MASTER OF SCIENCE

Advanced Pharmaceutical Engineering (ADPHARMING)

ACCREDITATION

KEY WORDS

SCHOOL PROPOSING THE MASTER
Mines Albi – In co-accreditation with Institut Mines-Télécom, Paris - France

INDUSTRIAL PARTNERS
Pfizer, Glaxo-Smith-Kline, Novartis, Eli-Lilly, Sanofi, Roche, Pierre Fabre, Servier, Teva, L’Oréal, Chanel, Merck, Bristol-Myers-Squibb, Astra-Zeneca, IPSEN...

PROGRAM
This is a full-time program of 2 years divided into four semesters: courses over 3 semesters followed by an internship of one semester in a company or in a research laboratory.

First semester: Introduction, scientific and technological bases.
• Cultural and linguistic integration
• Introduction to the pharmaceutical industry
• Fundamental sciences for pharmacy
• Transfer phenomena and thermodynamics
• Bases of the pharmaceutical engineering
• Initiation to the corporate world, visits
• Generic tools for engineering
• Project 1: Bibliography and presentation

Semester 2: Bases of pharmaceutical engineering, project and production management.
• Pharmaceutical engineering today
• Pharmaceutical engineering: process engineering, modelling.
• Project management
• Production management
• Supply chain management
• Lean management
• Eco-design, circular economy, innovation
• Control systems, sensors
• French culture and language
• Project 2: Research, modelling, industrial topics, innovation

Semester 3: Advanced Pharmaceutical Engineering.
• Specificities of international pharmaceutical companies
• Regulatory agencies
• Good Manufacturing Practices
• Mechanism of drugs action
• QbD, PAT
• Green processes for pharmacy
• Pharmaceutical processes & development.
• Pharmaceutical engineering: dosage forms, advanced and innovative galenics.
• Quality management system, QRM
• Pharmaceutical environment (clean rooms...)
• French culture and language
• Project 3: Research and/or industry oriented

Semester 4: MSc Thesis.
• 6-month Msc thesis in Industry or in a research lab (France or international).

LOCATION
Mines Albi, France
The city of Albi is part of UNESCO’s World heritage.

ADMISSION REQUIREMENTS
Participants must hold a four-year Bachelor of Science or Engineering degree with related major (Chemical Engineering, Chemical Sciences, Pharmaceutical Engineering, Pharmaceutical Sciences...) or an equivalent degree.
Participants holding a first industrial experience are also welcome.

LANGUAGE REQUIREMENTS
English: B2 Level
• Mother tongue or
• Study in an English-speaking country or
• English Langage Qualification such as:
  - TOEFL IBT 80,
  - ELTS 6.0,
  - TOEIC 750,
  - Cambridge CAE (Certificate of Advanced English).

French: A good knowledge of French language is not mandatory before arrival in France.

APPLYING
All applications should be made on-line:
www.mines-albi.fr/adpharming
Applications are open from January to June each year.

STRONG POINTS OF THE SCHOOL/PROGRAM
• International Campus
• Masters taught entirely in English and in small groups
• Strong links with the industries
• 6-month master thesis in industry or in a research lab
• Master boosted by the research department RAPSODEE (CNRS UMR 5302)
• A quality-chartered “Welcome to International Students” package
Scholarships are available depending on academic records and countries of origin (companies, governments, embassies...). Internships are paid and cover living expenses during the last semester.

Details of the School
Mines Albi - International students office - Campus Jarlard - Route de Teillet - 81013 Albi cedex 09 - France

Contact
Our knowledgeable staff will be happy to assist with any inquiries you may have.
Website ➔ www.mines-albi.fr/adpharming
Email ➔ admission.adpharming@mines-albi.fr
Tel. +33 5 63 49 33 49

Calendar
One intake per year in September.
• Year 1: Two academic semesters at Mines Albi.
• Year 2: One academic semester at Mines Albi + a 6-month Master thesis in industry and/or in a research lab.

Lodging
Individual furnished studio apartments are available for international students during their stay. The residences are located in Albi (our campus and city center) and offer all the comfort and facilities to the students. Living expenses are quiet low in Albi compared to other locations in France. Accommodation at the students’ Residence: about 330 Euros per month. The total amount does not exceed 6000 Euros per year (on campus food and accommodation).

Typical Jobs
• R&D manager in advanced galenics
• Formulation project leader
• Quality system manager
• PAT project manager
• Pilot Plant manager
• Plant performance & process excellence manager
• Auditor, Consultant or Expert in the field
• Production Planner, Production Analyst
• Deputy Head of Bioproduction
• Lean project manager or leader
• Supply chain manager
• QA - Supplied Materials manager
• Technology transfer manager/supervisor

Cost
9,000 euros per year