

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 5

1	General	Courses		60 credits			
Nr	Course		CRDT R	ef 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 R	ef 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	E040420	Mechanics of Materials Wim Van Paepegem Department of Materials, Textiles and Chemical Engineering	6	2	A:1	180	
4	E076040	Sustainable Business Operations Birger Raa Department of Industrial Systems Engineering and Product Design	3	2	A:1	90	
5	E045120	Transport Phenomena Tom De Mulder Department of Civil Engineering	6	2	B:2	180	

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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	6	3	A:2	180
		Mia Loccufier Department of Electromechanical, Systems and Metal Engineering				

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	E071050	Foundations of Physical and Electrochemistry Iwan Moreels Department of Chemistry	6	2	A:1	180
3	E002910	Introduction to Numerical Mathematics Karel Van Acoleyen Department of Electronics and Information Systems	3	2	A:2	90
4	E099142	Engineering Project Kevin Van Geem Department of Materials, Textiles and Chemical Engineering	6	2	A:2	180
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	E071031	Analytical Techniques Frank Vanhaecke Department of Chemistry	3	2	A:2	90
8	E078320	Sustainable Use of Materials: Plastics and Derived Materials Lode Daelemans Department of Materials, Textiles and Chemical Engineering	3	2	A:2	90
9	E045910	Heat Engineering and Mass Transport Geraldine Heynderickx Department of Materials, Textiles and Chemical Engineering	6	3	A:1	180
10	E071010	Process Engineering Antoon Beyne Department of Materials, Textiles and Chemical Engineering	6	3	A:1	180
11	E068660	Polymers Filip Du Prez Department of Organic Chemistry	6	3	A:1	180
12	E071040	Introduction to Reactor Science and Kinetics Mark Saeys Department of Materials, Textiles and Chemical Engineering	6	3	A:1	180
13	E066020	Microstructure of Materials Marcel Sluiter Department of Electromechanical, Systems and Metal Engineering	6	3	A:2	180
14	E069110	Advanced Fibres and Derived Materials Lode Daelemans Department of Materials, Textiles and Chemical Engineering	6	3	A:2	180
15	E078621	Environmental Technology and Climate Challenges Joris Thybaut Department of Materials, Textiles and Chemical Engineering	6	3	A:2	180
16	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 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

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