunications and Information Processing</i>	6	A:2	180
15	E003600	Information Theory [en] <i>Heidi Steendam -- Department of Telecommunications and Information Processing</i>	6	B:2	180
16	E017920	Design of Multimedia Applications [en] <i>Glenn Van Wallendael -- Department of Electronics and Information Systems</i>	6	A:2	180
17	E010220	Speech Processing [en] <i>Kris Demuyne -- Department of Electronics and Information Systems</i>	4	A:2	120
18	E034150	Blockchain Technologies and Applications [en] <i>Bjorn De Sutter -- Department of Electronics and Information Systems</i>	3	A:1	90
19	C004413	Causal Machine Learning [en] <i>Stijn Vansteelandt -- Department of Mathematics, Computer Science and Statistics</i>	5	A:2	150

2.1.1 Elective Courses Flemish Community 12 credits

Subscribe to no more than 12 credit units to be chosen from the study programmes of UGent including the [Ghent University elective courses](#) or study programmes of other higher education of the Flemish Community.

2.2 Minor Economics and Business Administration 30 credits

Subscribe to 30 credit units from no less than 1 and no more than 2 modules from the following list.

2.2.1 General Courses

Subscribe to no less than 24 and no more than 30 credit units from the following list, distributed over the first standard learning path as follows: no more than 24 credit units in year 1.

Dare to Venture can be chosen if you have already subscribed to Introduction to Entrepreneurship.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	F000758 Economics <i>Bruno Merlevede -- Department of Economics</i>	5			A:1	150
2	E076930 Financial and Cost Price Reporting in Companies <i>Sophie Maussen -- Department of Accounting, Corporate Finance and Taxation</i>	6			A:1	180
3	E076431 Introduction to Entrepreneurship [en] <i>Petra Andries -- Department of Marketing, Innovation and Organisation</i>	3			A:1	90
4	E076460 Dare to Venture [en] <i>Johan Verrue -- Department of Marketing, Innovation and Organisation</i>	4			A:2	120
5	F000845 Business Administration <i>Mirjam Knockaert -- Department of Marketing, Innovation and Organisation</i>	4			A:2	120
6	F000551 Business Skills [en] <i>Mieke Audenaert -- Department of Marketing, Innovation and Organisation</i>	4			C:2	120
7	F000768 Marketing Management <i>Maggie Geuens -- Department of Marketing, Innovation and Organisation</i>	6			A:1	180
8	F000855 Organization Theory [en] <i>Gosia Kozusznik -- Department of Marketing, Innovation and Organisation</i>	4			A:2	120
9	F000596 Business Cycles and Growth <i>Freddy Heylen -- Department of Economics</i>	6			A:1	180
10	F000446 Markets and Prices <i>Dirk Van de gaer -- Department of Economics</i>	6			A:1	180
11	F000093 Financial Markets and Institutions <i>Rudi Vander Venet -- Department of Economics</i>	5			A:2	150

12	F000752	Environmental Economics and Policy <i>Brent Bleys -- Department of Economics</i>	4	B:2	120
13	F000859	Corporate Social Responsibility <i>Saskia Crucke -- Department of Marketing, Innovation and Organisation</i>	3	A:2	90

2.2.2 Elective Courses UGent

Subscribe to courses for no more than 6 credit units to be chosen from the courses of UGent.

3 Master's Dissertation 30 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C002309 Master's Dissertation <i>N. N.</i>	30		2	A:J	825

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 course name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Croatian/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 is 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 2023-2024	f: annually, from 2024-2025	i: annually, from 2025-2026
b: tri-annually	d: bi-annually, from 2023-2024	g: bi-annually, from 2024-2025	j: bi-annually, from 2025-2026
	e: tri-annually, from 2023-2024	h: tri-annually, from 2024-2025	k: tri-annually, from 2025-2026