

## First Year

All year round

### Compulsory courses

STAT1207-1	<i>Applied statistics</i> - Yves BROSTAUX	30	30	-	5
LANG0906-4	<i>English language, part 2</i> - Ingrid BERTRAND	-	48	-	4

First semester

### Compulsory courses

GEST3015-1	<i>Quality management</i> - Marianne SINDIC - [6h SEM]	18	-	[+]	2
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Second semester

### Compulsory courses

GEST3028-2	<i>Accounting and management</i> - Thomas DOGOT, Philippe LEBAILLY	24	24	-	4
RSTG0006-1	<i>Internship and professional relations</i> - COLLÉGIALITÉ	-	-	-	12

### Optional courses

[...] Choose courses from the programme of the 1st and 2nd Master in bioengineering totalling 33 ECTS, with the approval of the President of the Jury

## Second Year

Second semester

### Compulsory courses

DOCU0449-3	<i>Scientific literature and information literacy</i> - Bernard POCHET - [14h AUTR]	4	6	[+]	2
RTFE0013-1	<i>Final work</i> - COLLÉGIALITÉ	-	-	-	18

[...] Choose courses, with the approval of the President of the Jury, totalling minimum 10 ECTS from the following list

- \* 1st and 2nd year courses in the master in bioengineering in subjects related to the field of speciality;
- \* Master-level courses from another of the ULg's faculties in subjects related to the field;
- \* Bibliographical studies and preparation for final thesis.

### Basic subjects

#### Optional courses

Choose courses totalling 4 ECTS from the following :

##### All year round

GESA0003-1	<i>Automatisation of processing sites</i> - N...	9	9	-	2
GESA0004-2	<i>Environmental legislation and policy</i> - N...	12	-	-	2
CHIB0010-1	<i>Basis of physical chemistry applied to environment</i> - Magali DELEU	-	-	-	2

##### First semester

GESA0001-2	<i>Chemical and physico-chemical analysis of waters</i> - JeanPaul BARTHELEMY	8	16	-	2
GESA0005-1	<i>Fluid mechanics and hydrology</i> - N...	10	4	-	2
GESA0014-1	<i>Life cycle analysis</i> - Angélique LÉONARD	12	12	-	2

##### Second semester

GESA0002-1	<i>Measurement and analysis of pollutants and micropollutants</i> - Philippe MAESEN	18	6	-	2
ENVT2055-1	<i>Ecosystem deterioration</i> - Roger PAUL	12	-	-	2
CHIM0683-2	<i>Green chemistry</i> - Aurore RICHEL	12	-	-	2

### Physico-chemical treatments

#### Compulsory courses

##### First semester

GESA0007-1	<i>Fundamental processes of physico-chemical wastewater treatment</i> - Philippe THONART	24	-	-	2
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##### Second semester

Master en sciences agronomiques et industries du vivant, à finalité  
spécialisée en procédé biologique de valorisation des effluents

GESA0006-1	<i>Practical aspects of physico-chemical wastewater treatment</i> - Philippe THONART	-	36	-	3
<b>Biological treatment of polluted environments</b>					
<b>All year round</b>					
GESA0008-1	<i>Wastewater treatment microbiology</i> - Frank DELVIGNE		15	9	- 2
GESA0009-1	<i>Practical aspects of biological wastewater treatments</i> - Frank DELVIGNE - [27h FT]		3	6	[+] 3
GESA0010-1	<i>Fundamental processes of biological wastewater treatment</i> - Frank DELVIGNE		24	-	- 2
CHIM9225-1	<i>Gas effluents processing</i> - JeanMarc ALDRIC		14	-	- 2
<b>Second semester</b>					
GESA0016-1	<i>Industrial effluent treatment</i> - Philippe THONART		12	-	- 2
<b>Collegial classes on transforming waste and energy</b>					
<b>Compulsory courses</b>					
<b>All year round</b>					
GESA0015-1	<i>Waste recovery : latest developments</i> - Philippe THONART - [20h SEM]		20	20	[+] 5
<b>Soil, waste and energy treatment</b>					
<b>Compulsory courses</b>					
<b>First semester</b>					
ENV2053-1	<i>Physical aspects of waste management</i> - Luc MINNE - [3h FT]		21	-	[+] 2
<b>Second semester</b>					
GESA0013-1	<i>Soil remediation</i> - Bruno CAMPANELLA, Gilles COLINET, Jacqueline DESTAIN - [6h SEM]		30	-	[+] 3