

**Vue cycle du programme des cours**

|   |   | Bl | Or | Th | Pr | Au | Cr |
|---|---|----|----|----|----|----|----|
| <b>General courses (B1 : 30Cr)</b>                          |   |    |    |    |    |    |    |
| SMEM0040-1  | <i>Research master thesis</i> - COLLÉGIALITÉ  | B1 | TA | -  | -  | -  | 24 |
| PHYS3132-1  | <i>Intellectual property and open innovation in materials science</i> (anglais) - Elodie NAVEAU                               | B1 | Q1 | 10 | 5  | -  | 2  |
| STRA0048-1  | <i>Innovation project in advanced materials science</i> (anglais) - COLLÉGIALITÉ  | B1 | Q1 | 5  | 30 | -  | 4  |
| <b>Focus courses (B1 : 30Cr)</b>                            |   |    |    |    |    |    |    |
| <b>Single focus (B1 : 30Cr)</b>                             |   |    |    |    |    |    |    |
| <b>Research Focus (B1 : 30Cr)</b>                           |   |    |    |    |    |    |    |
| CHIM9227-1  | <i>Quantum Chemistry</i> (anglais) - Françoise REMACLE  | B1 | Q1 | 30 | 10 | -  | 4  |
| PHYS3003-1  | <i>Physics of functional oxides</i> (anglais) - Philippe GHOSEZ   | B1 | Q1 | 20 | 10 | -  | 4  |
| CHIM9228-1  | <i>Macromolecular Chemistry</i> (anglais) - Christine JÉRÔME  | B1 | Q1 | 20 | 15 | -  | 4  |
| CHIM9256-1  | <i>Advanced solid state chemistry</i> (anglais) - Bénédicte VERTRUYEN   | B1 | Q1 | 30 | -  | -  | 4  |
| CHIM9230-1  | <i>Nanomaterials: synthesis, properties and applications</i> (anglais) - AnneSophie DUWEZ, Christine JÉRÔME, Damien SLUYSMANS | B1 | Q1 | 25 | -  | -  | 4  |
| <b>Specialised courses, including tutorial and practice</b> |   |    |    |    |    |    |    |
| Courses totaling 10 credits have to be chosen among :       |   |    |    |    |    |    |    |
| PHYS3014-1  | <i>Physics and chemistry of materials : complements</i> (anglais) - COLLÉGIALITÉ  | B1 | Q1 | 20 | -  | -  | 2  |
| PHYS3004-1  | <i>Physics of nanomaterials</i> (anglais) - JeanYves RATY   | B1 | Q1 | 20 | 10 | -  | 4  |
| PHYS0980-1  | <i>Spectroscopy of materials</i> (anglais) - Matthieu VERSTRAETE  | B1 | Q1 | 20 | 10 | -  | 4  |
| CHIM0725-2  | <i>Modelling molecules and extended systems, Partim A</i> (anglais) - Bernard LEYH, Françoise REMACLE                         | B1 | Q1 | 30 | -  | -  | 4  |
| CHIM9233-1  | <i>Molecular logic</i> (anglais) - Françoise REMACLE  | -  | Q2 | 25 | -  | -  | 2  |
| CHIM9234-1  | <i>Polymers and environment, Partim A</i> (anglais) - Philippe LECOMTE  | B1 | Q1 | 15 | -  | -  | 2  |
| CHIM9257-1  | <i>Introduction to solid state NMR, Partim A</i> (anglais) - Christian DAMBLON, Philippe LECOMTE                              | B1 | Q1 | 15 | -  | -  | 2  |
| CHIM9266-1  | <i>Characterization of nanostructures by scanning probe techniques</i> (anglais) - AnneSophie DUWEZ, Damien SLUYSMANS         | B1 | Q1 | 15 | -  | -  | 2  |
| PHYS0981-1  | <i>Quantum modeling of materials properties</i> (anglais) - Philippe GHOSEZ, Matthieu VERSTRAETE                              | B1 | Q1 | 20 | 10 | -  | 4  |
| PHYS0982-1  | <i>Physics of semiconductors</i> (anglais) - Ngoc Duy NGUYEN  | B1 | Q1 | 15 | -  | -  | 2  |
| PHYS3023-1  | <i>Physics of magnetic materials</i> (anglais) - Eric BOUSQUET  | B1 | Q2 | 20 | 10 | -  | 4  |
| PHYS3037-1  | <i>Nanofabrication : principles and techniques</i> (anglais) - Ngoc Duy NGUYEN, Alejandro SILHANEK                            | B1 | Q2 | 25 | 15 | -  | 4  |
| PHYS0987-1  | <i>Physics of materials for energy</i> (anglais) - Ngoc Duy NGUYEN, JeanYves RATY   | B1 | Q1 | 30 | -  | -  | 4  |
| PHYS0988-1  | <i>Intrinsic and induced topological properties of matter</i> (anglais) - Bertrand DUPÉ                                       | B1 | Q2 | 20 | 10 | -  | 4  |