

First Year

Compulsory courses

| | | | | | |
|------------|--|----|----|-----|---|
| STAT1207-1 | <i>Applied statistics</i> - Jean-Jacques CLAUSTRIAUX | 30 | 30 | - | 5 |
| INFO2038-1 | <i>Computer science and algorithmic</i> - Yves BROSTAUX | 6 | 18 | - | 2 |
| GEST3028-2 | <i>Accounting and management</i> - Philippe LEBAILLY | 24 | 24 | - | 4 |
| GEST3015-1 | <i>Quality management</i> - Marianne SINDIC - [6h SEM] | 18 | - | [+] | 2 |
| LANG0906-2 | <i>English language, part 2</i> - Marie-Anne DUFFELER | 16 | 32 | - | 4 |
| MANA0001-1 | <i>Human resources and industrial relations management</i> - Philippe LEPOIVRE - [8h AUTR] | - | - | [+] | 2 |

Optional courses

Choose courses totalling 33 ECTS from the following :

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|------------|--|----|----|-----|----|
| RSTG0006-1 | <i>Final work - Training</i> - COLLÉGIALITÉ | - | - | - | 10 |
| | <i>Notice</i> : this course must be followed by students enrolled in the specialisation on biological processing of waste. | | | | |
| CHIB0010-1 | <i>Basis of physical chemistry applied to environment</i> - Magali DELEU | - | - | - | 2 |
| | <i>Notice</i> : this course must be followed by students enrolled in the specialisation on biological processing of waste. | | | | |
| BIAA0003-1 | <i>Food and agro-food engineering, 1st part</i> - Philippe THONART | 24 | 24 | - | 4 |
| BIOL2019-1 | <i>Theoretical and physical chemistry applied to structural analysis of biomolecules</i> - Bernard WATHELET | 36 | 48 | - | 7 |
| BIOL2013-3 | <i>General microbiology, 2nd part</i> - Micheline VANDENBOL | 16 | 8 | - | 2 |
| BIOL2013-2 | <i>General microbiology, 1st part</i> - Micheline VANDENBOL | 16 | 8 | - | 2 |
| CHIM9241-1 | <i>Purification and concentration techniques</i> - Jacqueline DESTAIN | 24 | - | - | 2 |
| CHIM9242-1 | <i>Fundamentals of quantitative analytical chemistry, part 1</i> - Georges LOGNAY - [6h SEM] | 18 | - | [+] | 2 |
| INGE0001-2 | <i>Strength of materials and elasticity</i> - Pierre LATTEUR | 36 | - | - | 2 |
| CHIM9246-2 | <i>Instrumental analysis (electrochemistry and spectrometry)</i> - Georges LOGNAY - [8h SEM] | 20 | 44 | [+] | 6 |
| CHIM9245-1 | <i>Chromatographic analysis</i> - Georges LOGNAY - [6h SEM] | 18 | - | [+] | 2 |
| ENVT2044-1 | <i>General ecology</i> - Grégory MAHY, Arnaud MONTY | 28 | 20 | - | 4 |
| ENVT2045-2 | <i>Surveying</i> - Charles DEBOUCHE | 16 | 3 | - | 2 |
| HYDR0002-1 | <i>Water flow in soils</i> - Aurore DEGRÉ | 24 | - | - | 2 |
| HYDR0007-3 | <i>Fluid mechanics</i> - Charles DEBOUCHE | 14 | 10 | - | 2 |
| HYDR0006-2 | <i>Modelling of transfers in soils, 1st part</i> - Aurore DEGRÉ | 12 | 12 | - | 2 |
| INGE0003-1 | <i>Engine</i> - Charles DEBOUCHE | 24 | - | - | 2 |
| ALIM0001-1 | <i>Food hygiene</i> - Daniel PORTETELLE, Marianne SINDIC | 18 | 6 | - | 2 |
| ENVT3010-2 | <i>Surveying (complement)</i> - Charles DEBOUCHE | 8 | 10 | - | 2 |
| HYDR0008-1 | <i>Hydraulic pump and network</i> - Charles DEBOUCHE | 10 | 14 | - | 2 |
| ANIM0004-2 | <i>Microbial biochemistry and physiology</i> - Micheline VANDENBOL - [2h AUTR] | 12 | 10 | [+] | 2 |
| GERE0014-1 | <i>Design of agro-industrial infrastructures and environmental incidences</i> - Joseph FLABA - [6h FT] | 18 | - | [+] | 2 |
| VEGE0001-1 | <i>Plant protection products bases</i> - Bruno SCHIFFERS | 24 | - | - | 2 |
| BIOI0001-1 | <i>Industrial microbiology</i> - Philippe THONART | 24 | - | - | 2 |
| HYDR0011-2 | <i>Ecohydrology</i> - Aurore DEGRÉ - [12h FT] | 6 | - | [+] | 2 |
| VEGE0021-1 | <i>Limnology</i> - Frédéric FRANCIS - [4h SEM] | 10 | 10 | [+] | 2 |
| ENVT2054-1 | <i>Renewable energies</i> - [4h FT] | 20 | - | [+] | 2 |
| ECON2246-1 | <i>Economics of developing countries</i> - Baudouin MICHEL - [16h SEM] | 8 | - | [+] | 2 |
| ECON2254-1 | <i>Tropicals markets</i> - Baudouin MICHEL | 12 | 12 | - | 2 |
| DROI0967-1 | <i>Rural law</i> - Gaëtan GOISSE | 24 | - | - | 2 |
| AGRO0011-2 | <i>Pedology of tropical and subtropical environments</i> - Laurent BOCK - [9h FT] | 15 | - | [+] | 2 |
| CHIM0683-1 | <i>Green chemistry</i> - Aurore RICHEL | - | - | - | 2 |

Optional courses

[...] Courses should be chosen from the 1st and 2nd year Masters programmes

Second Year

Compulsory courses

DOCU0449-2 *Scientific literature and information literacy* - Bernard POCHET 4 6 - 2

Optional courses

Choose courses totaling 36 ECTS from the following :

Final work

RTFE0007-1 *Final work* - COLLÉGIALITÉ - - - 28

Notice : Final work for students enrolled at the Professional focus.

RTFE0013-1 *Final work* - COLLÉGIALITÉ - - - 18

Notice : Final thesis for students enrolled in the professional focus in biological waste treatment

These courses has to be taken by the students enrolled in the professional focus in biological waste treatment.

GESA0001-2 *Chemical and physico-chemical analysis of waters* - Jean-Paul BARTHELEMY 8 16 - 2

GESA0002-1 *Measurement and analysis of pollutants* - Georges LOGNAY 18 6 - 2

GESA0003-1 *Automation of wastewater treatment plants* - - Suppl : Jean-Luc VASEL 9 9 - 2

GESA0004-2 *Environmental legislation and policy* - Marc CULOT 12 - - 2

ENVT2055-1 *Ecosystem deterioration* - Roger PAUL 12 - - 2

GESA0005-1 *Fluid mecanic and hydrology* - Dimitri XANTHOULIS 10 4 - 2

GESA0014-1 *Life cycle analysis* - Bruno CAMPANELLA 12 12 - 2

GESA0016-1 *Industrial effluent treatment* - Philippe THONART 12 - - 2

CHIM9225-1 *Gas effluents processing* - Jean-Marc ALDRIC 14 - - 2

[...] Courses should be chosen from the 1st and 2nd year Masters programmes (bioengineer, statistics specialising in biostatistics, agronomical and industrial life sciences) in relevant fields for a total of 10 credits.

Compulsory courses

DOCU0451-1 *Literature seminar* - N... - - - 8

DOCU0452-1 *Quality systems and their systems of reference in terms of research* - Marianne SINDIC - - - 2

LANG0907-2 *English language : scientific communication* - andréas CHAUMOND, Marie-Anne DUFFELER - 36 - 4

DOCU0453-1 *Study and design of a research project* - N... - - - 6

[...] A 2-credit course to be chosen from the 1st and 2nd year Masters programmes (bioengineer, statistics specialising in biostatistics, agronomical and industrial life sciences) in relevant fields.