IMT Mines Alès
École Mines-Télécom

OBJECTIFS DE DÉVELOPPEMENT DURABLE

2024-2025

Societal and Environmental Responsibility Report

Editos

The 2025 Social and Environmental Responsibility (SER) Report is part of the ambitious framework of the **17 United Nations Sustainable Development Goals (SDGs)**, which set out the roadmap for building fairer, more sustainable societies that respect the planet. IMT Mines Alès is committed to ensuring that all its activities—research, education, economic development, and campus management—contribute to human well-being and to the preservation of the planet.

•The year **2025 marks a major milestone** with the awarding of the **DD&RS label for a four-year period**, recognizing the maturity of our approach and the coherence of our ecological and social transition policy. This label represents a key step that commits the school to continuing its efforts and strengthening collective momentum.

•Rooted in the **SER Strategy 2023–2027**, the mission of IMT Mines Alès is to educate responsible engineers capable of contributing to national development while preserving the planet's resources. Our commitment focuses primarily on **education**, as our foremost responsibility is to train engineers who are deeply aware of their societal responsibility, and on **research**, which generates the knowledge and innovations necessary to address these challenges.

•The actions presented in this report illustrate our strong involvement in the transformation of our academic programs, in **social inclusion** (the school welcomes **31.8% scholarship students**), and in the **reduction of our environmental footprint**, notably by targeting a **20% reduction in fossil energy consumption by 2027**.

•I would like to warmly thank all staff members, students, and partners who support us in this endeavor, for their daily commitment and for their contribution to the preparation of this report. It is through collective effort that we will continue to build a committed institution, serving transformation and future generations.

Assia Tria
Director of IMT Mines Alès

The United Nations 2030 Agenda for Sustainable Development and the 17 Development Goals (SDGs) has set out an ambitious plan to end poverty, fight inequality, and build more peaceful, just, sustainable and planet-friendly societies by 2030. These 17 SDGs respond to the following goals: "the fight against climate change; the preservation of biodiversity, environments and resources; social cohesion and solidarity between territories and generations; the fulfillment of all human beings" (https://www.agenda-2030.fr/odd/17-objectifs-de-developpement-durable-10).

The past year marks a stage of maturation in IMT Mines Alès' approach to environmental and social responsibility. The actions undertaken in recent years have gained in coherence and impact, reflecting a strong conviction: **there can be no successful transition without a profound transformation of our practices, our modes of organisation and our ways of thinking**.

The achievement of the **DD&RS label in 2025** recognises this collective effort and the robustness of the path taken, while also inviting us to go further—by structuring, measuring, prioritising and adjusting our actions with clarity. It reminds us that transition is a demanding process.

Training, research, innovation, campus management and support for individual pathways are no longer separate initiatives, but part of a shared project carried by the entire community. This report illustrates this cross-cutting dynamic, built on the commitment of staff, teacher-researchers, students and partners.

I warmly thank all those who contribute, on a daily basis, to this collective transformation. Their commitment is essential in making IMT Mines Alès a fully engaged institution in the transitions, serving society and future generations.

Ingrid Bazin
Directrice Responsabilité sociétale et environnementale
IMT Mines Alès

AXE 1: GOVERNANCE STRATEGY

IMT Mines Alès anchors its DD&RS governance within the Environmental and Social Responsibility (RES) Strategy 2023–2027, which is structured around four key pillars:
validated and recognised policies,
a community engaged through its professional roles,
a reduction of the environmental footprint,
a fulfilling and supportive working environment.
This work is coordinated by the Director of Sustainable Development and Social Responsibility, bringing together designated representatives from all departments of the school. This governance structure ensures strategic coherence and effective monitoring of the Green Plan, in close collaboration with stakeholders.
Developed through a collaborative process involving staff and students, the 2023–2027 strategy positions the school to address the major challenges of the energy, environmental, social and economic transitions. IMT Mines Alès thus affirms its mission: to train responsible engineers capable of contributing to national development while preserving the planet's resources.

THE FIVE PILLARS OF OUR ENVIRONMENTAL AND SOCIAL RESPONSIBILITY STRATEGY

RESEARCH INNOVATION

Conduct eco-responsible research, through both projects and practices, and support socio-economic stakeholders in a deep and continuous transformation towards sustainability and sobriety

EDUCATION

Adapt and transform our educational programs to meet the needs of society and businesses, and to respond to students' expectations regarding environmental and social responsibility.

GOUVERNANCE

Develop shared policies, embraced by staff and students, validated by governing bodies, implemented effectively and recognised through certification and labels.

SOCIAL POLICY/ DIVERSITY/ INCLUSION

Ensure social diversity and inclusion for applicants, students and staff, while promoting well-being on campus.

CAMPUS

Reduce the carbon footprint through a wide range of actions such as active mobility, waste management, energy sobriety and building renovation, and develop a green campus.

In **2025**, IMT Mines Alès was awarded the **DD&RS label** for a period of **four years**, recognising the maturity of its approach and the coherence of its actions in terms of strategy, governance, education, social policy and environmental exemplarity. The achievement of this label represents a major milestone for the institution, confirming the consistency and ambition of its ecological and social transition policy. It also strengthens the collective momentum driven by IMT Mines Alès' staff, students and partners, and will serve as a **structuring reference point** for future actions and for the development of the next strategic framework.

LABELLISÉ
DD&RS
Enseignement Supérieur
et Recherche responsables

IMT Mines Alès also **maintains its position in the global Top 300 of the THE Impact Rankings.** https://www.imt-mines-ales.fr/actualites/palmares-impact-2024-imt-mines-ales-reste-dans-le-top-300-des-meilleurs-etablissements

Top 5 ex-aequo France

Top 300 Monde

Times Higher Education
Impact Rankings 2025

Interdisciplinary Science Rankings 2026
Powered by THE

THE Interdisciplinary Science Rankings 2026

In 2025, IMT Mines Alès reached a new milestone in the international recognition of the excellence and openness of its research. The school was ranked **165th worldwide and 3rd in France** in the **Times Higher Education Interdisciplinary Science Rankings 2026**, one of the most demanding international rankings dedicated to interdisciplinary research. This outstanding result reflects the strong commitment of the institution to interdisciplinary science, in line with its scientific strategy and its commitments to ecological and social transitions.

AXE 2:
EDUCATION

IMT Mines Alès is transforming its educational programs to integrate skills related to ecological, energy and societal transitions. The RES strategy sets the objective that 50% of programs will address environmental and social responsibility by 2027, through:

the evolution of course content, teaching methods and assessment approaches,

training for teaching staff on climate and societal issues,

pedagogical support to integrate case studies, project-based learning and eco-design approaches.

Students also benefit from a wide range of awareness-raising initiatives, including Climate, Digital, Biodiversity and “2 Tonnes” workshops, energy sobriety activities, inclusive sports actions, scientific outreach, clean-up walks, as well as conferences and cultural events.

- The school is committed to integrating **ecological transition and social responsibility** across all **general engineering programs (FISE)** and **apprenticeship-based engineering programs (FISA)**.

Formation ingénieur Généraliste		
Tron commun		
Département Génie Civil Bâtiment Durable (GCBD)	*Option Infrastructures et Grands Ouvrages (IGO)*	
	Option Bâtiment et Energie	
Département Environnement, Energie, Risques (2ER)	*Option Energie et environnement (EE)*	
	Option Risques naturels et industriels (RISK)	
Département Ingénierie du Sous-sol et Exploitation des Ressources Minérales (ISERM)		
Département Eco-Conception Matériaux et Procédés (ECOMAP)		
Département Performance Industrielle et Systèmes Mécatronique (PRISM)	*Option Sytèmes Mécatroniques (SYM)*	
	Option Systèmes industriels et Transition Numérique (SITN)	
Département Informatique et Intelligence Artificielle (2IA)	*Option Intelligence Artificielle et Sciences des Données (IASD)*	
	Option Ingénierie Logiciel (IL)	
Formation Master et MS®		
Master DAMAGE		
Master BIOTIN		
MS® PRINEC		
MS® Sécurité industrielle et environnement		
MS® Exploitation et environnement miniers		
Formation de spécialité par apprentissage		
Ingénieur BATIMENT		
Ingénieur INFRES		
Ingénieur MIXX		

The school is committed to **structuring initiatives** that support inclusion, innovation and access to knowledge:
The "Galerie des Audacieuses", a travelling exhibition of portraits of female teacher-researchers, engineers, technicians and doctoral candidates, designed to offer middle and high school girls **local role models** and to challenge gender stereotypes in science. By highlighting 13 women scientists from diverse backgrounds, the exhibition helps combat the **"Matilda effect"**, which renders women invisible in scientific disciplines, and encourages young girls to pursue engineering careers.

•**Le programme Exception'Elles** (Prix Ingénieuses 2024) pour promouvoir l'entrepreneuriat féminin.

•**MACMIA** (France 2030) pour l'évolution des compétences en IA & Industrie du Futur

PRINEC: Training experts in circular economy engineering
In response to the limitations of the linear economic model and the growing demands for sustainability, **IMT Mines Alès and IMT Mines Albi** have created the **PRINEC Specialised Master's Programme – Processes and Resources for Circular Economy Engineering**. This programme addresses the environmental, societal and industrial transformations embedded in national and European regulatory frameworks (the European Green Deal, the Anti-Waste for a Circular Economy Act – AGEC, and the Climate and Resilience Act).
PRINEC aims to train **expert professionals capable of mastering the life cycle of materials**, from design to end-of-life, by integrating the principles of eco-design, recycling, reuse and the management of critical resources. The curriculum combines **materials science, industrial processes, life cycle assessment and socio-economic dimensions**, with particular attention paid to regulatory constraints and the needs of industry.

The Science Festival, Minér'Alès and Pint of Science, which strengthen access to scientific culture across the region, in line with the RES strategic objective of **making scientific knowledge accessible to all.**

AXE 3: RESEARCH & INNOVATION

The RES strategy commits IMT Mines Alès to developing eco-responsible research, both in its practices and in its objectives. From now on, each research project must integrate at least one Sustainable Development Goal (SDG), and reducing the carbon footprint of scientific activities is a key objective.

The strategy also encourages:

open science practices (HAL deposits),

carbon footprint assessments of laboratories,

inter-laboratory workshops to share knowledge and foster continuous improvement,

scientific outreach and mediation as a lever for societal engagement.

IMT Mines Alès s'engage activement pour un avenir durable à travers des projets de recherche axés sur la réduction des impacts environnementaux et la transition énergétique.

The **CREER Center** (Research and Education in Environment and Risk) adopts an interdisciplinary approach to study and mitigate the negative impacts of human activities on the environment, notably through research on water quality and quantity and the analysis of major risks

The **CERIS Center** (Teaching and Research Centre in Computer Science and Systems) stands out for its research on artificial intelligence and the industry of the future, with innovative projects such as EuroMov UMR. This partnership with the University of Montpellier aims to leverage AI and movement sciences to improve healthcare and sensorimotor rehabilitation.

For its part, the **C2MA Center** (Materials center of Mines d'Ales) explores the life cycle of materials, with a strong focus on eco-materials, recycling, and the reduction of environmental impact.

The incubator, the first technological incubator created in 1994 within an engineering school, embodies the school's commitment to sustainable innovation. It supports impact-driven start-ups, builds on 40 years of experience, integrates impact indicators, hosts deeptech showrooms, and organises student entrepreneurship pitch competitions.

Flagship research projects integrating the RES objectives include:

DuMaCoBio: interactions between materials and the marine environment, durability, bio-corrosion and eco-design.
OSMOZ: innovation in water technologies, impact reduction and risk management.
H2Mines: hydrogen and low-carbon materials.
BIOKARST, SCHAPI: emerging pollutants, advanced contaminant analysis, and assessment of water resource availability.
Best Crop, Algifoam, Locabati: circular economy, recyclable composites, biocomposites and bio-based foams.
IMPETUS, CitiN'Crise, Prégéris Chair: territorial resilience and risk management.
PelviTrack: health and well-being

AXE 4: SOCIAL POLICY

The RES strategy commits IMT Mines Alès to providing a fulfilling, inclusive and accessible working and learning environment for all.

Inclusion and equality

The school implements an ambitious policy to combat all forms of discrimination, with the objective of achieving zero reports by 2027.
Actions are being deployed to improve campus accessibility, including a Disability Master Plan, inclusive communication practices, adapted signage, and consideration of all types of disabilities.

Accessibility and inclusion

IMT Mines Alès pursues an active policy in favour of social accessibility and inclusion. The school welcomes 31.8% scholarship students and 30% apprentices, ensuring a diversity of backgrounds and broad access to engineering education. A solidarity grocery store, Entr'EMA, supports students experiencing financial hardship and helps combat student precarity. The institution also strengthens the prevention of and response to sexual and gender-based violence, through a comprehensive framework including a listening and support unit, a protocol with the public prosecutor's office, an Equality Officer, and anonymous reporting tools.

Accessibility and Inclusion of People with Disabilities

IMT Mines Alès further reinforces its commitment to disability inclusion through several structured actions. Each year, the school organises **Handisport days**, enabling students and staff to discover different types of disabilities through sports activities and awareness-raising initiatives. **Training sessions on disability**, offered to teaching and administrative staff, support better consideration of the specific needs of students with disabilities. Innovation also plays a key role in this inclusive approach, notably through inclusive technological projects such as *REEFLECT,* a connected and adapted home designed to improve autonomy and comfort for people with motor or sensory impairments.

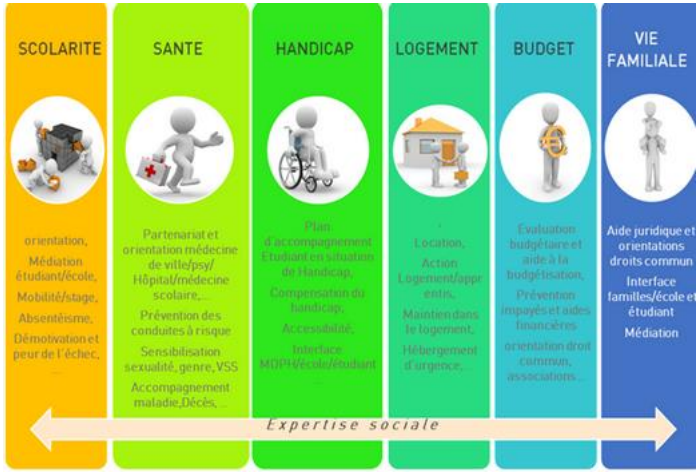
Gender balance and equality

The **IMT Ambassadrices programme** strengthens the school's ambitions in terms of gender equality and diversity within scientific and engineering fields.

Health and quality of life

IMT Mines Alès places the quality of life of students and staff at the heart of its strategy, with a target of achieving over 75% satisfaction. The school implements a comprehensive set of measures to ensure a safe and supportive learning and working environment, including a dedicated listening and support unit for sexual and gender-based violence, a medical and psychological support centre, mental health first aid (PSSM) initiatives, stress management actions, addiction prevention, as well as financial support mechanisms such as scholarships and the Erasmus+ social scheme.

Student life is further enriched through the engagement of student associations, the Entr'EMA solidarity grocery store, and a diverse cultural and scientific programme, all contributing to a dynamic and inclusive campus community.



AXE 5: ENVIRONNEMENTAL POLICY

IMT Mines Alès' RES strategy sets ambitious objectives to reduce the school's environmental footprint and to make the campus a model for ecological transition.
In terms of climate and energy, the institution aims to reduce its fossil energy consumption by 20% by 2027 and to achieve an annual 5% reduction in greenhouse gas emissions, through actions such as energy-efficient building renovations, the shift to biomass energy, optimisation of the thermal network, reduced travel, and carbon offset measures.
Biodiversity protection is another key priority. In terms of resource management, the school is committed to reducing water consumption by 50% and ensuring that at least 20% of supplies are reused or recycled, notably through rainwater harvesting, responsible purchasing practices and the reuse of equipment.

Biodiversity and natural spaces

IMT Mines Alès aims to make its campus a genuine site for ecological restoration. The school implements several ecosystem preservation initiatives, including biodiversity-focused events (naturalist inventories, installation of nesting boxes), public awareness activities during the *Printemps des Transitions*, and participation in research programs dedicated to the protection of aquatic environments, such as DuMaCoBio, OSMOZ, and the work carried out by the HSM laboratory.

These initiatives strengthen the campus's ecological resilience and contribute to a better understanding and protection of both terrestrial and marine environments.

Sustainable mobility and campus energy transition

IMT Mines Alès has implemented a Campus Mobility Plan aimed at reducing the use of fossil-fuel vehicles and encouraging more sustainable modes of transport. The school promotes active mobility, carpooling and increased use of public transport.

In parallel, several structural actions are reinforcing the site's energy transition: building renovations, the gradual replacement of boilers with biomass solutions, optimisation of the thermal network, and a reduction in travel linked to institutional activities.

Together, these measures contribute to the development of a future eco-campus, reducing the campus's carbon footprint and embedding the school in an ambitious ecological transition pathway.

Replacement of Gas Boilers with Biomass Boilers

In 2025, heating at the Claudie Haigneré site is provided by the combustion of locally produced wood pellets in new, high-performance boilers. This investment enables the school to eliminate CO_2 emissions associated with the use of fossil fuels.

As part of an eco-responsible approach, the former coal silos have been repurposed for pellet storage

Waste management and sustainable resource use

IMT Mines Alès is pursuing an ambitious strategy to reduce and recover waste, with the objective of achieving zero household waste incinerated or landfilled. The school has implemented eight-stream waste sorting and is expanding composting initiatives across its campuses.

In **2024, 5,785 kg** of biowaste were recovered, enabling the production of one tonne of compost.

Responsible resource management is also reflected in strong actions to combat waste, including the temporary removal of carafes, monitoring of water consumption, and awareness signage.

Our commitments to achieving the 17 Sustainable Development Goals: Key highlights 2024–2025

17 PARTENARIATS POUR LA RÉALISATION DES OBJECTIFS

IMT Mines Alès has decided to better structure its approach to sustainable development and its social responsibility, and to ensure continuous improvement in all its processes

Our “raison d'être”: “ *Strengthened by its membership of the IMT and its territorial roots, IMT Mines Alès gives its students the best possible opportunities for professional fulfillment, so that they can become responsible players in the development of the Nation* ***, while preserving the wealth of the Planet*** ”. The ambition project for the next five years, from 2023 to 2027, is a declination of the global strategy of the Institut Mines-Télécom, and preserves the specificities of IMT Mines Alès. It has been drawn up with a view to the major issues on which IMT Mines Alès wishes to position itself. These new challenges - energy, environmental, societal and economic transitions - are encouraging us to reposition ourselves at the level of our different professions and to define our priorities.

A team at the service of the school's social and environmental responsibility: The Sustainable Development and Social Responsibility Manager appointed in 2019 coordinates a steering committee made up of referents assigned to each of the school's departments (general secretariat, academic and student experience department, apprenticeship department, research and doctorate department, economic development department, communications department). **This DDRS steering committee** ensures a coherent structure for achieving the school's ambitions in terms of environmental and social responsibility, and is in contact with all the school's stakeholders. It coordinates the production of the school's DDRS self-assessments and monitors the Green Plan.

Thanks to the contribution and collaborative work involving students and staff, carried out since February 2022, IMT Mines Alès has been able to draw up an ambitious 2023/2027 strategy. Through our research, our training of engineers, masters and PhDs, and our support for companies in our territories, we are collectively committed to meeting society's major challenges. This new 2023-2027 strategy, based on our values, represents a new milestone in the service of our raison d'être and our missions, and will enable us to work in our rightful place to support staff, students, *alumni* and companies as they adapt to this world undergoing profound transformation.

The **Institut Mines-Télécom (IMT)** is a member of the **European University EULiST (European Universities Linking Society and Technology)**. In this context, **IMT Mines Alès is fully involved in this European dynamic**, alongside the other IMT schools, by contributing to the international cooperation initiatives led by the alliance. This participation enables IMT Mines Alès, through IMT, to engage in **European projects in education, research and innovation** aimed at collectively addressing the challenges of the **ecological, energy and societal transitions**. Integration into EULiST thus strengthens the school’s ability to share expertise, develop interdisciplinary approaches and train engineers capable of acting at the European level.

EULiST
EUROPEAN UNIVERSITY

In November 2024, IMT Mines Alès co-organized, together with AMUE (Agency for the Mutualisation of Universities and Institutions) and with the support of the scientific community “Sustainable Transformation of Organizations” of Institut Mines-Télécom, the M2024 symposium devoted to the theme “Perception and Models.” This event, which has brought together experts in the management of organizational technologies for more than 15 years, welcomed around twenty participants this year from diverse disciplines and regions. Its resolutely transdisciplinary approach made it possible to combine research in the humanities and social sciences, management, information and communication studies, design, sociology, digital technologies, and risk management in order to analyze the impact of actions on organizational modes

1 PAS DE PAUVRETÉ

IMT Mines Ales devotes €2M annually to social aid for students in favour of equal opportunities

Feuille de route

In line with its history, IMT Mines Alès plays a role in social mobility
To be a school accessible to all
Practicing equal opportunity policy

In 2024, among the engineering students :
31,8% have scholarships
30% of students are apprentices

- **Social scholarships** (~500,000€)
- **Exemption of tuition and fees for scholarship holders** (~600,000€): non-scholarship students who exceed the ceiling corresponding to step 0bis by 3,000€
- **Subsidy for catering** (~3000€)
- **International mobility grants** (~150,000€)
- **Merit-based grants** (~20,000€)
- **Student activities subsidy** (~70,000€)
- Welfare and **emergency assistance** (~15,000€)
- **Focused grants and exemptions** for certain international master's students (~11,000€)
- The IMT Mines Alès **Excellence Award** (~€5,000)
- Foundation grants via sponsorship (~5000€)

Student Project Support Awards
These awards support students or associations carrying out innovative, humanitarian, environmental, or societal projects.
ASC CyborgBulls received the 1st prize for its innovative societal project: participation in the FIRST Robotics Competition, with an educational focus on Science, Technology, Engineering, and Mathematics (STEM).
Elian Jeulin received the 2nd prize for his innovative project *"Daidala"*, a narrative horror video game based on the myth of Icarus, using a smartphone as the primary interface..

Hosting: https://www.imt-mines-ales.fr/ecole/le-campus#maison-des-eleves

Zero hunger aiding food supply to the people most in need in our area

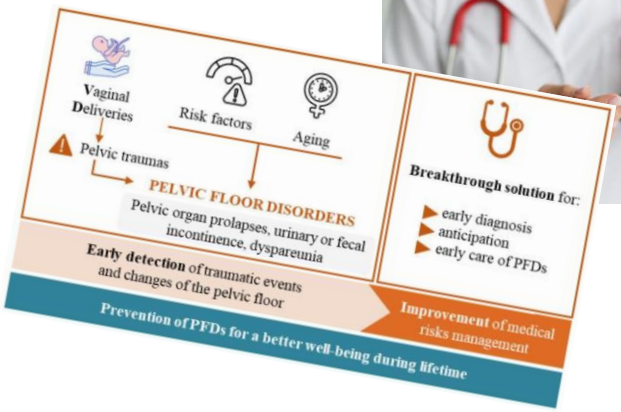
2025 — ATHEMA Charity Concert: Student Mobilisation for Food Assistance
In 2025, the student association **ATHEMA** at IMT Mines Alès organised a charity concert, with all proceeds donated to a food assistance organisation supporting people facing precarious living conditions.
This event, which brought together students, staff, and partners, aimed to raise funds while increasing community awareness of hunger and poverty issues.
The evening highlighted students' commitment to solidarity-based, cultural, and inclusive initiatives, demonstrating their willingness to take local action in support of vulnerable populations. This initiative strengthens the school's engagement in food solidarity and community-building, combining student participation, culture, and social impact.

Solidarity grocery: The students have set up a solidarity grocery store (Entr'EMA) to combat the difficulties generated by the health crisis. This initiative is supported by the Nîmes Food Bank, the Collectif d'Alès and the school. The aim is to encourage students at IMT Mines Alès to help each other out, by offering food and hygiene products at greatly reduced prices or free of charge, depending on each student's situation. This solidarity grocery store was set up during the health crisis to provide the school's pupils with basic necessities. She talks to us today about her experience.

3 BONNE SANTÉ ET BIEN-ÊTRE

Good health and well-being – to look after everyone's health IMT Mines Ales put in place measures to manage the health crisis

IMT Mines Alès is coordinating the European project **PelviTrack**, an innovative initiative dedicated to preventing perineal tears during childbirth. The project aims to develop a measurement and modelling tool for the perineum that will enable more accurate anticipation of tear risks and support improved clinical decision-making. Through transdisciplinary collaboration between researchers, healthcare professionals, and European partners, PelviTrack seeks to enhance childbirth safety, reduce postpartum complications, and sustainably improve women's health and well-being.



Predicting, Modelling and Personalising Prostate Cancer Treatment

In 2025, IMT Mines Alès highlighted a major health breakthrough through research aimed at improving the management of **prostate cancer**, one of the most common cancers in men. In partnership with medical and scientific teams, researchers are developing **predictive models** and **modelling tools** capable of anticipating the progression of the disease and adapting treatments to the individual characteristics of each patient.

This project is based on the detailed analysis of biological, clinical and imaging data to propose **personalised therapeutic protocols** that are more effective and less invasive. This innovative approach not only improves patient safety and quality of care but also reduces the risk of overtreatment thanks to a better understanding of cancer progression pathways.

Nanlok Henry Nimlang's PhD Defence

Nanlok Henry Nimlang, under the supervision of Sandrine Bayle and Gilles Dusserre, defended his PhD thesis entitled: "Modelling and Predicting Disease Risk Using Remote Sensing and GIS: Application to Malaria Cases in Nigeria."

This doctoral research develops a geospatial model to analyse malaria risk factors — ecological, meteorological, socio-economic, and epidemiological — in order to better understand disease transmission. The model helps identify endemic areas, optimise interventions, and manage resources for malaria control, while addressing the lack of data on vector distribution. The work aims to provide decision-makers with tools for more effective malaria management, notably through early warning systems and enhanced vector control strategies.

3 BONNE SANTÉ ET BIEN-ÊTRE

Good health and well-being – to look after everyone's health IMT Mines Ales put in place measures to manage the health crisis

Mental Health: From Awareness to Certified Training

Since 2024, IMT Mines Alès has strengthened its commitment to mental health.

In October 2024, the school organised its first **Mental Health Information Week**, which included:

a conference on sleep, a practical workshop, and a sophrology session, providing students and staff with concrete tools for stress prevention and management.

In March 2025, the institution continued this momentum by developing staff skills through the Mental Health First Aid (PSSM) training, delivered on 27–28 March 2025 by CODES 30.

This two-day training, accessible without prerequisites, teaches how to provide immediate assistance to a person experiencing:

the onset of a psychological disorder,

the worsening of an existing condition, or an acute mental health crisis, until professional help is available.

The training's pedagogical objectives — such as acquiring foundational knowledge, better understanding crisis situations, listening without judgment, and managing aggressive behaviour — are outlined in the official training guide.

Conference on Family Caregivers

IMT Mines Alès organized a conference-debate with general practitioner Vincent Valinducq, dedicated to the essential yet often overlooked role of **family caregivers**. The event addressed key issues related to health, mental load, support, and prevention for those who provide informal daily assistance to vulnerable individuals.

Committed to ensuring accessibility and inclusion for all, the school offered **French Sign Language (LSF) interpretation**, enabling deaf and hard-of-hearing participants to fully take part in the discussion.

Medical and Social Support Unit and Health Promotion

IMT Mines Alès has a dedicated **medical and social support unit** focused on promoting student health and well-being, offering medical, psychological, and social assistance throughout their academic journey. The service is structured around a full-time nurse and a physician providing weekly consultations, ensuring accessible and responsive care. The unit manages emergency care, supports students with disabilities, and offers personalised guidance based on listening, information, and orientation. Psychological support is also available, provided by a psychologist who meets students by appointment according to their needs.

The medical-social unit also plays a major role in **prevention and health education**, leading initiatives on key topics such as sexual health, contraception, sexually transmitted infections, addictions (tobacco, alcohol, drugs), stress, sleep, nutrition, and dermatology. When necessary, appropriate prescriptions are provided, including vaccinations, nicotine substitutes, blood tests, chest X-rays, or specific medical follow-ups.

This system contributes to creating a more **inclusive, safe, and supportive learning environment**, aligned with IMT Mines Alès' commitments to social responsibility and student well-being.

4 ÉDUCATION DE QUALITÉ

Quality education – IMT Mines Alès ensures access to knowledge and cultural activities for all students and employees

Promoting Scientific Culture — Participation in the Pint of Science Festival

As part of its commitment to open science and territorial engagement, IMT Mines Alès hosted the **Pint of Science Festival** in May 2024—the world's largest science communication festival—for the third consecutive year.

Over two evenings, on 13 May at Chai Samson and 15 May at Urban Parc, faculty researchers from the school and partner institutions presented their work to a wide audience in a friendly and accessible format.

On 13 May, the event titled *"Pigments & Pixels – You Won't Believe Your Eyes"* featured **Dominique Lafon-Pham** and **Isabelle Marc** , who explored the functioning of the visual system and demonstrated how neurophysiology can inspire innovative image-processing techniques

On 15 May, the evening *"Floods and Pollution – Let's Not Dive In Headfirst"* brought together **Anne Johannet** and **François Lestremau** who discussed the challenges of water management—both quantitative and qualitative—in the context of floods and pollution. They presented possible solutions, such as the use of artificial intelligence and pollutant-detection methods, to help anticipate and mitigate these risks.

This initiative allows IMT Mines Alès to bring research **out** of the laboratory and into the community, making science accessible to the public and creating bridges between scientific knowledge, citizens, and societal issues. It reflects a key dimension of the school's social responsibility: making science inclusive, understandable, and useful for all, particularly at the local level.

4 ÉDUCATION DE QUALITÉ

Quality education – IMT Mines Ales ensures access to knowledge and cultural activities for all students and employees

“Draw Me a Bison” is a scientific and cultural event held in October 2024. This conference, given by Dominique Lafon-Pham, teacher-researcher at IMT Mines Alès within the EuroMov-DHM laboratory, invites participants to explore the ways of life and thought of Paleolithic societies. Faced with the enigmatic nature of these ancient cultures, every clue becomes essential to better understand their representations and practices. Drawing on work carried out in major sites such as the Chauvet, Cussac, and Ebbou caves, the conference showed how colour can become a true scientific investigative tool**,** enabling the interpretation of Paleolithic cave art and offering a journey into the symbolic universe of humanity’s first artists.

On the occasion of the 2024 Science Festival, IMT Mines Alès offered a rich programme of 14 events designed to strengthen access to scientific culture for school audiences and the general public. the school organized a series of workshops, visits and conferences, enabling participants to discover research and science in an active and participatory way.

Students aged 6 to 18 were able to explore a wide range of topics: mechatronics, artificial intelligence, polymers and biocomposites, human and computer vision, everyday minerals, risk management, scientific creativity, and environmental issues such as climate and sustainable forest management. The conferences, including the improv-conference “Tous à l’eau!” and “Draw Me a Bison”, offered opportunities to connect science with art, environmental awareness and prehistoric heritage.

MOOC IMT Mines Alès :

Mooc Unlock you English: https://www.fun-mooc.fr/courses/course-v1:MinesTelecom+04034+session02/about
Mooc Probabilité pour l’ingénieur: https://www.fun-mooc.fr/courses/course-v1:MinesTelecom+04042+session01/about
Mooc Water-borne infectious diseases: https://www.fun-mooc.fr/fr/cours/water-borne-infectious-diseases/

5 ÉGALITÉ ENTRE LES SEXES

Sexual and gender based violence – IMT Mines Ales fight against this curse

Galerie des Audacieuses: Science Has No Gender — Everyone Has a Place in It

As part of its gender equality policy and its commitment to promoting diversity in scientific fields, IMT Mines Alès launched the **"Galerie des Audacieuses"**, an initiative aimed at highlighting and giving visibility to women—faculty researchers, engineers, technicians, and doctoral candidates—who actively contribute to research, innovation, and teaching.

During the **2024 edition**, under the patronage of **Claudie Haigneré** (the first French woman astronaut), the school organised conferences, workshops, and a symbolic ceremony. On this occasion, the **Clavières campus was renamed in her honour**, and **17 classrooms** were named after women who have made significant contributions to the history of science or to the institution.

The gallery currently features 13 photographic portraits created by art photographer Jean-Michel André. Through this artistic and symbolic project, the school offers “local role models” to counteract the Matilda effect—the historical invisibilisation of women in sciences.

Actions in progress at IMT Mines Alès :

- An Equality Officer has been recruited.
- The **school has signed a service contract with an outside organization** to help deal with reports and problems encountered;
- Two **social workers (one for students, one for staff)** are on hand to listen to anyone who feels the need, and to take action or redirect people if necessary;
- Accompaniment of **victims by a psychologist** at the ITM or chosen by them for a first listening and possible orientation;
- The **school** collaborates **with several student associations in the fight against SGBV**;
- 219 **people were trained (**over **744 hours of training** and a budget of over **€20,500**);
- **193h30** devoted to listening to staff; **310h30** to listening to students;
- Space **dedicated to VSS available on student and staff intranets**, with action plan follow-up, fact sheets, practical guides, public reports, communication kits...as well as information on criminal and legal consequences and an exchange forum.

5 ÉGALITÉ ENTRE LES SEXES

Sexual and gender based violence – IMT Mines Ales fight against this curse

IMT Mines Alès awarded the 2024 Ingénieuses Prize for its commitment to women's entrepreneurship

In May 2024, IMT Mines Alès and IMT Mines Albi received the 2024 Ingénieuses Prize from the CDEFI, recognising the school most actively engaged in the Exception'Elles programme—a scheme dedicated to promoting women's student entrepreneurship and developing leadership among female students and doctoral candidates.

Launched in 2021, this initiative addresses the underrepresentation of women in entrepreneurship and leadership positions. Each year, it offers tailored support to 30 participants, with the backing of the IMT Mines Alès incubator, which helps them structure and advance their business projects.

This distinction from CDEFI highlights IMT Mines Alès' strong commitment to gender equality, greater diversity in scientific fields, and enhancing women's access to future careers and leadership roles.

In 2024, six female students from IMT Mines Alès, enrolled in the general engineering programme or in apprenticeships, joined the IMT "Ambassadrices" initiative, designed to encourage young girls to pursue scientific and engineering pathways. After completing training in Paris, they visited several middle and high schools in the Alès metropolitan area, engaging exclusively with female groups to discuss gender stereotypes, self-confidence, and the opportunities offered by engineering careers.

Their intervention at Collège Diderot, which brought together 18 students, notably helped to challenge the idea that certain professions are "reserved" for men, using civil engineering as an example. The highly positive feedback from the pupils highlights the strong impact of this initiative.

6 EAU PROPRE ET ASSAINISSEMENT

IMT Mines Alès works to protect the gold of tomorrow

Organisation des Nations Unies pour l'éducation, la science et la culture

ICIREWARD
International Center for Interdisciplinary Research on Water Systems Dynamics sous l'égide de l'UNESCO

The school is a founding member of the IM2E institute (Institut montpellierrain de l'eau et de l'environnement), which is recognized as a **UNESCO center** . The official name is ICIReWaRD: “International Center for Interdisciplinary Research on Water Systems Dynamics”.) This institute, which brings together 15 research units (including the CREER of IMT Mines Alès), 400 scientists and 150 doctoral students, is developing a highly visible international activity on the theme of WATER, based on the continuum of research - training - business. The creation of this UNESCO center is undoubtedly international recognition of the leading role played by the IM2E in water sciences

THE IMPACT RANKINGS
SDG6 CLEAN WATER AND SANITATION
2024 **TOP 200**

Awards
IMT Mines Alès was ranked in the **TOP 200** of THE Impact Ranking 2024 on clean and sustainable water management (MDG n°6), thanks in particular to its cutting-edge scientific work on water resource management.

LabOVivant(s) Expands, Takes Shape, and Strengthens its Scientific and Civic Impact
In 2025, the LabOVivant(s) project continued its expansion in the Vallée Borgne, where residents, researchers, and public actors are experimenting with solutions to address the increasingly structural water scarcity affecting the Cévennes. This year marks a significant intensification of the participatory experiments carried out with IMT Mines Alès.
Engineering students conducted a participatory monitoring of spring water quality, aiming to quickly detect the presence of metals—particularly arsenic—using simple field tests carried out directly with local inhabitants. In parallel, a dedicated study on the impact of tourist activities on the river is being conducted, combining field observations, participatory photography, and community reporting.
The year 2025 also sets the stage for future developments: IMT Mines Alès and CIRAD are co-funding a SAGE PhD thesis (starting October 2025) to analyse, in both Occitanie and Senegal, how these “living laboratories” transform water governance and management in territories facing severe hydric stress.
Thus, in 2025, LabOVivant(s) has become a true tool for territorial innovation, connecting research, education, and citizen participation to support the Cévennes in adapting sustainably to water scarcity.
https://imtech.imt.fr/2025/10/22/labovivants-la-recherche-participative-face-au-manque-deau-dans-les-cevennes/

6 EAU PROPRE ET ASSAINISSEMENT

IMT Mines Alès works to protect the gold of tomorrow

OSMOZ: an innovative regional project to rethink water technologies

In 2024, IMT Mines Alès partnered with Rousselet Environnement and Enercoop Languedoc-Roussillon to launch the OSMOZ project, financially supported by the Occitanie Region through the READYNOV programme. This 20-month initiative aims to assess the feasibility of the future Water Technology Innovation Centre (CITE) in Occitanie, designed to transform the water treatment sector in depth.

In response to increasing pressure on water resources — declining quality, diffuse pollution, industrial impacts, and the effects of climate change — OSMOZ seeks to develop new treatment models that integrate the valorisation and reuse of residues generated by treatment processes. This approach aligns with the principles of industrial ecology, selecting technologies based on environmental performance, energy efficiency, and economic viability.

IMT Mines Alès contributes in particular to the assessment of technological risks, mobilising its expertise in environment, energy and risk management to secure and optimise future treatment solutions. The project also involves regional industrial partners, including Axens and SDTech, which provide effluents and support pilot-scale experiments.

In 2024, Tara Soleimani, a PhD student at IMT Mines Alès, received the Best Presentation Award at the ICESA 2024 International Conference on Environmental Science and Applications for work carried out within the framework of this project.

In November 2024, **Manon Erguy** defended her PhD thesis entitled *"Contribution of Artificial Neural Networks to Predicting Karst Flood Risk on the CEA Cadarache Site."* The thesis was supervised by Anne Johannet and Severin Pistre, in partnership with the GAIA doctoral school.

The research highlights the crucial role of groundwater in rapid flooding events affecting the CEA Cadarache site and reveals the heterogeneity of its fractured and karstified aquifer. Through innovative systemic analyses and the use of artificial neural networks, the study proposes a reliable groundwater rise forecasting strategy that complements existing hydrological models. The highly promising results demonstrate the strong performance of these models in complex aquifer contexts and open up perspectives for broader application across other areas of the site.

6 EAU PROPRE ET ASSAINISSEMENT

IMT Mines Alès works to protect the gold of tomorrow

World Water Day and the 2025 Spring of Transitions: A Strong Awareness Action on Water Waste in the Campus Cafeteria

On the occasion of World Water Day and as part of the Spring of Transitions 2025, the catering staff at IMT Mines Alès organised a powerful awareness-raising initiative to reduce water waste in the school cafeteria. Observations showed that 30 to 40 liters of drinking water were thrown away every day due to overfilled carafes left on tables without being consumed.

To address this invisible yet significant waste, the school decided to temporarily remove water carafes, inviting students and staff to fill their glasses or personal bottles directly at the water fountains. This measure was supported by an educational communication campaign, including posters with key data on water scarcity, the water footprint of daily consumption, and the environmental impacts of wasting potable water. These elements were presented during the launch of the Spring of Transitions on 31 March 2025.

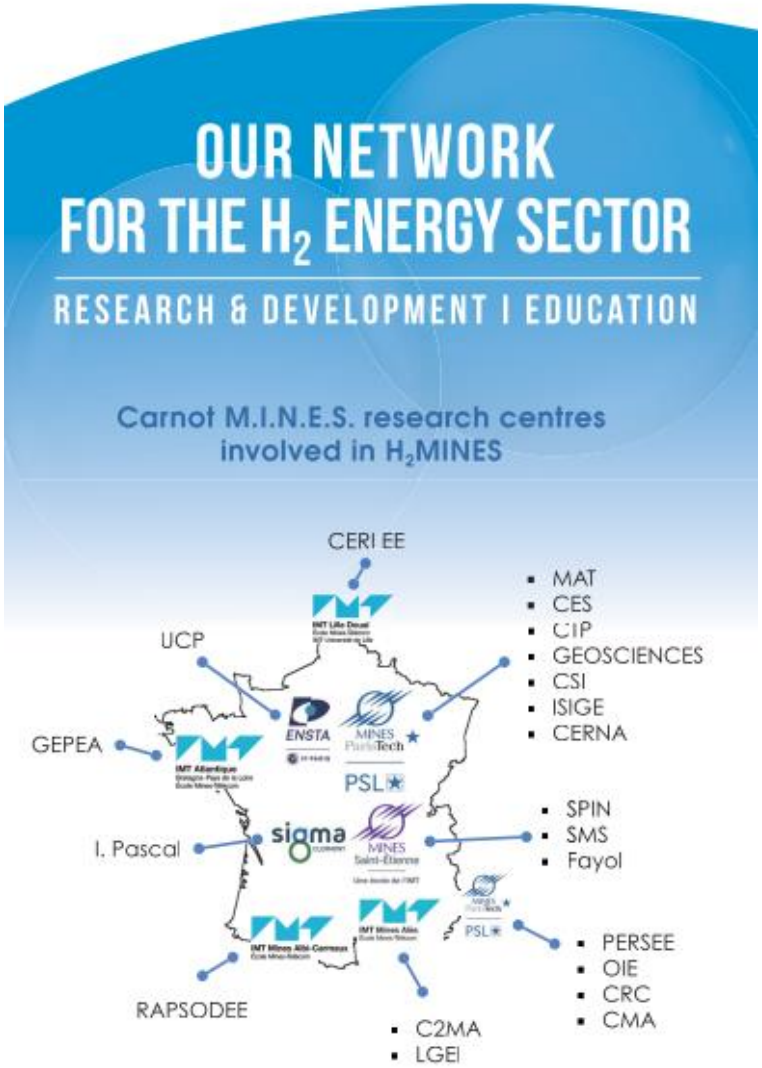
A **three-week consumption monitoring challenge** was implemented, revealing a significant decline in wasted water during the first two weeks, followed by a slight increase when sparkling water became available again at the end of the period.

This experiment demonstrated in a concrete way the importance of individual actions in preserving water resources, encouraged the use of personal water bottles, and raised student awareness of the water impact of their food habits, fully aligned with the objectives of the Spring of Transitions' Water focus area.

7 ÉNERGIE PROPRE ET D'UN COÛT ABORDABLE

Sustainable energy: a major challenge today and an opportunity for tomorrow

The ERT and EUREQUA teams are part of the ITM's **H2MINES hydrogen** cluster, which supports the **Carnot HyTrend project**. This project focuses on hydrogen production, CO2 capture and methanation for the renewable production of heat by combustion, and in particular interaction with various energy networks: POWER TO X. In this project, the ERT team is focusing on the circular economy to optimize hydrogen production cycles using renewable energies (hydrogen enables storage) and the consumption cycles of this energy. The EUREQUA team is interested in the production of hydrogen by biological methanation, and in the safety of hydrogen storage and handling. https://researchday.minesparis.psl.eu/le-programme-hytrend-lhydrogene-pour-la-transition-energetique/



In 2024, the **HORIZON Europe ECOHYDRO project** [2024–2027] was launched: *Economic manufacturing process of recyclable composite materials for durable hydrogen storage* (HORIZON-JTI-CLEANH2-2023-07-01).

The project has a total budget of **€9.62 million**, with the PCH unit at IMT Mines Alès receiving **€473k**.

ECOHYDRO aims to **improve the recyclability of hydrogen storage tanks**, a key component in the advancement of sustainable hydrogen technologies and the broader energy transition. ECOHYDRO, des composites recyclables pour stocker l'hydrogène

8 TRAVAIL DÉCENT ET CROISSANCE ÉCONOMIQUE

IMT Mines Ales is committed to enabling everyone to achieve their professional goals

Quality of employment:
Employment: as of 31/12/2024, 355 school staff members (paid) – breakdown: 40% permanent contracts, 34% civil servants, and 26% fixed-term contracts, including PhD candidates.
Teleworking policy: up to 3 days of teleworking per week possible (flexible or fixed arrangements).
Teleworking staff: 132 employees teleworked in 2024 – provision of identical equipment (screen, headset, etc.).
Training hours for staff in 2024: 4,276 hours
Including 325.5 hours dedicated to Ecological Transition / Social Responsibility – corresponding a priori to 12 trained staff members (training cost: €2,471).
Training courses:
– 2 Tonnes workshop
– ADAPTE
– 2 Tonnes workshop facilitator training
– Sustainable development and procurement
– Disability officer training

In terms of salary policy, the school implements the legislation applicable to public establishments, supplemented by the provisions of the ITM's "management framework". Social dialogue with staff representatives and trade unions is essential to the smooth running of the school, which implements a policy of human resources and skills management. Website: https://www.mines-ales.fr/ecole/travailler-imt-mines-ales

The start-up **Boudi**, incubated and supported by IMT Mines Alès, fully embodies the principles of social utility by placing inclusion, employment, and innovation at the core of its economic model. Recognized as an *adapted company* since October 2024, it employs four workers with disabilities and designs its entire industrial system based on their capacities, ensuring safe, suitable, and empowering working conditions.
In 2025, Boudi plans to invest €100K to further adapt its equipment to different types of disabilities, reinforcing its commitment to decent and accessible work. The start-up also contributes to the training and professional integration of young engineers: two final-year students from IMT Mines Alès, involved since the inception of the project, will join the company as co-developers.
This entrepreneurial model demonstrates that it is possible to combine economic performance, industrial innovation, and social inclusion while creating sustainable and high-quality employment opportunities

8 TRAVAIL DÉCENT ET CROISSANCE ÉCONOMIQUE

IMT Mines Ales is committed to enabling everyone to achieve their professional goals

MACMIA: Building the skills of the future for sustainable and inclusive growth

Winner of the France 2030 Call for Expressions of Interest “Skills and Jobs of the Future,” the MACMIA project—coordinated by Institut Mines-Télécom—aims to build a national training pathway for emerging professions in AI and the Industry of the Future. IMT Mines Alès plays a key role alongside a broad academic consortium (IMT Atlantique, IMT Nord Europe, Mines Saint-Étienne, IMT-BS, ESIGELEC, UTT, and several Campus des Métiers et des Qualifications d’Excellence) and major economic partners (competitiveness clusters Cap Digital and CIMES, the “Cité de l’IA”/MEDEF, large companies such as Festo, Valeo, Assystem, Cisco, Capgemini Engineering, Carrefour, as well as innovative SMEs). OPCO Atlas supports the consortium by facilitating the transformation of future professions.

MACMIA aims to train technicians, engineers and managers with dual expertise, combining AI with strategic sectors: the industry of the future, smart mobility, health and retail. The project also places the human dimension at the heart of digital transformation, through a transdisciplinary approach and the development of training pathways in cognitive engineering.

The programme relies on a strong commitment to attractiveness and equal opportunities, especially for secondary school students, through the involvement of Campus des Métiers et des Qualifications. Promoting gender diversity in digital professions is a major priority, supported by initiatives such as the IMT “Ambassadrices,” the CMQ programme “Les Filles de l’IA,” and collaborations with several inclusion-focused associations.

MACMIA also leverages innovative teaching methods: creation of serious games focused on diversity and career guidance, integration of LLMs and generative AI tools into learning activities, project-based pedagogy in partnership with companies, and use of the Teralab platform for secure data environments. The project thus contributes to French sovereignty in data and AI, starting from initial training.

The initiative will be deployed across eight regions (Occitanie, Auvergne–Rhône-Alpes, Brittany, Pays-de-la-Loire, Normandy, Île-de-France, Hauts-de-France, Grand Est) through a dense territorial network. MACMIA also plans to develop a national online portal bringing together all training offers, integrating an LMS and an AI-based recommendation engine to support individualized learning pathways.

Contact: Sylvie Ranwez, Head of the 2IA Department

9 INDUSTRIE, INNOVATION ET INFRASTRUCTURE

IMT Mines Alès DNA is to serve industrial innovation and technology transfer to society and the territory

Support for Innovation: Three New Projects Backed by the IMT Mines Alès Incubator

In 2025, the IMT Mines Alès incubator expanded its portfolio by supporting **three new innovative projects**, demonstrating the school's entrepreneurial dynamism and its commitment to developing impactful technological solutions. These new initiatives span a variety of fields—from engineering to digital and environmental technologies—and benefit from structured support including mentoring, technical expertise, access to technological platforms, and networking with industrial partners.

Emerging from research carried out within the ALGIFOAM project (2022–2024), the start-up **OCCEANE**, incubated at IMT Mines Alès since November 2024, illustrates the successful transition from research to sustainable innovation. The ALGIFOAM project enabled the development of 100% bio-based and biodegradable alginate foams, featuring remarkable properties such as lightness, thermal insulation and fire resistance. Thanks to an original process for producing expanded biopolymer beads, compatible with industrial requirements, and to collaborations with the luxury sector, these materials open up new low-environmental-impact application opportunities.

Participation in the SIANE Industries Exhibition

In October 2025, IMT Mines Alès took part in the **SIANE Industries Exhibition**, one of the major gatherings for industrial stakeholders, held at the MEETT in Toulouse. This event brought together companies, research centres, and academic institutions around the needs and innovations shaping the industry of the future. IMT Mines Alès' presence highlighted its expertise in engineering, technological innovation, and industrial transfer, while strengthening ties with economic partners in the region.

Over the three days, the school presented its technological platforms, collaborative industrial projects, and solutions developed by its laboratories in the fields of **Maintenance 4.0**, **advanced materials**, **process optimisation**, and **sustainable industrial transition**. The event also provided students with the opportunity to learn about sector expectations and meet potential recruiters.

9 INDUSTRIE, INNOVATION ET INFRASTRUCTURE

IMT Mines Alès DNA is to serve industrial innovation and technology transfer to society and the territory

In April 2025, IMT Mines Alès organized its student-entrepreneur pitch competition at the Hub Créativité, bringing together six projects led by nine engineering students. The event highlighted the quality of the proposals, the ambition of the ideas, and the students' ability to present and defend their projects with conviction and professionalism.
Three initiatives were awarded:
Bee D'ICI, which aims to optimize royal jelly production, won the Pépite LR prize as well as participation in VivaTechnology.
CIRCUL'AIR, a fine-particle filtration system designed to protect children transported in cargo bikes, received funding to develop a first prototype.
R-Cub Event, dedicated to creating eco-friendly packs for sustainable sporting events, will benefit from personalized coaching to accelerate its development.

40 Years of the IMT Mines Alès Incubator:
In 2024, IMT Mines Alès celebrated the 40th anniversary of its technological incubator, the first incubator ever created within an engineering school in France. This milestone was marked by an innovative and convivial event highlighting four decades of entrepreneurial support and territorial impact.
Through a series of activities inspired by well-known TV shows debates between project holders and business advisors, quizzes on environmental and societal impact, pitching sessions in front of potential funders, and a treasure hunt in the Hub Créativité, the event showcased the richness of the school's innovation ecosystem and the diversity of the startups it supports.
Demonstrations by incubated companies (BOUDI, Green4Cloud, DiappyMed, Rheochronos, Reeflect, etc.) highlighted how the incubator now fully integrates impact, ecological transition and social responsibility into entrepreneurial strategies.
The celebration brought together researchers, students, startups and institutional and economic partners, illustrating the strength of the territorial network and partnerships that have supported the incubator for 40 years.

10 INÉGALITÉS RÉDUITES

IMT Mines Alès contributes to the reduction of inequalities, both at the local level and through its specific action in developing countries

REEFLECT Project
The **connected home adapted for deaf individuals**, monitored and developed by Muriel Durand and Patrick Guyot (EuroMov – DHM).

Launch of the Caregiver Support Project — 27 September 2024
On 27 September 2024, IMT Mines Alès launched its caregiver support project, with the support and presence of the Maison des Aidants d'Alès, Nathalie Mallet (expert on the topic), and Vincent Valinducq (physician and health consultant for France Télévisions and TF1, known for describing himself as "the parent of his parents").
Through this initiative, IMT Mines Alès aims to support caregivers by implementing or highlighting existing resources within the school and across the local territory, in order to help alleviate the mental load carried by those who support loved ones.

Handisport Awareness Day
On 7 November 2024, the BDS (student sports association) organised a Handisport Awareness Day. The morning featured a conference for first-year students, led by Renaud Vadan, audio-description coordinator for the Paralympic Games, and Julien Louis, former sports journalist, who notably presented the use of exoskeletons.
In the afternoon, following refreshments provided by Tsiky Zanaka, students had the opportunity to try several adaptive sports disciplines: wheelchair basketball, tandem running, wheelchair table tennis, blind football, and boccia.
The initiative was a great success, combining discovery, conviviality, and awareness-raising around inclusion through sport. A new edition was on 25 September 2025.

Exception'Elles is a **scheme that encourages entrepreneurship among female engineering students and promotes female leadership**.
In engineering schools, few female students dare to envision themselves as entrepreneurs. Women engineers remain underrepresented in executive leadership positions, currently being three times fewer than their male counterparts.
Based on this shared observation, IMT Mines Alès and IMT Mines Albi created the Exception'Elles programme in 2021, with the aim of breaking down barriers, planting seeds of confidence in young women, and empowering them to dare.
The 2024 edition was marked by the participation of two partner schools — Ecole des Mines de Saint-Étienne and Toulouse Business School — which have reached similar conclusions and are exploring initiatives to support women's entrepreneurship. Perhaps 2025 will see the emergence of additional Exception'Elles programs across the country?

10 INÉGALITÉS RÉDUITES

IMT Mines Alès contributes to the reduction of inequalities, both at the local level and through its specific action in developing countries

Handisport Awareness Day — 25 September 2025

On 25 September 2025, the institution organised a full day dedicated to raising awareness about disability through sport, in partnership with several local associations — including IRRP, BDS IMT Mines Alès, Dans le Noir, Sésame Autisme, UNAPEI 30, and Les Olivettes — and with the strong involvement of the Bureau des Sports (BDS) and many student volunteers.

The day began at 12:00 pm with the official opening, followed by a picnic prepared by Artès at 12:30 pm. Workshops took place from 1:00 pm to 4:00 pm, offering participants a hands-on immersion into adaptive sports and inclusive sensory experiences.

The activities offered included:

Blindfolded duck fishing

Blind wellness walk

Handisport workshop in the gym

Goélette (sighted-guide) walking

These workshops were designed to create real-life simulations of sensory or motor limit**ations**, helping participants develop empathy, understanding, and openness.

Disability Awareness Training Sessions — 18 and 21 November

On **18 and 21 November**, two training sessions on disability awareness were organised for teaching and supervisory teams, academic administration staff, as well as teachers and programme coordinators.

Led by Francine Kalmès, psychologist at CAP Emploi (ADRH Handicap et Inclusion), this training aimed to strengthen the institution's inclusive practices and improve support for students with disabilities.

During these two-hour sessions, participants were invited to:

deconstruct stereotypes and challenge misconceptions about disability,

better understand various conditions, particularly invisible disabilities (mental health disorders, ADHD, DYS disorders, autism),

discover key conceptual frameworks such as the social model of disability and the Disability Creation Process,

reflect on their professional posture and the adaptation of pedagogical practices,

identify necessary accommodations and best practices to support the success and well-being of affected students.

This initiative aligns fully with the school's DDRS policy, fostering an inclusive and equitable learning environment and strengthening staff capacity to welcome and support all learners.

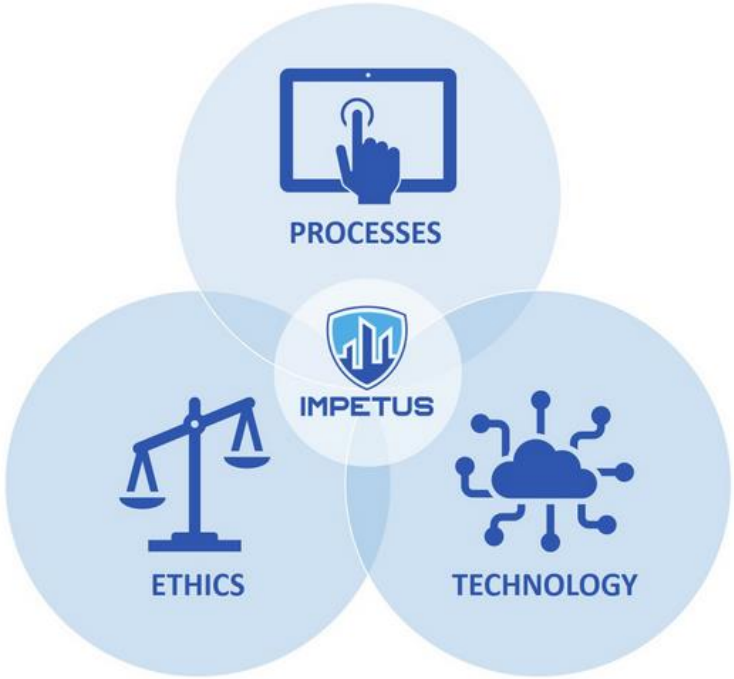
11 VILLES ET COMMUNAUTÉS DURABLES

A campus with sustainable practices and a link to its territory

The **sustainable mobility** policy has two objectives: to combat climate change and air pollution. This policy takes the form of a “campus travel plan” which, among other things, consists of :

- Develop soft modes of transport by encouraging the use of bicycles, scooters and walking for short distances.
- Incite the use of public transport and encourage travel by train.
- Favoring carpooling
- Reduce fossil fuel consumption and pollution associated with service vehicles

IMPETUS Project (Intelligent Management of Processes, Ethics and Technology for Urban Security)
The **final 2024 report** of the IMPETUS project is now available: https://www.impetus-project.eu/index.php/about-impetus/project
The project aims to improve urban security by developing new tools and integrating them into a unified digital platform. IMPETUS brings together a broad international consortium.



In **2024 and 2025**, the **MURTERFEU project**, funded by ADEME and carried out through the postdoctoral work of Raissa Carvahlo Martins (PCH unit), evaluated the fire behaviour of agro-concretes. These materials are non-load-bearing cast composites made from a mineral matrix (e.g., earth, lime, plaster) combined with plant-based matter (long plant fibres or vegetal aggregates). Agro-concretes not only serve as substitutes for conventional construction materials with a high environmental impact, but they also offer the advantage of being excellent thermal insulators.

11 VILLES ET COMMUNAUTÉS DURABLES

A campus with sustainable practices and a link to its territory

New Year Concert: A Cultural Initiative Strengthening Community Cohesion

In January 2025, IMT Mines Alès organised its New Year Concert, a unifying musical event that brought together students, staff, and residents of the Alès metropolitan area. Beyond its festive nature, this initiative contributes to fostering a vibrant and inclusive campus, promoting musical culture and making it accessible to everyone.

CitiN'Crise: A Serious Game for Crisis Management Training

In 2025, IMT Mines Alès strengthened its commitment to pedagogical innovation with CitiN'Crise, a serious game designed to train students in crisis management, particularly in response to major events affecting territories (floods, industrial accidents, network disruptions, etc.).

This immersive tool places learners in realistic decision-making scenarios, enabling them to develop skills in coordination, communication, risk analysis, and urban resilience.

This project illustrates IMT Mines Alès' mission to develop concrete, territory-based educational tools that prepare professionals capable of addressing contemporary challenges.

Minér'Alès: Showcasing Earth Sciences and Geological Heritage

From 17 to 25 May, IMT Mines Alès organized the second edition of **Minér'Alès**, an event designed to showcase to the general public its remarkable geology collections, including minerals, ores, rocks and fossils. Labelled *"Alès Agglo: Scène des Mondes,"* the event extended throughout the city and the wider Alès area to make Earth sciences accessible to as many people as possible.

Minér'Alès offers a unique opportunity to discover an exceptional scientific heritage while raising awareness among participants of geological, environmental and heritage-related issues.

12 CONSOMMATION ET PRODUCTION RESPONSABLES

IMT Mines Alès is heavily involved in the issues of sustainable production and sustainable consumption

Research at the C2MA: Wood as a Renewable Material for Sustainable Innovation

Research conducted at the Centre des Matériaux des Mines d'Alès (C2MA) shows that wood — a renewable, bio-based material — is experiencing renewed interest, not only in construction but also in innovative technical applications. As highlighted in an article published in IMTech magazine:

Using wood allows long-term carbon storage, which contributes to reducing greenhouse gas emissions and aligns with climate and sustainability objectives.

Wood offers significant structural advantages: it combines strength, lightness, and a low environmental footprint — a highly sought-after trio in the context of a circular economy.

At a time when traditional materials such as concrete are increasingly being questioned, wood emerges as a material of the future, capable of supporting a transition toward more sustainable construction and production methods.https://imtech.imt.fr/2024/12/19/promenons-nous-dans-le-bois-ce-materiau-davenir/

Waste Management: The School Restaurant Recycles Its Biowaste with Les Alchimistes

In 2024, the school restaurant partnered with Les Alchimistes to recycle its organic waste. A total of 5,785 kg of biowaste was collected and transformed into one tonne of compost.

ProACTIF Project

The **ProACTIF project** (funded by ADEME) aims to provide the plastic injection sector with plant-based fillers, specifically flax shives, that do not damage molds and offer new functionalities compared with unfilled or traditionally filled plastics (e.g., talc, wood). Their technical, economic, and environmental viability—particularly when combined with recycled plastics—will be demonstrated through the injection of terrace tiles and special pallets.

The consortium includes three partners: DEPESTELE, AG PLAST, and IMT Mines Alès.

PANTHER 2 Guyane Project

The **PANTHER 2 Guyane** project aims to assess the potential of a bio-insulation production chain adapted to the extreme hygrothermal conditions of French Guiana, using local residual wood resources (industrial by-products, clearing residues, etc.). Consortium partners include UMR ECOFOG, UAR LEEISA, and Institut P' Prime.

The objective of PANTHER is to explore a new model for valorising by-products from the Guyanese forestry sector to produce bio-based insulating materials—a prospect that aligns with local stakeholders' ambitions to diversify forest resource uses. After identifying the most promising transformation pathways for producing high-performance fibre insulation panels in tropical environments, the project aims to model their impact on the existing local production system.

The interdisciplinary nature of the partners involved, combined with innovative digital tools developed to integrate the knowledge generated, will help assess the potential of this new value chain as a whole.

Contact: Nicolas Le Moigne

anr agence nationale de la recherche

12 CONSOMMATION ET PRODUCTION RESPONSABLES

IMT Mines Alès is heavily involved in the issues of sustainable production and sustainable consumption

In 2025, IMT Mines Alès organised a **Day on Composite Circularity**, bringing together researchers, industry professionals, and students to discuss the challenges of recyclability, eco-design, and reducing the environmental impact of composite materials. The event showcased scientific and industrial advances aimed at extending material lifespans, promoting reuse, and developing recycling solutions tailored to industrial needs.
Discussions highlighted several key levers: improving manufacturing processes to reduce waste, developing composite materials that are easier to recycle, strengthening local reuse loops, and integrating circular approaches into production chains. This dynamic aims to gradually transform the materials sector into a **more circular model**, where resources are better used, less wasted, and considered across their entire life cycle.

In 2025, IMT Mines Alès organised a webinar dedicated to the European BEST-CROP project, on the theme **“Plant Biotechnology for a Sustainable Future.”** The event brought together researchers, industrial partners, and students to discuss advances in plant biotechnology aimed at improving barley productivity while reducing the environmental impact of crop production.
The webinar showcased the work carried out within the BEST-CROP programme, which investigates the optimisation of photosynthesis, plant adaptation to environmental stress, and the development of more sustainable varieties aligned with the challenges of circular agriculture. Discussions also highlighted the difficulties involved in transitioning towards more responsible agro-industrial systems that integrate innovation, food security, and ecosystem preservation.

13 MESURES RELATIVES À LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES

IMT Mines Alès is committed to all its stakeholders and all its energies

5th Edition of the "Rentrée Climat" — 9 September 2024
As part of its commitment to sustainable development and ecological transition, IMT Mines Alès organised its 5th "Rentrée Climat" on 9 September 2024. This major event brought together over 400 participants, including engineering students and staff, for two key activities:
Awareness workshops, such as the Climate Fresk, the Water Fresk, and the "2 Tonnes" workshop;
A Clean Walk along the banks of the Gardon in Alès, in partnership with Alès Agglomération.

Culture and Debate
The June 2024 cultural event invited participants to reflect on the drifts of ecological panic and called for a credible and democratic transition, distancing itself from dominant ideological approaches. In response to widespread eco-anxiety, the featured book encourages a return to reason and proposes a realistic, democratic strategy for ecological transition, positioned in contrast to ideological forms of environmentalism

Carbon dioxide sequestration in carbon-cement materials project (2022-2025): the project involves studying CO2 sequestration in new composite materials synthesised from cement/carbon with self-heating properties.
CRIZ'INNOV · The aim of this project is to imagine the crisis management of tomorrow where the crisis team member will be able, with one click, to have a synthetic view of the situation, its its evolution as well as an aid to decision making.
CIME Chair (Critical infrastructures Model based system Engineering) set up in collaboration with ASSYSTEM Engineering and Operation Services, IMT Mines Alès. The aim of this Industrial Chair is to help business players to work together more effectively, and to gain a better understanding of future risks and hazards so that they can better adapt to them.

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Decarbonizing Industry: A Roundtable to Rethink Industrial Performance

In 2025, IMT Mines Alès organized a roundtable dedicated to industrial decarbonization, centered on the theme: *"Maintenance 4.0 & Decarbonization: How Does Industrial Performance Become an Ecological Lever?"*

This event brought together industrial experts, faculty researchers, and students to examine the technical, organizational, and digital levers that can reduce the carbon footprint of industrial systems while improving operational efficiency.

The discussions highlighted the contribution of predictive maintenance, intelligent data management, and the modernization of industrial processes as key drivers for reducing energy consumption, limiting unplanned downtime, and optimizing resource use.

This integrated approachombining technological innovation and ecological transition illustrates how industry can reconcile high performance with the reduction of greenhouse gas emissions.

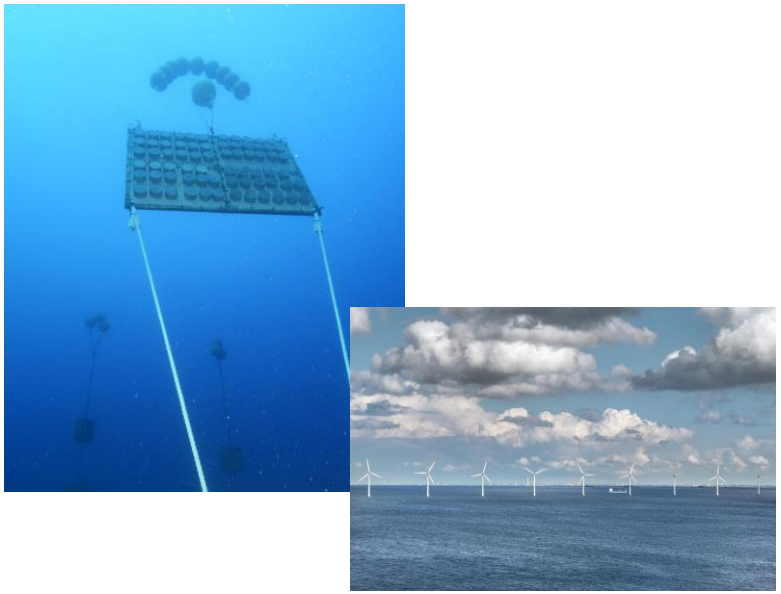
Innovation for the Decarbonization of the Construction Sector: Recycled Plastic Formwork

In 2024, the start-up Boudi, supported by IMT Mines Alès, launched a new range of recycled plastic formwork for the construction sector. By replacing traditional wooden or metal formwork with elements manufactured from repurposed plastic waste, this solution significantly reduces the carbon footprint of construction sites.

These lighter, reusable and durable formwork systems help limit the extraction of virgin resources, reduce construction waste and optimize on-site logistics. This innovation illustrates the contribution of the school and its incubator to the decarbonization of the construction industry and to the development of high-impact circular solutions.

14 VIE AQUATIQUE

A commitment to the preservation of rivers, lagoons and oceans



DuMaCoBio Project: Durability, protection and environmental impact of marine structures (bio)corrosion, anti-corrosion, ecodesign, biocolonisation (2022–2026)

IMT Mines Alès is participating in the DuMaCoBio project, a large-scale research programme aimed at improving the durability of marine structures, particularly those used for offshore wind turbines, a key sector in the energy transition. Researchers Marie Salgues and Jean-Claude Souche contribute the school's recognised expertise on the interactions between concrete, mortars and aggressive environments, studying how seawater and marine micro-organisms influence the resistance and long-term performance of these materials.

As part of the project, IMT Mines Alès is specifically analysing the effects of marine biocolonisation on different types of concrete, which have been immersed at a depth of 27 metres off the coast of Banyuls-sur-Mer. The researchers assess how surface chemistry, roughness and innovative formulations, including low-carbon concretes, affect biological colonisation and (bio)corrosion processes. The objective is to design materials that are more durable and environmentally respectful, in line with ecodesign principles.

The results of this work will help guide industrial stakeholders and decision-makers in selecting appropriate materials and protection systems for sustainable marine structures, at a time when offshore wind projects are rapidly expanding.

14 VIE AQUATIQUE

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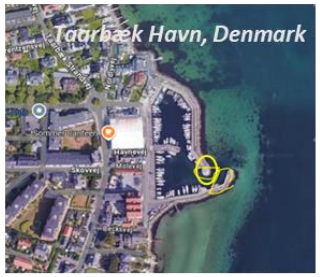

BIOSEACRETE: Durability of concrete in marine environment: comparison between Baltic and Mediterranean sea

The aim of BIOSEACRETE project is to minimise the ecological impact of the construction of marine structures. This approach involves not only limiting the negative effects of construction, but also designing structures in such a way as to encourage local biodiversity while avoiding the proliferation of invasive species. The project aims to design marine concretes by integrating precise environmental criteria. The project has three major objectives: 1) to reduce the carbon footprint of concrete, 2) to save natural resources, **and 3)to use marine structures which support the local ecosystem, in line with environmental ambitions 2 and 6 of the Green Pact for Europe. Hence,** the interaction between biocolonisation (the growth of marine micro-organisms on structures) and the durability of concrete will be studied on two distinct marine sites: the Baltic Sea and the Mediterranean Sea.

Contact: E. Garcia Diaz, M. Salgues, M. Hayek, G. Le Saout

Water quality is a major global challenge, and IMT Mines Alès is actively contributing to its improvement through research dedicated to the detection and characterization of emerging pollutants. In the article *"Fifty Shades of Clean Water,"* researchers François Lestremau and Andrés Sauvêtre from the HSM laboratory present the innovative methods they are developing to identify, analyse, and understand the presence of contaminants in wastewater and natural water.

Their approach combines advanced analytical techniques with expertise in environmental chemistry to detect pollutants that are often invisible yet potentially harmful to human health and ecosystems. By strengthening our ability to identify these substances, their work represents a crucial step toward more effective remediation solutions and the sustainable management of water resources. https://imtech.imt.fr/2024/09/06/remediation-eaux-usees-cinquante-nuances-deau-propre/

15 VIE TERRESTRE

A commitment to preserve and restore terrestrial ecosystems

Spring of Transitions 2025 — Exploring Local Biodiversity and Workshops to Support Wildlife
As part of the **Spring of Transitions 2025**, IMT Mines Alès organised a full day dedicated to the **discovery and preservation of local biodiversity on the Croupillac site**. Participants were invited to identify local plant species using the *PlantNet* application, guided by an illustrated reference sheet created for the event and showcasing several species present on campus (e.g., *Avena barbata*, *Bellis annua*, *Blackstonia perfoliata*, *Dactylis glomerata*, *Hypericum perfoliatum*, etc.)

This activity helped raise awareness of the richness of spontaneous flora and the importance of protecting it.
In parallel, a workshop was held to **build nest boxes for great tits** (*Parus major*). These birds, which already inhabit the campus, play an essential ecological role, notably by contributing to the natural regulation of insects. The nest boxes created will be installed in various green areas of the school to **support their presence and promote functional biodiversity**.
This day offered an intergenerational moment of learning and exchange around nature, strengthening awareness of biodiversity issues and encouraging concrete actions to protect the ecosystems on campus.

PC1 Anticipation Project: The Futures of Subsurface Use in France
In partnership with CSI and BRGM, this research project examines how different stakeholders envision and project the uncertain future of subsurface resource use in France. Situated at the intersection of the sociology of science and technology, social geography, and political sociology, the project is based on the hypothesis that actors involved in resource exploitation relate to the future in different ways depending on the knowledge and instruments they mobilize to make it emerge, quantify it, narrate it, or render it manageable.
These instruments — such as models, scenarios, standards and regulations, cost–benefit analyses, among others — provide varying forms of leverage over the future, due to their epistemological foundations, underlying assumptions, the technologies they consider, and the territories they encompass.
The project studies these instruments, their histories, practices, and associated controversies, as well as how they inform or shape public action regarding subsurface resources.
Contact: Juliette Cerceau

Chaire Industrie Minérale et Territoires · Project Governance of mining/quarrying projects and consultation : In a context of rising demand for mineral resources, the IM&T Chair brings together researchers, industry actors, public authorities, and citizens to analyse the technical, environmental, and societal issues linked to resource extraction. The Chair conducts field studies, trains new experts, and fosters dialogue with society.
Its research is structured around four key areas: technological innovations, environmental assessments, territorial policies, and anticipation of future mining scenarios.

16 PAIX, JUSTICE ET INSTITUTIONS EFFICACES

Promoting peaceful societies and ensuring acces to justice for all

Computer and Network Engineer
An engineering course in Computer Science and Networks with 2 distinct paths: Systems and Networks or Software Development.

IMT Mines Alès' IT and Networking engineer adapts to the new challenges in the IT field, brought about by the interconnection between software and systems/architectures (DevOps approach, full stack engineer, etc.). It also meets the growing demand for skills to ensure the security of information systems. Download the training program: https://www.imt-mines-ales.fr/sites/default/files/media/2025-10/infres_imt_mines_ales_apprentissage_10-2025_light.pdf

RESIIST for (**RESIlience des Infrastructures et Systèmes inTerconnectés**) is an ANR-funded project (18-CE39-0018 ANR - AAP Sécurité Globale et Cybersécurité - 2019/2023), bringing together 9 partners (AXELLIENCE, SNCF MOBILITES, LATTS and CEREMA) and teams from the Laboratoire des Sciences du Risque. Its aim is to propose a generic model of a critical infrastructure and the means to assess its ongoing resilience, based on models and data from the field.

Example of a thesis in progress :
WEPPE Alexandre. Anticipation of risk situations and system approach: contribution to modeling and real-time assessment of non-functional properties of critical infrastructure. Thesis supervision: DACLIN Nicolas, CHAPURLAT Vincent, TIXIER Jérôme, BONY-DANDRIEUX Aurélia. *On-line access: https: //theses.fr/s244368*

The idea is to use massive data to continuously assess the resilience of critical infrastructures. Data from various sources are interpreted to obtain relevant indicators reflecting several dimensions. By exploiting these indicators, infrastructure representation models and resilience models are developed. Intelligent visualization of these models enables decisions to be made and justified.

Roadmap 2024–2025

RESEARCH INNOVATION

- ✓ Organise events on interdisciplinarity in research.
- ✓ Integrate the concept of impact-driven research

EDUCATION

- ✓ Integrate new RES-related content into academic programs.
- ✓ Train teaching staff to integrate ecological and societal transitions into courses (ADAPTE 2026, Printemps des Transitions, etc.).
- ✓ Launch a new RES working group in collaboration with the Pedagogical Support Unit.

GOUVERNANCE

- ✓ Prepare the new strategy by focusing the school on robustness, as a key condition for a successful ecological and societal transition.
- ✓ Develop an Integrated Management System (IMS) covering all RES indicators.

SOCIAL POLICY/ DIVERSITY/ INCLUSION

- ✓ Continue the deployment of the Quality of Working Life (QVCT) policy.
- ✓ Implement the Disability Master Plan.
- ✓ Provide self-training on sexual and gender-based violence (SGBV), sign language training, and LGBTQI+ awareness training.
- ✓ Support staff at both individual and collective levels, through psychological support, skills assessments and coaching..

CAMPUS

Transformation of the Claudie Haigneré site into an eco-campus (pedestrian-friendly and accessible)
Implementation of multi-stream waste sorting in teaching and research buildings
Installation of electric vehicle charging stations
Biodiversity inventory across our campuses.

Environmental and Social Contribution

A commitment at the heart of the school's strategy

All reports: https://www.mines-ales.fr/ecole/imt-mines-ales/contribution-environnementale-societale

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