ARTS ET MÉTIERS

Talent booster for industry of the future

Arts et Métiers Institute of Technology

THE FOUNDATIONS

Arts et Métiers Institute of Technology

THE **FOUNDATIONS**

1780
The school was founded by the Duke of Rochefoucault-Liancourt

The origins are inextricably influenced by the thoughts and ideas that shaped the Age of Enlightenment, the intellectual movement that inspired the School's founder, the Duke of Liancourt.

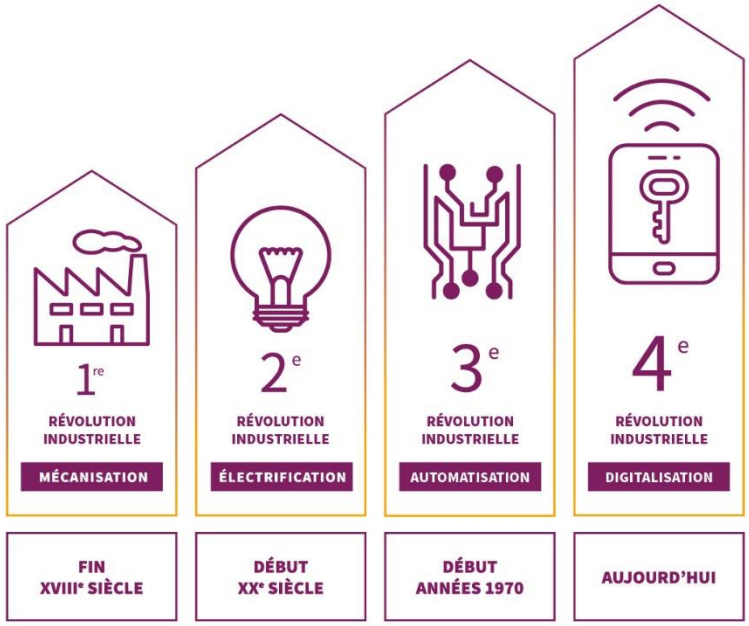
"Combining manual dexterity with the intelligence of knowledge"... such was the philosophy that embodied the school's ambitions.

- Empowering knowledge to address a specific need for society
- Empowering scientific knowledge to enhance the real world

For over two centuries, Arts et Métiers has been spearheading scientific progress and supporting each industrial revolution.

To address the challenges of the fourth industrial revolution, Arts et Métiers is directing its efforts towards **innovation**.

The four industrial revolutions, from the steam engine to digital technology:



Arts et Métiers Institute of Technology

THE ARTS ET MÉTIERS GROUP

Arts et Métiers Institute of Technology

THE ARTS ET MÉTIERS GROUP
IN FIGURES

11
SITES across France specialising in education and research

220
PHD STUDENTS
in our "Engineering Sciences" doctoral school

1
BACHELOR'S DEGREE OF TECHNOLOGY

6000
STUDENTS
across all courses

15
LABORATORIES
and research teams

11
ENGINEERING PROGRAMMES
1 Grande École engineering programme
10 Apprenticeship engineering programmes

1100
PERSONNEL
lecturers, technicians & administrative staff

7
MILLION in revenue
LIFELONG SKILLS DEVELOPMENT

+20
National research master's programmes

15
million in revenue generated through contracts with industry

2000
AUDITORS
in lifelong skills development

17
MASTÈRES SPECIALISÉS © programmes

Arts et Métiers Institute of Technology

A SOCIO-ECONOMIC CHAMPION
PROMOTING LOCAL COMMUNITY DEVELOPMENT

- An end-to-end range of courses from undergraduate through to doctorate level
- 11 locations for building even closer ties and insights with industry
- 15 laboratories and approximately 20 technology hubs
- A talent pipeline and incubator for the high-tech industry
- An in-depth understanding of industry's needs
- Talented individuals capable of meeting the challenges facing society through innovation

Arts et Métiers Institute of Technology

A SINGLE INSTITUTION WITH EIGHT CAMPUSES AND THREE INSTITUTES

Arts et Métiers campuses

Institutes

Arts et Métiers Institute of Technology

THE ARTS ET MÉTIERS GROUP
ALSO ENCOMPASSES:

AM VALOR
Arts et Métiers - Sciences et Technologies

- **The AMVALOR subsidiary, showcasing and promoting innovation for tomorrow's industry**

AMVALOR, the Arts and Métiers long-standing subsidiary, is responsible for promoting partnership research activities and showcasing the Group's expertise.

FDIF
Arts et Métiers - Sciences et Technologies

- **FDIF (Development Fund for the Industry of the Future)**

This fund was launched in 2016 to diversify the school's sources of funding.
Its aim is to secure funding to bankroll the school's major projects in four key areas, namely training, research & innovation, entrepreneurial activities, and heritage & infrastructures. The fund has already financed several equal opportunities projects, scholarship programmes, new research chairs and student-led solidarity projects.

Arts et Métiers Institute of Technology

A FRENCH ENGINEERING INSTITUTION **IN TUNE WITH INDUSTRY 4.0**

The Industry of the Future entails a broad array of wide-sweeping technological and digital changes with repercussions on current production methods and work organisation practices. The school trains engineers on every aspect of the product lifecycle.

Every site develops a specific range of research and innovation skills in relation to the local ecosystem.

In 2019, the school lent its support to the **FrenchFab** movement to develop and promote the "French Fab" label alongside BPI France with the aim of engaging young people with the driving force of French industry.

La FRENCH FAB

Arts et Métiers Institute of Technology

COURSES ANTICIPATING SOCIETY'S TECHNOLOGY NEEDS

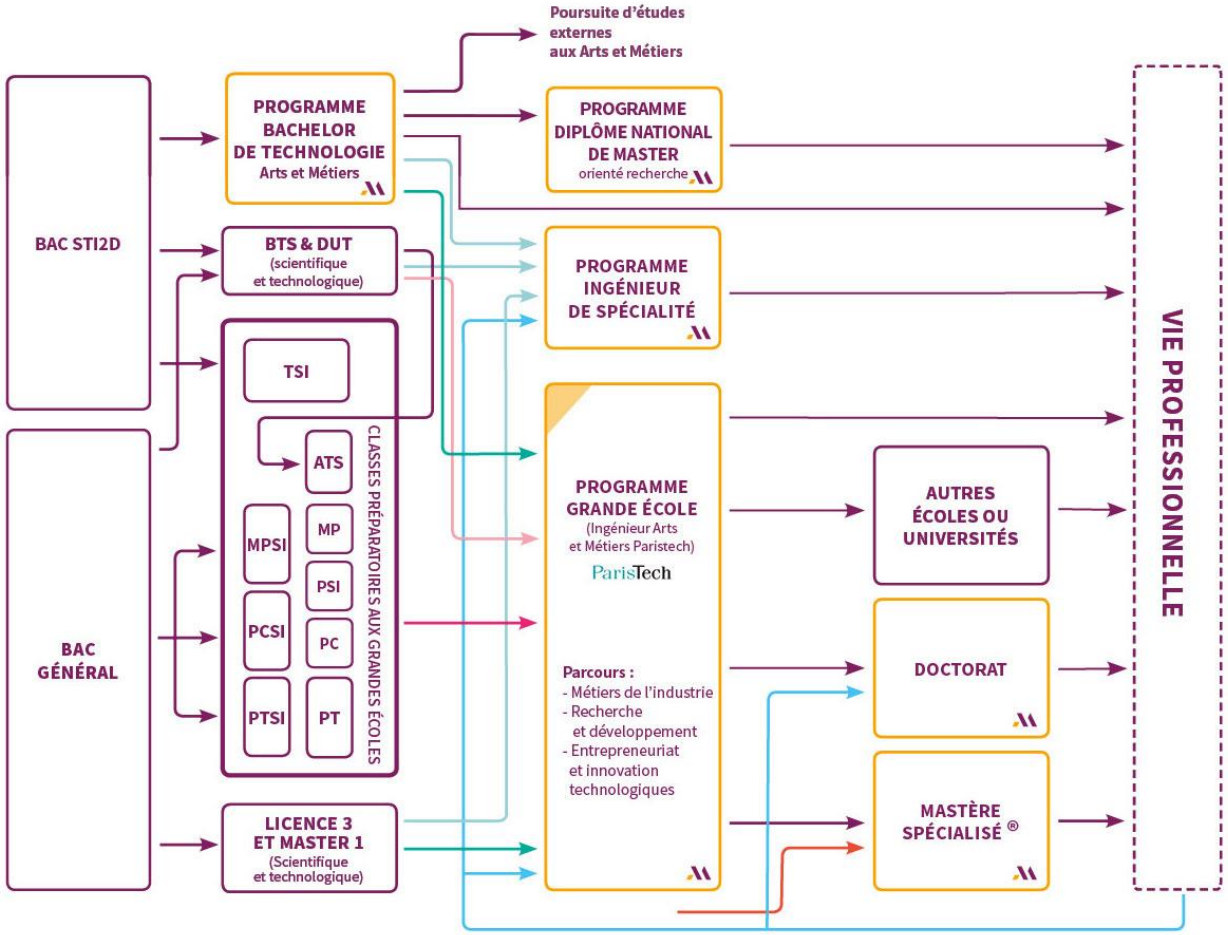
Arts et Métiers Institute of Technology

ARTS ET MÉTIERS OFFERS A **COMPREHENSIVE RANGE OF COURSES**: INITIAL TRAINING, LIFELONG SKILLS DEVELOPMENT AND DOCTORAL PROGRAMMES

- **Arts et Métiers ParisTech Grande École engineering programme** (level 7)
- **Apprenticeship engineering programme** (level 7)
- **Bachelor of technology programme** (level 6)
- **National research master's programme** (level 7)
- **Doctoral programme** (level 8)
- **Lifelong skills development**
  Mastères Spécialisés
  Tailor made short courses for industry

Arts et Métiers mission statement:
deliver solutions to the needs of every sector of industry

ADMISSION REQUIREMENTS FOR ARTS ET MÉTIERS PROGRAMMES



RECRUTEMENT

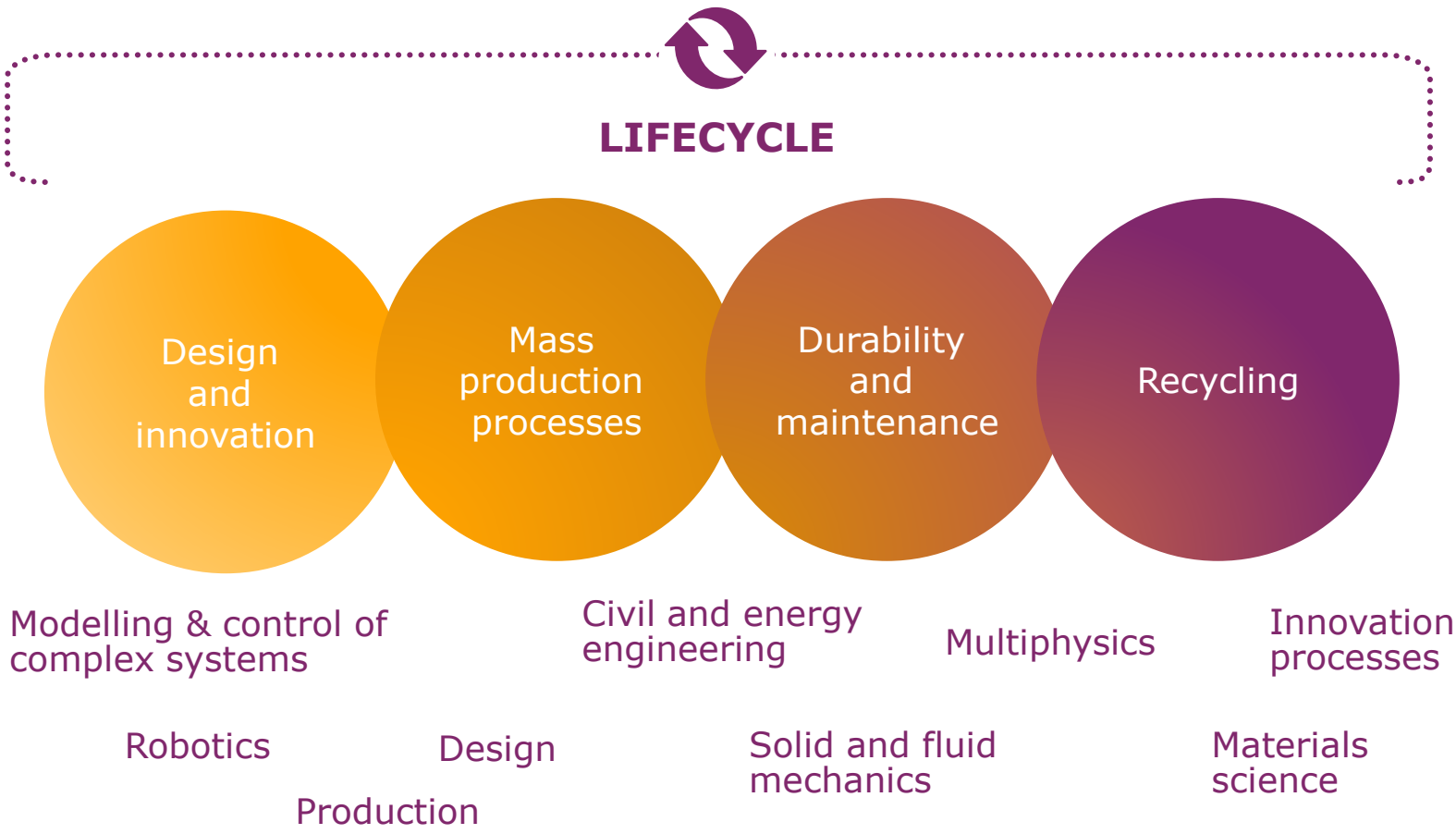
- Par procédure GEI-UNIV
- Recrutement spécifique à chaque enseignement de spécialité
- Par concours ENSEA
- Par concours :
  - PT : Banque PT
  - ATS : Concours ENSEA
  - MP,PC, PSI, TSI : concours Centrale-Supélec
- Externe aux Arts et Métiers ou sur candidature
- Accessible par la Validation des Acquis Professionnels (VAP)
- Niveau M1/Maîtrise ou diplôme équivalent + 3 ans d'expérience professionnelle
  - Diplôme école de commerce équivalent Master
  - Diplôme d'ingénieur (bac +5)
  - Diplôme d'université (bac +5)
- Pour ressortissants des CPGE (filières MP, PSI, PC, ATS et PT) et DUT/BTS : possibilité d'intégrer en cursus apprenti.
- Pour ressortissants des GPGE en filières MP, PSI et PT : possibilité d'intégrer en cursus militaire.

PROGRAMMES

- Externes aux Arts et Métiers
- Réalisés aux Arts et Métiers et accessibles par la Validation des Acquis d'Expériences (VAE)

Arts et Métiers Institute of Technology

RESEARCHERS AND **STUDENTS** CAN WORK ON THE **ENTIRE PRODUCT LIFECYCLE**: FROM DESIGN AND PRODUCTION THROUGH TO RECYCLING



Arts et Métiers Institute of Technology

RESEARCH AND OUR SCIENTIFIC EXPERTS

Arts et Métiers Institute of Technology

15 laboratories pioneering scientific expertise

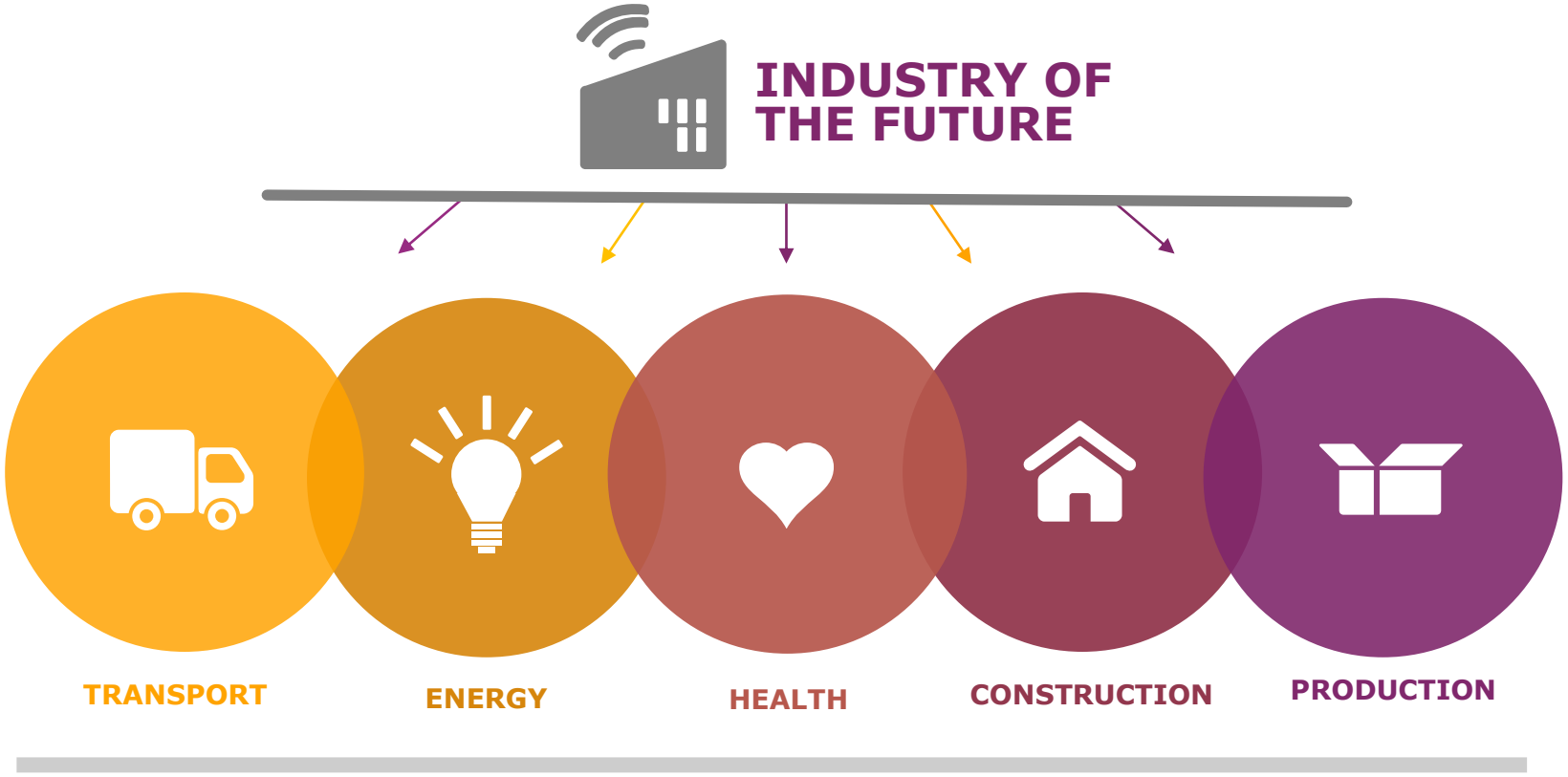
- **AMVALOR:** partnership-based research with businesses

- **Carnot ARTS Institute** is home to **22 laboratories** leading research and innovation

- Member of **EIT Manufacturing**

- **Six research chairs** in health, environment, clean mobility and smart industrial systems

TO MEET THE **EXPECTATIONS** OF FRENCH AND INTERNATIONAL **INDUSTRY**, **OUR RESEARCH TEAMS** ARE WORKING ON **FIVE MAJOR STRATEGIC AREAS**:



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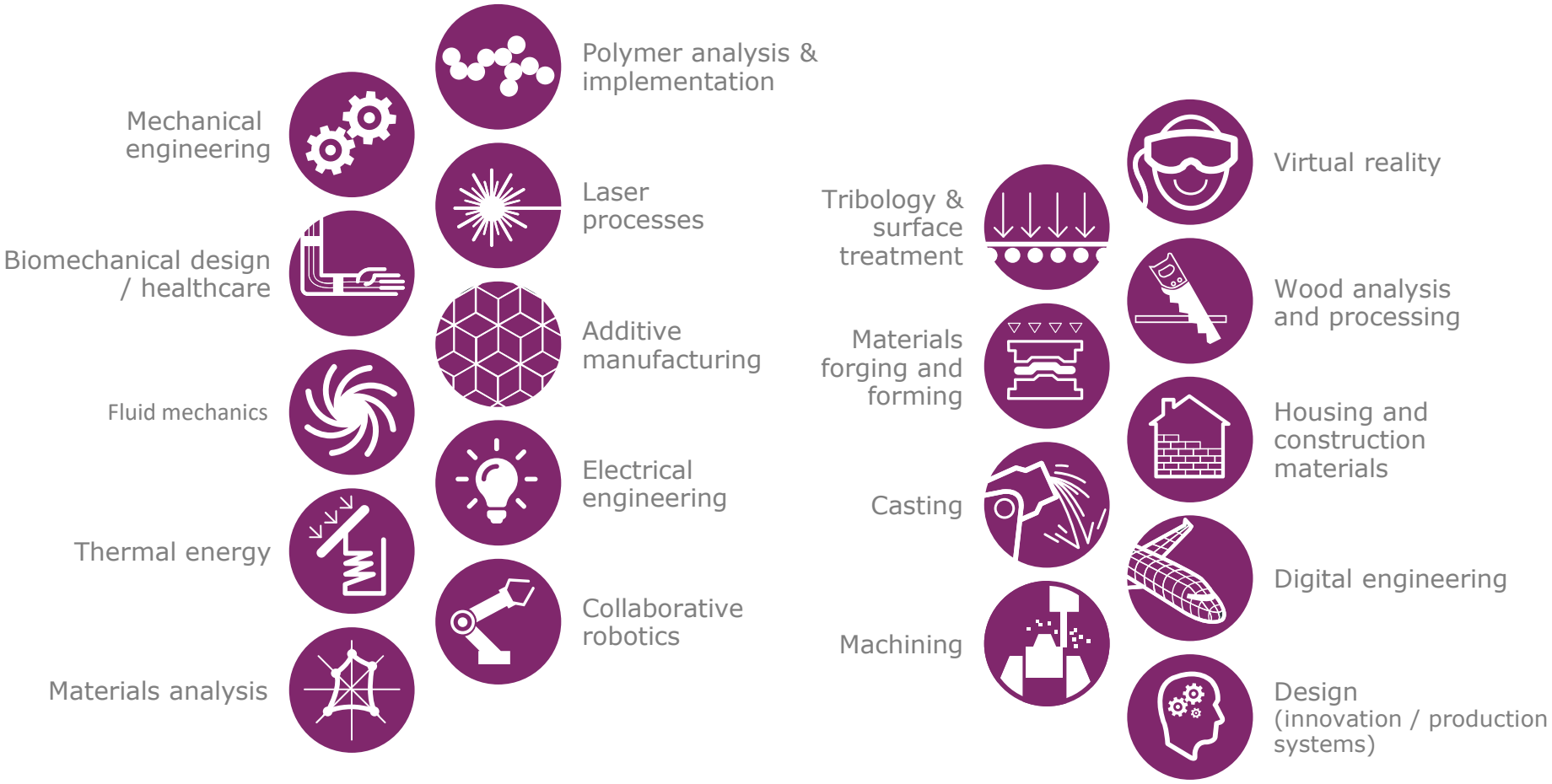
ARTS ET MÉTIERS LEADS **RESEARCH** IN **20 FIELDS**



Excellence label for transferring our research to the industrial world **Carnot Institute**

SUPPORTING TOMORROW'S ENTREPRENEURS

Arts et Métiers Institute of Technology

SUPPORTING TOMORROW'S ENTREPRENEURS

To help students breathe life into their innovative concepts, Arts et Métiers provides:

- **Training: business creation & development expertise, technological innovation and entrepreneurship**

- **Arts et Métiers incubator**

Arts et Métiers Institute of Technology

BUSINESS RELATIONS

Arts et Métiers Institute of Technology

BUSINESS RELATIONS
RECRUITMENT - TRAINING - INNOVATION

As part of its commitment towards the Industry of the Future, Arts et Métiers is forging strategic partnerships with industrial organisations:

- **Workplace integration**
- **Training**
- **Lifelong skills development contracts**

Arts et Métiers Institute of Technology

PARTNERSHIPS AROUND THE WORLD

Arts et Métiers Institute of Technology

OUR INTERNATIONAL **PARTNERSHIPS** ARE FOCUSED ON **TRAINING**, **RESEARCH** AND **TECHNOLOGY TRANSFER**

Arts et Métiers Institute of Technology

A STATE-OWNED INSTITUTION WITH CLEAR COMMUNITY OUTREACH AMBITIONS

Arts et Métiers Institute of Technology

A STATE-OWNED INSTITUTION

- Break down social and geographical barriers with scholarship programmes

- Promote science and technology among the female population with awareness-raising initiatives

- Promote social inclusion and workplace integration for people with disabilities as part of a mentorship scheme

- On-the-ground citizenship actions with participation in community life

- Sustainable development with specific training programmes and daily initiatives

Arts et Métiers Institute of Technology

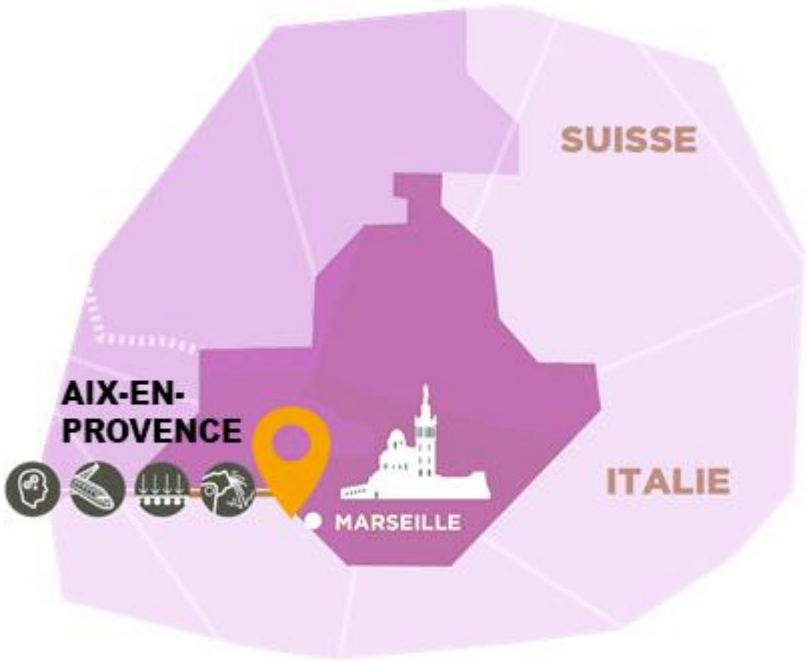
CAMPUSES & INSTITUTES IN DETAIL

Arts et Métiers Institute of Technology

AIX-EN-PROVENCE CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **7%**
Region's GDP: **€153 billion**
Proportion of the French population: **8%**
Population: **5,000,000**
162,000 students



RESEARCH

- Research areas: digital engineering, tribology and surface treatment, casting and materials characterisation
- Two laboratories: LISPEN (physical and digital systems engineering) and MSMP (mechanical engineering, surface treatment, materials and processes)

TRAINING

- 700 students
- Grande École engineering programme, three tracks :

Complex systems and product engineering - New energies for sustainable development - Advanced materials and processes for energy and nuclear applications

- Apprenticeship engineering programme, three disciplines :

Mechanical engineering - Public works - Electric systems

- National research master's programme
- Doctoral programme
- Three Mastères Spécialisés:

Expertise in renewable energy projects and production –

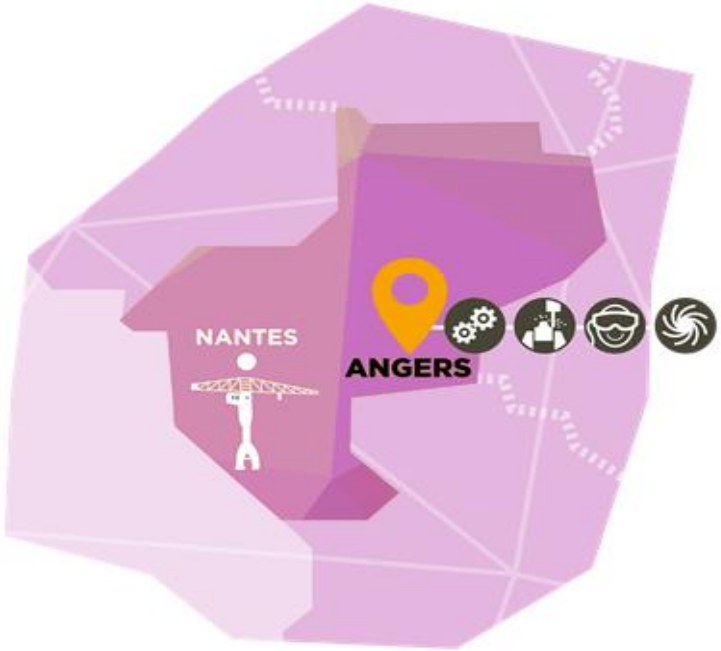
Expertise in nuclear safety - Expertise in creating drone solutions

Arts et Métiers Institute of Technology

ANGERS CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **5%**
Region's GDP: **€100 billion**
Proportion of the French population: **6%**
Population: **3,700,000**
160,000 students



RESEARCH

- Research areas: design & innovation, durability, complex flows, advanced manufacturing processes
- One laboratory: LAMPA (Angers laboratory for mechanical engineering, processes and innovation)

TRAINING

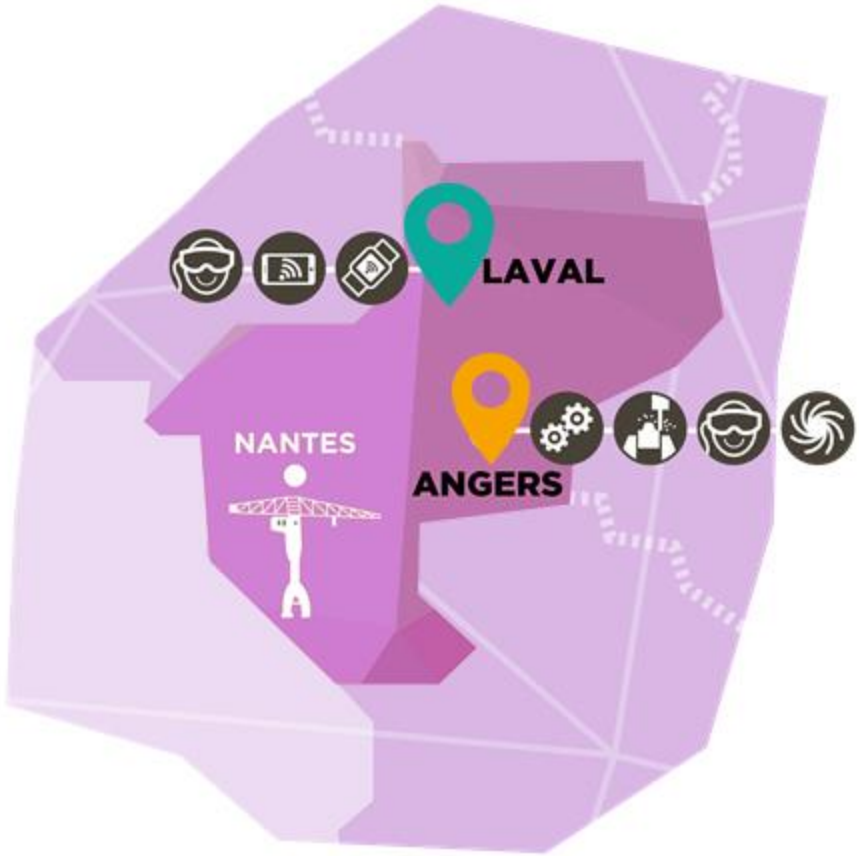
- 500 students
- Grande École engineering programme, two tracks:

Innovation management - Innovative process engineering

- Bachelor of technology programme
- Doctoral programme

Arts et Métiers Institute of Technology

LAVAL INSTITUTE



RESEARCH

- Research areas: virtual reality, augmented reality, smart objects
- One chair: Time to Concept

TRAINING

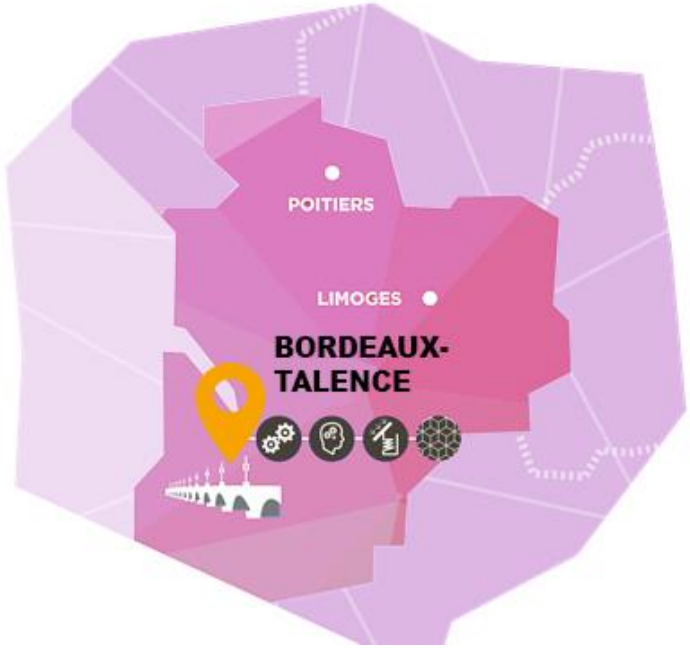
- 50 students
- National research master's programme: *Management of 3D interactive technologies*

Arts et Métiers Institute of Technology

BORDEAUX CAMPUS

Region's key figures

Percentage of the French GDP: **8%**
Region's GDP: **€160 billion**
Proportion of the French population: **9%**
Population: **6,000,000**
100,300 students



RESEARCH

- Research areas: mechanical engineering, design, thermal energy, additive manufacturing
- One laboratory: I2M (mechanics and engineering)

TRAINING

- 600 students
- Grande École engineering programme, two tracks :

Aviation and aerospace engineering - Materials and environmental process engineering for sustainable development

- Apprenticeship engineering programme, two disciplines :

Mechanical engineering with focus on production/maintenance - Specialisation in mechanics with focus on mechanical engineering

- Bachelor of technology programme
- Doctoral programme
- Mastère Spécialisé : *Aviation and aerospace project management*

Arts et Métiers Institute of Technology

CHÂLONS-EN-CHAMPAGNE CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **7%**
Region's GDP: **€150 billion**
Proportion of the French population: **9%**
Population: **5,550,000**
206,800 students

RESEARCH

- Research areas: mechanical engineering, tribology and surface treatment, casting
- One laboratory: MSMP (mechanical engineering, surface treatment, materials and processes)

TRAINING

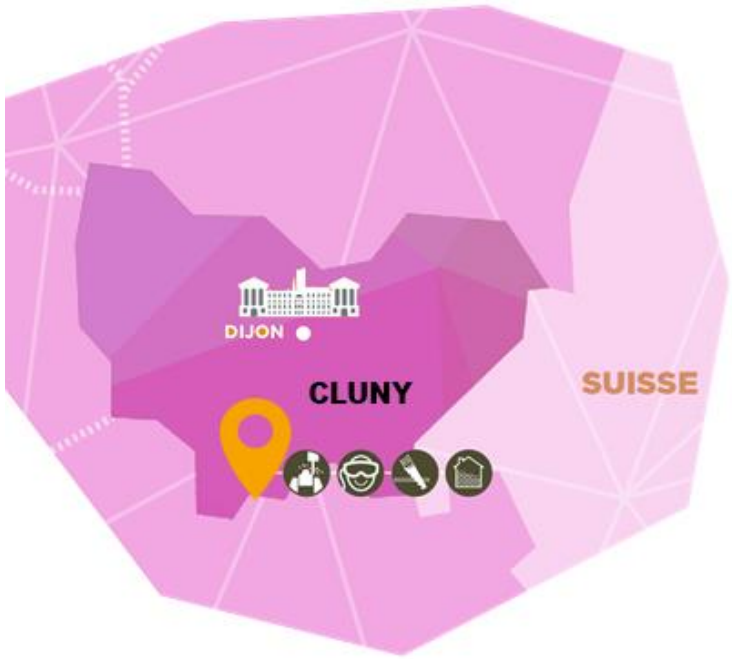
- 577 students
- Grande École engineering programme, one track : *Alternative fuels and engines*
- Apprenticeship engineering programme, one discipline : *Mechanical engineering*
- Bachelor of Technology programme
- Doctoral programme

Arts et Métiers Institute of Technology

CLUNY CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **3%**
Region's GDP: **€74 billion**
Proportion of the French population: **4%**
Population: **2,800,000 inhabitants**
56,000 students



RESEARCH

- Research areas: machining, virtual reality, wood processing and analysis, housing and construction materials
- Two laboratories: LaBoMaP (Burgundy laboratory for materials and processes), joint laboratory (BOPLI) with Brugère

TRAINING

- 600 students
- Grande École engineering programme,

three tracks : *Wood (material, process and construction) - Factory of the Future: from 3D prototyping to high - Speed machining*

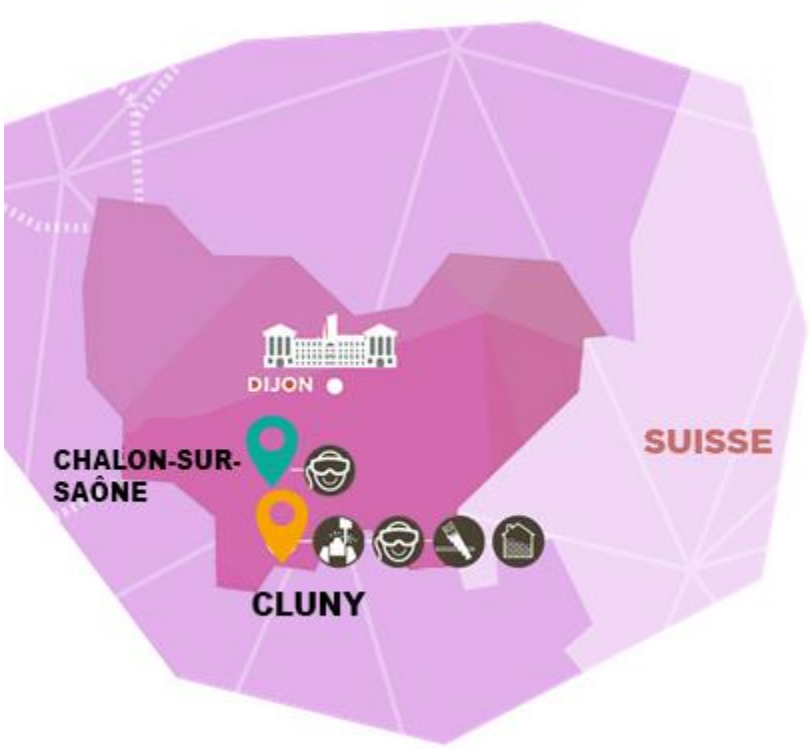
- National research master's programme:

Surface and materials engineering

- Doctoral programme

Arts et Métiers Institute of Technology

CHALON-SUR-SAÔNE INSTITUTE



RESEARCH

- Research areas: virtual reality, augmented reality, digital modelling
- Two laboratories: LISPEN-EA 7515 (physical and digital systems engineering), joint laboratory (LiV) with Renault

TRAINING

- National research master's programme : *Management of interactive technologies (MTI3D)*

Arts et Métiers Institute of Technology

CHAMBÉRY INSTITUTE

Region's key figures

Percentage of the French GDP: **12%**
Region's GDP: **€240 billion**
Proportion of the French population: **12%**
Population: **7,900,000**
305,000 students

RESEARCH

- Research areas: circular economy, environmental innovation, eco-design, recycling
- Researchers affiliated with the Product Design & Innovation laboratories (Paris) and Institute of Mechanics and Engineering (Bordeaux)
- One chair: Urban mining

TRAINING

- 70 students
- Grande École engineering programme,

one track: *Eco-design of goods and services*

- Apprenticeship engineering programme,

one discipline: *Risk management and environment*

- Doctoral programme
- Two Mastères Spécialisés:

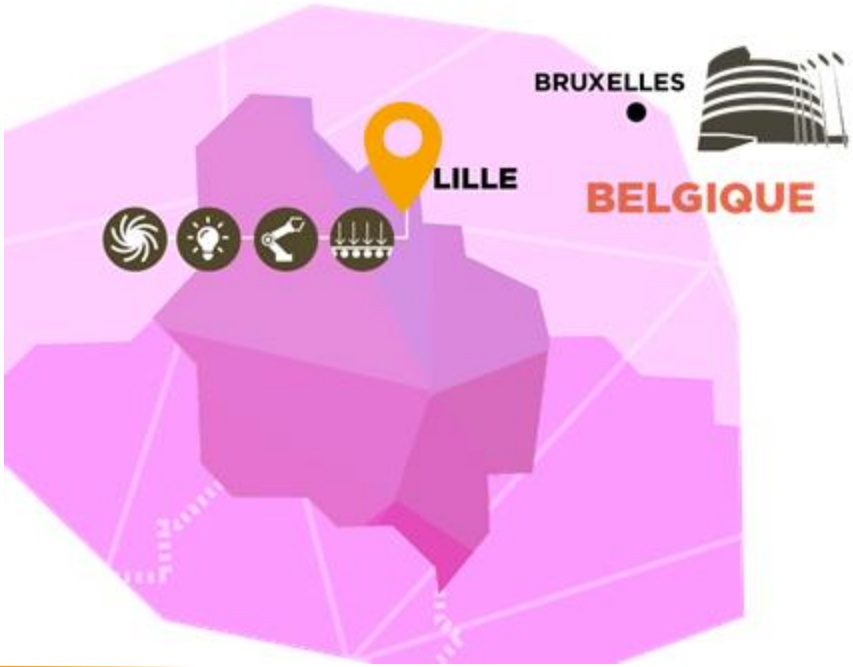
Sustainable construction and housing - Change management and sustainable innovation

Arts et Métiers Institute of Technology

LILLE CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **7%**
Region's GDP: **€150 billion**
Proportion of the French population: **9%**
Population: **6,000,000**
158,500 students



RESEARCH

- Research areas: fluid mechanics, electrical engineering, collaborative robotics, tribology and surface treatment
- Four laboratories: LMFL (Lille - Kampé de Fériet laboratory for fluid mechanics), L2EP (power electronics and electrotechnology), LISPEN (physical and digital systems engineering) and MSMP (mechanical engineering, surface treatment, materials and processes)
- One chair: nonlinear dynamics for absorbers of the future

TRAINING

- 500 students
- Grande École engineering programme, four tracks :

Energy efficiency for the factory of the future - Industrial management - Land transport engineering - Mechatronic systems for industrial innovation

- Bachelor of technology programme
- National research master's programme
- Three Mastères Spécialisés:

Project management for charging infrastructures, electric vehicles and driverless vehicles - New energies project management – ColRobot: expertise in collaborative robotics for the Industry of the Future

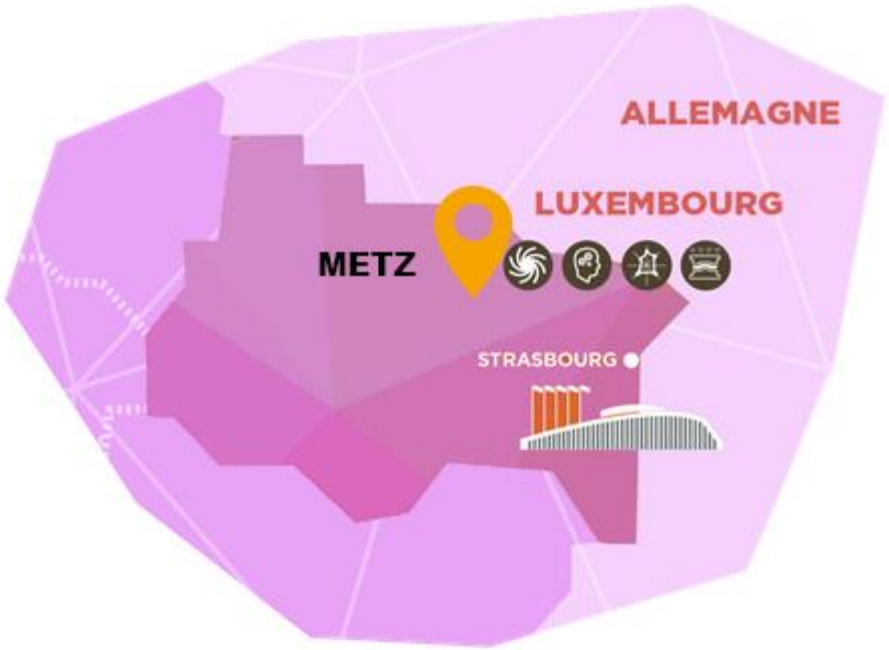
- Doctoral programme

Arts et Métiers Institute of Technology

METZ CAMPUS

REGION'S KEY FIGURES

Percentage of the French GDP: **7%**
Region's GDP: **€150 billion**
Proportion of the French population: **8%**
Population: **5,500,000**
137,100 students



RESEARCH

- Research areas: mechanical studies, design (including production systems), materials analysis, materials forming and forging
- Two laboratories: LCFC (design, fabrication and control) and LEM3 (microstructure analysis and mechanics of materials)
- One chair: production systems

TRAINING

- 500 students
- Grande École engineering programme,

two tracks : *Management of technological innovation in the automotive industry - Management of the factory of the future (as part of a lifelong skills development contract)*

- Apprenticeship engineering programme,

one discipline : *Design and operation of industrial equipment*

- National research master's programme
- Doctoral programme

Arts et Métiers Institute of Technology

PARIS CAMPUS

Region's key figures

Percentage of the French GDP: **30%**
Region's GDP: **€620 billion**
Proportion of the French population: **18%**
Population: **12,000,000**
663,000 students

RESEARCH

- Research areas: mechanical design, innovation and design, biomechanics and healthcare, fluid mechanics, thermal energy, materials analysis, polymer implementation and control, laser processes, additive manufacturing
- Four laboratories: IBHGC (Georges Charpak Institute of Human Biomechanics), LCPI (product design and innovation),PIMM (mechanical and materials engineering and processes), Dynfluid (fluid dynamics)
- One chair: biomechanics

TRAINING

- 1,700 students
- Grande École engineering programme, 13 tracks :

Biological engineering - Business creation and development - Development of polymer and composite parts - Product development - Low-carbon energy and energy - Efficient systems - Industrial management and global supply chains - Rotating machinery and fluid engineering - Materials & additive manufacturing – Mechatronics - Virtual prototyping - Applied quality and maintenance of industrial systems - Fluid systems simulations - Information and knowledge systems

- Apprenticeship engineering programme , two disciplines :

Energy process engineering – Industrial engineering

- National research master's programme
- Doctoral programme
- Six Mastères Spécialisés:

Global risk management - Maintenance management - Quality management - Innovation management and business development - Management of digital engineering for products and buildings - Management of industrial performance improvement

Arts et Métiers Institute of Technology

OUR PARTNERS

Alliance INDUSTRIE DU FUTUR

Cti

European Accreditation of Engineering Programmes EUR-ACE®

HESAM UNIVERSITÉ

Association INSTITUTS CARNOT

ParisTech

UBFC UNIVERSITÉ BOURGOGNE FRANCHE-COMTÉ

UNIVERSITE BRETAGNE LOIRE

UNIVERSITÉ DE REIMS CHAMPAGNE-ARDENNE

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