GHENT UNIVERSITY

Study Programme

Academic year 2024-2025

Faculty of Engineering and Architecture

Bachelor of Science in Engineering -- Chemical Engineering and Materials Science

Language of instruction: Dutch

Programme version 4

1 General Courses — 60 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E001142	Basic Mathematics *Hennie De Schepper -- Department of Electronics and Information Systems*	3		1	A:1	90
2	E020061	Physics I *Christophe Leys -- Department of Applied Physics*	6		1	A:1	180
3	E001132	Mathematical Analysis I *Hennie De Schepper -- Department of Electronics and Information Systems*	6		1	A:1	180
4	E001460	Discrete Mathematics I *Mario Pickavet -- Department of Information Technology*	4		1	A:1	120
5	E070070	Chemistry: the Structure of Matter *Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering*	4		1	A:1	120
6	E098513	Modelling, Making and Measuring *Filip Beunis -- Department of Electronics and Information Systems*	4		1	A:1	120
7	E015041	Informatics *Bart Dhoedt -- Department of Information Technology*	6		1	A:J	180
8	E001222	Mathematical Analysis II *Hendrik De Bie -- Department of Electronics and Information Systems*	4		1	A:2	120
9	E000662	Geometry and Linear Algebra *Hennie De Schepper -- Department of Electronics and Information Systems*	7		1	A:2	210
10	E070080	Chemical Thermodynamics *Maarten Sabbe -- Department of Materials, Textiles and Chemical Engineering*	3		1	A:2	90
11	E003043	Probability and Statistics *Jasper De Bock -- Department of Electronics and Information Systems*	6		1	A:2	180
12	E066012	Materials Technology *Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering*	4		1	A:2	120
13	E098512	Sustainability, Entrepreneurship and Ethics *Filip Beunis -- Department of Electronics and Information Systems*	3		1	A:2	90

2 General Courses — 39 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E001321	Mathematical Analysis III *Hendrik De Bie -- Department of Electronics and Information Systems*	6		2	A:1	180
2	E020220	Physics II *Christophe Leys -- Department of Applied Physics*	6		2	A:1	180
3	E045120	Transport Phenomena *Tom De Mulder -- Department of Civil Engineering*	6		2	B:2	180
4	E040420	Mechanics of Materials *Wim Van Paepegem -- Department of Materials, Textiles and Chemical Engineering*	6		2	A:1	180
5	E076040	Sustainable Business Operations *Birger Raa -- Department of Industrial Systems Engineering and Product Design*	3		2	A:1	90

6	E005020	Analysis of Systems and Signals *Gert De Cooman -- Department of Electronics and Information Systems*	6		3	A:1	180
7	E007120	Modelling and Control of Dynamic Systems *Mia Loccufier -- Department of Electromechanical, Systems and Metal Engineering*	6		3	A:2	180

3 Courses Related to the Main Subject — 81 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E078310	Sustainable Use of Materials: Metals *Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering*	3		2	A:1	90
2	E002910	Introduction to Numerical Mathematics *Karel Van Acoleyen -- Department of Electronics and Information Systems*	3		2	A:2	90
3	E099141	Engineering Project *Kevin Van Geem -- Department of Materials, Textiles and Chemical Engineering*	3		2	A:2	90
4	E021521	Statistical Physics *Louis Vanduyfhuys -- Department of Applied Physics*	3		2	A:2	90
5	E021560	Molecular Structure *Veronique Van Speybroeck -- Department of Applied Physics*	3		2	A:2	90
6	E070310	Organic Chemistry *Filip Du Prez -- Department of Organic Chemistry*	6		2	A:2	180
7	E071020	Chemical Thermodynamics II *Iwan Moreels -- Department of Chemistry*	4		2	A:2, B:1	120
8	E071030	Analytical Techniques [en, nl] *Frank Vanhaecke -- Department of Chemistry*	5		2	A:2	150
9	E078320	Sustainable Use of Materials: Plastics and Derived Materials *Lode Daelemans -- Department of Materials, Textiles and Chemical Engineering*	3		2	A:2	90
10	E045910	Heat Engineering and Mass Transport *Geraldine Heynderickx -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:1	180
11	E071010	Process Engineering *Antoon Beyne -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:1	180
12	E068660	Polymers *Filip Du Prez -- Department of Organic Chemistry*	6		3	A:1	180
13	E071040	Introduction to Reactor Science and Kinetics *Mark Saeys -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:1	180
14	E066020	Microstructure of Materials *Marcel Sluiter -- Department of Electromechanical, Systems and Metal Engineering*	6		3	A:2	180
15	E069110	Advanced Fibres and Derived Materials *Lode Daelemans -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:2	180
16	E078621	Environmental Technology and Climate Challenges *Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:2	180
17	E099040	Cross-Course Project *Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:2	180

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 2025-2026	f: annually, from 2026-2027	i: annually, from 2027-2028
b: tri-annually	d: bi-annually, from 2025-2026	g: bi-annually, from 2026-2027	j: bi-annually, from 2027-2028
	e: tri-annually, from 2025-2026	h: tri-annually, from 2026-2027	k: tri-annually, from 2027-2028