

Faculty of Engineering and Architecture

Bachelor of Science in Engineering -- Electromechanical Engineering

Language of instruction: Dutch

Programme version 3

1 General Courses 60 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | E001142 Basic Mathematics <i>Hennie De Schepper -- Department of Electronics and Information Systems</i> | 3 | | 1 | A:1 | 90 |
| 2 | E020061 Physics I <i>Christophe Leys -- Department of Applied Physics</i> | 6 | | 1 | A:1 | 180 |
| 3 | E001132 Mathematical Analysis I <i>Hennie De Schepper -- Department of Electronics and Information Systems</i> | 6 | | 1 | A:1 | 180 |
| 4 | E001460 Discrete Mathematics I <i>Mario Pickavet -- Department of Information Technology</i> | 4 | | 1 | A:1 | 120 |
| 5 | E070070 Chemistry: the Structure of Matter <i>Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering</i> | 4 | | 1 | A:1 | 120 |
| 6 | E098513 Modelling, Making and Measuring <i>Filip Beunis -- Department of Electronics and Information Systems</i> | 4 | | 1 | A:1 | 120 |
| 7 | E015041 Informatics <i>Bart Dhoedt -- Department of Information Technology</i> | 6 | | 1 | A:J | 180 |
| 8 | E001222 Mathematical Analysis II <i>Hendrik De Bie -- Department of Electronics and Information Systems</i> | 4 | | 1 | A:2 | 120 |
| 9 | E000662 Geometry and Linear Algebra <i>Hennie De Schepper -- Department of Electronics and Information Systems</i> | 7 | | 1 | A:2 | 210 |
| 10 | E070080 Chemical Thermodynamics <i>Maarten Sabbe -- Department of Materials, Textiles and Chemical Engineering</i> | 3 | | 1 | A:2 | 90 |
| 11 | E003043 Probability and Statistics <i>Jasper De Bock -- Department of Electronics and Information Systems</i> | 6 | | 1 | A:2 | 180 |
| 12 | E066012 Materials Technology <i>Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering</i> | 4 | | 1 | A:2 | 120 |
| 13 | E098512 Sustainability, Entrepreneurship and Ethics <i>Filip Beunis -- Department of Electronics and Information Systems</i> | 3 | | 1 | A:2 | 90 |

2 General Courses 45 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E090320 Electrical Circuits and Networks <i>Inge Nys -- Department of Electronics and Information Systems</i> | 6 | | 2 | A:1 | 180 |
| 2 | E040420 Mechanics of Materials <i>Wim Van Paepegem -- Department of Materials, Textiles and Chemical Engineering</i> | 6 | | 2 | A:1 | 180 |
| 3 | E020220 Physics II <i>Christophe Leys -- Department of Applied Physics</i> | 6 | | 2 | A:1 | 180 |
| 4 | E045120 Transport Phenomena <i>Tom De Mulder -- Department of Civil Engineering</i> | 6 | | 2 | B:2 | 180 |
| 5 | E001321 Mathematical Analysis III <i>Hendrik De Bie -- Department of Electronics and Information Systems</i> | 6 | | 2 | A:1 | 180 |
| 6 | E005020 Analysis of Systems and Signals <i>Gert De Cooman -- Department of Electronics and Information Systems</i> | 6 | | 3 | A:1 | 180 |

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|---|---------|--|---|---|-----|-----|
| 7 | E076040 | Sustainable Business Operations <i>Birger Raa -- Department of Industrial Systems Engineering and Product Design</i> | 3 | 3 | A:1 | 90 |
| 8 | E007120 | Modelling and Control of Dynamic Systems <i>Mia Locuffier -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | 3 | A:2 | 180 |

3 Courses Related to the Main Subject 75 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E032010 Electronic Systems and Instrumentation <i>Jan Doutreloigne -- Department of Electronics and Information Systems</i> | 6 | | 2 | A:2 | 180 |
| 2 | E040030 Dynamics of Rigid Bodies <i>Wim De Waele -- Department of Electromechanical, Systems and Metal Engineering</i> | 3 | | 2 | A:2 | 90 |
| 3 | E062220 Machine Elements <i>Patrick De Baets -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 2 | A:2 | 180 |
| 4 | E002910 Introduction to Numerical Mathematics <i>Karel Van Acoleyen -- Department of Electronics and Information Systems</i> | 3 | | 2 | A:2 | 90 |
| 5 | E099151 Engineering Project <i>Dieter Fauconnier -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 2 | A:2 | 180 |
| 6 | E036210 Electromagnetic Energy Conversion | 6 | | 2 | | 180 |
| 7 | E041011 Kinematics and Dynamics of Mechanisms <i>Magd Abdel Wahab -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 3 | A:1 | 180 |
| 8 | E008310 Electrical Power Systems <i>Lieven Vandevelde -- Department of Electromechanical, Systems and Metal Engineering</i> | 3 | | 3 | A:1 | 90 |
| 9 | E037010 Heat and Combustion Engineering <i>Steven Lecompte -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 3 | A:1 | 180 |
| 10 | E044011 Mechanics of Structures <i>Patricia Verleysen -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 3 | A:1 | 180 |
| 11 | E039110 Technical Thermodynamics <i>Michel De Paepe -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 3 | A:1 | 180 |
| 12 | E036111 Electrical Drives <i>Luc Dupré -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 3 | A:2 | 180 |
| 13 | E063130 Mechanical Production Technology | 3 | | 3 | | 90 |
| 14 | E003230 Statistical Data Processing <i>Nele De Belie -- Department of Structural Engineering and Building Materials</i> | 3 | | 3 | A:2 | 90 |
| 15 | E099050 Cross-Course Project <i>Michel De Paepe -- Department of Electromechanical, Systems and Metal Engineering</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 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 |