GHENT UNIVERSITY

Study Programme

Academic year 2024-2025

Faculty of Engineering and Architecture

Bachelor of Science in Engineering Technology -- Electromechanical Engineering Technology

Language of instruction: Dutch

Programme version 3

1 General Courses — 60 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E701033	Mathematics I *Tanja Van Hecke -- Department of Information Technology*	6		1	A:1	180
2	E701023	General Chemistry *Maarten Sabbe -- Department of Materials, Textiles and Chemical Engineering*	6		1	A:1	180
3	E701024	Electricity *Luc Dupré -- Department of Electromechanical, Systems and Metal Engineering*	6		1	A:1	180
4	E701051	Design Tools *Kathleen Gekiere -- Department of Structural Engineering and Building Materials*	4		1	A:1	120
5	E701029	Materials *Geert De Clercq -- Department of Materials, Textiles and Chemical Engineering*	3		1	A:1	90
6	E701030	Mechanics *Tom Claessens -- Department of Materials, Textiles and Chemical Engineering*	6		1	A:J	180
7	E701052	Engineering Project *Kathleen Gekiere -- Department of Structural Engineering and Building Materials*	5		1	A:J	150
8	E701034	Mathematics II *Tanja Van Hecke -- Department of Information Technology*	6		1	A:2	180
9	E701056	Physics *Sven Van Loo -- Department of Applied Physics*	6		1	A:2	180
10	E701053	Computer Science *Helga Naessens -- Department of Information Technology*	6		1	A:2	180
11	E701054	Sustainable Energy Technologies *Johan Lauwaert -- Department of Electronics and Information Systems*	3		1	A:2	90
12	E701055	Electronics *Jo Verhaevert -- Department of Information Technology*	3		1	A:2	90

2 General Courses — 15 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E702010	Signals and Systems *Jan Beyens -- Department of Information Technology*	6		2	A:1	180
2	E702090	Statistics and Mathematical Data-analysis *Tanja Van Hecke -- Department of Information Technology*	6		2	A:2	180
3	E702702	Business Administration *Birger Raa -- Department of Industrial Systems Engineering and Product Design*	3		3	A:2	90

3 Courses Related to the Main Subject — 105 credits

3.1 Courses Related to the Main Subject Electromechanical Engineering Technology — 80 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E702080	Thermodynamics and Fluid Mechanics *Tom Claessens -- Department of Materials, Textiles and Chemical Engineering*	6		2	A:1	180

2	E702030	Mechanics of Materials *Marc Wouters -- Department of Materials, Textiles and Chemical Engineering*	3		2	A:1	90
3	E702040	Electronics II *Stefaan Lambrecht -- Department of Information Technology*	6		2	A:1	180
4	E741044	Electrical Energy *Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering*	5		2	A:1	150
5	E741047	Electrical Measuring Techniques *Mathias Kersemans -- Department of Materials, Textiles and Chemical Engineering*	4		2	A:1	120
6	E702060	Signals and Systems II *Jan Beyens -- Department of Information Technology*	3		2	A:2	90
7	E741048	Machine Components *Patrick De Baets -- Department of Electromechanical, Systems and Metal Engineering*	3		2	A:2	90
8	E741049	Industrial project *Guy Foubert -- Department of Materials, Textiles and Chemical Engineering*	3		2	A:2	90
9	E741050	Fluid machines *Joris Degroote -- Department of Electromechanical, Systems and Metal Engineering*	3		2	A:2	90
10	E741026	Electrical Design of Industrial Installations *Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering*	6		2	A:2	180
11	E741027	CAD and Manufacturing Techniques *Jan De Strooper -- Department of Electromechanical, Systems and Metal Engineering*	6		2	A:2	180
12	E741034	Pneumatic and Hydraulic Drives *Jan De Strooper -- Department of Electromechanical, Systems and Metal Engineering*	6		3	A:1	180
13	E741051	PLC I *Tim Saillé -- Department of Electromechanical, Systems and Metal Engineering*	5		3	A:1	140
14	E741052	Electromechanical drive systems *Hendrik Vansompel -- Department of Electromechanical, Systems and Metal Engineering*	3		3	A:1	90
15	E741023	Control Theory *Jan Beyens -- Department of Information Technology*	6		3	A:2	180
16	E741046	Electric Drives *Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering*	6		3	A:2	180
17	E741053	Bachelor Thesis *Tom Claessens -- Department of Materials, Textiles and Chemical Engineering*	6		3	A:2	180

3.2 Major Mechanics or Major Electrotechnology and Automation — 25 credits

Subscribe to 25 credit units from 1 major from the following list. Subject to approval by the faculty.

3.2.1 Major Mechanics — 25 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E741031	Applied Materials Science *Inge Bellemans -- Department of Materials, Textiles and Chemical Engineering*	3		3	A:1	90
2	E741054	Advanced Machine Components *Patrick De Baets -- Department of Electromechanical, Systems and Metal Engineering*	5		3	A:1	150
3	E741035	CAD Applications *Magd Abdel Wahab -- Department of Electromechanical, Systems and Metal Engineering*	3		3	B:1	90
4	E741055	Mechanics of Materials and FEM *Marc Wouters -- Department of Materials, Textiles and Chemical Engineering*	5		3	A:1	150
5	E741056	Manufacturing Technology *Kris Hectors -- Department of Electromechanical, Systems and Metal Engineering*	5		3	A:2	150
6	E741057	Thermal Energy: Installation Components *Wim Beyne -- Department of Electromechanical, Systems and Metal Engineering*	4		3	A:2	120

3.2.2 Major Electrotechnology and Automation — 25 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E741058	Programming in C *Wim Van Den Breen -- Department of Information Technology*	3		3	A:1	90
2	E741039	CAD Electrotechnogy *Tim Saillé -- Department of Electromechanical, Systems and Metal Engineering*	3		3	A:1	90
3	E741059	Integration of Renewable Energy *Jan Desmet -- Department of Electromechanical, Systems and Metal Engineering*	3		3	A:1	90

4	E741060	Object oriented programming in C# *Veerle Ongenae -- Department of Information Technology*	4	3	A:1	120
5	E745006	Industrial Communication *Jo Verhaevert -- Department of Information Technology*	3	3	A:1	85
6	E731018	Embedded Systems: Microcontrollers *Patrick Van Torre -- Department of Information Technology*	6	3	A:2	180
7	E741041	PLC II *Tim Saillé -- Department of Electromechanical, Systems and Metal Engineering*	3	3	A:2	90

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
b: tri-annually	d: bi-annually, from 2025-2026	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