

Study Programme

Academic year 2025-2026

Faculty of Engineering and Architecture Preparatory Course Master of Science in Biomedical Engineering

Language of instruction: Dutch Programme version 7

1 General Courses

1.1 Intake: BSc/MSc in Engineering

Subscribe to no more than 45 credit units from the following list. Subject to approval by the faculty. Depending on the student's previous degree.

	the student's previous degree.	ODDT			
Nr Course		CRDT	Ref MT1	Session	Study
1 E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	1	A:1	180
2 E045120	Transport Phenomena Tom De Mulder Department of Civil Engineering	6	1	B:2	180
3 E090320	Electrical Circuits and Networks Inge Nys Department of Electronics and Information Systems	6	1	A:1	180
4 E074011	Quantitative Cell and Tissue Analysis [en] Andre Skirtach Department of Biotechnology	6	1	A:1	180
5 E092662	From Genome to Organism [en] Fransiska Malfait Department of Biomolecular Medicine	3	1	A:1	90
6 E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
7 E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
8 E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	1	A:1	90
9 E010390	Medical Signal Processing and Statistics [en] Nilesh Madhu Department of Electronics and Information Systems	3	1	A:2	90
10 E092735	Medical Physics [en] Klaus Bacher Department of Human Structure and Repair	6	1	A:2	180
1.2 Intake	: BSc/MSc Bioscience Engineering			90	credits
Nr Course		CRDT	Ref MT1	Session	Study
1 E090320	Electrical Circuits and Networks Inge Nys Department of Electronics and Information Systems	6	1	A:1	180
2 E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
3 E002910	Introduction to Numerical Mathematics Karel Van Acoleyen Department of Electronics and Information Systems	3	1	A:2	90
4 E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
5 E005020	Analysis of Systems and Signals Gert De Cooman Department of Electronics and Information Systems	6	2	A:1	180
6 E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	2	A:1	180
7 E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	2	A:1	90
8 E016350	Artificial Intelligence [en] Aleksandra Pizurica Department of Telecommunications and Information Processing	3	2	B:2	90

9	E092735	Medical Physics [en] Klaus Bacher Department of Human Structure and Repair	6	2	A:2	180
10	E010390	Medical Signal Processing and Statistics [en] Nilesh Madhu Department of Electronics and Information Systems	3	2	A:2	90

1.2.1 General Courses depending on the previous degree

Subscribe to no more than 44 credit units from the Bachelor of Science in Engineering, main subject Biomedical Engineering, depending on the student's previous degree. Subject to approval by the faculty.

	BSc/MSc in Physics and Astronomy			58	credits
Course		CRDT	Ref MT1	Session	Study
E090320	Electrical Circuits and Networks Inge Nys Department of Electronics and Information Systems	6	1	A:1	180
E092662	From Genome to Organism [en] Fransiska Malfait Department of Biomolecular Medicine	3	1	A:1	90
E074011	Quantitative Cell and Tissue Analysis [en] Andre Skirtach Department of Biotechnology	6	1	A:1	180
E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
E070310	Organic Chemistry Filip Du Prez Department of Organic Chemistry	6	1	A:2	180
E045120	Transport Phenomena Tom De Mulder Department of Civil Engineering	6	1	B:2	180
E005020	Analysis of Systems and Signals Gert De Cooman Department of Electronics and Information Systems	6	2	A:1	180
E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	2	A:1	180
E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	2	A:1	90
E016350	Artificial Intelligence [en] Aleksandra Pizurica Department of Telecommunications and Information Processing	3	2	B:2	90
E010390	Medical Signal Processing and Statistics [en] Nilesh Madhu Department of Electronics and Information Systems	3	2	A:2	90
4 Intake:	MSc Engineering Technology			55	credits
Course		CRDT	Ref MT1	Session	Study
E001161	Mathematic Models [en] Karel Van Acoleyen Department of Electronics and Information Systems	6	1	A:1	180
E092662	From Genome to Organism [en] Fransiska Malfait Department of Biomolecular Medicine	3	1	A:1	90
E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
	3 Intake: Course E090320 E092662 E074011 E032511 E092623 E070310 E045120 E045120 E063682 E068661 E016350 E010390 4 Intake: Course E001161 E092662	3 Intake: BSc/MSc in Physics and Astronomy Course E090320 Electrical Circuits and Networks Inge Nys - Department of Electronics and Information Systems E092662 From Genome to Organism [en] Fransiska Matiati - Department of Biomecular Medicine E074011 Quantitative Cell and Tissue Analysis [en] Andre Skirtach Department of Biotechnology E032511 Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems E092623 Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems E070310 Organic Chemistry Filip Du Prez Department of Civil Engineering E005020 Analysis of Systems and Signals Gert De Cooman Department of Electronics and Information Systems E063682 Biomechanics [en] Charlotte Debbaut Department of Teleconmunications and Information Systems E068661 Biomechanics [en] Charlotte Debbaut Department of Teleconmunications and Information Processing E016350 Artificial Intelligence [en] Milesh Madhu Department of Electronics and Information Systems 4 Intake: MSC Engineering Technology Course E001161 Mathematic Models [en] Milesh Madhu Department of Electronics and Information Systems E092662 From Genome to Organism [en] Hransiska Malfait Departme	3 Intake: BSc/MSc in Physics and Astronomy CRDT E090320 Electrical Circuits and Networks Inge Mys - Department of Electronics and Information Systems 6 E092662 From Genome to Organism [en] Fransiska Mattait - Department of Biomolecular Medicine 3 E074011 Quantitative Cell and Tissue Analysis [en] Andre Skitrach - Department of Biotechology 6 E032511 Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutrelogine - Department of Electronics and Information Systems 5 E092623 Modelling of Physiological Systems [en] Patrick Seger - Department of Electronics and Information Systems 6 E070310 Organic Chemistry Filip Du Prez - Department of Electronics and Information Systems 6 E005020 Analysis of Systems and Signals Ger De Comma - Department of Electronics and Information Systems 6 E0063682 Biomedical Polymers and Processing [n], en] Sandra Van Wierberghe - Department of Electronics and Information Systems 6 E016350 Artificial Intelligence [en] Medical Signal Processing and Statistics [en] Wiels Madhu - Department of Electronics and Information Processing 3 E016350 Medical Signal Processing and Statistics [en] Miels Madhu - Department of Electronics and Information Systems 3 E010390 Medical Signal Processing and Statistics [en] Miels Madhu - Department of Electronics and Informat	3 Intake: BSc/MSc in Physics and Astronomy Course CRDT Ref MTI E090320 Electrical Circuits and Networks Inge Wis Department of Electronics and Information Systems 6 1 E092662 From Genome to Organism [en] Fransika Maitet Department of Biotechnology 3 1 E074011 Quantitative Cell and Tissue Analysis [en] Andre Skirtach Department of Biotechnology 6 1 E032511 Electronic Systems and Instrumentation for Biomedical Engineers An Doutreloigne Department of Electronics and Information Systems 5 1 E032623 Modelling of Physiological Systems [en] Patrick Seers Department of Electronics and Information Systems 6 1 E070310 Organic Chemistry Filip Du Per Department of Organic Chemistry 6 1 E045120 Transport Phenomena Tom De Muider Department of Electronics and Information Systems 6 2 E063682 Biomedical Polymers and Processing [n], en] Sandra Van Wierberghe Department of Electronics and Information Systems 6 2 E016380 Artificial Intelligence [en] Metshadra Puzurea of Electronics and Information Systems 3 2 E016380 Artificial Intelligence [en] Metshadra Puzurea of Electronics and Information Systems 3 2	3 Intake: BSc/MSc in Physics and Astronomy 58 Course CRD T Ref MTI Session E090320 Electrical Circuits and Networks (log My > Department of Electronics and Information Systems) 6 1 A:1 E092662 From Genome to Organism [en] Ander Skitach - Department of Biomedicalar Medicine 3 1 A:1 E074011 Quantitative Cell and Tissue Analysis [en] Ander Skitach - Department of Biomedicale Medicine 5 1 A:2 E032511 Electronic Systems and Instrumentation for Biomedical Engineers is an Dubrielogne - Department of Electronics and Information Systems 5 1 A:2 E092623 Modelling of Physiological Systems [en] Patrick Seers - Department of Electronics and Information Systems 6 1 A:2 E070310 Organic Chemistry Filio Du Prec - Department of Electronics and Information Systems 6 2 A:1 E045120 Transport Phenomena Tom De Mulder - Department of Electronics and Information Systems 6 2 A:1 E063682 Biomechanics [en] Charlotte Debaut - Department of Electronics and Information Systems 6 2 A:1 E016360 Artificial Intelligence [en] Aleskandie Plurica - Department of Electronics and Information Systems 3

4	E002910	Introduction to Numerical Mathematics Karel Van Acoleyen Department of Electronics and Information Systems	3	1	A:2	90
5	E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
6	E070310	Organic Chemistry Filip Du Prez Department of Organic Chemistry	6	1	A:2	180
7	E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	2	A:1	180
8	E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	2	A:1	90
9	E074011	Quantitative Cell and Tissue Analysis [en] Andre Skirtach Department of Biotechnology	6	2	A:1	180
10	E016350	Artificial Intelligence [en] Aleksandra Pizurica Department of Telecommunications and Information Processing	3	2	B:2	90
11	E092735	Medical Physics [en] Klaus Bacher Department of Human Structure and Repair	6	2	A:2	180

05-05-2025 13:03

12 E010390 Medical Signal Processing and Statistics [en]		3	2	A:2	90
	Nilesh Madhu Department of Electronics and Information Systems				

1.5 Intake: MSc Biochemical Engineering Technology

		inee Breenennear Engineering reenneregy			• ·	0.00.00
Nr	Course		CRDT	Ref MT1	Session	Study
1	E090320	Electrical Circuits and Networks Inge Nys Department of Electronics and Information Systems	6	1	A:1	180
2	E001161	Mathematic Models [en] Karel Van Acoleyen Department of Electronics and Information Systems	6	1	A:1	180
3	E040420	Mechanics of Materials Wim Van Paepegem Department of Materials, Textiles and Chemical Engineering	6	1	A:1	180
4	E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
5	E002910	Introduction to Numerical Mathematics Karel Van Acoleyen Department of Electronics and Information Systems	3	1	A:2	90
6	E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
7	E045120	Transport Phenomena Tom De Mulder Department of Civil Engineering	6	1	B:2	180
8	E005020	Analysis of Systems and Signals Gert De Cooman Department of Electronics and Information Systems	6	2	A:1	180
9	E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	2	A:1	180
10	E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	2	A:1	90
11	E016350	Artificial Intelligence [en] Aleksandra Pizurica Department of Telecommunications and Information Processing	3	2	B:2	90
12	E092735	Medical Physics [en] Klaus Bacher Department of Human Structure and Repair	6	2	A:2	180
13	E010390	Medical Signal Processing and Statistics [en] Nilesh Madhu Department of Electronics and Information Systems	3	2	A:2	90

1.6 Intake: BSc/MSc degrees in the field of study of Biomedical Sciences and Medicine, Pharmaceutical Sciences, Dentistry, Revalidation and Kinesitherapy

88 credits

64 credits

Nr	Course		CRDT	Ref MT1	Session	Study
1	E015041	Informatics Bart Dhoedt Department of Information Technology	6	1	A:J	180
2	E001321	Mathematical Analysis III Hendrik De Bie Department of Electronics and Information Systems	6	1	A:1	180
3	E020220	Physics II Christophe Leys Department of Applied Physics	6	1	A:1	180
4	E090320	Electrical Circuits and Networks Inge Nys Department of Electronics and Information Systems	6	1	A:1	180
5	E040420	Mechanics of Materials Wim Van Paepegem Department of Materials, Textiles and Chemical Engineering	6	1	A:1	180
6	E045120	Transport Phenomena Tom De Mulder Department of Civil Engineering	6	1	B:2	180
7	E032511	Electronic Systems and Instrumentation for Biomedical Engineers Jan Doutreloigne Department of Electronics and Information Systems	5	1	A:2	150
8	E002910	Introduction to Numerical Mathematics Karel Van Acoleyen Department of Electronics and Information Systems	3	1	A:2	90
9	E092623	Modelling of Physiological Systems [en] Patrick Segers Department of Electronics and Information Systems	5	1	A:2	150
10	E068661	Biomedical Polymers and Processing [nl, en] Sandra Van Vlierberghe Department of Organic Chemistry	3	2	A:1	90
11	E022110	Electromagnetism I Dries Vande Ginste Department of Information Technology	6	2	A:1	180

12 E063682	Biomechanics [en] Charlotte Debbaut Department of Electronics and Information Systems	6	2	A:1	180
13 E005020	Analysis of Systems and Signals Gert De Cooman Department of Electronics and Information Systems	6	2	A:1	180
14 E007120	Modelling and Control of Dynamic Systems Mia Loccufier Department of Electromechanical, Systems and Metal Engineering	6	2	A:2	180
15 E016350	Artificial Intelligence [en] Aleksandra Pizurica Department of Telecommunications and Information Processing	3	2	B:2	90
16 E092735	Medical Physics [en] Klaus Bacher Department of Human Structure and Repair	6	2	A:2	180
17 E010390	Medical Signal Processing and Statistics [en] Nilesh Madhu Department of Electronics and Information Systems	3	2	A:2	90

1.6.1 General Courses depending on the previous degree

Subscribe to no more than 3 credit units from the Bachelor of Science in Engineering, main subject Biomedical Engineering, depending on the student's previous degree. Subject to approval by the faculty.

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 2026-2027
b: tri-annually	d: bi-annually, from 2026-2027
-	e: tri-annually, from 2026-2027

f: annually, from 2027-2028 g: bi-annually, from 2027-2028 h: tri-annually, from 2027-2028 i: annually, from 2028-2029 j: bi-annually, from 2028-2029 k: tri-annually, from 2028-2029