

# MATERIALS SCIENCE 120 ECTS

**The Master's degree** in Material Science addresses the needs of the manufacturing and service sectors. The course aims to provide students with advanced and integrated training across the following areas: chemistry and physics of solids, material production technology, instrumental characterization and modeling of material structures and properties. Subjects deal with the impact of materials on the environment, industry and economy; internship at public or private structures is highly recommended. Permanent contacts with local institutions, industries and service providers are established in order to guide post-graduates. The subjects are taught in English.

## first year (64 ECTS):

ECTS

Advanced mathematics and numerical analysis	8
Physics (Quantum Mechanics; Solid State Physics)	18
Polymeric Materials	8
Advanced Crystallography	6
Physical Chemistry	8
Analytical Chemistry for Material Science	4
Solid State Chemistry	6
Metallurgy	6

Lab activities (tot.): **8 ECTS**

## second year (12 ECTS):

ECTS

Organic Materials	6
Selection and use of materials	6

Lab activities (tot.): **4 ECTS**

## Training activities over the two-year degree (44 ECTS):

Optional	<b>8 ECTS</b>
Internship	<b>16 ECTS</b>
<b>Final dissertation</b>	<b>20 ECTS</b>