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## First Year

Period 1

### Compulsory courses

#### Corporate and projects management

GEST3028-2	<i>Accounting and management</i> - Philippe LEBAILLY	24	24	-	4
GEST3020-1	<i>Conceiving and economic assessment of project</i> - Baudouin MICHEL - [12h SEM]	12	-	[+]	2

### Optional courses

Choose one module from :

#### Animal production in temperate areas

ANIM0006-1	<i>Animal production in temperate areas, the ruminants</i> - Yves BECKERS - [8h FT]	28	12	[+]	4
ANIM0006-2	<i>Animal production in temperate areas, simple stomach animals and poultry</i> - André THEWIS - [8h FT]	16	-	[+]	2

#### Crop husbandry

AGRO0003-3	<i>Crop production in temperate regions, 1st part</i> - Bernard BODSON	24	-	-	2
HORT0001-1	<i>Principles of horticultural science</i> - Monique BODSON	24	-	-	2
AGRO0015-1	<i>Basis of agroecology in tropical areas</i> - Guy MERGEAI - [2h SEM]	22	-	[+]	2

Period 2

### Optional courses

Choose one module from :

#### Production and plant improvement

AGRO0008-2	<i>General tropical crop husbandry</i> - Guy MERGEAI - [3h SEM]	21	-	[+]	2
AGRO0006-1	<i>Malherbology and weeds control</i> - Bernard BODSON	21	3	-	2
VEGE0005-1	<i>General plant breeding</i> - Jean-Pierre BAUDOIN - [6h SEM]	18	-	[+]	2

#### Physiology and animal biochemistry

ANIM0005-1	<i>Biochemistry of the metabolisms in the domestic animals</i> - Robert RENAVILLE	24	-	-	2
ANIM0010-1	<i>Physiology of the domestic animals</i> - Robert RENAVILLE	24	-	-	2
BIOL2024-1	<i>Applied molecular biology</i> - Franck DEQUIEDT	24	-	-	2

Choose one module from :

#### Economy and rural sociology

ECON2245-1	<i>Agricultural economics</i> - Philippe BURNY	12	12	-	2
SOCI2234-1	<i>General and rural sociology</i> - Daniel BODSON	24	-	-	2
GEST3021-2	<i>Farm Business Management</i> - Thomas DOGOT	24	-	-	2

#### Physiology and plant biochemistry

VEGE0008-1	<i>Applied Plant Physiology and Biochemistry</i> - Patrick DU JARDIN - [6h SEM]	18	-	[+]	2
BIOL2023-1	<i>Bio-informatics, Methods for the analysis of genomic sequences</i> - Laurence LINS	24	-	-	2
HORT0004-1	<i>Physiology of plant reproduction and propagation</i> - Monique BODSON	24	-	-	2

Choose one module from :

#### Crop protection

# Study programmes 2011-2012

## Gembloux Agro-Bio Tech

### Master in Agricultural Bioengineering

VEGE0007-2	<i>Bases of phytopathology</i> - Philippe LEPOIVRE	12	12	-	2
VEGE0001-1	<i>Plant protection products bases</i> - Bruno SCHIFFERS	24	-	-	2
VEGE0002-1	<i>Applied zoology</i> - Eric HAUBRUGE - Suppl : Frédéric FRANCIS - [9h SEM]	15	-	[+]	2

#### Animal and food assessments

ALIM0003-2	<i>Feedstuffs</i> - Yves BECKERS - [4h FT]	20	10	[+]	3
ANIM0001-2	<i>Quantitative genetics</i> - Nicolas GENGLER	18	18	-	3

Period 3

#### Optional courses

Choose one module from :

##### Plant biotechnology

VEGE0004-2	<i>Molecular Plant Biotechnology</i> - Patrick DU JARDIN - [8h SI]	16	-	[+]	2
GBLX0003-2	<i>Biosafety and Ethics of Biotechnology</i> - Patrick DU JARDIN - [16h SEM]	8	-	[+]	2
VEGE0009-1	<i>Plant biotechnology : practical courses</i> - Marie-Laure FAUCONNIER	-	24	-	2

##### Futher animal production

AGRO0004-1	<i>Agro-pastoralism and forage productions, part 1</i> - Jérôme BINDELLE	24	-	-	2
AGRO0004-2	<i>Agro-pastoralism and forage productions, part 2</i> - Jérôme BINDELLE - [8h FT]	8	8	[+]	2
ANIM0002-2	<i>Animal Breeding</i> - Nicolas GENGLER	18	6	-	2

##### European and international policies

ECON2250-1	<i>International economics</i> - Philippe LEBAILLY	24	-	-	2
ECON2247-1	<i>Agricultural policy</i> - Philippe BURNY - [6h SEM]	12	6	[+]	2
GEST3019-1	<i>Food Policy and Strategy</i> - Philippe LEBAILLY	24	-	-	2

Choose one module from :

##### Technology of plant production

GEOP0004-2	<i>Operational pedology</i> - Laurent BOCK - [6h FT Tr. Pr.]	12	6	[+]	2
GERE0002-2	<i>Agricultural equipment</i> - Marie-France DESTAIN - [2h FT Tr. Pr.]	22	-	[+]	2
VEGE0011-1	<i>Application techniques for products to treat crops</i> - Bernard BODSON, Frédéric LEBEAU, Bruno SCHIFFERS - [3h FT]	21	-	[+]	2

##### Animal sciences

BIOL2014-1	<i>Additional anatomy and physiology course</i> - Robert RENAUVILLE	24	-	-	2
ANIM0012-1	<i>Animal pathology and hygiene</i> - Thierry VAN DEN BERG	24	-	-	2
ANIM0011-2	<i>Animal welfare and ethics in production and experimentation</i> - Daniel PORTETELLE, André THEWIS - [4h AUTR]	12	-	[+]	2

Period 4

#### Compulsory courses

##### Placement

MANA0001-1	<i>Human resources and industrial relations management</i> - Philippe LEPOIVRE - [8h AUTR]	-	-	[+]	2
RSTG0001-1	<i>Training</i> - Marie-Laure FAUCONNIER, Rodolphe PALM, Paul ROGER	-	-	-	4

Period 5

Choose one module from :

##### Physiology and animal biotechnology 2

ANIM0003-1	<i>Immunology, immunochemistry</i> - Daniel PORTETELLE	12	12	-	2
ANIM0004-2	<i>Microbial biochemistry and physiology</i> - Micheline VANDENBOL - [2h AUTR]	12	10	[+]	2

# Study programmes 2011-2012

## Gembloux Agro-Bio Tech

### Master in Agricultural Bioengineering

ALIM0001-1 *Food hygiene* - Daniel PORTETELLE, Marianne SINDIC 18 6 - 2

#### Agronomy and production systems

AGRO0003-4 *Crop production in temperate regions, 2nd part* - Bernard BODSON - [12h FT] 36 - [+] 4  
DROI0967-1 *Rural law* - Gaëtan GOISSE 24 - - 2

#### Technology of horticultural productions

HORT0003-2 *Managing tree growth and development : principles of arboriculture* - Monique BODSON 24 - - 2  
VEGE0006-2 *Integrated control of plant pathogens* - Philippe LEPOIVRE - [5h AUTR] 8 6 [+] 2  
HORT0007-1 *Post harvest physiology* - Monique BODSON 24 - - 2

Choose one module from :

#### Agronomy and production systems 2

AGRO0007-2 *Practical aspects of agriculture in temperate regions* - Bernard BODSON - [20h FT] 4 - [+] 2  
HORT0002-2 *Horticulture production systems* - Monique BODSON - [8h FT] 16 - [+] 2  
VEGE0018-4 *Special crop protection, malherbology* - Bernard BODSON - [4h AUTR] 20 - [+] 2

#### Fodder production

AGRO0011-2 *Pedology of tropical and subtropical environments* - Laurent BOCK - [9h FT] 15 - [+] 2  
ANIM0013-1 *Livestock production systems in tropical regions* - Jérôme BINDELLE 42 6 - 4

## Second year

### Optional courses

Choose one option from the following :

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

##### Period 1

Choose 2 modules from 2 different groups (Group A, B or C)

#### GROUP A

##### Animal production in temperate areas

*Notice* : this module can be chosen if it has already been taken in the first year of master.

ANIM0006-1 *Animal production in temperate areas, the ruminants* - Yves BECKERS - [8h FT] 28 12 [+] 4  
ANIM0006-2 *Animal production in temperate areas, simple stomach animals and poultry* - André THEWIS - [8h FT] 16 - [+] 2

##### Crop husbandry

*Notice* : this module can be chosen if it has already been taken in the first year of master.

AGRO0003-3 *Crop production in temperate regions, 1st part* - Bernard BODSON 24 - - 2  
AGRO0015-1 *Basis of agroecology in tropical areas* - Guy MERGEAI - [2h SEM] 22 - [+] 2  
HORT0001-1 *Principles of horticultural science* - Monique BODSON 24 - - 2

##### Biology of bio-aggressors and integrated pest management

VEGE0017-1 *Applied phytopathology* - Haissam JIJAKLI 4 20 - 2

# Study programmes 2011-2012

## Gembloux Agro-Bio Tech

### Master in Agricultural Bioengineering

VEGE0016-2	<i>Integrated control of plant pathogens</i> - Haissam JIAKLI - [9h SEM]	12	3	[+]	2
VEGE0018-3	<i>Special crop protection, phytopathology</i> - Haissam JIAKLI - [10h SEM, 14h FT]	-	-	[+]	2

#### GROUP B

#### Animal and plant product industry

ALIM0009-1	<i>Dairy science</i> - Marianne SINDIC - [3h FT]	12	9	[+]	2
GEST3015-1	<i>Quality management</i> - Marianne SINDIC - [6h SEM]	18	-	[+]	2
ALIM0010-2	<i>Food, human nutrition and dietetics</i> - André THEWIS	24	-	-	2

#### Biodiversity

BIOD0001-3	<i>Biodiversity survey and management</i> - Arnaud MONTY - [6h SEM]	18	-	[+]	2
BIOD0006-1	<i>Applied population ecology</i> - Jean-Philippe BIZOUX	14	10	-	2
VEGE0003-1	<i>Plant genetic resources</i> - Jean-Pierre BAUDOIN - [2h SEM, 8h FT]	14	-	[+]	2

#### GROUP C

#### Economics of development

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
ECON2253-1	<i>Economics of development Seminar</i> - Philippe LEBAILLY - [24h SEM]	-	-	[+]	2

#### Horticultural field

HORT0011-1	<i>Analysis of the network of operators in the horticulture industry</i> - Monique BODSON - [8h FT]	12	4	[+]	2
HORT0009-1	<i>Horticultural production method and equipment</i> - Hugo MAGEIN - [3h FT]	21	-	[+]	2
HORT0012-2	<i>Marketing of horticultural products</i> - André TOUSSAINT	18	-	-	2

#### Period 2

#### Choose 3 modules from 3 different groups

##### Group 1

#### Economic Decision Support

GBLX0057-1	<i>Mathematical methods in decision making</i> - Rodolphe PALM	12	12	-	2
GEST3022-1	<i>Operations research for economics</i> - Thomas DOGOT	16	8	-	2
ECON2249-1	<i>Economic models</i> - Matthieu DELPIERRE	24	12	-	2

#### Animal nutrition

ALIM0002-1	<i>Animal nutrition and feeding</i> - Yves BECKERS - [38h AUTR]	4	6	[+]	4
CHIM9252-1	<i>Applications of analytical chemistry</i> - Georges LOGNAY	4	20	-	2

#### Crop husbandry and tropical agroforestry

AGRO0012-3	<i>Special tropical crop husbandry, first part</i> - Jean-Pierre BAUDOIN - [6h SEM]	18	-	[+]	2
AGRO0012-2	<i>Special tropical crop husbandry, second part</i> - Jean-Pierre BAUDOIN - [12h SEM]	12	-	[+]	2
FORE0014-1	<i>Tropical agroforestry</i> - Jean-Louis DOUCET	24	-	-	2

#### Applied phytopharmacology

VEGE0010-1	<i>Safe and effective use of pesticides and residues control</i> - Bruno SCHIFFERS	14	10	-	2
VEGE0012-1	<i>Pesticide formulation and packaging</i> - Bruno SCHIFFERS - [3h SEM, 6h FT]	15	-	[+]	2
VEGE0013-1	<i>European regulation and ecotoxicology</i> - Thierry NUYTEN	24	-	-	2

##### Group 2

#### Management and sustainability of horticultural production systems

HORT0005-1	<i>Horticulture production systems : advanced analysis</i> - Monique BODSON - [12h SEM, 16h FT]	12	8	[+]	4
HORT0006-1	<i>Horticultural Systematic</i> - Monique BODSON - [4h SEM]	10	10	[+]	2

#### Biology of bio-aggressors and integrated pest management 2

# Study programmes 2011-2012

## Gembloux Agro-Bio Tech

### Master in Agricultural Bioengineering

VEGE0015-1	<i>Applied Entomology</i> - Eric HAUBRUGE	12	12	-	2
VEGE0018-5	<i>Special crop protection, zoology</i> - Frédéric FRANCIS	20	4	-	2
VEGE0014-2	<i>Integrated pest management</i> - Eric HAUBRUGE - Suppl : François VERHEGGEN	20	4	-	2

#### Market and Food Supply Analysis

ECON2252-2	<i>Marketing and consumer market research</i> - Jean-Pascal ROBIÉFROID	24	-	-	2
GBLX0056-1	<i>Marketing and consumer market research</i> - Jean-Pascal ROBIÉFROID	24	-	-	2
ECON2251-3	<i>Food and agro-industrial Chain Economy</i> - Philippe LEBAILLY	24	-	-	2

#### Animal Biotechnology

ANIM0008-2	<i>Animal cell culture</i> - Daniel PORTETELLE - [4h FT]	12	4	[+]	2
ANIM0009-2	<i>Immunobiology</i> - Daniel PORTETELLE - [4h AUTR]	12	4	[+]	2
GENE0002-2	<i>Molecular genetics of microorganisms</i> - Micheline VANDENBOL - [2h SEM]	14	8	[+]	2

#### Group 3

#### Livestock farming and the environment

GERE0014-1	<i>Design of agro-industrial infrastructures and environmental incidences</i> - Joseph FLABA - [6h FT]	18	-	[+]	2
ENVT2049-2	<i>Introduction to environmental assessment</i> - Charles DEBOUCHE	12	-	-	2
ENVT0035-1	<i>Alternative breeding system</i> - Yves BECKERS - [22h AUTR]	2	-	[+]	2

#### Crop productions

AGRO0009-1	<i>Modelling of crop development</i> - Bernard BODSON	24	-	-	2
AGRO0010-2	<i>Plant production and agrarian systems</i> - Bernard BODSON - [12h AUTR]	30	6	[+]	4

#### Environmental economy and statistics applied to rural economics

STAT1213-1	<i>Elements of multivariate statistical methods</i> - Rodolphe PALM	12	12	-	2
STAT1218-1	<i>Statistical methods for economics</i> - Rodolphe PALM	12	12	-	2
ECON2248-1	<i>Environmental economy</i> - Kevin MARÉCHAL	24	-	-	2

#### Applied plant biotechnology

GBLX0152-1	<i>Biotechnology applied to phytopathology</i> - Haissam JIJAKLI	12	6	-	2
HORT0010-1	<i>Horticulture and environmental requirements</i> - Monique BODSON - [12h SEM]	12	-	[+]	2
GBLX0153-1	<i>Biotechnology applied to pest prevention</i> - Frédéric FRANCIS	-	-	-	2

#### Group 4

#### Project

GBLX0154-1	<i>Multidisciplinary project</i> - COLLÉGIALITÉ	-	-	-	6
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#### Management courses programme (in HEC-ULg)

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

Choose one of the following courses :

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

#### Compulsory courses

##### Period 3

##### Dissertation

RTFE0002-1	<i>Final dissertation - N...</i>	-	-	-	<b>27</b>
LANG0907-2	<i>English language : scientific communication - andréas CHAUMOND, Marie-Anne DUFFELER</i>	-	36	-	<b>3</b>