# Study Programme

Academic year 2024-2025

## Faculty of Engineering and Architecture
## Bachelor of Science in Engineering --  Electrical Engineering

Language of instruction: Dutch

Programme version 4

| | 1  General Courses | | | | | 60 credits |
|---|---|---|---|---|---|---|
| Nr | Course | CRDT | Ref | MT1 | Session | Study |
| 1 | E001142  Basic Mathematics<br>Hennie De Schepper -- Department of Electronics and Information Systems | 3 | | 1 | A:1 | 90 |
| 2 | E020061  Physics I<br>Christophe Leys -- Department of Applied Physics | 6 | | 1 | A:1 | 180 |
| 3 | E001132  Mathematical Analysis I<br>Hennie De Schepper -- Department of Electronics and Information Systems | 6 | | 1 | A:1 | 180 |
| 4 | E001460  Discrete Mathematics I<br>Mario Pickavet -- Department of Information Technology | 4 | | 1 | A:1 | 120 |
| 5 | E070070  Chemistry: the Structure of Matter<br>Joris Thybaut -- Department of Materials, Textiles and Chemical Engineering | 4 | | 1 | A:1 | 120 |
| 6 | E098513  Modelling, Making and Measuring<br>Filip Beunis -- Department of Electronics and Information Systems | 4 | | 1 | A:1 | 120 |
| 7 | E015041  Informatics<br>Bart Dhoedt -- Department of Information Technology | 6 | | 1 | A:J | 180 |
| 8 | E001222  Mathematical Analysis II<br>Hendrik De Bie -- Department of Electronics and Information Systems | 4 | | 1 | A:2 | 120 |
| 9 | E000662  Geometry and Linear Algebra<br>Hennie De Schepper -- Department of Electronics and Information Systems | 7 | | 1 | A:2 | 210 |
| 10 | E070080  Chemical Thermodynamics<br>Maarten Sabbe -- Department of Materials, Textiles and Chemical Engineering | 3 | | 1 | A:2 | 90 |
| 11 | E003043  Probability and Statistics<br>Jasper De Bock -- Department of Electronics and Information Systems | 6 | | 1 | A:2 | 180 |
| 12 | E066012  Materials Technology<br>Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering | 4 | | 1 | A:2 | 120 |
| 13 | E098512  Sustainability, Entrepreneurship and Ethics<br>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<br>Inge Nys -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 2 | E040420  Mechanics of Materials<br>Wim Van Paepegem -- Department of Materials, Textiles and Chemical Engineering | 3 | | 2 | B:1 | 90 |
| 3 | E020220  Physics II<br>Christophe Leys -- Department of Applied Physics | 6 | | 2 | A:1 | 180 |
| 4 | E005020  Analysis of Systems and Signals<br>Gert De Cooman -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 5 | E001321  Mathematical Analysis III<br>Hendrik De Bie -- Department of Electronics and Information Systems | 6 | | 2 | A:1 | 180 |
| 6 | E007120  Modelling and Control of Dynamic Systems<br>Mia Loccufier -- Department of Electromechanical, Systems and Metal Engineering | 6 | | 2 | A:2 | 180 |

| Nr | Course | | CRDT | Ref | MT1 | Session | Study |
|---|---|---|---|---|---|---|---|
| 7 | E076040 | Sustainable Business Operations | 3 | 2 | A:1 | | 90 |
| | | Birger Raa -- Department of Industrial Systems Engineering and Product Design | | | | | |
| 8 | E016350 | Artificial Intelligence [en] | 3 | 3 | B:2 | | 90 |
| | | Aleksandra Pizurica -- Department of Telecommunications and Information Processing | | | | | |

## 3   Courses Related to the Main Subject                                              81 credits

| Nr | Course | | CRDT | Ref | MT1 | Session | Study |
|---|---|---|---|---|---|---|---|
| 1 | E003110 | Applied Probability | 3 | 2 | A:2 | | 90 |
| | | Sabine Wittevrongel -- Department of Telecommunications and Information Processing | | | | | |
| 2 | E017210 | Computer Programming | 6 | 2 | A:2 | | 180 |
| | | Filip De Turck -- Department of Information Technology | | | | | |
| 3 | E099121 | Engineering Project | 3 | 2 | A:2 | | 90 |
| | | Herbert De Smet -- Department of Electronics and Information Systems | | | | | |
| 4 | E065110 | Materials in Electronics | 6 | 2 | A:2 | | 180 |
| | | Jeroen Beeckman -- Department of Electronics and Information Systems | | | | | |
| 5 | E034110 | Computer Architecture | 6 | 2 | A:2 | | 180 |
| | | Koen De Bosschere -- Department of Electronics and Information Systems | | | | | |
| 6 | E012110 | Communication Theory | 6 | 3 | A:1 | | 180 |
| | | Nele Noels -- Department of Telecommunications and Information Processing | | | | | |
| 7 | E900039 | Applied Electromagnetism | 6 | 3 | A:1 | | 180 |
| | | Dries Vande Ginste -- Department of Information Technology | | | | | |
| 8 | E031110 | Digital Electronics | 6 | 3 | A:1 | | 180 |
| | | Dirk Stroobandt -- Department of Electronics and Information Systems | | | | | |
| 9 | E008620 | Communication Networks | 6 | 3 | A:1 | | 180 |
| | | Wouter Tavernier -- Department of Information Technology | | | | | |
| 10 | E030210 | Analog Electronics | 6 | 3 | A:1 | | 180 |
| | | Jeroen De Maeyer -- Department of Electromechanical, Systems and Metal Engineering | | | | | |
| 11 | E030610 | Photonics | 6 | 3 | A:2 | | 180 |
| | | Günther Roelkens -- Department of Information Technology | | | | | |
| 12 | E010010 | Signal Processing [en] | 6 | 3 | A:2 | | 180 |
| | | Nilesh Madhu -- Department of Electronics and Information Systems | | | | | |
| 13 | E028411 | Heat Transfer in Electronics | 3 | 3 | A:2 | | 90 |
| | | Filip Beunis -- Department of Electronics and Information Systems | | | | | |
| 14 | E099020 | Cross-Course Project | 6 | 3 | A:2 | | 180 |
| | | Johan Bauwelinck -- Department of Information Technology | | | | | |
| 15 | E030230 | Design of Analog Circuits and Building Blocks | 6 | 3 | A:2 | | 180 |
| | | Guy Torfs -- Department of Information Technology | | | | | |

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 |