

**Block view of the study programme**

Or Th Pr Au Cr

**Block 1**
**General courses**

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

**Specialised courses**
**Single focus**
**Research focus**

Courses totaling 30 credits have to be chosen among:

**Quantum materials: design and modelling**

CHIM9227-1	<i>Quantum Chemistry</i> (english language) - Françoise REMACLE	Q1	30	10	-	<b>4</b>
PHYS3003-1	<i>Physics of functional oxides</i> (english language) - Philippe GHOSEZ	Q1	20	10	-	<b>4</b>
PHYS3004-1	<i>Physics of nanomaterials</i> (english language) - JeanYves RATY	Q1	20	10	-	<b>4</b>
PHYS0980-1	(pas organisé en 2023-2024) <i>Spectroscopy of materials</i> (english language)	Q1	20	10	-	<b>4</b>
PHYS3023-1	<i>Physics of magnetic materials</i> (english language) - Eric BOUSQUET	Q2	20	10	-	<b>4</b>
CHIM0725-2	<i>Modelling molecules and extended systems</i> (english language) - Françoise REMACLE	Q1	20	-	-	<b>2</b>
PHYS0981-1	<i>Quantum modelling of materials properties</i> (english language) - Philippe GHOSEZ, Matthieu VERSTRAETE	Q1	20	10	-	<b>4</b>
CHIM9233-1	<i>Molecular logic</i> (english language) - Françoise REMACLE	Q2	25	-	-	<b>2</b>
PHYS0988-1	<i>Intrinsic and induced topological properties of matter</i> (english language) - Bertrand DUPÉ	Q2	20	10	-	<b>4</b>

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

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

**Block 2**