Study Programme

Academic year 2023-2024

Faculty of Engineering and Architecture
Master of Science in Electromechanical Engineering Technology

Language of instruction: Dutch
Programme version 12

1 General Courses — 30 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E745022	Data Aquisition	3		1	A:1	90
		Guillaume Crevecoeur -- Department of Electromechanical, Systems and Metal Engineering					
2	E745024	Advanced Electric Drives	3		1	B:1	85
		Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering					
3	E725090	Manufacturing Processes	3		1	A:1	90
		Wim De Waele -- Department of Electromechanical, Systems and Metal Engineering					
4	E745030	CAE Applications	6		1	A:1	180
		Marc Wouters -- Department of Materials, Textiles and Chemical Engineering					
5	E725019	Polymer Processing [en]	6		1	A:1	180
		Ludwig Cardon -- Department of Materials, Textiles and Chemical Engineering					
6	E745025	Applied Metallurgy [en, nl]	3		1	A:2	90
		Roumen Petrov -- Department of Electromechanical, Systems and Metal Engineering					
7	E741070	Thermal Energy: Sustainable Application in Industry and Buildings	6		1	A:2	180
		Steven Lecompte -- Department of Electromechanical, Systems and Metal Engineering					

2 Elective Courses — 12 credits

Subscribe to 12 credit units from 2 modules from the following list. Subject to approval by the faculty.

2.1 Technological Electives

Subscribe to no less than 6 credit units from the following list. Subject to approval by the faculty.
Only 6 credits with reference a are allowed.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E725070	Mould Making [en]	6			A:2	180
		Ludwig Cardon -- Department of Materials, Textiles and Chemical Engineering					
2	E725050	Product Development and Additive Manufacturing [en]	3			A:1	90
		Ludwig Cardon -- Department of Materials, Textiles and Chemical Engineering					
3	E725110	Polymer and Composite Materials [en]	3			A:2	90
		Mariya Edeleva -- Department of Materials, Textiles and Chemical Engineering					
4	E745040	CAM Applications	3			A:1	90
		Kris Hectors -- Department of Electromechanical, Systems and Metal Engineering					
5	E900069	Composites [en]	6			A:1	180
		Wim Van Paepegem -- Department of Materials, Textiles and Chemical Engineering					
6	E045240	Computational Fluid Dynamics [en]	4			C:2	120
		Joris Degroote -- Department of Electromechanical, Systems and Metal Engineering					
7	E056600	Construction Techniques [en]	3			C:2	90
		Wim De Waele -- Department of Electromechanical, Systems and Metal Engineering					
8	E731018	Embedded Systems: Microcontrollers	6			A:2	180
		Patrick Van Torre -- Department of Information Technology					
9	E745006	Industrial Communication	3			A:1	85
		Jo Verhaevert -- Department of Information Technology					
10	E755008	Production of Electrical Energy	3			A:1	85
		Christof Dauwels -- Department of Electromechanical, Systems and Metal Engineering					

Nr	Course		CRDT	Ref	MT1	Session	Study
11	E053642	Railway Technology Fundamentals [en] *Hendrik Bonne -- Department of Electromechanical, Systems and Metal Engineering*	3			A:1	90
12	E053643	Advanced Railway Technology [en] *Hendrik Bonne -- Department of Electromechanical, Systems and Metal Engineering*	3			A:2	90
13	E721046	Environmental Management *Diederik Rousseau -- Department of Green Chemistry and Technology*	3			A:1	90
14	E745027	Sustainable Engineering Techniques [en] *Tom Depover -- Department of Materials, Textiles and Chemical Engineering*	3			A:1	90
15	I002702	Clean Technology: Assessment Methods [en] *Sophie Huysveld -- Department of Green Chemistry and Technology*	3			A:1	90
16	E745050	Vehicle Technology *Frédéric Maes -- Department of Electromechanical, Systems and Metal Engineering*	3			A:2	90
17	E773770	Maintenance and Shutdown in the Process Industry [en] *Paul Van Steenberge -- Department of Materials, Textiles and Chemical Engineering*	3			A:1	90
18	E099600	Industry Internship Engineering Technology [en, nl] *Patrick Segers -- Department of Electronics and Information Systems*	6	a		A:J	180
19	E099600	Industry Internship Engineering Technology [en, nl] *Patrick Segers -- Department of Electronics and Information Systems*	3	a		B:J	90
20	E099400	Research Internship [en] *Patrick Segers -- Department of Electronics and Information Systems*	6	a		A:J	180
21	E099400	Research Internship [en] *Patrick Segers -- Department of Electronics and Information Systems*	3	a		B:J	90

2.2 Non-Technological Electives

Subscribe to no more than 6 credit units from the following list. Subject to approval by the faculty.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E076450	Basic Entrepreneurship *Yannick Dillen -- Department of Marketing, Innovation and Organisation*	3	UKV		A:1	90
2	E076460	Dare to Venture [en] *Johan Verrue -- Department of Marketing, Innovation and Organisation*	4			A:2	120
3	E076471	Dare to Start [en] *Frank Gielen -- Department of Information Technology*	3			A:2	90
4	E076431	Introduction to Entrepreneurship [en] *Petra Andries -- Department of Marketing, Innovation and Organisation*	3			A:1	90
5	A003001	Academic English [en] *Geert Jacobs -- Department of Linguistics*	3	UKV		B:1, A:2	90
6	K001339	Sustainability Thinking *Thomas Block -- Department of Political Sciences*	5	UKV		A:J	150

3 Master's Dissertation   18 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	E705002 Master's Dissertation	18		1	B:J	540

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 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