

**Course Sequence**  
**Dual Masters Program in Materials Science**  
**Colorado School of Mines and University of Bordeaux**

**Year 1: Colorado School of Mines**

<b>Name of the teaching unit</b>
Bonding, Structure and Crystallography (MLGN 593)
Materials Thermodynamics (MLGN 591)
Advanced Materials Kinetics and Transport (MLGN 592)
Quantum Mechanics (PHGN 520)
Surface Analysis Techniques (CHGN 583 / MLGN 583)
Analytical Chemistry (CHGN 507)
Solid State Physics (MLGN 502)
One elective course proposed by the student
<b>TOTAL 24 credit hours / 60 ECTS</b>

**Year 2: University of Bordeaux**

<b>Name of the teaching unit</b>
Photonics, Lasers and Imaging
Dielectric and Magnetic properties
Two elective courses among four proposed: <ul style="list-style-type: none"> <li>• Large scale facilities</li> <li>• Self-assembly of polymers and surfactants</li> <li>• Energy, information and communication</li> <li>• Computational chemistry</li> </ul>
Foreign Languages (French or English)
Management and entrepreneurship
Professional project
Case study / Master thesis research project
<b>TOTAL 24 credit hours / 60 ECTS</b>