Second Year

Over the two license years students must follow a minimum of 600h (theory courses and practical work combined).
In the first year students must take at least 360h (theory courses and practical work combined). At least three of the compulsory courses specified below must be taken.
In the second license students must take a minimum of 160h (theory courses and practical work combined). They must also write a dissertation 22,5 ECTS.
The choices must adhere to various requirements (courses to be taken at the lastest in the same semester as the course concerned) and prerequisites (courses to be taken before the course concerned), and be submitted to and approved by the Board of Studies. The equivalent of 120h can be taken in other study programmes. The Board of Studies fixes the number of equivalent hours.

Compulsory courses

ASTR0201-1	*Astronomy* - Arlette NOELS#GRÖTSCH	30	15	-	**6,5**
MATH0256-1	*Differential Geometry* - Pierre LECOMTE	30	10	-	**6,5**
MATH0212-1	*General Topolgy* - Pierre MATHONET	30	10	-	**6,5**
MATH0213-1	*Mathematical Statistics* - Paul GÉRARD	30	10	-	**6,5**
MATH0214-1	*Partial Derivative Equations* - Françoise BASTIN	30	10	-	**6,5**
MATH0215-1	*Algebra* - Georges HANSOUL	30	10	-	**6,5**
MATH0216-1	*Analysis IV* - Jochen WENGENROTH	30	10	-	**6,5**
GEST0086-2	*Operations Research* - Yves CRAMA	30	10	-	**6,5**

One of the two following courses :

PHYS0203-1	*Statistical physics* - Nicolas VANDEWALLE	30	10	-	**6,5**
PHYS0243-1	*Quantum Physics I* - Thierry BASTIN	30	10	-	**6,5**

Option cours

ASTR0202-1	*Internal structure of stars* - Arlette NOELS#GRÖTSCH	30	10	-	**6,5**
ASTR0203-1	*Evolution of stars* - Arlette NOELS#GRÖTSCH	30	10	-	**6,5**
	Prerequisite ASTR0202-1 Structure interne des étoiles				
INFO0213-1	*Automata and formal languages theory* - Michel RIGO	30	10	-	**6,5**
MATH0017-1	*Mathematical Logic and Set Theory* - Georges HANSOUL	30	10	-	**6,5**
MATH0209-1	*Measure Theory* - Jochen WENGENROTH	30	10	-	**6,5**
GEST0366-1	*Advanced Operations Research* (english) - Yves CRAMA	45	-	-	**6,5**
MATH0219-1	*Lie Groups and Lie Algebras* - Pierre LECOMTE	30	10	-	**6,5**
MATH0220-1	*Functions of complex variables* - Jean-Pierre SCHNEIDERS	30	10	-	**6,5**
MATH0245-2	*Discrete structures* - Michel RIGO	30	10	-	**6,5**
MATH0221-1	*Analysis of time series* - Paul GÉRARD	30	10	-	**6,5**
MATH0222-1	*Introduction to stochastic processes* - Gentiane HAESBROECK	30	10	-	**6,5**
MATH0223-1	*Further numerical analysis* - Jean-Pierre SCHNEIDERS	30	10	-	**6,5**
MATH0235-1	*Homological algebra and sheaf theory* - Jean-Pierre SCHNEIDERS	30	10	-	**6,5**
MATH0236-1	*Introduction to the theory of D-modules* - Jean-Pierre SCHNEIDERS	30	10	-	**6,5**
MECA0203-1	*Continuum Mechanics* - Pierre DAUBY	30	10	-	**6,5**
MECA0204-1	*General Relativity and Cosmology* - Yves DE ROP	30	10	-	**6,5**
STAT0201-1	*Multivariate statistics* - Adelin ALBERT	30	10	-	**6,5**
INFO0212-1	*Computability and complexity theory* - Michel RIGO	30	10	-	**6,5**
MATH0224-1	*Compléments d'analyse fonctionnelle*	30	10	-	**6,5**
MATH0234-1	*Boolean Topology and Boolean Algebra* - Georges HANSOUL	30	10	-	**6,5**
MATH0225-1	*Advanced Differential Geometry* - Pierre LECOMTE	30	10	-	**6,5**
PHYS0204-1	*Quantum Physics II* - Thierry BASTIN	30	10	-	**6,5**
PHYS0205-1	*Further Physical Statistics* - Nicolas VANDEWALLE	30	10	-	**6,5**
STAT0721-1	*Robust non-parametrical statistics* - Gentiane HAESBROECK	30	10	-	**6,5**
SMEM0004-1	*Mémoire*	-	-	-	**22,5**