




INSTITUT
POLYTECHNIQUE
DE PARIS

**Master of Science
and Technology**



We are delighted that you are considering us for your Master's education.

Ecole Polytechnique is a highly renowned institution in the world of Science, Technology, and Research. We are also called "l'X" and have a rich history vibrant with passion and love for imparting knowledge.

Contents

4	Bonjour and Welcome to France
6	Our Rankings
7	Delve into the Xperience
8	Your Home away from Home
10	Campus
14	Some Relevant Information
16	Tuition Fees and Financial Aid
17	Boost your Employability
18	Applying to Ecole Polytechnique
21	Where We Are
22	Our MScT Programs
23	Glossary of the MSc&T programs

Bonjour and Welcome to

France

Europe is home to some of the world's most prestigious and honourable universities! Pursuing a master's education in Europe can offer incredible career options and advantages. A study from IES abroad found that 85% of current employees said that studying abroad helped them perform better in their education and careers. Did you know that France is ranked the 5th best country for studying abroad globally and the 3rd best country in Europe in 2024?



France - An ideal location for your studies!

Many factors make France a fitting option for career advancement, such as its high standard of living and safety. France is famous for all of it, be it research opportunities, inclusive education, or the wide variety of programs to choose from. It gives you easy access to other European countries, has the notable long-term advantage of Permanent Residence with progressive work rights for international students.

Studying in France proves to be a strategic choice in terms of finance and cost. France is also placed #1 country in Europe for the 5th consecutive year for worldwide investment attractiveness! Thanks to the rich history and culture-filled French lifestyle, there will be no shortage of learning and exploration, and you will have an unforgettable life experience, be it as a student or as someone living in the country!

Paris The "City of Lights" and much more!

We know that the Eiffel Tower and Louvre are widely known gold spots in Paris, but you will see numerous gems that are often overlooked. Adding to the hotspots are the lesser-known Sacre Coeur, Montmartre, Montparnasse, Versailles, Pantheon, and much more! The city's fascinating heritage and stunning architecture will leave you awestruck.

Living in Paris as a student, you will have many advantages with your student card. You can access cultural and Artistic locations such as 14 grand museums and specific exhibitions, 16000 libraries, co-working spaces, and certain study facilities for free. You will also benefit from reduced student prices across many restaurants, shops, and transportation.

In the heart of France, we have created an environment that fosters your personal and intellectual growth.

Ecole Polytechnique campus, located at Palaiseau, is just a short journey from the heart of Paris. Surrounded by greenery and nature, our campus is a gateway to the city's major attractions, including the iconic Chateau de Versailles, the bustling Saclay cluster and the French Silicon Valley.



Population - Around 65 million



Recognitions - 2nd most extensive railway network in Europe, Producer of 400 different types of cheese



Most known for - History, Arts, Science and culture, French cuisine, the "Tour de France," the Eiffel Tower and the Louvre, the Cannes Film Festival, Disneyland Paris, Architecture, Fashion, the most prominent French Revolution, and much more.



Currency - Euro



Weather: coldest months - December and January, hottest - July and August.





Delve into the Xperience

Your **Professors**

As we are consistently ranked as the top university in France and are upheld by world-class professors, our academic excellence is one of a kind. The high-level MSc&T programs train students to improve their know-how and adapt to fast-paced work and constantly changing environments.

In addition, you will be engaging with our industry experts and national and international collaborators, thus ensuring your ability to handle complex scientific concepts with hands-on training.

Our Academic and **Corporate Partnerships**

We have three major academic partners: HEC Paris (for the MSc&T Data Science for the business program), ENSAE (for the MSc&T Data and Economics for Public Policy program), and Telecom Paris (for the MSc&T Data and Economics for Public Policy program).

In addition, we are associated with strong corporate partnerships, such as those with Google, EDF, Enedis, Total Energies, and Suez, just to name a few.

Our partnerships and close industry collaborations aim to provide students with real-time case studies and team projects, field trips and conferences, 4 to 6 months of Paid Work placements across the globe, and an annual job fair with more than 200 companies from top French stock markets.



Innovation

At Ecole Polytechnique, we listen to every small idea and project in our classes or labs. We have strongly emphasized pioneering innovation, establishing our first innovation center, the "X-Up," in 2015. This center houses the institution's start-up incubator, accelerator, coworking spaces, and more. We have also started the X-Corporate, a support program for innovative SME and ETI projects!

As historically inclined intuitions, we know firsthand the vital significance of innovation and growth. Hence, our master's students are backed by our programs' innovative and radical course content.

Research and **Technology**

Our excellence is achieved through sheer passion for innovation and acquiring in-depth, multifaceted scientific knowledge. We do this by ensuring the primary caliber of our labs, which are filled with exceptionally advanced equipment and machinery.

We assembled our first laboratory in 1794 and are currently home to 23 exclusive labs in 8 major fields, including a Molecular Chemistry Laboratory, an Organic Synthesis Laboratory, and much more.

From the intricacies of Structural Cell Biology to the complexities of Condensed Matter in Physics, we foster a deep curiosity in our students. This curiosity is not just for the sake of knowledge but to equip them to apply their comprehensive understanding in practical, real-world situations.



Please check out the QR code to learn more about our Labs!



Your Home away from Home!



Mox Student Union Where creativity meets fun!

Ecole Polytechnique MSc&T students have exceptional opportunities to be part of a vibrant Student Board called the "MoX." The MoX is involved in orchestrating engaging events and activities across the campus. The team comprises of 8 council members, from the President to Event representatives. MoX is an admirable means of improvisation in student life integration on campus. You can get in touch with them at: mox@polytechnique.



AX Alumni – Continuing Connections

AX is an exclusive alum network with over 30,000 Alums worldwide. Upon graduating, you will receive the L'X directory, an online directory that helps you stay connected. You will also be part of the AX Careers and the Credit X-Minus privileges our Alumni offer.

The AX also offers several spaces across Paris for your professional and personal endeavours, including rooms equipped for video conferencing.



Please check out this QR code to learn more about Mox!



Supporting International students

Our international students are always given practical support and guidance from the beginning till the end, so although your classmates will be from different parts of the world, you can easily navigate, break the ice, and make friends for life.

Whether you're sporty, into cybersecurity, a tech enthusiast, or a lover of sustainability and the environment, we have it all! From settling into your student life to working after graduation, advice is always within reach.

We know that sometimes, experience can be the best teacher, so we will always support you in having the best possible experiences with us.



Please check out our QR code to learn more about our AX Alumni!



Mindful Well-being

As an international institution, we acknowledge the value of mental health and overall well-being in our students. Above all, we place primary importance on making our students feel welcomed and have a sense of belonging so that they can achieve their best results. We have our own Mental Health Awareness hotline, which offers free services to our students 24/7 along with a doctor, chiro, and a physician.



Please check out this QR code to learn more about our psychological assistance!





Aerial view of the Polytechnique campus



Dribble in Our Basketball

Our Swimming Pools



Strike in Our Martial Arts



Indulge in Debates



Racing and Marathon



















Kickoff in Our Football



Enjoy Live Music

Everything on Campus

With over 164 hectares, the Ecole Polytechnique campus includes everything you would need in your student life. There are more than 200 Student associations and 20 Sporting activities (including 8,000 km² of indoor sports and much more). We count almost 250 associations with a variety of cultural, artistic, social, scientific, religious and sporting activities that contribute to our student success.

-  Library
-  Bank
-  Catering
-  Hair Salon
-  Housing
-  Scientific Events and Talks
-  Research Labs
-  Post Office
-  Fire Station
-  Museum
-  Professional Events
-  Team Sports
-  Library
-  Fighting Sports
-  Cultural Events
-  Water Sports
-  Medical Facility



Stroll around the Bord de Lac

Cherry Blossom at Polytechnique





Some relevant information

BasiX

Our dedicated Welcome desk team will be able to greet and assist you. We also have a specific team to help you with your Onboarding processes such as Housing, Visa and more! Check out BasiX and find more information about them using the QR code below!



Please check out this QR code to learn more about BasiX!



Visale

If you live off campus you will need a guarantor for your housing and accommodations in France. You can either approach resources such as Garantme or have your parents or legal guardian act as a Guarantor. The French government offers free Guarantees to students via a resource called Visale.



Please check out this QR code to learn more about Visale!



CAF

The French government also provides financial aid to every students for their housing, regardless of the type of apartment they live in, whether an apartment, private studio, or shared. You can apply for this government allowance and receive money in your account every month. The amount you receive differs based on each type of lodgement and rent.



Please check out this QR code to learn more about Crous and Caf!



Health Insurance

You will be eligible for health insurance from the French government called Amelie. To apply for this insurance, make sure to get your Birth certificate translated into French and Apostille it.



Reduced Prices

In France, with your ISIC card, you can shop and avail yourself of entertainment and technological offers at student/discounted prices. There are countless shops providing this discount. For more information on this, check out the QR code!



On Campus Accommodation

Some on-campus accommodations are provided for students who apply for them. These accommodations are just a 5-minute walk from classes. As a result, many of our MSc&T students opt to reside at Ecole Polytechnique.

All our accommodations have an individual toilet and shower room. You will not need to purchase housing insurance, electricity, or heating contracts separately; everything is included in your rent. The cost of accommodation ranges from 495 Eur to 574 Eur. You must pay 300 euros as the security deposit, which will be fully cashed and returned based on any damage incurred.



Visa and Work Permit

Rest assured, converting your student visa (SLTS), which is initially valid for 3 months, to a one-year-long visa (VLTS) upon arrival in France is straightforward. You can find more information about this on the Campus France page. It is compulsory for students to get this conversion done as soon as they can after reaching France. This process should be completed within 3 months of arrival and would cost around 75 EUR per year.

After your studies and initial internship, you can reside in France as a "Job Seeker" on a "Job Seek" visa for 2 years.



Please check out this QR code to learn more about Visa and Work permits!



Tuition Fees and Financial Aid

Our Latest Tuition Fees



For our latest tuition fees and more information on the programs, please head on to our website:



Interest Free Loan

You also have the opportunity to apply for loans offered by the Ecole Polytechnique Foundation, which come with a 0% interest rate.

Check out the QR code below to learn more about the financial support programs. You may also apply for loans and other financial aid in your country.



Please check out our QR code to learn more about financial aids!



When considering your student budget, you can divide your expenses as follows:

Your tuition fees, Your living expenses (including rent, utilities, transportation, food, groceries and SIM), Other expenses include your visa, insurance, gym memberships, and entertainment.

Expense	Cost (EUR)
Accommodations at Ecole Polytechnique (range) (all utilities included)	495 - 575
Off campus accommodations (range)	600 - 800
Studio apartments (range)	700 - 900
Subscription to travel via Bus/ Trains/ trams RER (price after reduction Navigo)	375
Phone plans (most of them include unlimited calls and data)	10
Visa Conversion from SLTS to VLTS (one time cost)	75

A brief summary of your essential living expenditures

Scholarships



Ecole Polytechnique

All admitted candidates are automatically considered for the Polytechnique scholarship by our foundation, thereby needing no additional documents. *Be sure to apply for the first and second rounds, as only those who do so are eligible for these scholarships*, and the evaluations will be based on the overall profile of the students.

Scholarships outside Ecole Polytechnique

You can also apply for numerous scholarships outside of Ecole Polytechnique, such as the Eiffel Scholarship, Erasmus Mundus scholarships, and more. Check out the Campus France and the Campus Bourses listing for this.



Please check out the QR code to learn more about our scholarships.



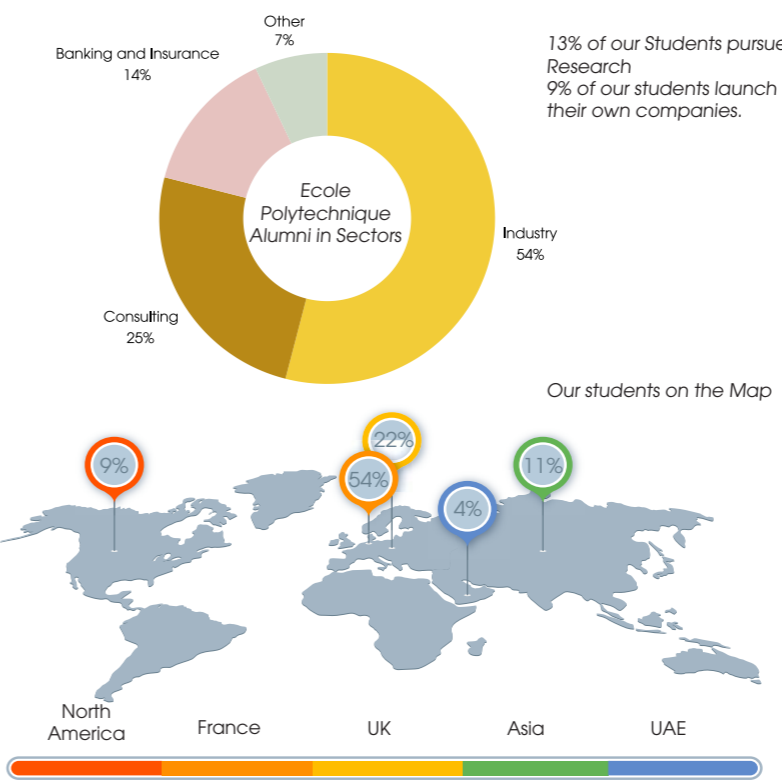
Boost your Employability

Specialist Support

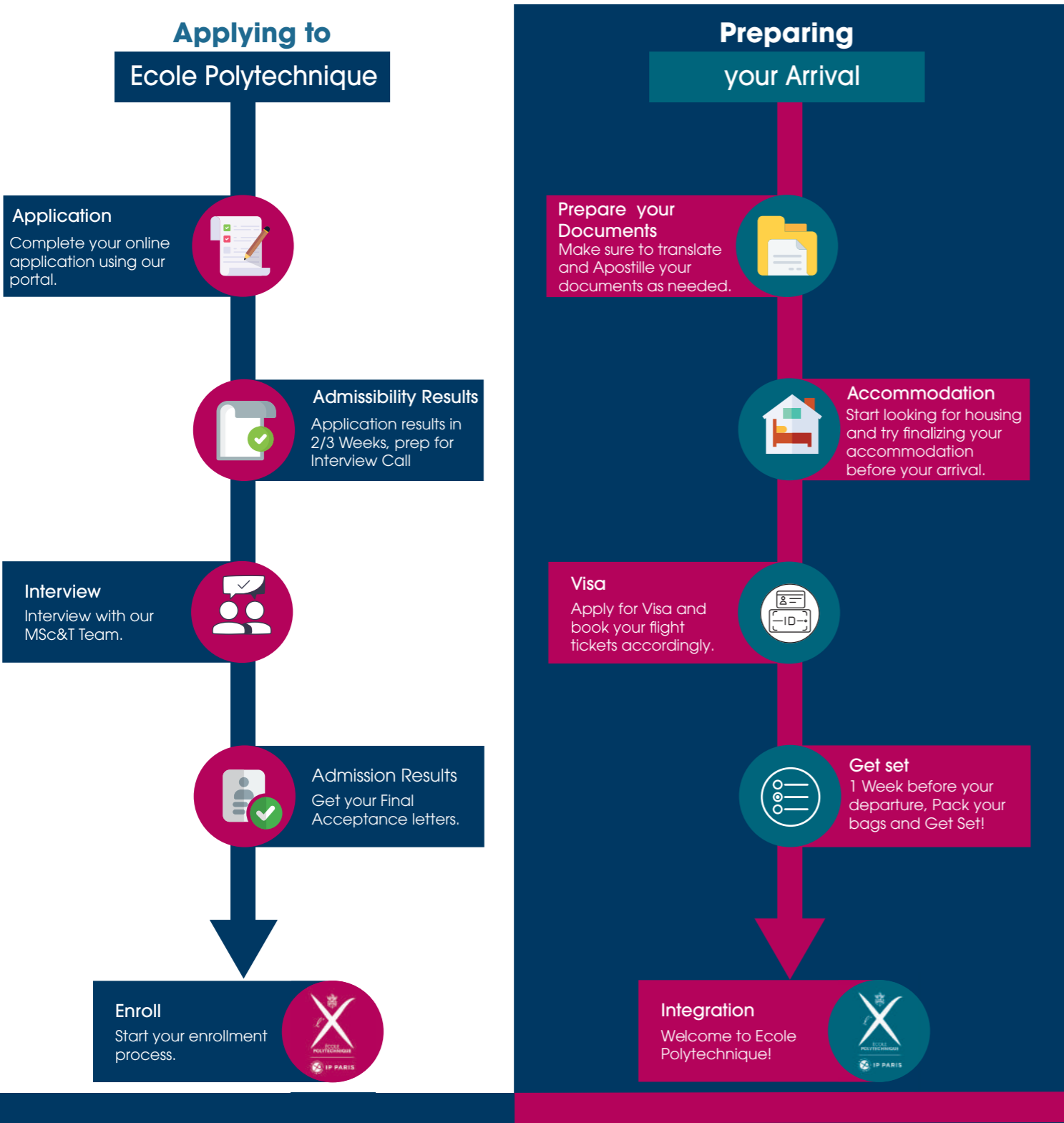
You will always be given personalized support from our friendly and informative career center. Whether you continue your studies, apply for a graduate job or an internship; our career center will be able to scrutinize your resume, help with interviews, and provide inputs to help you stand out from the crowd! With our mindful experts you can also expand on one of the most critical aspects of job hunting: soft skills. Through out the year you will have events such as Apér'orientations, Company Day, Career Forum, X Forum and much more.

Our tips and tricks for your internship applications

There are a few key aspects to consider while applying for an internship or job in France. Invest in learning French, keep your digital mediums updated, and tailor your resume for the numerous positions you apply for. Ensure you have a sound motivation letter and a good record of extracurricular activities. If all this seems too far away to think about and overwhelming, relax. Rest assured, at Ecole Polytechnique, you will receive tailored support from our Career Center team.



Applications and Preparing Your Arrival to France



Overview and Deadlines

It is advised to start your application procedures as soon as possible. We advise you to start early, research well, and gather all the necessary documents for your application.

Our informative Admissions team will guide you every step of the way, should you require it. The essential documents for your applications can be found in the QR below:

Please check out our QR code to learn more about Admission Deadlines!

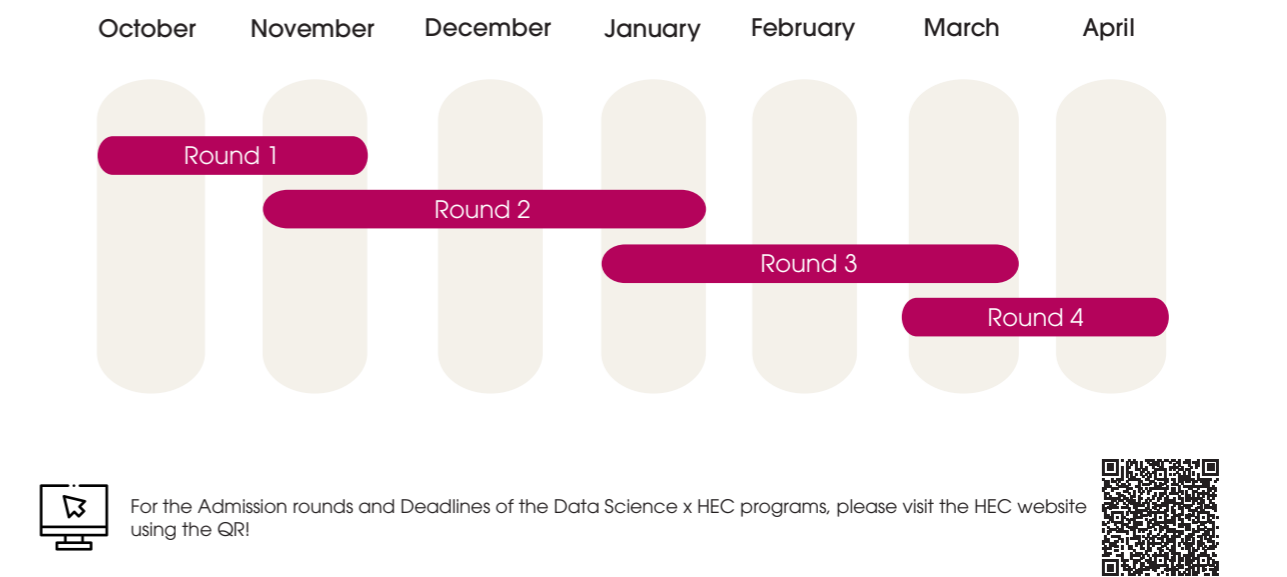
Language Requirements

For all our MSc&T programs, applicants must demonstrate full language proficiency in English.

We accept IELTS, TOEFL, and CAE scores, dating no longer than two years before the program. There is no requirement for French Language proficiency.

Please check out our QR code to learn more about Admission Requirements!

Admission Calendar





Where we are

What is the MSc&T?

Ecole Polytechnique's Master of Science and Technology Programs are two-year courses providing state-of-the-art multidisciplinary education. The courses offer in-depth scientific knowledge relevant to your career interest, whether it is new technologies, economics, data science, or sustainable development.

These professionally oriented master's degrees also equip you with the practical skills and initial work experience necessary to succeed in the industry, R&D, and public sectors. Sports, Humanities, and Languages are mandatory for all the MSc&T programs.

Our programs are designed for students who want to play a key role in leading technology and business organizations worldwide. As such, only highly qualified undergraduate students with a solid science and/or engineering background can enter these programs.

MSc&T students acquire high-level theoretical knowledge that is well balanced with practical skills. This is thanks to outstanding courses taught by Ecole Polytechnique's world-class professors, associated research centers, national and international academic partners, public Institutions, and top industry professionals.

Glossary of the MScT programs

Computer Science

- Visual and Creative AI
- Trustworthy and Responsible AI
- Internet of Things: Innovation and Management
- Cybersecurity
- Science and Technology in Extended Cinematography



Environment

- Energy Environment: Science, Technology and Management
- Environmental Engineering and Sustainability management.



Economics

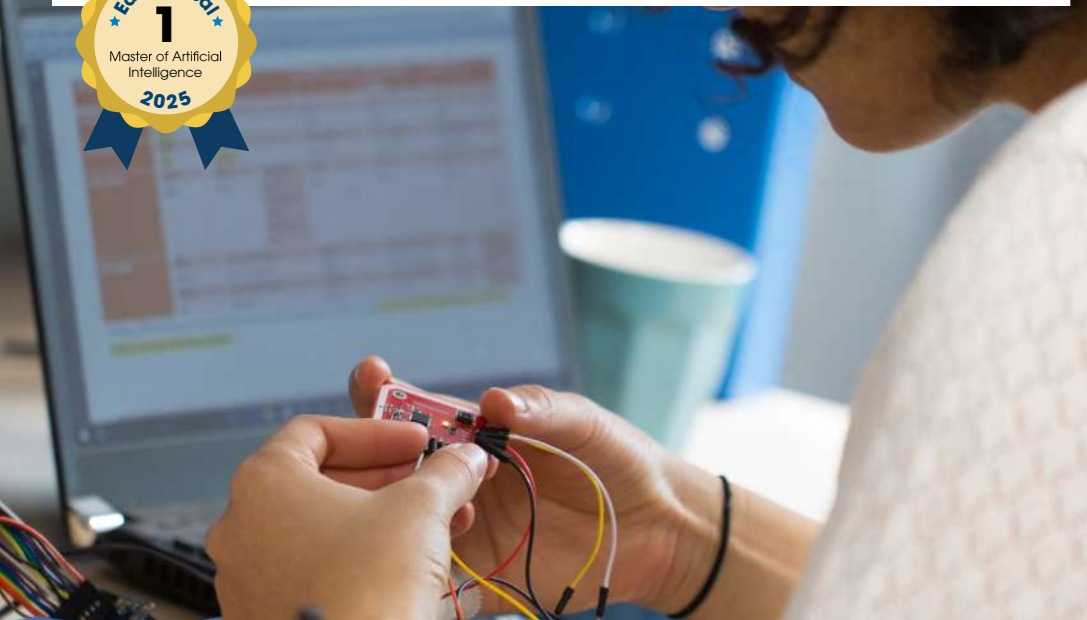
- Economics, Data Analytics and Corporate Finance
- Data and Economics for Public Policy
- Economics for Smart Cities and Climate Policy



Data Science

- Data Science and AI for Business X - HEC
- Double Degree Data and Finance X - HEC

Visual and Creative Artificial Intelligence



Meet our Program Directors:
Johannes Lutzeyer
Aymeric Dieuleveut



Visual & Creative Artificial Intelligence is a two-year master's program, taught entirely in English and designed for highly qualified and internationally oriented students. The program offers high-level scientific courses taught by professors from École Polytechnique and partner companies.

The program will also give you keys to becoming the next creators of innovative applications that apply artificial intelligence to visual content to provide new solutions to creative tasks.

Academic Prerequisites

- Ideally, candidates should hold a **double bachelor's degree in mathematics and computer science**. Alternatively, a Bachelor's degree in either field is acceptable, provided the applicant has a **solid background in the other field**.
- To **enter directly in the M2**, applicants should hold **a master's degree or a master 1 level** (bachelor with 240 ECTS or more) in **Applied math including machine learning, algorithmic and visual computing courses**, or in **Computer science including a strong background in visual computing, math and machine learning**.

Overall Structure of the Program

This program integrates **computational sciences** with the vibrant field of **visual computing**. The **first year** provides a **robust introduction** to multimodal artificial intelligence, covering the fundamentals of machine learning and deep learning. The **second year dives deeper** into advanced AI techniques, such as deep reinforcement learning and large language models, while broadening your skills in visual computing. The program **concludes with a 5-to-6-month internship**, in either a corporate R&D center or a research laboratory.

Module Breakdown

For detailed information on all modules please visit the QR!

What You Can Become

- Virtual Reality Developer
- Mobile App Developer
- E-Commerce Specialist
- Autonomous Systems Engineer
- AI and Visual Computing Expert.

About a third of our students pursue a doctorate often in the form of "CIFRE thesis" in Companies.



Trustworthy and Responsible Artificial Intelligence



Meet our Program Directors:
Sonia Vanier
Jesse Read



TRAI is a **two-year master's** program, taught entirely in English and designed for highly qualified and internationally oriented students. The program offers **high-level scientific courses** taught by professors from École Polytechnique and partner companies.

The originality of the program is to emphasise not only technical advances and cases, but also to highlight the **practical and social limitations of modern AI**, the **implications** of such limitations, and how to **mitigate** such issues.

Academic Prerequisites

- Ideally, candidates should hold a **double bachelor's degree in mathematics and computer science**. Alternatively, a Bachelor's degree in either field is acceptable, provided the applicant has a **solid background in the other field**.
- To **enter directly in the M2**, applicants should hold **a master's degree or a master 1 level** (bachelor with 240 ECTS or more) in **Applied math including machine learning, algorithmic and visual computing courses**, or in **Computer science including a strong background in visual computing, math and machine learning**.



Overall Structure of the Program

The **first year** focuses on **multimodal artificial intelligence**, from the foundations of machine learning and optimization, to advanced techniques including reinforcement learning. The **second year** includes **more in-depth courses** in machine learning (such as deep reinforcement learning and large language models), networks optimization and graphs, verification and evaluation, transparency, privacy.

Module Breakdown

For detailed information on all modules please visit the QR!

What You Can Become

- AI Ethics Specialist
 - AI System Auditor
 - AI Research Scientist
 - AI Solutions Architect
 - Regulatory Compliances Officer
- These roles may be undertaken **across different industries** such as healthcare, security, ecological transition, technology, energy, transport, finance and beyond.

Internet of Things: Innovation and Management



Meet our Program Director:
Thomas Clausen

The Internet of Things: Innovation and Management Master of Science and Technology program is designed to **train future leaders of the digital revolution**. Our students learn to **create** new objects, **enhance** the use of existing ones, **develop** business models, **advance** understanding through research, and do much more.

Academic Prerequisites

- Bachelor's Degree (or Licence): **Science, Technology, Engineering, and Mathematics**.
- Applicants from other educational backgrounds may also be considered, provided they have a solid skill set in the above-mentioned subjects.

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

In the first year, all students take the **same foundational** classes.

In the second year, they choose from a **diverse range of classes** to specialize in connected objects, **guided by their Graduate Project** to align with their academic goals.



The flexibility of our program and hard skills in terms of Java Programming and Machine Learning lectures really helped me identify the areas of my interests and I use them in a real-world environment.

What You Can Become

- Software Investigation Engineer in Robotics
- Software Engineer
- IoT Product Expert
- PhD students



Cybersecurity

Overall Structure of the Program

The program provides a **robust framework** and comprehensive **technical expertise** in **security, privacy, and cryptography**. Participants will gain the necessary knowledge and competencies to **strategize, oversee, and uphold** the security measures of an organization's cloud infrastructure and applications.

What You Can Become

- System Design
- Architecture
- Safe Maintenance
- Audit
- System testing
- Incident Response

Experience Based Learning

- Activities (ex: Capture the Flag)
- Group Workshop
- Seminars
- Internship



Meet our Program Directors:
Olivier Blazy
Thomas Clausen



With the Ecole Polytechnique Cybersecurity program, students will acquire:

- A **high-level** understanding of the broad field of cybersecurity.
- Students will develop concrete operational skills within the three core activities of **defensive and offensive cybersecurity** (creating secure systems, ensuring ongoing security, and handling system security compromises).
- An understanding of **security professionals'** roles within each of these activities.

Academic Prerequisites

- License/bachelor: **IT, applied mathematics, engineering, or electronics**.
- **Computational chemistry/biology/bioinformatician**.
- Applicants from other educational backgrounds may also be considered, provided they have a solid skill set in the above-mentioned subjects.

Module Breakdown

For detailed information on all modules please visit the QR!



Science and Technology in Extended Cinematography



Meet our Program Director:
Pascal Guehl
Vincent Iowy



The first pillar of this program is a **robust scientific and technical foundation**, covering 3D scene acquisition, interaction techniques for 3D content creation, animation, and image synthesis, real-time 3D, as well as image and sound processing. It incorporates **new capture technologies, AI-based reconstruction, and augmented reality techniques**.

The second pillar includes **interdisciplinary courses** that offer a comprehensive perspective on the processes and challenges within the film and audiovisual industries, with hands-on projects in **virtual production** developed in collaboration with **industry professionals, such as directors of photography and VFX supervisors**.

Academic Prerequisites

Ideally, candidates should hold a **double Bachelor's degree in Mathematics and Computer Science**. Alternatively, a Bachelor's degree in either field is acceptable, **provided the applicant has a strong skill set in the other**.

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

This curriculum spans **two years and follows a work-study format (French "alternance")**, structured across **four trimesters**. Students alternate between **three-month academic periods** and **three-month professional placements** in partner companies. The Master's program is currently aligned with the **professional certification of the Master's in Computer Science from Institut Polytechnique de Paris (IP Paris)**, as part of the France Compétences framework RNCP.

What You Can Become

- Film and Visual Effects Artist
- Video Game Designer/Developer
- Interactive Media Specialist
- Research Scientist
- Innovative Product Developer

During the academic trimesters, students spend half a day each week on a creative project, allowing them to explore a technology or subject of their choice. They also have intensive periods on set that offer them hands-on experience in virtual production.



Energy Environment: Science, Technology, and Management



Meet our Program Directors:
Eric Johnson
Simone Kotthaus



Energy transition is one of the most significant challenges faced by our economy and society today.

This MSc&T provides scientific expertise on **renewable energy production and storage modes** and their impact on electrical networks. It also explores the knowledge of **climate change, greenhouse gases, and air pollution** to understand societal demand.

This program trains engineers to provide innovative solutions for energy transition in **large companies, SMEs, or start-ups**.

Academic Prerequisites

- Bachelor's Degree: **Physics, Electrical Engineering, Chemical Engineering, Mechanical Engineering, or Energy Science**.
- Bachelor of Science: **Physics or "Diplôme d'ingénieur"**

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

The program's 1st year is designed to provide **comprehensive scientific understanding**, covering various topics crucial to renewable energy sources and the environment. In the 2nd year, students are allowed to **build these foundations** and explore topics in much **greater depth**, as well as the complex interplay between **renewable energies, the environment, and the economy**.



In fact, unlike other MSc&T programs, the STEEM one has the advantage of offering a variety of different courses and students can choose the ones matching their interests, therefore shaping their future careers.

What You Can Become

- Project Manager for New Photovoltaic Installations or Systems.
- R&D Engineer.
- Researcher in Atmospheric Chemistry.
- Researcher in Thermal Engineering.
- Photovoltaic Engineer
- Sustainability Researcher.



Environmental Engineering and Sustainability Management



Meet our Program Directors:
Edith Nicol
Olivier Chapleur



The Environmental Engineering and Sustainability Management MSc&T is a 2-year program providing students with **real-world technical expertise** on environmental issues, including soil and water pollution diagnosis, treatment and valorization processes, and **an in-depth understanding** of their development's economic and social challenges.

The technical and management classes cover **international regulations and ethical issues**.

Academic Prerequisites

- Bachelor's degree: **Engineering, Chemistry, Physics, Geology, or Biology**.
- Applicants with other degrees may be considered, provided they have a strong background in the above-mentioned subjects.

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

The program aims to train students to become **project managers** who tackle **various environmental challenges**. While most programs on environmental issues only provide students with technical skills, this MSc&T also prepares you for **managing positions**.



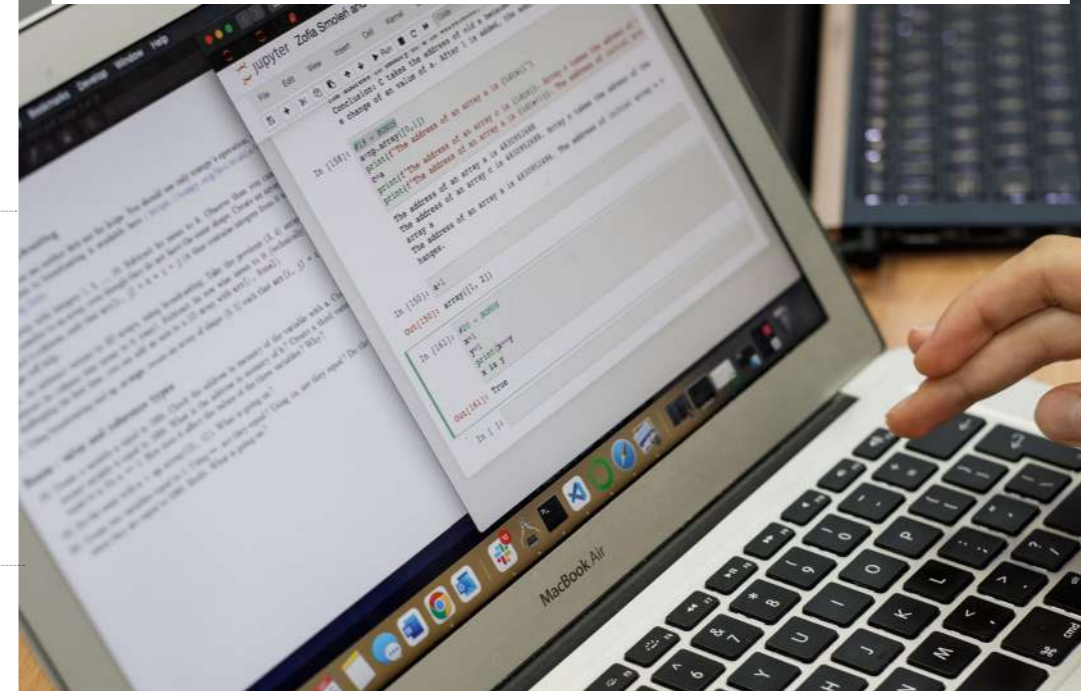
"As a consultant, I mainly work on the calculation and analysis of emissions generated by companies and find reduction measures for them."

What You Can Become

- Carbon Footprint & Life Cycle Analysis Project Manager.
- Corporate Environmental Strategy Lead
- Sustainable Development Compliance Officer
- Pollution Remediation & Waste Management Specialist
- Water & Soil Treatment Engineer
- Environmental Scientist



Economics, Data Analytics and Corporate Finance



Meet our Program Director:
Marie-Laure Allain

The "Economics, Data Analytics, and Corporate Finance" Master of Science and Technology provides students with essential skills for **strategic decision-making** in the corporate world. The program combines **three complementary disciplines** that are usually taught separately at this level of study: **microeconomic analysis, corporate finance, and data analytics**.

Academic Prerequisites

- This MSc&T program is primarily designed for students with a strong foundation in **Mathematics and Economics**. Its highly quantitative approach requires **a solid command of Mathematics**.
- Open to students with a **finance or engineering background**.

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

The first year primarily involves **theory-based teaching**, focusing on **fundamentals and methodologies** of the disciplines studied; the second year offers more **applied, project-oriented courses** and includes one of the **two specializations: Finance or Economics**.



"The theoretical courses help us build a fairly rational way of approaching problems and give us a beneficial thought structure for everyday life."

What You Can Become

- Entrepreneurs
- Investment Banking
- Lead Investment Analyst
- Systemic Risk and Financial Institutions Consultant
- Data Scientist
- Engineering
- Photovoltaic Engineer
- Sustainability Researcher.



Data and Economics for Public Policy



Meet our Program Directors:
Pierre Boyer
Franck Malherbet



The MSc&T “Data and Economics for Public Policy” meets modern society’s grand **challenges**. This program is entirely taught in English and is **unique** among **leading French engineering schools** that have trained high-level policy leaders for over **two centuries**.

The program also equips students with the knowledge and understanding needed to **reform and enhance public policies** - focusing on the quantitative methods of framing, analyzing, and resolving public policy problems.

Academic Prerequisites

- **Foreign or French Engineers’ degree** (or equivalent) with solid skills in **Mathematics and a minor in Economics**.
- French students with excellent results in a licence in **Applied Mathematics or Econometrics**.

Module Breakdown

For detailed information on all modules please visit the QR!

Overall Structure of the Program

With this program, students gain **problem-solving, quantitative, and managerial skills**. At a time of heightened concern about labor, poverty, social inclusion, education, health, regulation and competition this MSc&T program gives students the **tools to develop effective, evidence-based solutions**.

Decision-making in public affairs is now more informed by data than ever before. The goal of this MSc&T is to offer a program at the nexus of data science, statistics, and economics, relying on the expertise of the leading French “grande Ecole” engineering schools. The program focuses on the increasingly central role of data in framing, formulating, and implementing contemporary public policies.

What You Can Become

- Public Policy leaders.
- Advocates in Government policies.
- Analysts/ Consultants in Private sectors, in France and abroad.
- With this course, students also meet the European prerequisites for a PhD program.



Economics for Smart cities and Climate Policy



Meet our Program Director:
Patricia Crifo

The “**Economics for smart cities and climate policy**”(ESCLIP) MSc&T provides students with academic training and real-world case studies essential to understand how cities of the 21st century can address the profound changes faced with **new technologies, urban services and mobility needs while adapting and mitigating climate change**.

Academic Prerequisites

- Bachelor’s Degree (or Licence) in **Economics, Mathematics, Civil Engineering and/or Transportation Studies**
- Engineering Degree with skills and interest for **mathematics and economics**.
- Applicants from other educational backgrounds may also be considered provided that they have a solid skill set in the subjects mentioned above.

Module Breakdown

For detailed information on all modules please visit the QR!



Overall Structure of the Program

In this program, students will gain a strong foundation in economic skills. Additionally, they will have the opportunity to gain international exposure through a 4-6 month internship each year in France or abroad.



“The MSc&T in Smart Cities framework allowed me to see how cities develop by managing their assets and energy from an economic perspective.”

What You Can Become

- Smart City Project Manager or Urban Planner
- Sustainability Consultant
- Climate Policy and Environmental Data Scientist/Analyst
- Energy and Sustainability Manager
- Green Policy Advisor.

Data Science and AI for Business X - HEC



Overall Structure of the Program

1st Year At Ecole Polytechnique - Get **thorough training with hands-on hard skills using programming languages**. You will also explore Financial Markets and Financial Data Numerical processing.

2nd Year At Hec Paris - In your second year, you will join the Master in International Finance program at **HEC**. You will get a **full spectrum** training on the fields of Finance and join an **elective concentration** dedicated to Data and Finance.



"Ecole Polytechnique benefits from its excellent alum base and organizes many events to allow students to meet professionals with the same background. Firms also have recruiting teams dedicated to the Ecole Polytechnique pool of applicants."

What You Can Become

- Entrepreneurs
- Data Scientist
- Consultant
- Business Developer
- General Management



Academic Prerequisites

- Bachelor's degree: **Data Science, Engineering, Business and Economics**.
- A strong background in **Mathematics is mandatory**, as mathematical aspects of Data Science are the core of the 1st year.

Module Breakdown

For detailed information on all modules please visit the QR!

Double Degree Data and Finance X - HEC



Overall Structure of the Program

1st Year At Ecole Polytechnique - Get **thorough training with hands-on hard skills using programming languages**. You will also explore Financial Markets and Financial Data Numerical processing.

2nd Year At Hec Paris - In your second year, you will join the Master in International Finance program at HEC. You will get a **full spectrum** training on the fields of Finance and join an **elective concentration** dedicated to Data and Finance.

What You Can Become

- Investment Banking
- Financial Markets
- Consulting
- Data Science
- General Management
- Business Development

Academic Prerequisites

Strong quantitative skills: **Data science and Mathematics**.



"Data science is **shaping the world of finance** at many different levels. This double degree offers an impressive blend of **quantitative topics, technical skills, financial markets, and broader business and investment fields**. Everything you will need to make a difference in modern finance!"
Stefano De Marco, Program Director

Module Breakdown

For detailed information on all modules please visit the QR!









Meet our Program Director:
Stefano De Marco
Evren ORS



This program is a double degree offered jointly by **Ecole Polytechnique and HEC Paris**. It combines the academic expertise of the **best engineering school** in France with that of the **best business school** in France.

This Double Degree's critical aspect is providing students with the tools needed to solve real problems using **structured and unstructured data masses**. We teach them to **ask the 'right' questions** (from statistics, 'business,' and finance perspectives) and use the **appropriate mathematical and IT tools** and methodology to answer these questions.

Connect with us

		
Master of Science and Technology - École Polytechnique	master_polytechnique	Master of Science and Technology - École Polytechnique
		
Chat with us at +33 764 86 55 20	polytechnique_ students_x	Chat with us in Unibuddy - programmes. polytechnique/chat-with- our-students

Contact us



Rte de Saclay, 91120 Palaiseau



+33 6 04 93 98 66



<https://www.polytechnique.edu>

Picture Credits - Jeremy Barande
Issue - March 2025

