

Faculty of Engineering and Architecture

Bachelor of Science in Engineering -- Engineering Physics

Language of instruction: Dutch

Programme version 4

1 General Courses 60 credits

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

2 General Courses 39 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E090320 Electrical Circuits and Networks Inge Nys -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 2 | E020220 Physics II Christophe Leys -- Department of Applied Physics | 6 | | 2 | A:1 | 180 |
| 3 | E001321 Mathematical Analysis III Hendrik De Bie -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 4 | E005020 Analysis of Systems and Signals Gert De Cooman -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 5 | E045120 Transport Phenomena Tom De Mulder -- Department of Civil Engineering | 6 | | 2 | B:2 | 180 |
| 6 | E076040 Sustainable Business Operations Birger Raa -- Department of Industrial Systems Engineering and Product Design | 3 | | 3 | A:1 | 90 |

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|---|---------|---|---|---|-----|-----|
| 7 | E007120 | Modelling and Control of Dynamic Systems Mia Loccufier -- Department of Electromechanical, Systems and Metal Engineering | 6 | 3 | A:2 | 180 |
|---|---------|---|---|---|-----|-----|

3 Courses Related to the Main Subject

81 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E040050 Theoretical Mechanics I Dimitri Van Neck -- Department of Physics and Astronomy | 6 | | 2 | A:1 | 180 |
| 2 | E001810 Mathematical Tools in Engineering: Linear Algebra Srdan Lazendic -- Department of Electronics and Information Systems | 3 | | 2 | A:2 | 90 |
| 3 | E020310 Physics III Louis Vanduyfhuys -- Department of Applied Physics | 6 | | 2 | A:2 | 180 |
| 4 | E023010 Quantum Mechanics I Louis Vanduyfhuys -- Department of Applied Physics | 6 | | 2 | A:2 | 180 |
| 5 | E099131 Engineering Project Nathalie De Geyter -- Department of Applied Physics | 6 | | 2 | A:2 | 180 |
| 6 | E040060 Theoretical Mechanics II Dimitri Van Neck -- Department of Physics and Astronomy | 3 | | 2 | A:2 | 90 |
| 7 | E021110 Materials and Fields Jeroen Beeckman -- Department of Electronics and Information Systems | 6 | | 3 | A:2 | 180 |
| 8 | E024610 Solid-state Physics and Semiconductors I Henk Vrielinck -- Department of Solid State Sciences | 6 | | 3 | A:1 | 180 |
| 9 | E001820 Mathematical Tools in Engineering: Complex Analysis Hennie De Schepper -- Department of Electronics and Information Systems | 3 | | 3 | A:1 | 90 |
| 10 | E023060 Quantum Mechanics II Veronique Van Speybroeck -- Department of Applied Physics | 6 | | 3 | A:1 | 180 |
| 11 | E022110 Electromagnetism I Dries Vande Ginste -- Department of Information Technology | 6 | | 3 | A:1 | 180 |
| 12 | E032010 Electronic Systems and Instrumentation Jan Doutreloigne -- Department of Electronics and Information Systems | 6 | | 3 | A:2 | 180 |
| 13 | E024620 Solid-state Physics and Semiconductors II Christophe Detavernier -- Department of Solid State Sciences | 3 | | 3 | A:2 | 90 |
| 14 | E030610 Photonics Günther Roelkens -- Department of Information Technology | 6 | | 3 | A:2 | 180 |
| 15 | E022210 Electromagnetism II Hendrik Rogier -- Department of Information Technology | 3 | | 3 | A:2 | 90 |
| 16 | E099030 Cross-Course Project Christophe Leys -- Department of Applied Physics | 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 |