

Faculty of Engineering and Architecture

Linking Course Master of Science in Electromechanical Engineering Technology

Language of instruction: Dutch

Programme version 8

## 1 General Courses

The student takes one of the following tracks, depending on the result of the qualification test. The reduced track can only be followed on the condition that the student passes the qualification test.

More information on the qualification test: [ugent.be/ea](http://ugent.be/ea)

Students holding one of the following degrees cannot participate in the qualification test, and take the track of 75 credit units:

- Bachelor in de luchtvaart, afstudeerrichting aspirant-lijnpiloot of certificaat lijnpiloot
- Bachelor in de agro- en biotechnologie, afstudeerrichting landbouwmechanisatie

### 1.1 General Courses

75 credits

| Nr | Course                                                                                                                                | CRDT | Ref | MT1 | Session | Study |
|----|---------------------------------------------------------------------------------------------------------------------------------------|------|-----|-----|---------|-------|
| 1  | E701033 Mathematics I<br><i>Tanja Van Hecke -- Department of Information Technology</i>                                               | 6    |     | 1   | A:1     | 180   |
| 2  | E702080 Thermodynamics and Fluid Mechanics<br><i>Tom Claessens -- Department of Materials, Textiles and Chemical Engineering</i>      | 6    |     | 1   | A:1     | 180   |
| 3  | E741035 CAD Applications<br><i>Magd Abdel Wahab -- Department of Electromechanical, Systems and Metal Engineering</i>                 | 3    |     | 1   | B:1     | 90    |
| 4  | E741031 Applied Materials Science<br><i>Inge Bellemans -- Department of Materials, Textiles and Chemical Engineering</i>              | 3    |     | 1   | A:1     | 90    |
| 5  | E741044 Electrical Energy<br><i>Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering</i>                  | 5    |     | 1   | A:1     | 150   |
| 6  | E702030 Mechanics of Materials<br><i>Marc Wouters -- Department of Materials, Textiles and Chemical Engineering</i>                   | 3    |     | 1   | A:1     | 90    |
| 7  | E701034 Mathematics II<br><i>Tanja Van Hecke -- Department of Information Technology</i>                                              | 6    |     | 1   | A:2     | 180   |
| 8  | E702090 Statistics and Mathematical Data-analysis<br><i>Tanja Van Hecke -- Department of Information Technology</i>                   | 6    |     | 1   | A:2     | 180   |
| 9  | E741046 Electric Drives<br><i>Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering</i>                    | 6    |     | 1   | A:2     | 180   |
| 10 | E741056 Manufacturing Technology<br><i>Kris Hectors -- Department of Electromechanical, Systems and Metal Engineering</i>             | 5    |     | 1   | A:2     | 150   |
| 11 | E741057 Thermal Energy: Installation Components<br><i>Wim Beyne -- Department of Electromechanical, Systems and Metal Engineering</i> | 4    |     | 1   | A:2     | 120   |
| 12 | E702010 Signals and Systems<br><i>Jan Beyens -- Department of Information Technology</i>                                              | 6    |     | 2   | A:1     | 180   |
| 13 | E741055 Mechanics of Materials and FEM<br><i>Marc Wouters -- Department of Materials, Textiles and Chemical Engineering</i>           | 5    |     | 2   | A:1     | 150   |
| 14 | E741054 Advanced Machine Components<br><i>Patrick De Baets -- Department of Electromechanical, Systems and Metal Engineering</i>      | 5    |     | 2   | A:1     | 150   |
| 15 | E741023 Control Theory<br><i>Jan Beyens -- Department of Information Technology</i>                                                   | 6    |     | 2   | A:2     | 180   |

### 1.2 General Courses: reduced track

63 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--------|------|-----|-----|---------|-------|
|----|--------|------|-----|-----|---------|-------|

|    |         |                                                                                                                          |   |   |     |     |
|----|---------|--------------------------------------------------------------------------------------------------------------------------|---|---|-----|-----|
| 1  | E701033 | Mathematics I<br><i>Tanja Van Hecke -- Department of Information Technology</i>                                          | 6 | 1 | A:1 | 180 |
| 2  | E702080 | Thermodynamics and Fluid Mechanics<br><i>Tom Claessens -- Department of Materials, Textiles and Chemical Engineering</i> | 6 | 1 | A:1 | 180 |
| 3  | E702010 | Signals and Systems<br><i>Jan Beyens -- Department of Information Technology</i>                                         | 6 | 1 | A:1 | 180 |
| 4  | E741055 | Mechanics of Materials and FEM<br><i>Marc Wouters -- Department of Materials, Textiles and Chemical Engineering</i>      | 5 | 1 | A:1 | 150 |
| 5  | E741035 | CAD Applications<br><i>Magd Abdel Wahab -- Department of Electromechanical, Systems and Metal Engineering</i>            | 3 | 1 | B:1 | 90  |
| 6  | E741054 | Advanced Machine Components<br><i>Patrick De Baets -- Department of Electromechanical, Systems and Metal Engineering</i> | 5 | 1 | A:1 | 150 |
| 7  | E741031 | Applied Materials Science<br><i>Inge Bellemans -- Department of Materials, Textiles and Chemical Engineering</i>         | 3 | 1 | A:1 | 90  |
| 8  | E701034 | Mathematics II<br><i>Tanja Van Hecke -- Department of Information Technology</i>                                         | 6 | 1 | A:2 | 180 |
| 9  | E702090 | Statistics and Mathematical Data-analysis<br><i>Tanja Van Hecke -- Department of Information Technology</i>              | 6 | 1 | A:2 | 180 |
| 10 | E741046 | Electric Drives<br><i>Peter Sergeant -- Department of Electromechanical, Systems and Metal Engineering</i>               | 6 | 1 | A:2 | 180 |
| 11 | E741023 | Control Theory<br><i>Jan Beyens -- Department of Information Technology</i>                                              | 6 | 1 | A:2 | 180 |
| 12 | E741056 | Manufacturing Technology<br><i>Kris Hectors -- Department of Electromechanical, Systems and Metal Engineering</i>        | 5 | 1 | A:2 | 150 |

#### 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 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 |