A single year

Compulsory courses

PHYS0240-2	*Biophysics* - Maryse HOEBEKE	30	15	-	**5**
PHYS0930-1	*Atomic Physics* - Thierry BASTIN	30	15	-	**5**
PHYS0931-1	*Data processing* - Pierre MAGAIN	15	30	-	**4**
SMEM0027-1	*Final thesis* - COLLÉGIALITÉ	-	-	-	**18**

Optional courses

Choose, in agreement with the Physics Board of Studies, courses totalling 28 ECTS from the following :

Physics

PHYS0932-1	*Cold atoms and atomic clocks* - Thierry BASTIN	20	-	-	**4**
PHYS2027-1	*Ultracold atoms and Bose-Enstein condensates* - Peter SCHLAGHECK	30	-	-	**4**
PHYS0094-1	*Multiphase flows and dynamic interfaces* - Hervé CAPS	20	10	-	**4**
AESS0241-1	*Introduction to physic didactics* - Maryse HOEBEKE	20	-	-	**4**
SPAT0012-2	*General relativity, Part : Introduction* - Yves DE ROP	20	-	-	**4**
PHYS0934-1	*Coherent Optics and laser applications* - Serge HABRAKEN	15	20	-	**4**
PHYS0124-1	*Instrumental Optics I* - Serge HABRAKEN	20	15	-	**4**
PHYS0969-1	*Introduction to biophotonics* - Laurent DREESEN	20	10	-	**4**
PHYS0937-1	*Physical functional materials* (english language) - Philippe GHOSEZ - Suppl : Julien VARIGNON	20	10	-	**4**
PHYS0938-1	*Physics and cultural heritage* - David STRIVAY	15	5	-	**4**
PHYS0939-2	*Physics of non-linearities, chaos and fractals* - Nicolas VANDEWALLE	15	15	-	**4**
PHYS2012-1	*Relativistic quantum mechanics and relativistic statistics* - Peter SCHLAGHECK	20	5	-	**4**
PHYS0250-2	*Experimental statistical physics* - Stéphane DORBOLO	10	20	-	**4**
PHYS0941-2	*Theoretical physics : Nuclei and particles* - JeanRené CUDELL	30	-	-	**4**
PHYS0942-2	*Ionising radiations and imaging* - Alain SERET	20	-	-	**4**
PHYS0943-1	*Electronic paramagnetic resonance* - Maryse HOEBEKE	15	5	-	**4**
PHYS3012-2	*Electronic and vibrational spectroscopies* (english language) - Matthieu VERSTRAETE	15	15	-	**4**
PHYS0095-1	*The physics of accelerators and vacuum technologies* - David STRIVAY	10	10	-	**4**
CHIM0202-2	*Physical chemistry* - Christian DAMBLON, Bernard LEYH	30	-	-	**4**
SPAT0012-3	*General relativity, Part : Complement* - Yves DE ROP	40	-	-	**4**
PHYS0945-1	*Complex fluids* - Nicolas VANDEWALLE	20	10	-	**4**
PHYS0235-1	*Introduction to quantum optics* - John MARTIN	30	-	-	**4**
PHYS0948-1	*Microgravity* - Hervé CAPS, Nicolas VANDEWALLE - [3d FW]	10	20	[+]	**4**
PHYS0949-1	*Atomic structures modeling* - Pascal QUINET	10	10	-	**4**
PHYS0950-1	*Nanoparticles and low-dimensional systems* (english language) - JeanYves RATY	20	10	-	**4**
PHYS0125-3	*Instrumental Optics II* - Serge HABRAKEN	25	30	-	**4**
PHYS3017-1	*Physical science in an historical perspective* - Martine JAMINON - [1d Vis.]	30	-	[+]	**4**
PHYS3013-1	*Physical characterization of materials and interfaces* - Ngoc Duy NGUYEN	15	15	-	**4**
PHYS0970-1	*Physics of superconductors* - Alejandro SILHANEK	30	-	-	**4**

Environmental management

ENVT0031-2	*Society / Environment (epistemology, law, economics and social sciences towards the environment)* - François MELARD, Marc MORMONT	24	12	-	**3**
ENVT0030-2	*Managing the environment (transitional issues, instruments, case studies)* - JeanMarie HAUGLUSTAINE, François MELARD, Marc MORMONT, Catherine MOUGENOT, Pierre M. STASSART	24	12	-	**3**
ENVT0034-1	*GIS data management* - Philippe ANDRE, Jacques NICOLAS, AnneClaude ROMAIN, Bernard TYCHON	12	12	-	**2**
ENVT0013-3	*Assessment tools (impact assessment, LCA)* - Alain HANSON, Jacques NICOLAS, Nathalie SEMAL	12	12	-	**2**
ENVT0848-3	*Impacts of human activities on ecosystems and including land use* - Célia JOAQUIMJUSTO, Angélique LÉONARD, Roberto RENZONI, Emmanuël SÉRUSIAUX	20	10	-	**2**

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.

[...] Up to 8 ECTS can be chosen in another study path or in another institution, except if the 12 ECTS of the module "Environmental Management" have already been chosen