IMT Mines Albi
École Mines-Télécom

RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

# REACH NEW OPPORTUNITIES



# JOIN OUR ENGLISH TRACKS AT IMT MINES ALBI!

## *A leading graduate engineering school in France*

### ACCESSIBILITY

- Opportunity to enroll in programs with no need of speaking French
- **English materials**

### INTERCULTURAL SKILLS

- A multicultural environment with students from all over the world
- FLE **(French as a foreign language) courses** and French acculturation

### INTEGRATION INTO THE LABOUR MARKET

- **English, a major asset** in a globalized business world
- Programs to help design a more energy-efficient industry and society

### LEADING ENGINEERING SCHOOL

- A school from IMT (Institut Mines-Télécom), **French Federal Institute of Technological Universities of science and management** for sustainable economic development

## 4 AVAILABLE PROGRAMS FOR A MORE RESPONSIBLE WORLD

Available on the third semester (September to February) of our master program,
**each English track enables students to earn 30 ECTS credits.**
**Classes are taught in English**. AI-powered instant translation can be used on a limited basis as a supplementary tool.
**Choose from the school's 4 tracks:**

### Renewable energies, sustainable production and construction

Sharpen your skills in the field of **renewable energy systems**, from production to distribution, including integration at different scales: buildings, cities, regions and industries.

### Industrial engineering for organizational performance

Meet the **logistics challenges of organizations** in all sectors, by optimizing the performance of physical and information flow management systems.

### Advanced materials and processes for tomorrow's transports

Develop **high-performance materials solutions and associated processes**, in response to the key challenges facing companies and industries of the future: aeronautics, automotive, aerospace, rail...

### Pharmaceutical, agrifood and cosmetics processes

Develop an industrial culture and skills in these sectors through **the study of manufacturing and business processes,** taking into account the specific and evolving constraints of these industries.

## APPLICATION

| | *1st period* | *2nd period* |
|---|---|---|
| **Nomination deadline for partners** | March, 1st | May, 1st |
| **Application deadline for students** | March, 15th | May, 15th |

*Applications are welcome from students currently in final year of bachelor's studies or your first year of master's degree.*

***for-mobiliteac@mines-albi.fr***

# ENGLISH TRACKS PROGRAM

Click on each course module to view its content.

## RENEWABLE ENERGIES, SUSTAINABLE PRODUCTION AND CONSTRUCTION

| 5 teaching units | Program | Credits |
|---|---|---|
| Energy and Environmental Issues | - Energy economics and energy transition issues<br>- Rhetorical and technical debating, professionalisation<br>- French as a foreign language | 6 ECTS |
| Energy systems | - Solar energy<br>- Fluid systems and refrigeration thermodynamics | 4 ECTS |
| Conversion | - Wind power<br>- High-power solar energy converters and statistical methods<br>- Hydrogen value chain | 6 ECTS |
| Distribution | - Thermodynamic engine cycles for electricity and heat production<br>- Energy storage and control<br>- $CO_2$ Capture, transport, use and storage | 6 ECTS |
| Production | - Renewable gases and biofuels<br>- Biomass, waste and pollutants projects<br>- Turbulent flows<br>- Flow and transfer simulation project | 8 ECTS |

## ADVANCED MATERIALS AND PROCESSES FOR TOMORROW'S TRANSPORTS

| 5 teaching units | Program | Credits |
|---|---|---|
| AI, projects, and communication in the transport sector | - AI applied to processes and materials<br>- Project in aeronautical, aerospace and automotive techniques<br>- Rhetorical and technical debating, professionalisation | 6 ECTS |
| Behavior, modelling and business sectors | - Plates and anisotropic laminates<br>- Professional sectors - Aeronautics<br>- French as a foreign language | 6 ECTS |
| Behavior of metallic materials | - Failure of materials<br>- Surface engineering<br>- From mechanical tests to numerical modelling | 6 ECTS |
| Research project 1 | - Research project 1 | 6 ECTS |
| Research project 2 | - Research project 2 | 6 ECTS |

## INDUSTRIAL ENGINEERING FOR ORGANIZATIONAL PERFORMANCE

| 5 teaching units | Program | Credits |
|---|---|---|
| Thematic opening and professionalisation | - Contract management and team management<br>- French as a foreign language<br>- Rhetorical and technical debating, professionalisation | 6 ECTS |
| Management of company resources and flows | - Supply Chain management<br>- ERP and Enterprise Information systems | 4 ECTS |
| Project management | - Collaborative Design and PLM (Product Lifecycle Management)<br>- Agile project management<br>- Advanced project management | 6 ECTS |
| Engineering project | - Engineering project development - preparing an intervention<br>- Engineering project development - implementation<br>- Hackathon | 6 ECTS |
| Supply Chain | - Purchasing and supply management<br>- Supply Chain engineering<br>- Steering by process and performance<br>- Advanced process simulation | 8 ECTS |

## PHARMACEUTICAL, AGRIFOOD AND COSMETICS PROCESSES

| 5 teaching units | Program | Credits |
|---|---|---|
| Industrial environment | - Rhetorical and technical debating, professionalisation<br>- Research project | 6 ECTS |
| Chemistry and biotechnology | - Green chemistry and polyphasic reactors<br>- Biotechnological processes<br>- French as a foreign language | 6 ECTS |
| Solid chain | - Solid generation<br>- Upstream operations<br>- Downstream operations | 6 ECTS |
| Scale-up and models | - Dimensioning - scale-up<br>- Discrete modelling for processes<br>- A systems approach to process modelling | 6 ECTS |
| Research and development project | - Research Initiation Project | 6 ECTS |

Follow us

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