

#### Vue bloc du programme des cours

Or Th Pr Au Cr

#### Bloc 1

##### General courses

|            |                                                                                         |    |   |   |     |    |
|------------|-----------------------------------------------------------------------------------------|----|---|---|-----|----|
| SMEM0040-1 | Research master thesis - COLLÉGIALITÉ                                                   | TA | - | - | -   | 28 |
| PHYS3014-1 | Physics and chemistry of materials : complements (anglais) - COLLÉGIALITÉ - [15h Proj.] | Q1 | 5 | - | [+] | 2  |

##### Specialised courses

Courses totaling 30 credits have to be chosen among:

##### Quantum materials: design and modelling

|            |                                                                                  |    |    |    |   |   |
|------------|----------------------------------------------------------------------------------|----|----|----|---|---|
| CHIM9227-1 | Quantum Chemistry (anglais) - Françoise REMACLE                                  | Q1 | 30 | 10 | - | 4 |
| PHYS3003-1 | Physics of functional oxides (anglais) - Philippe GHOSEZ                         | Q1 | 20 | 10 | - | 4 |
| PHYS3004-1 | Physics of nanomaterials (anglais) - N...                                        | Q2 | 20 | 10 | - | 4 |
| PHYS3023-1 | Physics of magnetic materials (anglais) - Eric BOUSQUET                          | Q2 | 20 | 10 | - | 4 |
| CHIM0725-2 | Modelling molecules and extended systems (anglais) - Françoise REMACLE           | Q2 | 15 | -  | - | 2 |
| PHYS0981-1 | Quantum modelling of materials properties (anglais) - Philippe GHOSEZ            | Q1 | 20 | 10 | - | 4 |
| CHIM9233-1 | Molecular logic and quantum computing (anglais) - Françoise REMACLE              | Q2 | 15 | -  | - | 2 |
| PHYS0988-1 | Intrinsic and induced topological properties of matter (anglais) - Bertrand DUPÉ | Q2 | 20 | 10 | - | 4 |
| PHYS3140-1 | Magnetism and superconductivity (anglais) - Bertrand DUPÉ                        | Q1 | 20 | 10 | - | 4 |

##### Functional materials and nanostructures: fabrication and characterization

|            |                                                                                                          |    |    |    |     |   |
|------------|----------------------------------------------------------------------------------------------------------|----|----|----|-----|---|
| CHIM9228-1 | Macromolecular Chemistry (anglais) - Christine JÉRÔME                                                    | Q1 | 20 | 15 | -   | 4 |
| CHIM9256-1 | Inorganic materials and chemistry (anglais) - Nicolas SOMERS, Bénédicte VERTRUYEN - [15h Proj.]          | Q1 | 15 | -  | [+] | 4 |
| CHIM9230-1 | Physical chemistry of nanostructures and single molecules (anglais) - AnneSophie DUWEZ, Damien SLUYSMANS | Q1 | 25 | -  | -   | 4 |
| PHYS3037-1 | Nanofabrication : principles and techniques (anglais) - Ngoc Duy NGUYEN, Alejandro SILHANEK              | Q2 | 25 | 20 | -   | 5 |
| CHIM0752-1 | Single-molecule approaches in biology and chemistry (anglais) - Damien SLUYSMANS                         | Q1 | 25 | -  | -   | 4 |
| CHIM9234-1 | Polymers and environment, Partim A (anglais) - Philippe LECOMTE                                          | Q1 | 15 | -  | -   | 2 |
| CHIM9257-1 | Introduction to solid state NMR, Partim A (anglais) - Christian DAMBLON, Philippe LECOMTE                | Q1 | 15 | -  | -   | 2 |
| PHYS0987-1 | Physics of materials for energy (anglais) - Ngoc Duy NGUYEN - [15h Proj.]                                | Q1 | 20 | -  | [+] | 4 |

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