

**Cycle view of the study programme**

		Bl	Or	Th	Pr	Au	Cr
<b>Compulsory courses (B1 : 32Cr)</b>							
PHYS0240-2	<i>Biophysics</i> - Maryse HOEBEKE	B1	Q2	30	15	-	5
PHYS0930-1	<i>Atomic physics</i> - Thierry BASTIN	B1	Q1	30	-	-	4
PHYS0931-1	<i>Data processing</i> - Pierre MAGAIN	B1	Q2	15	30	-	5
SMEM0027-1	<i>Final thesis</i> - COLLÉGIALITÉ	B1	TA	-	-	-	18

**Optional courses (B1 : 28Cr)**

Choose, in agreement with the Jury, courses totalling 28 ECTS from the courses below : (B1 : 28Cr)

PHYS0932-1	<i>Cold atoms and atomic clocks</i> - Thierry BASTIN	B1	Q2	20	10	-	4
PHYS2027-2	<i>Ultracold atoms and Bose-Einstein condensates</i> - Peter SCHLAGHECK	B1	Q2	25	-	-	4
PHYS0094-1	<i>Multiphase flows and dynamic interfaces</i> - Hervé CAPS	B1	Q2	20	10	-	4
AESS0241-1	<i>Introduction to physics didactics</i> - Maryse HOEBEKE	B1	Q1	20	-	-	4
PHYS3035-1	<i>Optics supplements and lasers applications (english language)</i> - Serge HABRAKEN	B1	Q1	15	20	-	4
PHYS0124-1	<i>Instrumental optics I (english language)</i> - Serge HABRAKEN	B1	Q1	20	15	-	4
PHYS0969-1	<i>Introduction to biophotonics</i> - Laurent DREESEN	B1	Q2	20	10	-	4
PHYS0937-1	<i>Physical functional materials (english language)</i> - Philippe GHOSEZ	B1	Q1	20	10	-	4
PHYS0938-1	<i>Physics and cultural heritage</i> - David STRIVAY	B1	Q1	15	5	-	4
PHYS0939-2	<i>Physics of non-linearities, chaos and fractals</i> - Nicolas VANDEWALLE	B1	Q2	15	15	-	4
PHYS2012-1	<i>Relativistic quantum mechanics and relativistic statistics</i> - Peter SCHLAGHECK	B1	Q1	20	5	-	4
PHYS0250-2	<i>Experimental statistical physics</i> - Stéphane DORBOLO	B1	Q1	10	20	-	4
PHYS0941-2	<i>Theoretical physics : Nuclei and particles</i> - JeanRené CUDELL	B1	Q1	30	-	-	4
PHYS0942-3	<i>Ionising radiations and imaging</i> - Alain SERET	B1	Q1	20	5	-	4
PHYS0943-1	<i>Electronic paramagnetic resonance</i> - Maryse HOEBEKE	B1	Q2	15	5	-	4
PHYS3012-3	<i>Electronic and vibrational spectroscopy (english language)</i> - Matthieu VERSTRAETE	B1	Q1	20	10	-	4
PHYS0095-1	<i>The physics of accelerators and vacuum technologies</i> - David STRIVAY	B1	Q2	10	10	-	4
CHIM0202-2	<i>Physical Chemistry</i> - Christian DAMBLON, Bernard LEYH	B1	Q2	30	-	-	4
SPAT0012-1	<i>General relativity, Part 1: Introduction</i> - Yves DE ROP	B1	Q1	20	-	-	4
SPAT0012-2	<i>General relativity, Part 2: Mathematics methods</i> - Yves DE ROP	B1	Q1	20	-	-	2
SPAT0012-3	<i>General relativity, Part 3: supplement</i> - Yves DE ROP	B1	Q2	20	-	-	2
PHYS0945-1	<i>Complex fluids</i> - Nicolas VANDEWALLE	B1	Q1	20	10	-	4
PHYS0235-2	<i>Introduction to quantum optics</i> - John MARTIN	B1	Q2	25	-	-	4
PHYS0948-1	<i>Microgravity</i> - Hervé CAPS, Nicolas VANDEWALLE - [3d FW]	B1	Q2	10	20	[+]	4
PHYS0949-1	<i>Atomic structures modelling</i> - Pascal QUINET	B1	Q2	10	10	-	4
PHYS0950-1	<i>Nanoparticles and low-dimensional systems (english language)</i> - JeanYves RATY	B1	Q1	20	10	-	4
PHYS3017-1	<i>Physical science in an historical perspective</i> - Martine JAMINON - [1d Vis.]	B1	Q1	30	-	[+]	4
PHYS3013-1	<i>Physical characterization of materials and interfaces</i> -	B1	Q1	15	15	-	4

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PHYS0970-1	<i>Physics of superconductors</i> - Alejandro SILHANEK	B1	Q1	30	-	-	<b>4</b>
PHYS3019-1	<i>Techniques of experimental physics</i> - Geoffroy LUMAY	B1	Q1	20	20	-	<b>4</b>
PHYS3020-1	<i>Digital tools of soft matter</i> - François LUDEWIG, Geoffroy LUMAY	B1	Q2	15	15	-	<b>4</b>
PHYS3021-1	<i>Advanced quantum mechanics</i> - Thierry BASTIN, John MARTIN, Peter SCHLAGHECK	B1	Q1	30	-	-	<b>4</b>
PHYS3022-1	<i>Theory of magnetism (english language)</i> - Eric BOUSQUET	B1	Q2	20	-	-	<b>4</b>
[...]	Up to 8 ECTS can be chosen in another study path or in another institution						