

Faculty of Engineering and Architecture

Bridging Programme Master of Science in Computer Science Engineering

Language of instruction: English

Programme version 6

## 1 General Courses

78 credits

Het brugprogramma Master of Science in Computer Science Engineering kan worden gevolgd door studenten met de volgende vooropleiding:

- Master in de industriële wetenschappen: elektronica en ICT: multimedia en informatietechnologie
- Master in de industriële wetenschappen: elektronica en ICT: ICT
- Master in de industriële wetenschappen: elektronica-ICT, afstudeerrichting: ingebedde systemen
- Master in de industriële wetenschappen: informatica

Voor studenten met vooropleiding elektronica en ICT: multimedia en informatietechnologie kan het brugprogramma worden aangepast naargelang de inhoudelijke verwantschap met de vooropleiding (na goedkeuring door de faculteit).

Nr	Course	CRDT	Ref	MT1	Session	Study
1	E001161 <b>Mathematic Models</b> <i>Karel Van Acoleyen -- Department of Electronics and Information Systems</i>	6	BRUG	1	A:1	180
2	E001470 <b>Discrete Mathematics II [n]</b> <i>Joris Walraevens -- Department of Telecommunications and Information Processing</i>	6	BRUG	1	A:2	180
3	E016350 <b>Artificial Intelligence</b> <i>Aleksandra Pizurica -- Department of Telecommunications and Information Processing</i>	6	BRUG	1	A:2	180
4	E017930 <b>Parallel and Distributed Software Systems</b> <i>Filip De Turck -- Department of Information Technology</i>	6		1	A:1	180
5	E017920 <b>Design of Multimedia Applications</b> <i>Glenn Van Wallendael -- Department of Electronics and Information Systems</i>	6		1	A:2	180
6	E031710 <b>Research Project</b> <i>Joris Walraevens -- Department of Telecommunications and Information Processing</i>	3		1	A:1	90
7	E033710 <b>Design Project</b> <i>Femke De Backere -- Department of Information Technology</i>	9		1	A:J	270
8	E012320 <b>Mobile and Broadband Access Networks</b> <i>Ingrid Moerman -- Department of Information Technology</i>	6		1	B:2	180
9	E003600 <b>Information Theory</b> <i>Heidi Steendam -- Department of Telecommunications and Information Processing</i>	6		1	B:2	180
10	E011322 <b>Queueing Analysis and Simulation</b> <i>Joris Walraevens -- Department of Telecommunications and Information Processing</i>	6		1	A:1	180
11	E034140 <b>Parallel Computer Systems</b> <i>Lieven Eeckhout -- Department of Electronics and Information Systems</i>	6		2	A:1	180
12	E061330 <b>Machine Learning</b> <i>Joni Dambre -- Department of Electronics and Information Systems</i>	6		2	B:1	180
13	E019400 <b>Information Security</b> <i>Eric Laermans -- Department of Information Technology</i>	6		2	B:2	180

## 2 Elective Courses

18 credits

Subscribe to 18 credit units.

Divided as follows (choose between one of the two elective paths):

- Elective path 1:
  - at least 18 credits units from one major or minor from the Master of Science in Computer Science Engineering (module 2.1.1)
- Elective path 2:
  - at least 12 credit units from the list with elective courses Computer Science Engineering (module 2.2.1)
  - no more than 6 credit units from the programmes of Ghent University (modules 2.2.2)

Subject to approval by the faculty.

## 3 Master's Dissertation

24 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
03-04-2025	11:04					

### 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 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