

Th Pr Au Cr

## A single year

### Compulsory course

SMEM0011-1 *Final thesis* - COLLÉGIALITÉ - - - **16**

### Optional courses

With the approval of the Board of Studies in Mathematics, choose courses totaling 32 ECTS from the first list below :

#### First list

MATH0463-1	<i>Functional Analysis I</i> - JeanPierre SCHNEIDERS - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0209-3	<i>Measure Theory</i> - Samuel NICOLAY - [20h Mon. WS]	30	10	[+]	<b>8</b>
INFO0213-2	<i>Automata and formal languages theory</i> - Michel RIGO - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0220-2	<i>Functions of complex variables</i> - JeanPierre SCHNEIDERS - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0464-1	<i>Differential geometry II</i> - Pierre LECOMTE - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0017-3	<i>Mathematical Logic and Set Theory</i> - Georges HANSOUL - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0465-1	<i>Algebraic Topology</i> - JeanPierre SCHNEIDERS - [20h Mon. WS]	30	10	[+]	<b>8</b>
MATH0489-1	<i>Lie algebra</i> - Pierre MATHONET - [20h Mon. WS]	30	10	[+]	<b>8</b>

### Choose one module (12 ECTS) from :

#### Module : Mathematics

MATH0483-2	<i>History of mathematics</i> - Georges HANSOUL - [20h Mon. WS]	20	-	[+]	<b>4</b>
[...]	With the approval of the Board of Studies in Mathematics, choose one (several) course(s) totaling 8 ECTS from the first list below or from the second list below and, possibly, from the courses programme of other masters				

#### The second list

STAT0723-2	<i>Linear models</i> - N... - [20h Mon. WS]	30	10	[+]	<b>8</b>
STAT0201-3	<i>Multivariate statistics</i> - Gentiane HAESBROECK - [20h Mon. WS]	30	10	[+]	<b>8</b>
STAT0725-2	<i>Bayesian statistics</i> - Philippe LAMBERT - [20h Mon. WS]	30	10	[+]	<b>8</b>
INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS	30	30	-	<b>8</b>
INFO0054-1	<i>Functional programming</i> - Pascal GRIBOMONT	30	30	-	<b>8</b>
ASTR0201-3	<i>Astronomy</i> - MarcAntoine DUPRET - [20h Mon. WS]	30	10	[+]	<b>8</b>
PHYS0243-2	<i>Quantum Physics I</i> - Thierry BASTIN - [20h Mon. WS]	30	10	[+]	<b>8</b>
PHYS0203-2	<i>Statistical physics</i> - Nicolas VANDEWALLE - [20h Mon. WS]	30	10	[+]	<b>8</b>
SPAT0012-1	<i>General relativity</i> - Yves DE ROP	60	-	-	<b>8</b>
SPAT0044-1	<i>Stellar Structure and evolution I</i> - MarcAntoine DUPRET	20	20	-	<b>4</b>
SPAT0045-1	<i>Stellar structure and evolution II</i> - MarcAntoine DUPRET	20	20	-	<b>4</b>
MECA0203-3	<i>Continuum Mechanics</i> - Pierre DAUBY - [20h Mon. WS]	30	10	[+]	<b>8</b>

#### Module : Environmental Management

ENVT0031-2	<i>Society / Environment</i> - François MELARD	24	12	-	<b>3</b>
ENVT0030-2	<i>Managing the environment</i> - JeanMarie HAUGLUSTAINE, François MELARD, Pierre M. STASSART	24	12	-	<b>3</b>
ENVT0034-1	<i>Environmental data management</i> - Philippe ANDRE, AnneClaude ROMAIN, Bernard TYCHON	12	12	-	<b>2</b>
ENVT0013-3	<i>Assessment tools (impact assessment, LCA)</i> - Alain HANSON, Nathalie SEMAL	12	12	-	<b>2</b>
ENVT0848-3	<i>Impacts of human activities on ecosystems and including land use</i> - Célia JOAQUIMJUSTO, Angélique LÉONARD, Roberto RENZONI, Emmanuël SÉRUSIAUX	20	10	-	<b>2</b>

*Notice* : Students who choose the two courses from the "Environmental Science and Management" module will have direct access to the 2nd year of the Masters in Environmental Science and Management, organised on the Arlon campus. Other students will also have access to the 2nd year of the Masters in Environmental Science and Management, on the condition that they take courses corresponding to these 12 credits in addition to the 60 credits taken during this study year.