

Faculty of Engineering and Architecture

Master of Science in Electronics and ICT Engineering Technology -- Embedded Systems

Language of instruction: Dutch

Programme version 3

1 General Courses 12 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | E735025 Multimedia <i>Bart Goossens -- Department of Telecommunications and Information Processing</i> | 6 | | 1 | A:1 | 180 |
| 2 | E735019 Wireless and Mobile Communication <i>Jo Verhaever -- Department of Information Technology</i> | 6 | | 1 | A:1 | 180 |

2 Courses Related to the Main Subject 36 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | E735050 System on Chip Design <i>Lieven Tytgat -- Department of Electronics and Information Systems</i> | 6 | | 1 | A:1 | 180 |
| 2 | E736010 Cloud Applications and Mobile <i>Sofie Van Hoecke -- Department of Electronics and Information Systems</i> | 6 | | 1 | A:2 | 180 |
| 3 | E736020 Computer Vision <i>Hiep Luong -- Department of Telecommunications and Information Processing</i> | 6 | | 1 | A:2 | 180 |

2.1 Master's Dissertation

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|-------------------------------|------|-----|-----|---------|-------|
| 1 | E705002 Master's Dissertation | 18 | | 1 | B:J | 540 |

3 Elective Courses 12 credits

Subscribe to 12 credit units from no less than 2 and no more than 3 elective course lists from the following list. Subject to approval by the faculty.

3.1 Elective Courses Embedded Systems

Subscribe to no less than 3 and no more than 9 credit units from the following list. Subject to approval by the faculty.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E735040 Sensors and Interfacing <i>Jeroen Missinne -- Department of Electronics and Information Systems</i> | 6 | | | A:1 | 180 |
| 2 | E019370 Robotics [en] <i>Tony Belpaeme -- Department of Electronics and Information Systems</i> | 6 | | | A:1 | 180 |
| 3 | E735090 Applied Machine Learning <i>Sofie Van Hoecke -- Department of Electronics and Information Systems</i> | 6 | | | A:1 | 180 |
| 4 | E735027 Biomedical Electronics <i>Paul Devos -- Department of Information Technology</i> | 3 | | | A:1 | 90 |
| 5 | E735032 High-frequency Techniques and EMC <i>Günter Vermeeren -- Department of Information Technology</i> | 3 | | | A:2 | 90 |
| 6 | E735031 Waves and Antennas <i>Günter Vermeeren -- Department of Information Technology</i> | 3 | | | A:2 | 90 |

3.2 Elective Courses Electronics Engineering or ICT

Subscribe to no more than 6 credit units from the following list. Subject to approval by the faculty.

- The courses with reference 'EL' are from the programma with main subject Electronics Engineering
- The courses with referentie 'IT' are from the programma with main subject ICT

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

| | | | | | | |
|----|---------|---|---|-------|-----|-----|
| 1 | E010310 | Image Processing <i>Wilfried Philips -- Department of Telecommunications and Information Processing</i> | 6 | IT | A:1 | 180 |
| 2 | E019370 | Robotics [en] <i>Tony Belpaeme -- Department of Electronics and Information Systems</i> | 6 | IT | A:1 | 180 |
| 3 | E735034 | Transmission Lines <i>Emmeric Tanghe -- Department of Information Technology</i> | 3 | IT/EL | A:1 | 90 |
| 4 | E736020 | Computer Vision <i>Hiep Luong -- Department of Telecommunications and Information Processing</i> | 6 | IT | A:2 | 180 |
| 5 | E016712 | Computer Graphics [en] <i>Danilo Babin -- Department of Telecommunications and Information Processing</i> | 3 | IT | B:2 | 90 |
| 6 | E735031 | Waves and Antennas <i>Günter Vermeeren -- Department of Information Technology</i> | 3 | IT/EL | A:2 | 90 |
| 7 | E735050 | System on Chip Design <i>Lieven Tytgat -- Department of Electronics and Information Systems</i> | 6 | EL | A:1 | 180 |
| 8 | E735027 | Biomedical Electronics <i>Paul Devos -- Department of Information Technology</i> | 3 | EL | A:1 | 90 |
| 9 | E735021 | Characterisation of Semiconductor Components and Electronic Devices <i>Johan Lauwaert -- Department of Electronics and Information Systems</i> | 3 | EL | A:2 | 90 |
| 10 | E735033 | Electronic Measurements and EMC <i>Guy Torfs -- Department of Information Technology</i> | 3 | EL | A:2 | 90 |

3.3 Elective Social Courses

Subscribe to 3 credit units from the following list. Subject to approval by the faculty.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | E735018 Emerging Technologies in ICT and Automation <i>Jan Beyens -- Department of Information Technology</i> | 3 | | | A:2 | 90 |
| 2 | E076431 Introduction to Entrepreneurship [en] <i>Petra Andries -- Department of Marketing, Innovation and Organisation</i> | 3 | | | A:1 | 90 |
| 3 | E670000 Summer Course [en, nl] <i>Steven Verstockt -- Department of Electronics and Information Systems</i> | 3 | | | A:1 | 90 |
| 4 | E099600 Industry Internship Engineering Technology [en, nl] <i>Patrick Segers -- Department of Electronics and Information Systems</i> | 3 | | | B:J | 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 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 |