GHENT UNIVERSITY

Study Programme

Academic year 2027-2028

Faculty of Engineering and Architecture

Bridging Programme Master of Science in Computer Science Engineering

Language of instruction: English

Programme version 7

1 General Courses 78 credits

The Bridging Programme Master of Science in Computer Science Engineering is open to students in possession of following diplomas :
- Master in de industriële wetenschappen: informatica
- Master in de industriële wetenschappen: elektronica-ICT, afstudeerrichting ICT
- Master in de industriële wetenschappen: elektronica-ICT, afstudeerrichting ingebedde systemen
- Master in de industriële wetenschappen: elektronica-ICT, afstudeerrichting multimedia en informatietechnologie

All students subscribe to the general courses, supplemented with the general courses according to their entry diploma.

Students who are admitted with the diploma 'Master in de industriële wetenschappen: elektronica-ICT, afstudeerrichting multimedia en informatietechnologie', will follow an adapted Bridging Programme according to their prior education. Subject to approval by the faculty.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E001161	Mathematic Models *Karel Van Acoleyen -- Department of Electronics and Information Systems*	6	BRUG	1	A:1	180
2	E001470	Discrete Mathematics II [nl] *Joris Walraevens -- Department of Telecommunications and Information Processing*	6	BRUG	1	B:1	180
3	E031710	Research Project *Joris Walraevens -- Department of Telecommunications and Information Processing*	3		1	A:1	90
4	E017950	Secure Software and Systems *Bart Coppens -- Department of Electronics and Information Systems*	6		1	A:1	180
5	E033710	Design Project *Femke De Backere -- Department of Information Technology*	9		1	A:J	270
6	E003600	Information Theory *Heidi Steendam -- Department of Telecommunications and Information Processing*	6		1	B:2	180
7	E011325	Queueing Theory *Joris Walraevens -- Department of Telecommunications and Information Processing*	3	BRUG	1	A:2	90
8	E003110	Applied Probability [nl] *Sabine Wittevrongel -- Department of Telecommunications and Information Processing*	3	BRUG	1	A:2	90
9	E016350	Artificial Intelligence *Aleksandra Pizurica -- Department of Telecommunications and Information Processing*	6	BRUG	1	A:2	180
10	E034140	Parallel Computer Systems *Lieven Eeckhout -- Department of Electronics and Information Systems*	6		2	A:1	180
11	E017930	Parallel and Distributed Software Systems *Filip De Turck -- Department of Information Technology*	6		2	A:1	180
12	E010311	Visual Computing *Bart Goossens -- Department of Telecommunications and Information Processing*	6		2	A:1	180
13	E061335	Advanced Machine Learning *Tom Dhaene -- Department of Information Technology*	6		2	A:2	180
14	E004122	Advanced Discrete Algorithms *Mario Pickavet -- Department of Information Technology*	6		2	A:2	180

1.1 Intake: MSc industriële wetenschappen informatica 6 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E031110	Digital Electronics *Dirk Stroobandt -- Department of Electronics and Information Systems*	6		1	B:1	180

1.2 Intake: MSc industriële wetenschappen elektronica-ICT, afstudeerrichting ICT 12 credits

Nr	Course		CRDT	Ref	MT1	Session	Study

1	E018125	Database Management [nl] *Guy De Tré -- Department of Telecommunications and Information Processing*	6	BRUG	1	A:1	180
2	E019400	Information Security *Eric Laermans -- Department of Information Technology*	6		1	B:2	180

1.3 Intake: MSc industriële wetenschappen elektronica-ICT, afstudeerrichting Embedded Systems — 18 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E018125	Database Management [nl] *Guy De Tré -- Department of Telecommunications and Information Processing*	6	BRUG	1	A:1	180
2	E019400	Information Security *Eric Laermans -- Department of Information Technology*	6		1	B:2	180
3	E061331	Machine Learning: Learning from Data *Joni Dambre -- Department of Electronics and Information Systems*	6	BRUG	2	A:1	180

2 Elective Courses

Subscribe to elective courses from the Master of Science in Computer Science Engineering:

- Intake MSc industriële wetenschappen: informatica
  Subscribe to 12 credit units, at least 6 ECTS from the list Elective Courses Computer Science Engineering and no more than 6 ECTS from the Elective Courses Ghent University. Subject to approval by the faculty.

- Intake MSc industriële wetenschappen: elektronica-ICT, afstudeerrichting ICT
  Subscribe to 6 credit units from the list Elective Courses Computer Science Engineering. Subject to approval by the faculty.

3 Master's Dissertation — 24 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E091103	Master's Dissertation	24		2	B:J	720

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 2028-2029	f: annually, from 2029-2030	i: annually, from 2030-2031
b: tri-annually	d: bi-annually, from 2028-2029	g: bi-annually, from 2029-2030	j: bi-annually, from 2030-2031
	e: tri-annually, from 2028-2029	h: tri-annually, from 2029-2030	k: tri-annually, from 2030-2031