

Faculty of Engineering and Architecture

Bachelor of Science in Engineering -- Biomedical Engineering

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 48 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	E090320 <b>Electrical Circuits and Networks</b> <i>Inge Nys -- 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	E001321 <b>Mathematical Analysis III</b> <i>Hendrik De Bie -- Department of Electronics and Information Systems</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	E045120 <b>Transport Phenomena</b> <i>Tom De Mulder -- Department of Civil Engineering</i>	6		2	B:2	180
6	E076040 <b>Sustainable Business Operations</b> <i>Ludo Poelaert -- Department of Industrial Systems Engineering and Product Design</i>	3		3	A:1	90

7	E005020	Analysis of Systems and Signals <i>Gert De Cooman -- Department of Electronics and Information Systems</i>	6	3	A:1	180
8	E007120	Modelling and Control of Dynamic Systems <i>Mia Loccufer -- Department of Electromechanical, Systems and Metal Engineering</i>	6	3	A:2	180
9	E016350	Artificial Intelligence [en] <i>Aleksandra Pizurica -- Department of Telecommunications and Information Processing</i>	3	3	B:2	90

### 3 Courses Related to the Main Subject 72 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	E092662 From Genome to Organism [en] <i>Fransiska Malfait -- Department of Biomolecular Medicine</i>	3		2	A:1	90
2	E032511 Electronic Systems and Instrumentation for Biomedical Engineers <i>Jan Doutreloigne -- Department of Electronics and Information Systems</i>	5		2	A:2	150
3	E092623 Modelling of Physiological Systems [en] <i>Patrick Segers -- Department of Electronics and Information Systems</i>	5		2	A:2	150
4	E099172 Engineering Project <i>Patrick Segers -- Department of Electronics and Information Systems</i>	5		2	A:J	150
5	E002910 Introduction to Numerical Mathematics <i>Karel Van Acoleyen -- Department of Electronics and Information Systems</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	E003230 Statistical Data Processing <i>Nele De Belie -- Department of Structural Engineering and Building Materials</i>	3		2	A:2	90
8	E022110 Electromagnetism I <i>Dries Vande Ginste -- Department of Information Technology</i>	6		3	A:1	180
9	E074011 Quantitative Cell and Tissue Analysis [en] <i>An Hendrix -- Department of Human Structure and Repair</i>	6		3	A:1	180
10	E063682 Biomechanics [en] <i>Charlotte Debbaut -- Department of Electronics and Information Systems</i>	6		3	A:1	180
11	E068661 Biomedical Polymers and Processing <i>Sandra Van Vlierberghe -- Department of Organic Chemistry</i>	3		3	A:2	90
12	E092735 Medical Physics [en] <i>Klaus Bacher -- Department of Human Structure and Repair</i>	6		3	A:2	180
13	E010390 Medical Signal Processing and Statistics [en] <i>Nilesh Madhu -- Department of Electronics and Information Systems</i>	3		3	A:2	90
14	E021560 Molecular Structure <i>Veronique Van Speybroeck -- Department of Applied Physics</i>	3		3	A:2	90
15	E021521 Statistical Physics <i>Louis Vanduyfhuys -- Department of Applied Physics</i>	3		3	A:2	90
16	E099070 Cross-Course Project [nl, en] <i>Stefaan Vandenberghe -- Department of Electronics and Information Systems</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