Mastère Spécialisé | Advanced Master
Digital Materials & Advanced Processes Modelling

MAPMOD
Become an expert in the field of computational mechanics and be ready to be part of the next generation of engineers in digital manufacturing.

Next October in Sophia Antipolis

CEMEF, MINES ParisTech lab, offers you a one-year post-master degree
- in close connection with an industrial partner
- to develop your skills and expertise necessary to join the digital industry.

mapmod.cemef.mines-paristech.fr
MAPMOD main goals:
The post master degree MAPMOD aims at providing knowledge on advanced material manufacturing. In the future, understanding and controlling the material microstructure during forming processes will be instrumental in achieving the required material properties.
The main features of our training programme is:
• focus on high level industrial needs
• use of cutting-edge, industrial grade computational industrial tools to:
  - bring knowledge in both computational methods and material physics & mechanics
  - understand material behaviour from micro- to macro- scale
  - model innovative processes

Programme:
• Micro- & macro- scale description of material behaviour
• Numerical methods and modelling
• Application to - digital material simulation
  - innovative processes
  - induced material properties
• Project work on an industrially-relevant topic defined by the partner company

Applicant profiles and qualifications required:
Candidates must hold a 5-year higher education qualification (Bac+5) with a good knowledge in computational methods or mechanics. They typically look for a specialization in advanced processing with the objective of working in an industrial company.

Admission:
Applications are reviewed by a jury. Selected candidates will be interviewed, generally by the educational team of MAPMOD and by the industrial partner.

The plus:
• Excellence of MINES ParisTech in the field of engineering education
• Strong link with the industrial environment: study visits in companies, testimonials & conferences by recognized experts
• Training in practical skills that can be readily applied to innovate in the manufacturing world

Our educational vision
“Material is everywhere, in your car, your phone, your pen! However, material is nothing without manufacturing! MAPMOD programme aims at providing you with the most advanced tools to study, analyze and solve the material challenges faced by industrial companies, to be proactive and competitive.”

Katia Mocellin, Head of MAPMOD

Timetable
• Applications: January to June
• Course: October to September
• Industrial training:
  - Part time 200h: October to March
  - Full time: April to September

Location
Courses take place at CEMEF lab., located on the French Riviera, in the Technopark of Sophia Antipolis.

Attendance
limited to 10-15

Language
Courses will be taught in English

Fees
The €15,000 cost is generally paid by the industrial partner. The charge left to the student is of ~€1000 for the administrative registration. Students receive financial support to cover part of their living expenses.

Contact:
mapmod@mines-paristech.fr
mapmod.cemef@mines-paristech.fr
CEMEF MINES ParisTech
Rue Claude Daunesse 06904 Sophia Antipolis
Tél. 33 (0)4 93 95 74 18

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