

**Materials science and engineering**  
**Disciplinary Minor "Materials science and engineering"**

Person in charge : Dr Béatrice Marselli

teachers, credits and semesters could be modified

Courses (indicative list)	Teachers	Course book	Credits	semester
Advanced metallurgy	Leinenbach	MX	4	MA1-3
Assembly techniques (pas donné en 2024-25)	Leinenbach/vacat	MX	2	MA2
Ceramic and Colloidal Processing	Testino	MX	3	BA5
Composites polymères + TP	Bourban/Michaud	MX	4	BA5
Composites technology	Bourban/Michaud/Wakeman	MX	3	MA1-3
Corrosion et protection des métaux + TP	Mischler/Igual Muñoz	MX	3	BA6
Crystalline materials: structures and properties	Stolichnov	MX	5	BA6
Déformation des matériaux	Logé	MX	4	BA5
Engineered living materials	Abitbol	MX	3	MA1-3
Fracture of materials	Drezet/Molinari	MX	4	MA2
Fundamentals of solid-state materials	Marzari	MX	4	MA1-3
Introduction à la microscopie+TP	Cantoni/Hessler	MX	5	BA5
Nanomaterials (pas donné en 2024-25)	Tileli	MX	3	MA1-3
Materials selection	Michler/Vaucher	MX	2	MA2
Milieux continus	Drezet	MX	4	BA3
Organic electronic materials	Frauenrath	MX	4	MA2
Science des polymères + TP	Görl	MX	5	BA5
Projet Matériaux	Divers	MX	6	BA6
Propriétés fonctionnelles des matériaux	Piazza	MX	2	BA5
Towards sustainable materials	Leterrier/Wakeman	MX	4	MA2
Résistance des matériaux	Bourban	MX	3	BA4
Rhéologie et mécanique des fluides	Leterrier	MX	4	BA4
Properties of semiconductors and related nanostructures	Piazza	MX	5	MA2
Soft matter	Amstad/Klok	MX	4	MA1-3
Statistical mechanics	Cerioti	MX	4	MA2
Surface analysis	Igual Muñoz/Stolichnov	MX	3	MA1-3
Surfaces and interfaces	Stellacci/Nakatsuka	MX	3	BA5
Sustainability and materials	Abitbol	MX	3	BA6
Thermodynamics for materials science	Stellacci	MX	3	BA3
Transformations de phases	Cayron	MX	4	BA6
Tribology	Mischler S./Igual Muñoz	MX	2	MA1-3
Wood structures, properties and uses	Pichelin	MX	2	MA2