

**Vue cycle du programme des cours**

B1 Or Th Pr Au Cr

**General courses (B1 : 30Cr)**

SMEM0040-1	<i>Research master thesis</i> - COLLÉGIALITÉ	B1	TA	-	-	-	<b>28</b>
PHYS3014-1	<i>Physics and chemistry of materials : complements</i> (anglais) - COLLÉGIALITÉ	B1	Q1	20	-	-	<b>2</b>

**Specialised courses (B1 : 30Cr)**
**Single focus (B1 : 30Cr)**
**Research focus (B1 : 30Cr)**

Courses totaling 30 credits have to be chosen among: (B1 : 30Cr)

**Quantum materials: design and modelling**

CHIM9227-1	<i>Quantum Chemistry</i> (anglais) - Françoise REMACLE	B1	Q1	30	10	-	<b>4</b>
PHYS3003-1	<i>Physics of functional oxides</i> (anglais) - Philippe GHOSEZ	B1	Q1	20	10	-	<b>4</b>
PHYS3004-1	<i>Physics of nanomaterials</i> (anglais) - JeanYves RATY	B1	Q1	20	10	-	<b>4</b>
PHYS0980-1	<i>Spectroscopy of materials</i> (anglais) - Matthieu VERSTRAETE	B1	Q1	20	10	-	<b>4</b>
PHYS3023-1	<i>Physics of magnetic materials</i> (anglais) - Eric BOUSQUET	B1	Q2	20	10	-	<b>4</b>
CHIM0725-2	<i>Modelling molecules and extended systems, Partim A</i> (anglais) - Bernard LEYH, Françoise REMACLE	B1	Q1	30	-	-	<b>4</b>
PHYS0981-1	<i>Quantum modelling of materials properties</i> (anglais) - Philippe GHOSEZ, Matthieu VERSTRAETE	B1	Q1	20	10	-	<b>4</b>
CHIM9233-1	<i>Molecular logic</i> (anglais) - Françoise REMACLE	B1	Q2	25	-	-	<b>2</b>
PHYS0988-1	<i>Intrinsic and induced topological properties of matter</i> (anglais) - Bertrand DUPÉ	B1	Q2	20	10	-	<b>4</b>

**Functional materials and nanostructures: fabrication and characterization**

CHIM9228-1	<i>Macromolecular Chemistry</i> (anglais) - Christine JÉRÔME	B1	Q1	20	15	-	<b>4</b>
CHIM9256-1	<i>Advanced solid state chemistry</i> (anglais) - Bénédicte VERTRUYEN	B1	Q1	30	-	-	<b>4</b>
CHIM9230-1	<i>Nanomaterials: synthesis, properties and applications</i> (anglais) - AnneSophie DUWEZ, Christine JÉRÔME, Damien SLUYSMANS	B1	Q1	25	-	-	<b>4</b>
PHYS3037-1	<i>Nanofabrication : principles and techniques</i> (anglais) - Ngoc Duy NGUYEN, Alejandro SILHANEK - [15h Labo.]	B1	Q2	25	15	[+]	<b>4</b>
CHIM9266-1	<i>Characterization of nanostructures by scanning probe techniques</i> (anglais) - AnneSophie DUWEZ, Damien SLUYSMANS	B1	Q1	15	-	-	<b>2</b>
CHIM9234-1	<i>Polymers and environment, Partim A</i> (anglais) - Philippe LECOMTE	B1	Q1	15	-	-	<b>2</b>
CHIM9257-1	<i>Introduction to solid state NMR, Partim A</i> (anglais) - Christian DAMBLON, Philippe LECOMTE	B1	Q1	15	-	-	<b>2</b>
PHYS0982-1	<i>Physics of semiconductors</i> (anglais) - Ngoc Duy NGUYEN	B1	Q1	15	-	-	<b>2</b>
PHYS0987-1	<i>Physics of materials for energy</i> (anglais) - Philippe GHOSEZ, Ngoc Duy NGUYEN	B1	Q1	30	-	-	<b>4</b>

[...] Up to 10 credits can be chosen as well from other study programmes organized by ULiège (choice to be validated by the local coordinator)