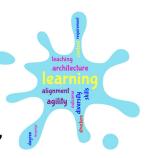


Agility, Resilience and Transformation in Curriculum Design



The DECART curriculum canvas, as a tool, permits higher education stakeholders to:

- share and confront ideas in curriculum design in a synthetic manner abstracting details
- increase the quality and relevance of curriculum design activities
- foster collaboration and enhance capacity to operate jointly between programs
- boost interoperation of curriculums

With this curriculum canvas, you can:

- shape the broadlines of a new curriculum to design
- describe an existing or under development curriculum
- stimulate changes with cards and discuss component links
- confront a curriculum to an operational context
- pressure a curriculum with disruption & crisis cards

Once a curriculum designed in the canvas, curriculum resilience analysis & transformation are available via other DECART tools.

#### More infos:

www.decartproject.eu decart-contact@imt-atlantique.fr #decartproject













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### IMT Atlantique, France

FISE: Formation Ingénieur Statut Edutiant

1.3, July 2025

#### More Details

https://www.imt-atlantique.fr/sites/default/files/ document/brochure-ingenieur.pdf

# Master of Science in Engineering French "Diplôme d'Ingénieur" https://www.imt-atlantique.fr/en/study/engineering?p=0ZHTcJ3Ov1My

## General Description

- 3-year curriculum on digital, energy and environmental sectors, maintaining a focus on the humanities & social sciences.
  - flexible and integrated curriculum with numerous pathways,
- French CTI and EUR-ACE accredited.
- Min. 9 months of internships, in France or abroad:
  - spread over the 3-year curriculum to map out a solid professional project & develop professional competencies
- An IMT Atlantique engineer is expected
  - have top-level understanding of complex, highly interconnected systems,
  - understand & master the major challenges of a future company, as executives.
  - network in an intercultural environment.
  - · focus on agility, to create a diverse & inspiring career path.
- Stance on society's major industrial, digital and environmental transformations.

## Operational Context

- Technological University under the authority of the French Ministry of Industry & Digital Technologies
  - one of the top 10 institutions of this kind in France (Grandes Ecoles).
  - in the top 400 universities in THE world university ranking.
- Approx. 2300 students:
  - incl. approx. 40% international students, originating from >70 countries.
  - · 25% increase of student population by 2027.
- Teaching & research staff:
  - 250 faculty
- 91% of graduates in work:
  - within 2 months of graduation (incl. 77% before the end of their studies).
  - avarage salary reaching €40,824 (2023).
- Annually CTI certified data:
  - https://www.cti-commission.fr/accreditation https://www.cti-commission.fr/donnees



Aligned with French accreditation CTI Program Outcomes and RNCP38322

- https://www.cti-commission.fr
- https://www.francecompetences.fr/recherche/ rncp/38322
- 1. Understand, analyze & summarize a complex problem and/or situation;
- 2. Solve a complex problem by combining theory & practice;
- 3. Design and build systems & organizations;
- 4. Criticize & make decisions
- 5. Innovate & undertake in a complex & uncertain context (VUCA)
- 6. Manage innovative, complex, risky as high-stakes projects;
- 7. Lead and manage a team using different management methods
- 8. Cooperate, particularly in international and intercultural environments:
- 9. Communicate:
- 10. Integrate social issues into decisions and actions:
- 11. Integrate organizational issues into decisions and actions:
- 12. Reflect on oneself, one's knowledge and experience;
- 13. Adapt and evolve;
- 14. Demonstrate personal & professional commitment.

### Teaching & Learning



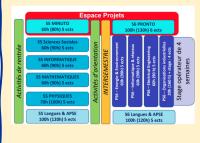
- Internship: 26%
  - min. of 9 months' internships, spread over the3 years
- Labs: 18%
- Practicals: 16%
- PiBL: 15% Lectures: 10%
- Flipped classroom: 5%
- Foreign languages: 6%
- Breadth intersemesters: 4%
- With Sport (ECTS credited)
- Associative activities.

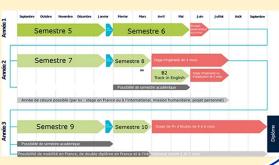
#### Assessements

- European LMD model:
  - 30 ECTS per semester
  - 3-year curriculum:
    - L3, M1 & M2
  - BSc. L3 at 60 ECTS
  - MSc. at 120 ECTS
- Competency-based, aligned with French RNCP engineer title
- Internship assessments on competencies
- Written exams
- Orals
- Reports

#### Structure

- Integrated curriculum style:
  - Year 1 (L3), either the Brest or Nantes campus:
    - common core syllabus in S5 & S6, Pronto & CoDev projects, inter-semester course, 1st experience in a company "Stage ouvrier"
  - Year 2 (M1), open up a wide range of opportunities on 3 campuses & abroad
    - TAF-based majors S7 & S8, completed by 2 specialisation subjects, CmdEntreprise project and inter-semester activities
    - B2 English track
    - 2<sup>nd</sup> experience in a company "Stage ingénieur"
    - 1 intl acamedic semester, optional 1-year break for professional
  - Year 3 (M2), S9 & S10, ProcCom project, then internship
  - Majors (TAFs = thématiques d'approfondissement): (1) Energy, nuclear & environmental engineering, (2) CS & networks, (3) Industrial engineering & organizations, (4) Electrical engineering/robotics, electronics, automation, telecommunication & embedded systems, and (5) Healthcare engineering





## Transversal Skills



- Exhibit openness, autonomy, and flexibility, adapt to new ideas & changing environments,
- Apply a wide range of scientific & technical skills across a broad scope of disciplines,
- Develop and utilize interpersonal & crossdisciplinary skills to collaborate effectively,
- Work effectively in an intercultural environment, respecting & valuing diversity,
- Analyze & contribute to environmental & societal transformation (TES: Transition Écologique et
- Assess & articulate the significant contribution of research to the challenges of TES.
- Engage in research & innovation to address complex problems & advance knowledge.

## Entry Requirements



- Tests in Sciences & French:
  - · Maths & physics
  - electronics-electricity-automation

  - engineering sciences
  - mechanics, civil engineering
- Admission capacity:
  - 305 after the French Concours commun Mines-Ponts competitive entrance exam or the French GEI-Univ...
  - 90 for Intl. students with MSc.,
  - 60 for French & foreign students who hold a BSc. or MSc.

## Diversity & inclusion



- ODD 10: >29% of intl. students 100% of students with food &
- accommodation financial aid ODD5: 23.2% female students
  - Women in STEM, CPED member
  - Leadership & salary negotiation for women
  - mission Egalité Femmes
  - Women 100 Professions programme
  - online module to raise awareness of sexual & gender-based violence
- Bienvenue en France label

# Languages A



- Courses in French & English
- For graduation: Enalish (level
  - C1). another language (level B2)
- up to 4 languages: Arabic, Chinese, French German, Italian, Japanese, Portuguese, Russian, Spanish
- Interculturality courses and experiences

#### Locations



Loire (France): Nantes, Brest & Rennes

Dual degrees & exchanges: Intl experience as an

- academic semester at one of the partner universities, or a year abroad for a double degree, or an internship
- network of >200 academic partners worldwide
- 51 dual degree agreement.