

Faculty of Bioscience Engineering

Linking Course Master of Science in Bioindustrial Sciences: Circular Bioprocessstechnology

Campus: Courtray

Language of instruction: Dutch

Programme version 5

1 General Courses 40 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I610018 Mathematics I <i>Jan Baetens -- Department of Data Analysis and Mathematical Modelling</i> | 6 | | 1 | A:1 | 180 |
| 2 | I620034 Programming <i>Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | 1 | A:1 | 90 |
| 3 | E620032 Applied Fluid Mechanics and Thermodynamics <i>Michel De Paepe -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 1 | A:1 | 180 |
| 4 | I640043 Sustainability Assessment <i>Steven De Meester -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:1 | 90 |
| 5 | I610019 Mathematics II <i>Jan Baetens -- Department of Data Analysis and Mathematical Modelling</i> | 6 | | 1 | A:2 | 180 |
| 6 | E610055 Electronics <i>Sam Lemey -- Department of Information Technology</i> | 3 | | 1 | A:2 | 90 |
| 7 | I620033 Thermal Engineering <i>Joël Hogie -- Department of Green Chemistry and Technology</i> | 4 | | 1 | A:2 | 120 |
| 8 | I620032 Smart Sensors <i>Sergei Gusev -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |
| 9 | I630061 Methodology <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:2 | 90 |

2 General Courses

2.1 20 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | E610019 Materials <i>Geert De Clercq -- Department of Materials, Textiles and Chemical Engineering</i> | 3 | | 1 | A:1 | 90 |
| 2 | I610021 Technology for Circular Economy <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:2 | 90 |
| 3 | I630051 Biochemical Engineering <i>Katleen Raes -- Department of Food Technology, Safety and Health</i> | 6 | | 1 | A:2 | 180 |
| 4 | I630067 Sustainable Materials <i>Ann Dumoulin -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 5 | I630062 Portfolio Internationalisation <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:J | 90 |

2.1.1 13 credits

This module doesn't need to be followed when the student passes the qualification test and can follow the reduced track.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I630045 Chemical Engineering <i>Steven De Meester -- Department of Green Chemistry and Technology</i> | 7 | | 1 | A:1 | 180 |
| 2 | I630065 Resource Recovery <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |

2.2

21 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | I630019 Biometrics <i>Stijn Luca -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | 1 | A:2 | 90 |
| 2 | I630064 Process Control <i>Sergei Gusev -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 3 | I630051 Biochemical Engineering <i>Katleen Raes -- Department of Food Technology, Safety and Health</i> | 6 | | 1 | A:2 | 180 |
| 4 | I630068 Sustainable Energy <i>Jos Knockaert -- Department of Electromechanical, Systems and Metal Engineering</i> | 4 | | 1 | A:2 | 120 |
| 5 | I630062 Portfolio Internationalisation <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:J | 90 |

2.2.1

16 credits

This module doesn't need to be followed when the student passes the qualification test and can follow the reduced track.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I630063 Circular Water Technology <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 2 | I630065 Resource Recovery <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |
| 3 | I630067 Sustainable Materials <i>Ann Dumoulin -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |

2.3

19 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | I610021 Technology for Circular Economy <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:2 | 90 |
| 2 | I630019 Biometrics <i>Stijn Luca -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | 1 | A:2 | 90 |
| 3 | I630051 Biochemical Engineering <i>Katleen Raes -- Department of Food Technology, Safety and Health</i> | 6 | | 1 | A:2 | 180 |
| 4 | I630062 Portfolio Internationalisation <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:J | 90 |
| 5 | I630068 Sustainable Energy <i>Jos Knockaert -- Department of Electromechanical, Systems and Metal Engineering</i> | 4 | | 1 | A:2 | 120 |

2.3.1

16 credits

This module doesn't need to be followed when the student passes the qualification test and can follow the reduced track.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I630063 Circular Water Technology <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 2 | I630065 Resource Recovery <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |
| 3 | I630067 Sustainable Materials <i>Ann Dumoulin -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |

2.4

50 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E610013 Mechanics <i>Michael Monte -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 1 | A:J | 180 |
| 2 | E610019 Materials <i>Geert De Clercq -- Department of Materials, Textiles and Chemical Engineering</i> | 3 | | 1 | A:1 | 90 |
| 3 | I610021 Technology for Circular Economy <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | | 1 | A:2 | 90 |
| 4 | I630019 Biometrics <i>Stijn Luca -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | 1 | A:2 | 90 |
| 5 | I630063 Circular Water Technology <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 6 | I630045 Chemical Engineering <i>Steven De Meester -- Department of Green Chemistry and Technology</i> | 7 | | 1 | A:1 | 180 |

| | | | | | | |
|----|---------|--|---|---|-----|-----|
| 7 | I630064 | Process Control <i>Sergei Gusev -- Department of Green Chemistry and Technology</i> | 5 | 1 | A:1 | 150 |
| 8 | I630062 | Portfolio Internationalisation <i>Diederik Rousseau -- Department of Green Chemistry and Technology</i> | 3 | 1 | A:J | 90 |
| 9 | I630067 | Sustainable Materials <i>Ann Dumoulin -- Department of Green Chemistry and Technology</i> | 5 | 1 | A:1 | 150 |
| 10 | I630068 | Sustainable Energy <i>Jos Knockaert -- Department of Electromechanical, Systems and Metal Engineering</i> | 4 | 1 | A:2 | 120 |
| 11 | I630065 | Resource Recovery <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | 1 | A:2 | 180 |

2.5

50 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | E610013 Mechanics <i>Michael Monte -- Department of Electromechanical, Systems and Metal Engineering</i> | 6 | | 1 | A:J | 180 |
| 2 | E610019 Materials <i>Geert De Clercq -- Department of Materials, Textiles and Chemical Engineering</i> | 3 | | 1 | A:1 | 90 |
| 3 | E610016 Physics <i>Michael Monte -- Department of Electromechanical, Systems and Metal Engineering</i> | 5 | | 1 | B:2 | 150 |
| 4 | I630019 Biometrics <i>Stijn Luca -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | 1 | A:2 | 90 |
| 5 | I620031 Physico-Chemistry <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |
| 6 | I630063 Circular Water Technology <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 7 | I630045 Chemical Engineering <i>Steven De Meester -- Department of Green Chemistry and Technology</i> | 7 | | 1 | A:1 | 180 |
| 8 | I630067 Sustainable Materials <i>Ann Dumoulin -- Department of Green Chemistry and Technology</i> | 5 | | 1 | A:1 | 150 |
| 9 | I630065 Resource Recovery <i>Stijn Van Hulle -- Department of Green Chemistry and Technology</i> | 6 | | 1 | A:2 | 180 |
| 10 | I630068 Sustainable Energy <i>Jos Knockaert -- Department of Electromechanical, Systems and Metal Engineering</i> | 4 | | 1 | A:2 | 120 |

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 |