Study Programme

Faculty of Sciences

Master of Science in Computer Science

Language of instruction: Dutch

Programme version 5

1 General Courses — 60 credits

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

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

Nr	Course		CRDT	Ref	MT1	Session	Study
8	E017822	Software Architecture	4				120
		Frank Gielen -- Department of Information Technology					
9	E017941	Software Hacking and Protection [en]	6			A:1	180
		Bjorn De Sutter -- Department of Electronics and Information Systems					
10	E018230	Recommender Systems [en]	6			A:2	180
		Luc Martens -- Department of Information Technology					
11	C000145	Algorithmic Graph Theory	6			A:2	165
		Gunnar Brinkmann -- Department of Mathematics, Computer Science and Statistics					
12	E018221	Management of Imperfect Data	4				120
13	C001719	Capita Selecta in Soft Computing	6			(A:2)[d]	165
		Chris Cornelis -- Department of Mathematics, Computer Science and Statistics					
14	C003711	Computational Challenges in Bioinformatics [en]	6			A:2	180
		Jan Fostier -- Department of Information Technology					
15	C001026	Computer Algebra	6			A:2	165
		Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
16	E735023	Computer Vision	3			A:2	90
17	E003600	Information Theory [en]	6			B:2	180
		Heidi Steendam -- Department of Telecommunications and Information Processing					
18	E017920	Design of Multimedia Applications [en]	6			A:2	180
		Glenn Van Wallendael -- Department of Electronics and Information Systems					
19	E010220	Speech Processing [en]	4			A:2	120
		Kris Demuynck -- Department of Electronics and Information Systems					
20	E034150	Blockchain Technologies and Applications [en]	3			A:1	90
		Bjorn De Sutter -- Department of Electronics and Information Systems					

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

Nr	Course		CRDT		Ref	MT1		Session	Study
12	F000752	Environmental Economics and Policy	4				B:2		120
		Brent Bleys -- Department of Economics							
13	F000859	Corporate Social Responsibility	3				A:2		90
		Saskia Crucke -- Department of Marketing, Innovation and Organisation							

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	30	2		A:J	825
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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 2022-2023	f: annually, from 2023-2024	i: annually, from 2024-2025
b: tri-annually	d: bi-annually, from 2022-2023	g: bi-annually, from 2023-2024	j: bi-annually, from 2024-2025
	e: tri-annually, from 2022-2023	h: tri-annually, from 2023-2024	k: tri-annually, from 2024-2025