

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

## 2 General Courses 39 credits

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

6	E005020	Analysis of Systems and Signals <i>Gert De Cooman -- Department of Electronics and Information Systems</i>	6	3	A:1	180
7	E007120	Modelling and Control of Dynamic Systems <i>Mia Loccuffier -- Department of Electromechanical, Systems and Metal Engineering</i>	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 <i>Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering</i>	3		2	A:1	90
2	E002910 Introduction to Numerical Mathematics <i>Karel Van Acoleyen -- Department of Electronics and Information Systems</i>	3		2	A:2	90
3	E099141 Engineering Project <i>Kevin Van Geem -- Department of Materials, Textiles and Chemical Engineering</i>	3		2	A:2	90
4	E021521 Statistical Physics <i>Louis Vanduyfhuys -- Department of Applied Physics</i>	3		2	A:2	90
5	E021560 Molecular Structure <i>Veronique Van Speybroeck -- Department of Applied Physics</i>	3		2	A:2	90
6	E070310 Organic Chemistry <i>Filip Du Prez -- Department of Organic Chemistry</i>	6		2	A:2	180
7	E071020 Chemical Thermodynamics II <i>Iwan Moreels -- Department of Chemistry</i>	4		2	A:2	120
8	E071030 Analytical Techniques [en, nl] <i>Frank Vanhaecke -- Department of Chemistry</i>	5		2	A:2	150
9	E078320 Sustainable Use of Materials: Plastics and Derived Materials <i>Lode Daelemans -- Department of Materials, Textiles and Chemical Engineering</i>	3		2	A:2	90
10	E045910 Heat Engineering and Mass Transport <i>Geraldine Heynderickx -- Department of Materials, Textiles and Chemical Engineering</i>	6		3	A:1	180
11	E071010 Process Engineering <i>Antoon Beyne -- Department of Materials, Textiles and Chemical Engineering</i>	6		3	A:1	180
12	E068660 Polymers <i>Filip Du Prez -- Department of Organic Chemistry</i>	6		3	A:1	180
13	E071040 Introduction to Reactor Science and Kinetics <i>Mark Saeys -- Department of Materials, Textiles and Chemical Engineering</i>	6		3	A:1	180
14	E066020 Microstructure of Materials <i>Marcel Sluiter -- Department of Electromechanical, Systems and Metal Engineering</i>	6		3	A:2	180
15	E069110 Advanced Fibres and Derived Materials <i>Lode Daelemans -- Department of Materials, Textiles and Chemical Engineering</i>	6		3	A:2	180
16	E078621 Environmental Technology and Climate Challenges <i>Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering</i>	6		3	A:2	180
17	E099040 Cross-Course Project <i>Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering</i>	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 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 2024-2025	f: annually, from 2025-2026	i: annually, from 2026-2027
b: tri-annually	d: bi-annually, from 2024-2025	g: bi-annually, from 2025-2026	j: bi-annually, from 2026-2027
	e: tri-annually, from 2024-2025	h: tri-annually, from 2025-2026	k: tri-annually, from 2026-2027