



UNIVERSITÉ DE TECHNOLOGIE DE BELFORT-MONTBÉLIARD

Become a UTBM Engineer

A different vision of the world

Benefit from a renowned **ENGINEERING SCHOOL PROGRAM IN A UNIVERSITY ENVIRONMENT**



Choosing UTBM means building your own career plan through a tailored education program. UTBM boasts an internationally-oriented, scientific, technological, human, and entrepreneurial education, open to worldwide cultures.

If you want companies to recognize you as the free and responsible person to whom they can entrust their work, come study at UTBM.

Ghislain Montavon
Director of UTBM

2760



students
(engineering degrees,
masters, and PhDs)

7th



biggest* engineering
school in the country

*based on the number of
graduates out of 205 schools

572



international students
from 64 different
countries

210



teachers and
associate professors

647



courses, 83 of
which are taught in
foreign languages

9800



partner companies

262



partner universities
on 5 continents 48 dual
degrees abroad

1



international
campus
in Shanghai - UTSEUS

561



engineering
students graduated
in 2021

11231 depuis 1999

18,5 %



of new graduates
work in
34 foreign countries

UTBM boasts

10 REASONS to choose UTBM

EMPLOYMENT AND SALARY

→ On average, it takes 1,1 month for graduates to find their first job
→ 49.5% of our students are hired by the company after their internship or apprenticeship
→ 37.8K average annual starting salary

SPECIALIZED TEACHING

→ 5 majors for engineering students :
• Computer science
• Energy
• Industrial Systems
• Mechanical engineering
• Ergonomics and Mechanical engineering
→ 4 majors for engineering apprentices :
• Computer science
• Electrical Engineering
• Industrial logistics
• Mechanical engineering

QUALITY STANDARDS

→ Degrees accredited by the CTI (French Engineering Degrees Commission)
→ Our engineering degrees have all been awarded the EUR-ACE Label



TEAM PROJECTS

→ Experiential learning of team and project management
→ Innovative projects under the supervision of lecturer-researchers, laboratories, and companies
→ Technological projects supported by our partner companies
→ A unique yearly event: Innovation CRUNCH Time©

A TAILORED EDUCATION PROGRAM

→ Build your course of study according to your career plan (only for engineering students)
→ Meet your professors once a semester to guide you with your course program

STUDENT LIFE

→ Open and accessible to all, it is overflowing with cultural and sporting events, packed with new initiatives and tried-and-ready favorites. You are at the heart of a wonderful countryside and can also enjoy music festivals like the Eurockéennes and FIMU!

EDUCATION FORMAT

→ A renowned Engineering School and a University of Technology at the cutting edge of research & innovation
→ You can enroll after graduating from high school or anytime before your 4th year of academic studies

HUMANITIES

→ Aim to train engineers to be good citizens, responsible managers, and creative entrepreneurs

INTERNATIONAL

→ 8 foreign languages taught by native speaker
→ Students must go abroad for at least 4 ½ months (6 months recommended)

A COMMITED UNIVERSITY

→ 5 majors for engineering students mentioned on the diploma
→ We are certified ISO 14001-environmental management-and ISO 45001-occupational health and safety



/ WATCH UTBM'S
PREVIEW VIDEO /

Sources: 2020 Employment Survey and UTBM's 2021 Activity Report

Choose a **FIVE-YEAR STUDY PROGRAM**

After your high school diploma, reap the benefits of an integrated preparatory cycle in an engineering school

- The first two years allow you to get some experience so you can choose the right engineering major
- A technological culture instilled right from the beginning of your studies
- A solid scientific, technical, and human course of study
- An introduction to the industrial field starting from year 1
- An international experience is possible starting from year 2 either by interning or studying abroad for a semester
- The ability to pursue the major of your choosing at the end of the Preparatory Cycle



Distribution of the Learning Outcomes during the Preparatory Cycle

- 46% Scientific Knowledge
- 29% Techniques and Methods
- 19% Humanities (Technology, Science and Society, Languages...)
- 6% Internship

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A DIFFERENT VISION of the world

A Study Program with Strong Human Values

Throughout the study program, the Humanities courses will train you to be a multi-faceted engineer, an expert in your field and a responsible citizen, i.e. someone who is open to the world, considerate of others and the environment. We want our engineers to be critical, introspective, and innovative so they can make technology meaningful. We also want you to be highly trained professionals, showing good social skills and confidence in the business world.

We offer five different "Science, Technology and Society" (T2S) pathways:

- International Careers • Innovation and Technological Change • Digital Humanities
- Entrepreneurship and Management
- Technology, Environment, Sustainability

Choose Between 8 Languages

German, English, Chinese, Korean, Spanish, Italian, Japanese, and Russian.

International exams certified in English, German, Spanish, Chinese, French as a Foreign Language, Japanese, and Korean.

Go Abroad for an International Experience

During your five-year or three-year course program at UTBM, you are required to go abroad for an internship or an exchange semester. Studying abroad will make it easier for you to adapt to different environments and situations and will allow you to improve your language skills while giving you a completely new perspective of the world.

With the ECTS (European Credit Transfer System), UTBM enables students to take classes all around the world. You can also complete a dual degree with one of our partner universities such as the HE-Arc in Switzerland, ETS/UQAC/UQAC in Canada, Universidad de Oviedo in Spain, the National Central University (NCU) in Taiwan, the Federal University of Technology of Parana in Brazil, the Karlsruhe University of Applied Science in Germany, and more.

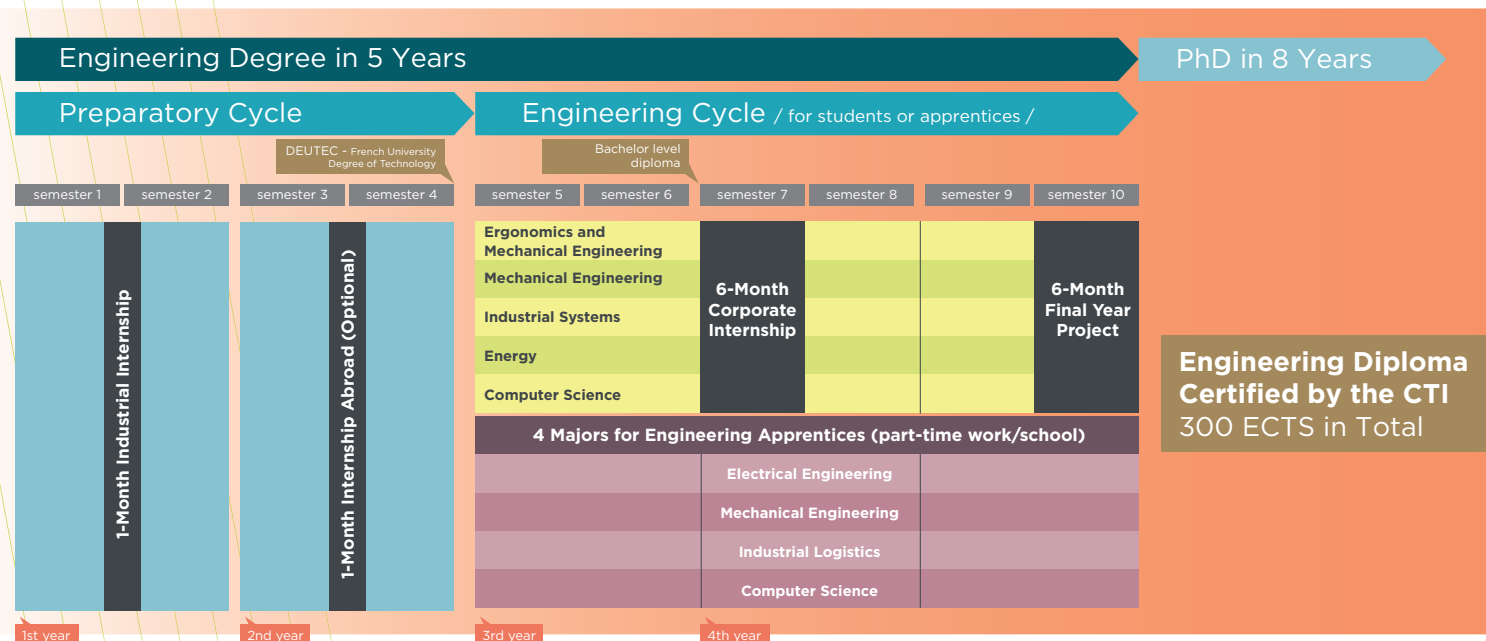
An International Campus

We boast 20% international students who come from 67 different countries. We value the diversity created by this international presence. As such, some of our "Science, Technology and Society" pathways (T2S) are taught in English.

On the UTSEUS international campus operated by the three Universities of Technology along with the Shanghai University, you can spend a semester in China starting from the last semester of the preparatory cycle and you can also pursue the new UTSEUS Dual Master's Degree in Mechatronics Smart Cyber Physical Systems for a year and a half (beginning Fall 2022).



From your high school diploma onwards, **you can join UTBM at different stages throughout the five-year program**



CRUNCH, A FORCE FOR INNOVATION



UTBM Innovation CRUNCH Time®

Designed like a hackathon, CRUNCH Time is a supersized educational event that brings together not only UTBM students but also students from partner universities in France and abroad. Over a four-day period, some 1600 students work in 160 different groups, utilizing their skills to complete project challenges suggested by companies, organizations, and local agencies.

CRUNCH Time revolves around the process of Design Thinking and stimulates the quick realization of ideas. Throughout the event, students must work together just like they would in a company setting. For project initiators, it is also a great opportunity to step out of their structure and meet a new generation of engineers that will one day be a part of their teams.



Innovation CRUNCH LAB®

Located at the heart of UTBM and Techn'hom, the Innovation Crunch Lab is a technology-based collaborative space that is open and accessible to everyone. Students, researchers, industrial groups, microbusinesses/SMEs, individuals and makers can all meet and connect in this unique space. Crunch Lab is a true technological toolbox where you can find hundreds of digital and multimedia equipment, as well as different areas (coworking, makerspace, ideation) in which skills can be developed and innovation facilitated. This place also offers custom training programs, making it possible for everyone to discover and grasp new technologies. Inspired by maker culture, the idea behind the Crunch Lab is to go from Design Thinking to Design Doing so as to best support projects. It is truly the place where we can rethink innovation together.



COMPANIES, the wealth of our partnerships

We boast an outstanding economic environment. UTBM is at the heart of France's biggest industrial region, and many technological industries are located in the Belfort-Montbéliard area. From its creation, UTBM has developed close business links with numerous companies, from global leaders to high-tech SMEs. This closeness with the industrial world is one of our biggest strengths.

The Industrial Internship: Your Path to Professional Life

Benefit from outstanding internship experiences, either 46 weeks in total (for the three-year course program) or 54 weeks in total (for the five-year course program).

- > A 1-month industrial internship during the 1st year
- > A 1-month internship abroad (optional) during the 2nd year
- > A 6-month internship as an engineering assistant during the 4th year
- > A 6-month final project during the 5th year

The Corporate Relations staff will help you identify and contact companies that correspond to your needs and requirements, whether in France or abroad.

The Apprenticeship Training: A Direct Link with Companies

Offered in partnership with the ITII of Franche-Comté (Institute of Industrial Engineering Techniques), the apprenticeship takes place over the course of three years during which you will be sharing your time between school and on-the-job training. As part of your apprenticeship, you will also have to complete a 12-week experience abroad. Apprentices can choose between four engineering majors.



Courses Taught by Engineers and Working Managers

Nearly 15% of our classes are taught by professionals who are experts in their field and whose experience bring an invaluable perspective.

Companies Work Side by Side with Students

Throughout the year, UTBM hosts job conferences, technical conferences, as well as internship, apprenticeship, and career fairs. Thanks to UTBM's corporate network, students can successfully connect with companies in France or abroad.

In addition to these larger events, students can always connect with managers and UTBM alumni who might help them develop their specific career plan.

Code Name: P2I

The Innovative Industrial Project is a particular feature of UTBM. Students are immersed into a company or a research lab where they work in teams and must comply with specifications, budget constraints, and project deadlines.

/ Office of Corporate Relations / +33 (0)3 84 58 30 96 / relations.entreprises@utbm.fr





9 MAJORS

TO BECOME AN ENGINEER



ENGINEERING
DEGREE
RECOGNIZED
BY THE FRENCH
GOVERNMENT



MASTER'S DEGREE
RECOGNIZED
BY THE FRENCH
GOVERNMENT

UTBM offers 9 majors from which you can choose before starting the three-year engineering cycle.

During the 3rd semester of the engineering cycle (for students), you will also choose a specialization that matches your career plan.



/ CHECK
THE COURSE GUIDE /

Your Missions

→ Design, develop and deploy software, IT systems and networks for all kinds of industries and organizations using theoretical and practical skills related to artificial intelligence, virtual and augmented reality, networks, systems, data, and robotics

Career opportunities

Network Administrator, Database Administrator, Design Engineer, CIO, Project Manager, Commercial Engineer, QA Engineer, Research Engineer, Computer Vision Engineer, Robotics Engineer, IT Project Manager, Data Engineer, Artificial Intelligence Engineer

MAJOR IN Computer science

for engineering students

CHOOSE 2 SPECIALIZATIONS OUT OF 9

→ Design and Deployment of a Network Infrastructure

Specialize in designing wired or wireless network infrastructures, deploying Local and Wide Area Networks, as well as radio networks such as cellular networks or networks of communicating objects

→ Data Science

Design and develop databases, master business intelligence tools, master techniques and software needed to manipulate data, especially big data, and learn how to process and utilize the data

→ Methods and Tools for Software Deployment

Specialize in designing and deploying "large-scale" software that can meet quality and sustainability requirements

→ Virtual Worlds, UX, UI

Specialize in virtual and augmented reality in the fields of entertainment, education, industry, and health

Design software that can account for technological as well as human aspects

→ Robotics and Embedded Systems

Specialize in robotics and embedded software using specific systems, real-time systems and Global Positioning Systems

→ Advanced IT Development

Specialize in understanding programming languages, developing complex, distributed software, and mastering blockchain security algorithms

→ Artificial Intelligence

Specialize in AI techniques: multi-agent systems, machine learning and optimization

→ Network Virtualization and Safety

Specialize in system virtualization and safety as well as system and network management

→ Computer Vision

Become an expert in image collection, treatment and analysis, and apply your skills to the field of autonomous driving, robotics and medical imaging

MAJOR IN Computer science

for engineering apprentices

in partnership with the ITII (Institute of Industrial Engineering Techniques) Nord Franche-Comté

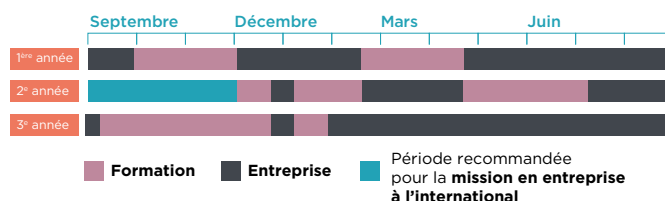
1 SPECIALIZATION

→ Information Systems Engineering

Specify, analyze, design, model, manage and industrialize intelligent and complex computer systems

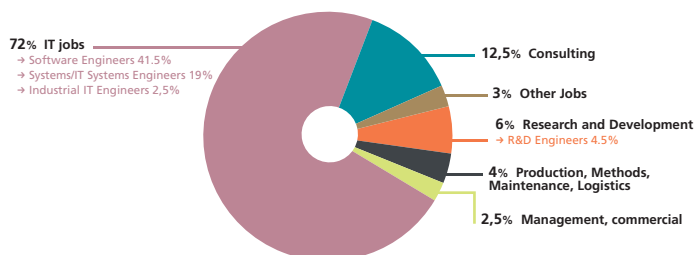
Run projects, master information collection and processing within a big data environment to support decision-making

/ SANDWICH COURSE SCHEDULE /



MAIN JOBS

held by graduates (engineering students) according to the 2021 Employment Survey



Your missions

- Design, control and innovate energy management systems and electrical energy production, conversion, transportation, and distribution systems
- Run development projects in electrical and energy engineering

Fields

Electrical and Electronics Engineering, Industrial IT, Automation, as well as Digital, Virtual and Thermal Simulation

MAJOR IN Energy

for engineering students

4 SPECIALIZATIONS

→ Electrical Energy Production

Develop and run conventional, renewable, intermittent and hybrid power generating facilities

→ Networks and Conversion of Electrical Energy

Develop, design, and control energy conversion and storage systems, operate and monitor embedded and stationary electricity networks

→ Electronics and Embedded Systems

Become an expert in the study of embedded systems: real-time control, monitoring, electric hybridization, electromagnetic compatibility, hybrid and electric vehicles, railway electric traction

→ Smart Buildings and Energy Efficiency

Become an expert in the field of energy efficiency in buildings, home automation, bioclimatic design. Develop smart energy production and management systems

MAJOR IN Electrical Engineering

for engineering apprentices

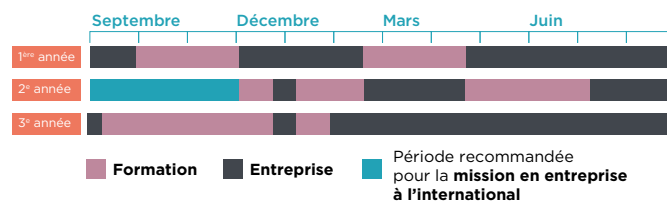
in partnership with the ITII (Institute of Industrial Engineering Techniques) Nord Franche-Comté

1 SPECIALIZATION

→ Electrical Engineering

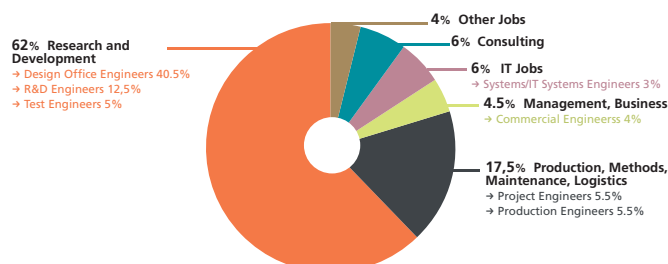
Study, size, simulate and implement electrical systems in the industrial, transport, energy production sectors, and more. Run and manage industrial projects associated to industrial IT, electrical, electronics and automation

/ SANDWICH COURSE SCHEDULE /



MAIN JOBS

held by graduates (engineering students) according to the 2021 Employment Survey



Your missions

- Manufacture a product: you either design an entire factory or a machine's component, you create and develop a new process
- Run an industrial organization: as a field engineer, you manage production, optimize internal and external logistics, facilitate continuous improvement, and ensure quality control
- Nonstop innovation: you run a team or a project, you find solutions to complex issues that combine technical, organizational, and human aspects

Fields

Innovation, Troubleshooting, Project Management, Production Technologies, Industrial Organization, Logistics, Quality, Mechanical Design, Materials, Automation, Robotics

MAJOR IN Industrial Systems

for engineering students

4 SPECIALIZATIONS

→ Innovation and Process Design

Control, choose, maximize, and develop production processes to make production cleaner, faster, cheaper and constantly better using skills acquired in mechanical manufacturing, measurements, analysis and innovation

→ Computer-Aided Engineering

Create a 4.0 industrial system and test it using skills acquired in automation, robotics, CAD, digital factory, virtual and augmented reality

→ Logistics and Industrial Organization

Design and maximize internal and external logistics, organize and manage production while meeting environmental challenges (reverse logistics, "green" logistics)

→ Quality and Industrial Performance

Facilitate continuous improvement (better quality, lower costs, reduced deadlines, better work life, more safety, less pollution) using technical, methodological and management skills (lean management, Six Sigma)

MAJOR IN Industrial Logistics

for engineering apprentices

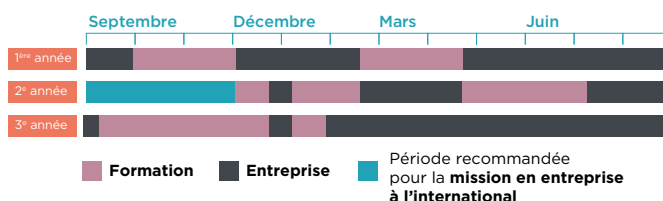
in partnership with the ITII (Institute of Industrial Engineering Techniques) Nord Franche-Comté

1 SPECIALIZATION

→ Logistics and Industrial Organization

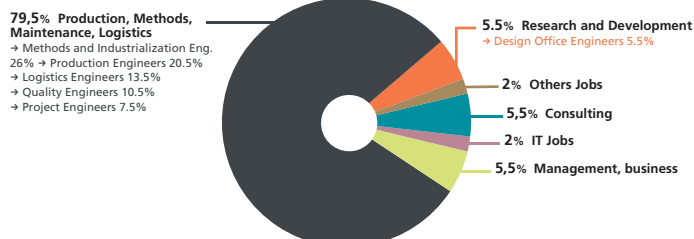
Organize, model, optimize and offer industrial players the right product, at the right place and at the right time

/ SANDWICH COURSE SCHEDULE /



MAIN JOBS

held by graduates (engineering students) according to the 2021 Employment Survey



Your missions

→ Design and size mechanical, thermo-mechanical, mechatronic or cyber-physical products: from demand analysis to functional prototype production
→ Understand and anticipate multi-physical demands and behaviors of complex mechanical systems (architecture, structures, fluids, heat, vibrations, etc.) that you have studied using modeling techniques, simulation, and digital optimization

Career opportunities

Product Architect, Design Office Engineer, Calculation Engineer, Project Manager, Commercial Engineer, Test Engineer

MAJOR IN Mechanical Engineering

for engineering students

4 SPECIALIZATIONS

→ Product Design and Development

Convert customers' needs into specifications, innovative product concepts, mechanical systems, and then into prototypes

→ Materials Science Applied to Technological Projects

Design and develop new products using materials and processes in accordance with social and environmental issues

→ Mechatronic Systems Design

Design and manage complex mechatronic systems including mechanics, computing, automation, electronics, or systems with expanded functions

→ Modeling and Optimization of Thermo-Mechanic Systems

Use methods and digital calculation tools (modeling, simulation, and optimization), understand and anticipate multi-physical phenomena that affect thermo-mechanic systems

MAJOR IN Mechanical Engineering

for engineering apprentices

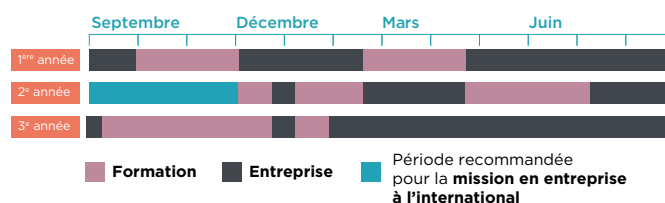
in partnership with the ITII (Institute of Industrial Engineering Techniques) Nord Franche-Comté

1 SPECIALIZATION

→ Mechanical Design for Energy and Transport

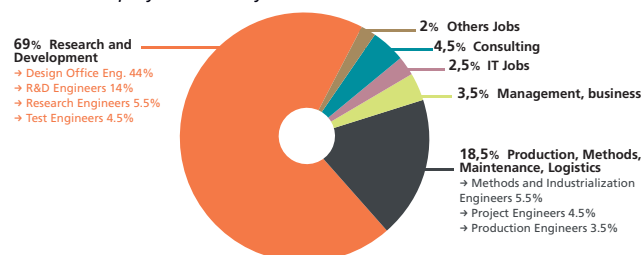
Design and size products as well as mechanical, thermo-mechanical, and mechatronics systems while building a culture of scientific and technical excellence and a practical application of innovation in the field of energy and transport

/ SANDWICH COURSE SCHEDULE /



MAIN JOBS

held by graduates (engineering students) according to the 2021 Employment Survey



Your missions

- Design innovative products that are user-centered and environmentally friendly
- Design, structure, develop and assess innovative mechanical systems and workstations complying with technical requirements and standards
- Incorporate the professional expertise of both ergonomics specialists and industrial designers into projects

Career opportunities

Design Office Engineer, Design Engineer, Human Factors Engineer, Director of Continuous Improvement and Workplace Ergonomics, Head of R&D, Product Manager, Vehicle and Product Architect, Innovation Manager...

MAJOR IN Ergonomics and Mechanical Engineering

for engineering students

3 SPECIALIZATIONS

→ Ergonomics, Innovation and Design

Design useful and innovative products by applying metrology and ergonomic assessment, collaborative digital engineering tools and advanced engineering techniques

→ Innovation and Eco-design

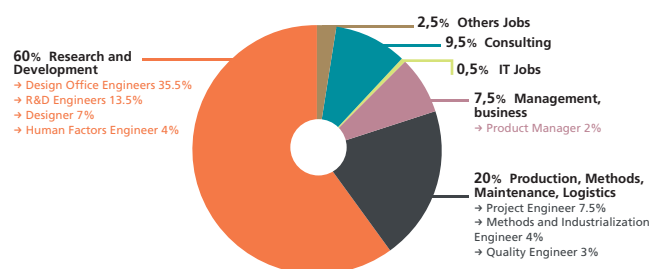
Implement eco-innovation techniques and tools to produce responsible designs compatible with the well-being of people and protecting the environment, by integrating low-carbon energy sources and light-weight materials to reduce vehicle mass

→ Industrial Design and Product Development

Work efficiently and proactively alongside designers to make innovative products that are attractive in terms of both function and appearance, optimize their design and take into account production processes and product requirements in perceived quality while making sure that they can be manufactured

MAIN JOBS

held by graduates (engineering students) according to the 2020 Employment Survey



A DYNAMIC, CREATIVE, AND FRIENDLY CAMPUS





You Will Spend Unforgettable Years at UTBM

Our graduates can attest to that. The bright corridors of UTBM's buildings designed by Roland Castro are bursting with energy and creativity.

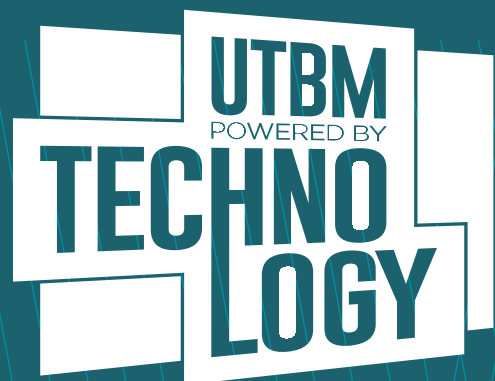
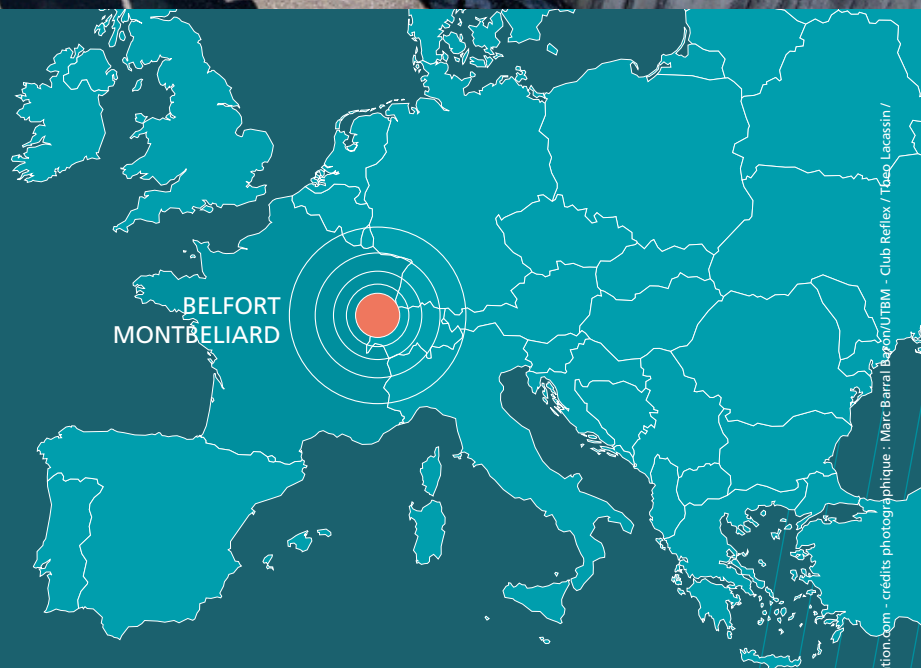
ARE YOU FOND OF SPORTS AND CULTURE—ANY CULTURE?
DO YOUR HOBBIES AND SCIENCE OVERLAP?

You will be spoiled for choice with many clubs and organizations. Franche-Comté, only a 2h30 train ride from Paris and 45 minutes away from the Basel Mulhouse EuroAirport, might be industrial but it's also one of France's greenest regions. Nature lovers will be overjoyed.

AND LET'S NOT FORGET ABOUT THE EUROCKÉENNES ROCK FESTIVAL OR OTHER ACTIVITIES OUTSIDE THE CLASSROOM!
Every day brings its share of surprises here.



/ DISCOVER
STUDENT LIFE /



CONTACT

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Accredited by the CTI
(French engineering accreditation institution)



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