

## First Year

First semester

Teaching Period One and Two

### Compulsory courses

#### AGRO1.11 Rural economics and European and international policy.

ECON0942-1 *Rural economics and farm business management* - Philippe BURNY, Thomas DOGOT, Philippe LEBAILLY - [8h FT] 32 20 [+] 4

GEST3019-2 *Food Policy and Strategy* - Philippe BURNY, Thomas DOGOT, Philippe LEBAILLY - [4h24 FT] 8 [+] 3

STAT1213-1 *Multivariate statistical analysis* - Yves BROSTAUX 12 12 - 2

#### AGRO1.12 General crop husbandry

VEGE0023-1 *Foundations of managing and controlling bio-agressors* - Eric HAUBRUGE, Philippe LEPOIVRE, Bruno SCHIFFERS - Suppl : Frédéric FRANCIS - [6h FT] 54 - [+] 4

VEGE0024-1 *General plant science* - Bernard BODSON, Guy MERGEAI - [6h FT] 48 6 [+] 5

#### AGRO1.13 Dairy production by ruminants

ANIM0014-1 *Physiology of reproduction and lactation* - Robert RENAUVILLE - [2h FT] 22 - [+] 2

ANIM0015-1 *Dairy animal production science* - Yves BECKERS, Jérôme BINDELLE, Nicolas GENGLER - [8h FT] 64 - [+] 5

ANIM0016-1 *Milk technology* - Marianne SINDIC - [2h FT] 22 - [+] 2

Second semester

Period 3

### Optional courses

#### GROUP A

Choose one module from :

#### AGRO1.31 Animal sciences

ANIM0012-1 *Animal pathology and hygiene* - Thierry VAN DEN BERG 24 - - 2

ANIM0011-3 *Welfare and ethics in animal productions* - Nadia EVERAERT, Daniel PORTETELLE - [4h FT] 12 8 [+] 2

ANIM0005-1 *Biochemistry of the metabolisms in the domestic animals* - Robert RENAUVILLE 24 - - 2

#### AGRO1.32 Economics of development

ECON2246-2 *Economics of developing countries* - Baudouin MICHEL - [16h SEM] 8 - [+] 2

ECON2254-2 *Tropicals markets* - Baudouin MICHEL 12 12 - 2

ECON2253-2 *Economics of development Seminar* - Thomas DOGOT, Philippe LEBAILLY - [24h SEM] - - [+] 2

#### AGRO1.33 Tropical agroecology

VEGE0025-1 *Tropical agroecology* 18 - - 6

- *Principles of tropical agroecology* - Guy MERGEAI - [2h SEM, 4h FT] 36 12 -

- *Food and industrial crops in tropical regions* - Guy MERGEAI

#### GROUP B

Choose one module from :

#### AGRO1.34 Meat and eggs

ANIM0017-1 *Meat and eggs* - Yves BECKERS, Jérôme BINDELLE, Nadia EVERAERT, Nicolas GENGLER, Robert RENAUVILLE - [8h FT] 64 - [+] 6

#### AGRO1.35 Agricultural policy, sociology and rural legislation

SOCI2234-1 *General and rural sociology* - Daniel BODSON 24 - - 2

ECON2247-1	<i>Agricultural policy</i> - Philippe BURNY - [6h SEM]	12	6	[+]	2
DROI0967-1	<i>Rural law</i> - Gaëtan GOISSE	24	-	-	2

**AGRO1.36 Physiology, plant breeding and multiplication of cultivated plants**

VEGE0026-1	<i>Physiology, plant breeding and multiplication of cultivated plants</i>				<b>6</b>
	- <i>Physiology</i> - Pierre DELAPLACE, Patrick DU JARDIN	12	6	-	
	- <i>Plant breeding</i> - Emmanuelle ESCARNOT	12	6	-	
	- <i>Diversity of plant genetic resources</i> - Marc LATEUR - [8h FT]	8	2	[+]	
	- <i>Multiplication of cultivated plants</i> - André TOUSSAINT - [2h FT]	10	6	[+]	

Period 4

**Compulsory courses**

**AGRO1.41 Internship**

MANA0004-1	<i>Portfolio (Master 1)</i> - Philippe LEPOIVRE	-	-	-	2
RSTG0001-1	<i>Internship and professional relations</i> - Philippe LEPOIVRE	-	-	-	3

Period 5

**GROUP A**

Choose one module from :

**AGRO1.51 Microbial biochemistry and immunology**

ANIM0003-1	<i>Immunology and immunochemistry</i> - Daniel PORTETELLE	12	12	-	2
ANIM0004-4	<i>Microbial biochemistry and physiology</i> - Micheline VANDENBOL	12	12	-	2
ALIM0001-1	<i>Food hygiene</i> - Daniel PORTETELLE, Marianne SINDIC	18	6	-	2

**AGRO1.52 Economic Decision Support**

GBLX0057-2	<i>Mathematical methods in decision making</i> - Catherine CHARLES	12	12	-	2
GEST3022-2	<i>Operations research for economics</i> - Thomas DOGOT	16	8	-	2
STAT1218-1	<i>Statistical methods for economics</i> - Yves BROSTAUX	12	12	-	2

**AGRO1.53 Plant production in temperate areas**

VEGE0027-1	<i>Plant production in temperate areas</i>				<b>6</b>
	- <i>Plant science of various species involved in large scale cultivation and animal fodder production in temperate regions</i> - Bernard BODSON	20	4	-	
	- <i>Implementing technical arrangements under real conditions</i> - Bernard BODSON - [8h - FT]		16	[+]	
	- <i>Evaluating and optimising production systems</i> - Bernard BODSON - [8h FT]	10	6	[+]	

**GROUP B**

Choose one module from :

**AGRO1.54 Bromatology and the cultivation of animal fodder**

ANIM0018-1	<i>Bromatology and the cultivation of animal fodder</i> - Yves BECKERS, Jérôme BINDELLE - [8h FT]	48	16	[+]	6
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**AGRO1.55 Integrated management of self-propagating plants and bio-agressors**

VEGE0028-1	<i>Integrated management of self-propagating plants and bio-agressors</i> - Bernard BODSON, Frédéric FRANCIS, Eric HAUBRUGE, Haïssam JIJAKLI, Bruno SCHIFFERS - [6h FT]	48	18	[+]	6
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All year round

Period 6

**Compulsory course**

**AGRO1.61 English**

LANG2952-1	<i>Practice of specialized English for agricultural sciences : part 1</i> - Yves BECKERS, Jérôme BINDELLE, Philippe BURNY, Sophie DEPOTERRE, Thomas DOGOT, Nicolas GENGLER, Eric HAUBRUGE, Philippe LEBAILLY, Philippe LEPOIVRE,	-	-	[+]	4
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## Second year

First semester

### Optional courses

*Choose one option from the following :*

#### "Agronomical sciences" courses programme (in GxABT)

##### AGRO2.10 Group project

AGRO0020-1	<i>Group project</i> - Yves BECKERS, COLLÉGIALITÉ	-	-	-	<b>4</b>
GEST3020-1	<i>Conceiving and economic assessment of project : food crop and agroforestry</i> - Baudouin MICHEL - [12h SEM]	12	-	[+]	<b>2</b>

#### Period 1

Choose one module from :

##### AGRO2.11 Market and supply analysis

ECON2251-3	<i>Food and agro-industrial Chain Economy</i> - Philippe LEBAILLY	24	-	-	<b>2</b>
ECON2252-2	<i>Marketing and consumer market research</i> - JeanPascal ROBIÉFROID	24	-	-	<b>2</b>
GBLX0056-1	<i>Complement of marketing and consumer market research</i> - JeanPascal ROBIÉFROID	24	-	-	<b>2</b>

##### AGRO2.12 Soil-less horticulture and plant productions

VEGE0035-1	<i>Soil-less horticulture and plant productions</i> - Pierre DELAPLACE, Haïssam JIAKLI, Hugo MAGEIN, Christine MOUREAUX, Bruno SCHIFFERS, André TOUSSAINT	48	24	-	<b>6</b>
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##### AGRO2.13 Complements of animal engineering

ANIM0019-1	<i>Food formulations</i> - Yves BECKERS, Jérôme BINDELLE	12	36	-	<b>4</b>
ANIM0020-1	<i>Numerical genetics, genomics and modeling</i> - Nicolas GENGLER	12	12	-	<b>2</b>

Choose one module from :

##### AGRO2.14 Plant biotechnology

VEGE0032-1	<i>Plant biotechnology</i>				<b>6</b>
	- <i>Molecular plant biotechnology</i> - Pierre DELAPLACE, Patrick DU JARDIN	12	6	-	
	- <i>Exercise of plant biotechnology</i> - Pierre DELAPLACE	-	18	-	
	- <i>Biotechnology applied to pest prevention</i> - Frédéric FRANCIS	9	9	-	
	- <i>Biotechnology applied to phytopathology</i> - Haïssam JIAKLI	10	8	-	

##### AGRO2.15 Human nutrition and quality control

GEST3015-1	<i>Quality management</i> - Marianne SINDIC - [6h SEM]	18	-	[+]	<b>2</b>
ALIM0010-2	<i>Food, human nutrition and dietetics</i> - Nadia EVERAERT	24	-	-	<b>2</b>
ANIM0009-4	<i>Immunobiology</i> - Daniel PORTETELLE - [14h AUTR]	10	-	[+]	<b>2</b>

#### Period 2

Choose one module from :

##### AGRO2.21 Applied economic analysis

ECON2249-3	<i>Economic models</i> - Matthieu DELPIERRE	12	12	-	<b>2</b>
ECON2250-1	<i>International economics</i> - Philippe LEBAILLY	24	-	-	<b>2</b>
ECON2248-1	<i>Environmental economy</i> - Kevin MARÉCHAL	24	-	-	<b>2</b>

**AGRO2.22 Alternative methods of controlling weeds and bio-agressors**

VEGE0033-1	<i>Alternative methods of controlling weeds and bio-agressors</i>				<b>6</b>
	- <i>Alternative methods</i> - Haïssam JIAKLI	12	4	-	
	- <i>Biological control of insect pests</i> - Eric HAUBRUGE, François VERHEGGEN	12	13	-	
	- <i>Weeds control</i> - Bernard BODSON	12	4	-	
	- <i>Biopesticides</i> - Bruno SCHIFFERS	7	-	-	
	- <i>Seminar</i> - COLLÉGIALITÉ - [8h SEM]	-	-	[+]	

**AGRO2.23 Animal biotechnology**

ANIM0008-1	<i>Animal cell culture</i> - Daniel PORTETELLE - [4h FT]	12	8	[+]	<b>2</b>
BIOL2024-3	<i>Applied molecular biology</i> - Luc WILLEMS	24	12	-	<b>3</b>
ANIM0010-2	<i>Physiology of the domestic animals</i> - Robert RENAUVILLE	12	-	-	<b>1</b>

Choose one module from :

**AGRO2.24 Applied rural socioeconomics**

ECON2273-1	<i>Applied rural socioeconomics</i> - Yves BROSTAUX, Thomas DOGOT, Philippe LEBAILLY	72	-	-	<b>6</b>
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**AGRO2.25 Chemical, biological and environmental risks related to plant productions**

VEGE0034-1	<i>Chemical, biological and environmental risks related to plant productions</i> - Bernard BODSON, Patrick DU JARDIN, Bruno SCHIFFERS, François VERHEGGEN	30	42	-	<b>6</b>
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**AGRO2.26 Livestock farming and the environment**

ANIM0021-1	<i>Breeding and environment</i>				<b>6</b>
	- <i>Alternative breeding system</i> - Yves BECKERS - [23h AUTR]	1	-	[+]	
	- <i>Animal biodiversity</i> - Nicolas GENGLER	24	-	-	
	- <i>Modeling of the relation between breeding systems and the environment</i> - Jérôme BINDELLE	24	-	-	

**Management courses programme (in HEC-ULg)**

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	<b>4</b>
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	24	-	-	<b>2</b>
GEST3003-1	<i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN	16	16	-	<b>3</b>
GEST3004-1	<i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN	16	16	-	<b>3</b>
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	<b>4</b>
GEST3006-1	<i>Operations and supply chain management I</i> (english language) - Yasemin ARDA	16	16	-	<b>3</b>
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ	-	30	-	<b>4</b>
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	<b>4</b>

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	16	16	-	<b>3</b>
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	16	16	-	<b>3</b>
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	<b>3</b>

Second semester

**Compulsory courses**

**Period 3**

**AGRO2.31 Final dissertation**

RTFE0002-1	<i>Final dissertation (bioengineering)</i> - N...	-	-	-	<b>24</b>
MANA0005-1	<i>Portfolio (MA2)</i> - Philippe LEPOIVRE	-	-	-	<b>2</b>

All year round

**Period 6**

**Compulsory course**

LANG2953-1	<i>Practice of specialized English for agricultural sciences : part 2</i> - Sophie DEPOTERRE, -	-	-	-	<b>4</b>
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Study programmes 2013-2014  
Gembloux Agro-Bio Tech  
Master in Agricultural Bioengineering

Estelle MAYARD, Robert RENAVILLE