

#### Cycle view of the study programme

		Bl	Or	Th	Pr	Au	Cr
<b>Compulsory courses (B1 : 56Cr, B2 : 56Cr, B3 : 36Cr)</b>							
BIOL2045-1	<i>Biology basis</i> - Patrick DU JARDIN, Ludivine LASSOIS - Suppl : Caroline DE CLERCK	B1	Q1	18	6	-	3
BOTA0412-1	<i>Botany : Organization of seed plants</i> - Patrick DU JARDIN	B1	Q1	24	20	-	4
BOTA0413-1	<i>Botany : Diversity and evolution of plants</i> - Patrick DU JARDIN - [4h FT]	B1	Q2	20	16	[+]	3
CHIM9267-1	<i>Chemistry of equilibria</i> - Aurore RICHEL - [8h REM]	B1	Q2	20	21	[+]	4
CHIM9268-1	<i>Chemistry: from the atom to the molecule</i> - MarieLaure FAUCONNIER - [10h REM, 8h AUTR]	B1	Q1	31	36	[+]	7
ENVT0044-1	<i>Current environmental issues : project</i> - Catherine COLAUX - [3h AUTR]	B1	Q1	10	4	[+]	2
GBLX2131-2	<i>Biosphere, agriculture and society</i> - Benjamin DUMONT , Grégory MAHY - [2h SEM]	B1	Q2	42	-	[+]	4
GEO0008-1	<i>Earth sciences: from the mineral to geospheres</i> - Frédéric BOULVAIN, JeanThomas CORNELIS - Suppl : Marie DINCHER - [8h FT]	B1	Q2	30	16	[+]	4
MATH0494-1	<i>General mathematics 1</i> - Catherine CHARLES - [8h REM, 10h AUTR]	B1	Q1	22	24	[+]	4
MATH0493-1	<i>General mathematics 2</i> - Catherine CHARLES - [8h REM]	B1	Q2	18	22	[+]	4
PHYS3024-1	<i>General physics: Thermodynamics</i> - Bernard LONGDOZ, Geoffroy LUMAY - [8h REM]	B1	Q1	16	18	[+]	3
PHYS3025-1	<i>General physics: Mechanics particle</i> - Bernard LONGDOZ - Suppl : Pierre DUMORTIER - [8h REM]	B1	Q2	28	28	[+]	5
ZOOL2016-1	<i>Zoology : Basic concepts</i> - Eric HAUBRUGE - [2h AUTR]	B1	Q1	22	-	[+]	2
ZOOL2017-1	<i>Zoology: animal diversity and evolution</i> - François VERHEGGEN - [3h FT]	B1	Q1	10	20	[+]	3
ZOOL2018-1	<i>Zoology: animal behaviour</i> - François VERHEGGEN - [2h AUTR]	B1	Q2	20	-	[+]	2
ZOOL2019-1	<i>Zoology: Entomology, Entomology</i> - Frédéric FRANCIS	B1	Q2	-	22	-	2
BIAA0002-1	<i>Agriculture and food technology</i> - Mohamed AYADI	B2	Q2	24	-	-	2
BIOL2011-1	<i>Animal and human physiology</i> - Yves BECKERS, Jérôme BINDELLE, Nicolas GENGLER, Martine SCHROYEN	B2	Q2	40	8	-	4
BOTA0414-1	<i>Systematic botany</i> - Pierre DELAPLACE, Patrick DU JARDIN	B2	TA	10	22	-	3
CHIM9238-3	<i>Analytical chemistry</i> - Philippe MAESEN, Giorgia PURCARO	B2	Q2	16	32	-	4
CHIM9239-2	<i>Chemistry of renewable resources</i> - Aurore RICHEL <b>Prerequisite :</b> CHIM9268-1 - Chimie : De l'atome à la molécule	B2	Q2	36	-	-	3
CHIM9255-3	<i>Organic Chemistry</i> - MarieLaure FAUCONNIER	B2	Q1	21	27	-	4
ECON2244-1	<i>Political and social economy, Introduction</i> - Thomas DOGOT, Kevin MARÉCHAL	B2	Q2	32	16	-	4
ELEC0438-1	<i>Electricity</i> - Bernard HEINESCH <b>Prerequisite :</b> MATH0494-1 - Mathématique générale 1 MATH0493-1 - Mathématique générale 2	B2	Q1	24	36	-	5
FORE0001-2	<i>Forest ecosystem management</i> - Hugues CLAESSENS, JeanLouis DOUCET <b>Corequisite :</b> GEO0009-1 - Science du sol	B2	Q2	24	-	-	2
GEO0009-1	<i>Ground science</i> - JeanThomas CORNELIS - Suppl : Marie DINCHER - [6h AUTR]	B2	Q2	44	8	[+]	5

**Prerequisite :**

GEOP0008-1 - Sciences de la Terre : Du minéral aux géosphères

INFO2037-1	<i>Introduction to computer science</i> - Hélène SOYEURT	B2	Q1	6	18	-	2
MATH0485-3	<i>General mathematics 3</i> - Catherine CHARLES	B2	Q1	14	21	-	3
	<b>Prerequisite :</b> MATH0494-1 - Mathématique générale 1						
MECA0519-1	<i>Mechanics of rigid bodies</i> - Benoît MERCATORIS	B2	Q1	12	12	-	2
	<b>Prerequisite :</b> MATH0494-1 - Mathématique générale 1 PHYS3025-1 - Physique générale : Mécanique particule						
PHYS3026-1	<i>General physics : fluid dynamics and photometry</i> - Laurent DREESEN, Benoît MERCATORIS	B2	Q2	9	15	-	2
SOCI2233-1	<i>Sociology, Sociology</i> - Julie GÉRARD	B2	Q1	24	-	-	2
STAT2002-1	<i>Fundamental statistics, first part</i> - Yves BROSTAUX	B2	Q1	18	18	-	3
STAT2003-1	<i>Basic statistics, part 2</i> - Yves BROSTAUX	B2	Q2	12	12	-	2
	<b>Corequisite :</b> STAT2002-1 - Statistique fondamentale, 1ère partie						
ZOOL2020-1	<i>Zoology: Evolution</i> - Eric HAUBRUGE - [5h AUTR]	B2	Q1	22	-	[+]	3
GBLX2154-1	<i>Bioengineering philosophy and ethics</i> - Thibault DE MEYER, Patrick DU JARDIN	B2	Q1	24	-	-	1
GEST3028-2	<i>Accounting and management</i> - <i>General accounting</i> - Thomas DOGOT - <i>Management, green accounting and business plan</i> - Thomas DOGOT	B3	Q1	12	12	-	4
				10	14	-	
GEST3773-1	<i>Management of quality</i> - Mohamed AYADI, Sébastien MASSART - [6h AUTR]	B3	Q1	18	-	[+]	2
STAT2004-1	<i>Applied statistics : First part</i> - Yves BROSTAUX	B3	Q1	12	12	-	2
	<b>Prerequisite :</b> STAT2003-1 - Statistique fondamentale, 2e partie						
STAT2005-1	<i>Applied statistic : Second part</i> - Yves BROSTAUX	B3	Q2	12	12	-	2
	<b>Corequisite :</b> STAT2004-1 - Statistique appliquée : 1ère partie						
PSYC5897-3	<i>Team, organization and change</i> - Daniel FAULX, Véronique JANS, Tiber MANFREDINI - [44h SEM]	B3	TA	4	-	[+]	2
	<b>Corequisite :</b> MANA0003-1 - Portfolio (Bachelier) GEST3773-1 - Gestion de la qualité GEST3028-2 - Comptabilité et gestion des entreprises						

*Notice :* This course is only accessible to students who are towards the end of the cycle (i.e. students who still have to achieve a maximum of 64 credits in the Bachelor programme) and who meet the co-requisite conditions.

MANA0003-1	<i>Portfolio (Bachelor)</i> - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Dorothée GOFFIN - [24h AUTR]	B3	TA	-	-	[+]	2
	<b>Corequisite :</b> PSYC5897-3 - Equipe, organisation & changement						
RSTG0008-1	<i>Internship (Bachelor)</i> - Hélène SOYEURT - [18h AUTR]	B3	TA	6	-	[+]	2
BIOL2044-1	<i>Plant physiology</i> - Patrick DU JARDIN	B3	Q1	27	9	-	3
	<b>Prerequisite :</b> BIOL2045-1 - Fondements de biologie						
BIOL2013-2	<i>General microbiology, Introduction</i> - Patrick FICKERS, Philippe JACQUES	B3	Q1	16	8	-	2
	<b>Prerequisite :</b> BIOL2045-1 - Fondements de biologie						

ENVT2044-1	<i>General ecology</i> - Grégory MAHY, Arnaud MONTY <b>Prerequisite :</b> BOTA0414-1 - Botanique systématique GBLX2131-2 - Biosphère, agriculture et société	B3	Q1	24	-	-	2
INFO2038-1	<i>Computer science and algorithmic</i> - Hélène SOYEURT <b>Prerequisite :</b> INFO2037-1 - Introduction à l'informatique	B3	Q1	2	22	-	2
MATH2016-1	<i>General mathematics and modelling of dynamics systems</i> - Jérôme BINDELLE, Catherine CHARLES, Frank DELVIGNE, Adeline FAYOLLE, Benoît MERCATORIS <b>Prerequisite :</b> MATH0485-3 - Mathématique générale 3	B3	Q1	24	24	-	4
PHYS3036-1	<i>Environmental physics</i> - Bernard LONGDOZ <b>Prerequisite :</b> PHYS3026-1 - Physique générale : mécanique des fluides et photométrie	B3	Q1	18	18	-	3
LANG2966-2	<i>English language: level 3</i> - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Fiona THEWISSEN - [48h E-Lrng]	B3	TA	-	24	[+]	4

#### Optional courses (B1 : 4Cr, B2 : 4Cr, B3 : 24Cr)

Two language courses for a total of 8 credits based on the level test in block 1: (B1 : 4Cr, B2 : 4Cr)

LANG2950-1	<i>English language: level 1</i> - Estelle MAYARD - [48h E-Lrng]	B1	TA	-	24	[+]	4
LANG2962-2	<i>English language: level 2</i> - Sophie DEPOTERRE, Annabel FOREST - Suppl : Ivan DOSEN - [48h E-Lrng]	B1	TA	-	24	[+]	4
LANG2962-1	<i>English language: level 2</i> - Sophie DEPOTERRE, Annabel FOREST - Suppl : Ivan DOSEN - [48h E-Lrng] <b>Prerequisite :</b> LANG2950-1 - Langue anglaise : niveau 1	B2	TA	-	24	[+]	4
LANG2966-3	<i>English language: level 3</i> - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Fiona THEWISSEN - [48h E-Lrng] <b>Prerequisite :</b> LANG2962-2 - Langue anglaise : niveau 2	B2	TA	-	24	[+]	4

Choose one course from the following : (B3 : 1Nbr)

If the student do not complete an Erasmus trip at the end of the Bachelor :

INGE0008-1	<i>Multidisciplinary experimental project</i> - Yves BROSTAUX, Pierre DELAPLACE, Sébastien MASSART, Benoît MERCATORIS, Arnaud MONTY, Bernard POCHET - [60h AUTR] <b>Corequisite :</b> ENVT2044-1 - Ecologie générale BIOL2044-1 - Physiologie végétale GEST3773-1 - Gestion de la qualité STAT2005-1 - Statistique appliquée : 2ème partie STAT2004-1 - Statistique appliquée : 1ère partie	B3	TA	6	6	[+]	6
------------	---	----	----	---	---	-----	---

If the student complete an Erasmus trip at the end of the Bachelor :

DOCU0449-3	<i>Scientific literature and information literacy</i> - Bernard POCHET - [14h AUTR]	B3	Q1	4	6	[+]	2
------------	---	----	----	---	---	-----	---

#### Choose one option from the following : (B3 : 1Nbr)

##### Agronomy (B3 : 18Cr)

AGRO0001-1	<i>Basic principles of agriculture and agroecology</i> - Pierre DELAPLACE, Benjamin DUMONT - [4h FT]	B3	Q2	20	-	[+]	2
AGRO0002-1	<i>Fertilization and crop nutrition</i> - Caroline DE CLERCK, Patrick DU JARDIN, Benjamin DUMONT - [2h AUTR]	B3	Q2	18	4	[+]	2

	<b>Prerequisite :</b> GEOP0009-1 - Science du sol								
	<b>Corequisite :</b> BIOL2044-1 - Physiologie végétale AGRO0001-1 - Fondement d'agriculture et d'agroécologie								
AGRO0021-1	<i>Introduction to cultivation techniques and levers</i> - Benjamin DUMONT , Ludivine LASSOIS - Suppl : Nicolas DESOIGNIES - [4h AUTR] <b>Corequisite :</b> AGRO0001-1 - Fondement d'agriculture et d'agroécologie	B3	Q2	20	-	[+]			2
BIOL2015-3	<i>Molecular biology</i> - Patrick FICKERS <b>Corequisite :</b> BIOL2016-3 - Génétique générale	B3	Q2	24	-	-			2
BIOL2016-3	<i>General genetics</i> - Nicolas GENGLER, Ludivine LASSOIS - Suppl : Martine SCHROYEN <b>Corequisite :</b> BIOL2015-3 - Biologie moléculaire	B3	Q2	12	12	-			2
BIOL2018-1	<i>Animal nutrition</i> - Yves BECKERS <b>Prerequisite :</b> BIOL2011-1 - Physiologie animale et humaine	B3	Q2	24	-	-			2
SPRA0001-1	<i>Sustainable breeding and zoogenetic resources</i> - Nicolas GENGLER - [4h FT] <b>Corequisite :</b> BIOL2016-3 - Génétique générale	B3	Q2	20	-	[+]			2
BIOL2043-1	<i>Application of molecular biology and genetics</i> - Nicolas GENGLER, Ludivine LASSOIS, Martine SCHROYEN, Hervé VANDERSCHUREN, Luc WILLEMS <b>Corequisite :</b> BIOL2016-3 - Génétique générale	B3	Q2	-	24	-			2
INGE0002-1	<i>Refrigeration and drying</i> - Nicolas JACQUET, Paul MALUMBA KAMBA <b>Prerequisite :</b> PHYS3024-1 - Physique générale : Thermodynamique	B3	Q2	18	6	-			2
<b>Chemistry and bioindustry (B3 : 18Cr)</b>									
BIAA0003-1	<i>Modelling physical and biological processes</i> - Frank DELVIGNE	B3	Q2	24	-	-			2
BIOL2015-3	<i>Molecular biology</i> - Patrick FICKERS <b>Corequisite :</b> BIOL2016-3 - Génétique générale	B3	Q2	24	-	-			2
BIOL2016-3	<i>General genetics</i> - Nicolas GENGLER, Ludivine LASSOIS - Suppl : Martine SCHROYEN <b>Corequisite :</b> BIOL2015-3 - Biologie moléculaire	B3	Q2	12	12	-			2
BIOL2019-1	<i>Theoretical chemistry and physics applied to biomolecules structural analysis</i> - Christian DAMBLON, Loïc QUINTON	B3	Q2	24	24	-			4
CHIM9269-2	<i>Catalysis</i> - MarieLaure FAUCONNIER - [2h AUTR]	B3	Q2	6	12	[+]			2
CHIM9242-4	<i>Fundamentals of quantitative analytical chemistry</i> - Giorgia PURCARO <b>Prerequisite :</b> CHIM9238-3 - Chimie analytique	B3	Q2	16	32	-			4
ALIM0013-2	<i>Techniques of food preservation</i> - Christophe BLECKER	B3	Q2	24	-	-			2
<b>Environmental sciences and technologies (B3 : 18Cr)</b>									
GERE0036-1	<i>Instrumentation: sensors and signals</i> - Benoît MERCATORIS <b>Prerequisite :</b>	B3	Q2	24	24	-			4

	ELEC0438-1 - Electricité								
	<b>Corequisite :</b> MATH2016-1 - Mathématique générale et modélisation des systèmes dynamiques								
HYDR0001-1	<i>General hydrology</i> - Aurore DEGRÉ	B3	Q2	14	10	-			<b>2</b>
HYDR0007-3	<i>Fluid mechanics</i> - Michel PIROTON	B3	Q2	14	10	-			<b>2</b>
	<b>Prerequisite :</b> PHYS3026-1 - Physique générale : mécanique des fluides et photométrie MATH0485-3 - Mathématique générale 3								
INGE0001-2	<i>Strength of materials and elasticity</i> - <i>Introduction</i> - Laurent DUCHENE - <i>In-depth study</i> - Laurent DUCHENE	B3	Q2	24	-	-			<b>3</b>
	<b>Prerequisite :</b> MATH0485-3 - Mathématique générale 3 MECA0519-1 - Mécanique du corps rigide								
PHYS3010-2	<i>Bioclimatology basis</i> - Bernard LONGDOZ - Suppl : Bernard HEINESCH	B3	Q2	24	-	-			<b>2</b>
	<b>Prerequisite :</b> PHYS3026-1 - Physique générale : mécanique des fluides et photométrie								
ENVT3129-1	<i>Evaluating sustainability</i> - Andrea DI MARIA, Angélique LÉONARD - [2h SEM]	B3	Q2	12	16	[+]			<b>3</b>
Select 1 course from Environmental sciences and technologies subject : (B3 : 1Nbr)									
AGRO0001-1	<i>Basic principles of agriculture and agroecology</i> - Pierre DELAPLACE, Benjamin DUMONT - [4h FT]	B3	Q2	20	-	[+]			<b>2</b>
INGE0002-1	<i>Refrigeration and drying</i> - Nicolas JACQUET, Paul MALUMBA KAMBA	B3	Q2	18	6	-			<b>2</b>
	<b>Prerequisite :</b> PHYS3024-1 - Physique générale : Thermodynamique								
<b>Management of forests and natural areas (B3 : 18Cr)</b>									
AGRO0001-1	<i>Basic principles of agriculture and agroecology</i> - Pierre DELAPLACE, Benjamin DUMONT - [4h FT]	B3	Q2	20	-	[+]			<b>2</b>
BIOL2015-3	<i>Molecular biology</i> - Patrick FICKERS	B3	Q2	24	-	-			<b>2</b>
	<b>Corequisite :</b> BIOL2016-3 - Génétique générale								
BIOL2016-3	<i>General genetics</i> - Nicolas GENGLER, Ludivine LASSOIS - Suppl : Martine SCHROYEN	B3	Q2	12	12	-			<b>2</b>
	<b>Corequisite :</b> BIOL2015-3 - Biologie moléculaire								
FORE0021-2	<i>Tree species in temperate regions</i> - Arnaud MONTY	B3	Q2	12	12	-			<b>2</b>
	<b>Prerequisite :</b> BOTA0414-1 - Botanique systématique								
FORE0022-3	<i>Ecological foundations of the silviculture</i> - Hugues CLAESSENS - [12h AUTR]	B3	Q2	12	2	[+]			<b>2</b>
	<b>Prerequisite :</b> FORE0001-2 - Gestion des écosystèmes forestiers								
HYDR0001-1	<i>General hydrology</i> - Aurore DEGRÉ	B3	Q2	14	10	-			<b>2</b>
INGE0001-4	<i>Strength of materials and elasticity, Introduction</i> - Laurent DUCHENE	B3	Q2	24	-	-			<b>2</b>
	<b>Prerequisite :</b> MATH0485-3 - Mathématique générale 3 MECA0519-1 - Mécanique du corps rigide								
PAYS0006-2	<i>Landscape ecology concepts</i> - Jan BOGAERT	B3	Q2	12	12	-			<b>2</b>
	<b>Prerequisite :</b> BOTA0413-1 - Botanique : Diversité et évolution des végétaux GBLX2131-2 - Biosphère, agriculture et société								

PHYS3010-2	<i>Bioclimatology basis</i> - Bernard LONGDOZ - Suppl : Bernard HEINESCH <b>Prerequisite :</b> PHYS3026-1 - Physique générale : mécanique des fluides et photométrie	B3	Q2	24	-	-	-	2
------------	---	----	----	----	---	---	---	---

#### Optional activities (B3 : 18Cr)

RSTG0012-1	<i>Additional internship</i> - Aurore DEGRÉ	B3	TA	-	-	-	-	5
VEGE0045-1	<i>Permaculture and systemic design</i> - Caroline DE CLERCK, Haïssam JIJAKLI	B3	Q2	36	12	-	-	4
HULG9544-1	<i>French course for IN mobility students (S1)</i> - N...	B3	Q1	-	-	-	-	3
HULG9545-1	<i>French course for IN mobility students (S2)</i> - N...	B3	Q2	-	-	-	-	3
HULG9546-1	<i>Erasmus: integration weeks</i> - N...	B3	Q1	-	-	-	-	3

#### Learning support activities (B1 : 1Cr)

IREM0006-1	<i>#BloqueBooster: supervised exam revision in the Spring holidays</i> - Stéphanie GENDARME - [5d REM]	B1	Q2	-	-	[+]	-	-
IREM0007-1	<i>Zen@etudes: How and why to manage stress? (reduced course loads)</i> - Sandrine WUIDART - [2h REM]	B1	Q2	-	-	[+]	-	-
IREM0008-1	<i>Keeping or increasing motivation in a context of a reduced course loads</i> - Céline MATHY, Sandrine WUIDART - [2h REM]	B1	Q2	-	-	[+]	-	-
IREM0009-1	<i>Hebdo MethodO support with additional help in connection to the context of repeating a year</i> - Sylviane HUBERT, AnneFrance LANOTTE - [5h REM]	B1	TA	-	-	[+]	-	-
IREM0018-1	<i>Maintaining or rediscovering your motivation if you have to repeat a year (Q1)</i> - Céline MATHY, Sandrine WUIDART - [2h REM]	B1	Q1	-	-	[+]	-	-
IREM0019-1	<i>Zen@etudes: The hows and whys of stress management (fewer than 30 credits approved - Q1)</i> - Sandrine WUIDART - [2h REM]	B1	Q1	-	-	[+]	-	-
IREM0020-1	<i>Maintaining or rediscovering your motivation if you have to repeat a year (Q2)</i> - Céline MATHY, Sandrine WUIDART - [2h REM]	B1	Q2	-	-	[+]	-	-
IREM0021-1	<i>Zen@etudes: How and why to manage stress? (fewer than 30 credits approved - Q2)</i> - Sandrine WUIDART - [2h REM]	B1	Q2	-	-	[+]	-	-
LREM0005-1	<i>Taking stock of your French skills (Q2)</i> - Marielle MARÉCHAL - [1,5h REM]	B1	Q2	-	-	[+]	-	-
LREM0010-1	<i>Taking stock of your skills in French (Q1)</i> - Samia HAMMAMI, Frédéric SAENEN - [15h REM]	B1	Q1	-	-	[+]	-	-
RREM0001-1	<i>Remediation General mathematics 1 with reduced course load (MATH0494-1)</i> - Catherine CHARLES - [40h REM]	B1	Q2	-	-	[+]	-	-
RREM0002-1	<i>Remediation Chemistry from the atom to the molecule (CHIM9268-1)</i> - Georges LOGNAY - [20h REM]	B1	TA	-	-	[+]	-	-
RREM0003-1	<i>Remediation Thermodynamics (PHYS3024-1)</i> - Geoffroy LUMAY - [20h REM]	B1	Q1	-	-	[+]	-	-
RREM0004-1	<i>Making a lighter course load a pathway to success: Working methods and organisation</i> - Catherine COLAUX - [3h REM]	B1	Q2	-	-	[+]	-	-
RREM0005-1	<i>Remedial mathematics 1 (no reduced course loads) (MATH0494-1)</i> - Catherine CHARLES - [22h REM]	B1	Q2	-	-	[+]	-	-
RREM0006-1	<i>Remediation in Mathematics Part I (MATH0494-1)</i> - Catherine CHARLES - [40h REM]	B1	Q1	-	-	[+]	-	-
RREM0007-1	<i>Efficient organisation of personal work</i> - Catherine COLAUX	B1	TA	-	-	-	-	-
RREM0008-1	<i>Integrating theory and practice into a single tool: application to mathematics</i> - Catherine CHARLES, Catherine COLAUX - [3h REM]	B1	Q1	-	-	[+]	-	-

RREM0009-1	<i>Planning your January session &amp; organising your exam and study session</i> - Catherine COLAUX - [3h REM]	B1	Q1	-	-	[+]	-
RREM0010-1	<i>Learning support activities in particle mechanics (PHYS3025-1)</i> - Bernard LONGDOZ - [20h REM]	B1	Q2	-	-	[+]	-
RREM0011-1	<i>Planning your June session</i> - Catherine COLAUX - [3h REM]	B1	Q2	-	-	[+]	-