

MASTER DEGREE

Control & Durability of Materials CDM

CDM Master Degree Presentation

The CDM Master is a EIPHI Master's degree in material science. The Control & Durability of Material field addresses both theoretical and applied research by covering the development, life, fatigue and recycling cycles of materials.

The training covers many industrial fields such as metallurgy, ceramics, microelectronics, nano-technologies, cement industry, glass, etc.

This master's degree is strongly supported by the ICB laboratory, and presents the major scientific breakthrough, at the experimental and industrial level in the field of materials control and characterization.

The industrial sectors is wide, going from metallurgy, nanotechnologies, chemistry, transport (automotive and aeronautics), energy, electronic, robotic, cement industry, archaeology, to restoration of historic buildings.

PROGRAM (Dijon Campus)

Y E A R 1	Core Courses with Research Project 24 ECTS		Crossdisciplinary Courses 6 ECTS
	Core Courses with Research Project 18 ECTS	Soft Skills Courses 6 ECTS	Crossdisciplinary Courses 6 ECTS
Y E A R 2	Specialized Courses with Research Project 24 ECTS		Soft Skills Courses 6 ECTS
	Research Internship 30 ECTS		

<p>Core Course List: 42 ECTS</p> <p>SPECTROSCOPIC CHARACTERIZATION OF MATERIALS SPECTROSCOPIES POLYMER & HYBRID MATERIALS LIFE & LAB</p> <p>ELECTROCHEMISTRY MORPHOLOGICAL & STRUCTURAL CHARACTERIZATION OF MATERIALS RESEARCH PROJECTS</p>	<p>Cross-disciplinary Course List: 12 ECTS</p> <p>PHYSICAL CHEMISTRY OF MATERIALS INORGANIC CHEMISTRY...</p>
<p>Specialized Course List: 24 ECTS</p> <p>REACTIVITY OF SOLIDS FUNCTIONALITY OF MATERIALS NANO MATERIALS ADVANCED TECHNIQUES ADVANCED RESEARCH PROJECT</p>	<p>Soft Skills Course List: 12 ECTS</p> <p>FOREIGN LANGUAGE NON-DESTRUCTIVE TESTING & QUALITY PROFESSIONAL WORLD...</p>



RESEARCH

Processes, Materials, Durability, Metallurgy, Interfaces, Nanosciences Departments

1 Research Laboratory



3 Research Departments

Research Domains :

Adsorption & desorption processes in naporous materials, separation
Corrosion & anti-corrosion of metals and alloys, electrochemical corrosion, dry corrosion at high temperature
Surface treatment by laser, functionalization of surfaces, thin films & coatings
Cement & concrete science, colloids
Powder metallurgy, sintering, ceramics
Shaping of pharmaceutical products, hybrid nanoparticles & nanostructures including medical applications
Development of spectroscopic techniques for surface analyses, surface science

