A GREAT PLACE TO LIVE AND WORK

Tarbes is a city in Occitanie which offers to its 5,700 students an exceptional and affordable quality of life on a human-scaled campus.

The surrounding environment, at the foot of the Pyrenees and at the heart of an diverse industrial area promotes well-being and offers a range of rich and varied activities. It is:

• 25 minutes from Pau
• 1h30 from Toulouse
• close to Spain
• 1h from the ski slopes
• 1h30 from the beaches of the Basque and Landes coasts at the heart of a diversified industrial fabric

LOCAL INVOLVEMENT

ENT supports and promotes community involvement by its students, which trains them in human interactions and prepares them for the world of work.

• Financing of student projects: food drives, stream cleanups, rallies to help humanitarian projects
• Involvement of ENIT in local civic projects: disability awareness day, key partner of the association "Les Bouchons d’Amour"
• Support in awareness-raising actions, education for sustainable development: association Engineers without Borders Tarbes

COHESION AS AN ASSET

At ENIT, the Student Office plays an important role in the integration of new students and the cohesion between the different year groups. The students are truly involved in the associative life of their school, and they coordinate each year many student clubs and organize each year dozens of events (sports, music) that allow them to meet each other, get to know each other better and develop a spirit of solidarity and mutual support.

THE ENIT IN FIGURES

• More than 50 years of existence (founded in 1963)
• A network of 7,000 engineers
• 1,200 students enrolled
• 200 to 250 new graduates per year
• 600 internships per year in companies
• 160 teachers
• 115 apprentices in training
• More than 3,000 partner companies
• A research laboratory of more than 130 people
• 3 million euros of budget per year for Research
• 95% of graduates find a job in less than 6 months
• Partnerships with 161 universities in 37 countries

A NETWORK OF SUCCESSFUL GRADUATES

The mission of the ENIT Graduates Association is to maintain cohesion within the entire population of ENIT graduates. In addition to maintaining the network, the association promotes the diploma, supports students towards their Integration into professional life and participates in the educational and educational bodies of ENIT and higher education in order to defend the best interests of engineers.

Jean-Yves Fourquet, Directeur

The INP-ENIT provides quality training that allows you to acquire key skills for industry. The organization of the curriculum provides numerous opportunities for internships and projects and teaching which has practical application, effectively transforming knowledge into professional and personal experience. A student graduating from ENIT has a lot to offer a prospective employer and that is why I frequently recommend the school to others. It is an accessible public school, focused on the success of its students and offering several parallel programmes. Because the school is ‘small’ we have excellent communication with teachers, researchers and the administration. This makes for a dynamic student life and makes our years here, in a small yet urban setting very pleasant and relaxed.

Thomas Batigne, 8th year student entrepreneur, founder of Lynxter (3D printing)

INNOVATIVE EDUCATIONAL EQUIPMENTS

• Library; the library is a resource centre specialising in engineering sciences. Its collection is completed with collections of general culture.
• 165,000 books, 600 DVDs, 60 audio books, 60 newspapers and magazines, 26,000 electronic books and 8,000 online magazines.
• Active Pedagogy Room
• 6 project rooms
• Student’s House
• 3D printing room
DEVELOPING THE TALENTS OF TOMORROW

A MULTI-SKILLED ENGINEERING SCHOOL

The school trains general engineers though it is oriented towards Mechanical Engineering and Industrial Engineering. Graduates are able to design, implement and operate industrial systems and production equipment with respect for the environment, standards and safety. The multidisciplinary nature of the courses allows students to develop innovative skills, openness and adaptability, essential in an increasingly demanding industrial environment.

EMPLOYMENT, thesis, VIE/VAE, other courses

INTERNSHIP

Mobility in a partner school or double diploma

COMMON BASE

OPTIONS

GM | GI | GMSP | CSI | BTP

training-research link

INTERNSHIP

INTERNSHIP

COMMON BASE

INTERNSHIP

COMMON BASE

BASIC SCIENCES

Mathematics, Physics, Thermal, Acoustics, Optics, Electricity, Electromagnetism, Chemistry

ENGINEERING SCIENCES


HUMAN, ECONOMIC AND SOCIAL SCIENCES

Communication, Environment, Management, Sociology, Economics, Law (L2 English required), LV1 and LV2 (German, Spanish, Arabic)

MECHANICAL ENGINEERING

Design, manufacturing, dimensioning, modelling, and numerical simulation of mechanical systems

BUILDINGS AND PUBLIC WORKS

Structural design and calculation, geotechnics, earthworks, housing, energy, building equipment

ENGINEERING OF MATERIALS AND STRUCTURES AND PROCESSES

Materials and design, commissioning of materials, metals and composites

INDUSTRIAL ENGINEERING

Organisation, logistics, production, management, risk, performance evaluation, lean manufacturing

FROM SEMESTER 7, FIVE OPTIONS BELOW:

INTEGRATED SYSTEMS DESIGN

Design of systems, architectures, on-board energy management, robotics and autonomous systems algorithm

MECHANICAL ENGINEERING

Design, manufacturing, dimensioning, modelling and numerical simulation of mechanical systems

BUILDINGS AND PUBLIC WORKS

Structural design and calculation, geotechnics, earthworks, housing, energy, building equipment

ENGINEERING OF MATERIALS AND STRUCTURES AND PROCESSES

Materials and design, commissioning of materials, metals and composites

INDUSTRIAL ENGINEERING

Organisation, logistics, production, management, risk, performance evaluation, lean manufacturing

STRONG LINKS BETWEEN TRAINING AND RESEARCH

• 50 teacher-researchers are involved in teaching using excellent equipment and resources which are shared between teaching, research and innovation

• External speakers from the world of industry, are frequently invited to participate in teaching courses, giving lectures and supporting projects

• Our students receive an education that focuses real-life problems in companies and gives them real insights into their future working life

The training cycle includes 3 industrial placements (2 internships and 1 End of Study Project) which constitute 30% of the total volume of the course and a one-semester stay abroad.

The options offered to students are linked to the laboratory’s current research projects. The profile of engineers trained at ENIT is thus enriched by this contact with research. The laboratory regularly accepts ENIT students on internships or EIEPs.

Four masters courses are offered the ENIT engineering diploma:

• Master 2 Sciences for the Mechanics of Materials and Structures (SMMS)

• Master 2 Elaboration, Characterization and Surface Treatments (MECTS)

• Master 2 Product Lifecycle Management (PLM)

• Master’s degree in Eco-Engineering, specialty in Sustainable Development Engineering (MSEE)

Some students stay on to do their thesis at our laboratory and go on to work in R&D in industry or teach in higher education in France and abroad.

RECRUITMENT STANDARDS AND PATHS TO OBTAIN AN ENIT ENGINEERING DEGREE

• Initial training: Student status: BAC, BAC+2, BAC+3 Apprentice status: BAC+2 and employment contract

• Continuing education: BAC+2 or equivalent + 1 preparatory cycle

• VAE: BAC+2 and professional experience

• Professionalization contract in 5th year (employment contract)

BECOMING AN ENGINEER THROUGH APPRENTICESHIP

Mechanical Engineering and Building Engineering options Public Works are proposed according to the student’s initial career path and the host company.

MORE INFORMATION

Admissions service
admissions@enit.fr
+33 (0)5 62 44 27 04 / +33 (0)5 62 44 27 05
ENT AT THE HEART OF RESEARCH AND INNOVATION

ENT puts its scientific and technological skills and resources benefit the socio-economic fabric.

THE PRODUCTION ENGINEERING LABORATORY

A STRONG DYNAMIC PARTNERSHIP

In combination with training, technology transfer and industrial development, ENT conducts multidisciplinary research in the field of systems engineering sciences within the Production Engineering Laboratory (LGP).

Created in 1989, the LGP has more than 130 employees (teacher-researchers, doctoral students, engineers) involved in the disciplines of materials, mechanics, electrical engineering, computer science, robotics and production science and technology.

Most often, research is carried out as part of collaborative projects involving academia and industry. The LGP has built a network of partnerships in different fields: rail, aeronautics, health, construction, services, environment.

This research has led to numerous national and international collaborations.

- 55 teacher-researchers and 62 doctoral students
- 130 Ph.D.s trained
- 20 professors qualified to lead research
- Partnerships within projects for an annual budget of 3 M€

4 RESEARCH TEAMS

Interfaces and Functional Materials
Advanced material assembly processes, sustainability of interfaces, ageing and damage, tribology

Decision-making and Cognitive Systems
Knowledge engineering (computing, management of intangible assets), artificial intelligence, post mortem documentation, data sharing, risk assessment, Prognostics and Health Management (PHM), decision support

Multi-scale Integrated Design
Experimental mechanics (fatigue, contact-free measurement of fields) modeling and digital simulation, manufacturing process optimization (machining, ALM metals)

Decision and Interoperability for System Dynamics
Systems engineering, production, planning, supervision, robot control, virtual reality, vision, HW/SW co-design, robotics, human-machine interaction, power electronics

ENT brings together outstanding experimental and testing resources which are available to researchers, students and industrial partners:

- 2 Resource and Competence Centres within the establishment: CIMMES and IDICE
- 2 centres located outside the university campus: PRIMES and METALLICADOUR
- 2 centres on campus: CRTCI and CEF3D

Advanced technological platforms developed in partnership with companies and for companies

Innovative Materials and Processes
- Additive manufacturing
- Topological optimization
- Modeling and numerical simulation
- Mechanical and metallurgical characterization

Study Centre for 3D Manufacturing
- Innovative geocomposites
- Agro-sourced materials
- High-performance composites

Mechanical, Materials and Surfaces Engineering Center
- Mechanical expertise
- Assemblies
- Thin films and coatings
- Metallurgical expertise

Platform of Research and of Innovation in Mechatronics, Energy and Systems
- Design and multiphysics simulation
- Prototype manufacturing in clean rooms
- Electrical testing of systems of high power
- Non-destructive testing
- Characterizations of functionality, reliability under different constraints

Resources Centre and Technology Transfer
- High-performance machining
- Welding FSW, TIG and MSG CMT
- Robotization of machining and assembly operations
- Programming of optimal trajectories

Information, Decision and Communication in Companies
- Software design and development
- Virtual reality, vision and robotics
- Performance evaluation
- Simulation and flow management
- Command Control

Lionel Arnaud, Associate Professor-Researcher

MORE INFORMATION
Secretary's office
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INNOVATION AND INDUSTRIAL PARTNERSHIPS
A LONG-TERM STRATEGY OF PARTNERSHIPS WITH COMPANIES FOCUSED ON THE INDUSTRY OF THE FUTURE

In 1963, the keystone at the foundation of ENIT was to meet the need for engineers in industry. In line with this founding principle, the school still places companies at the heart of a strategy, based on both human beings and technology. ENIT strives to improve the quality of its training and research in order to position itself as an essential player in the industry of the future.

Companies are more than partners and in fact, become real stakeholders in the direction ENIT is taking through their active participation in governing bodies. ENIT/company relations are based on a win-win paradigm: the school continues to develop positively as it responds to business challenges.

3 key areas: Skills development / Talent sourcing / Support for Innovation

COMPANIES AT THE HEART OF ENIT’S STRATEGY

TRAIN
• Continuing education leading to a diploma
• EAV
• Continuing training leading to a qualification custom-made

RECRUIT
• Internships and IEPs
• Apprentices
• Professionalisation contracts
• Business Forum
• Professional Days
• Industrial Conferences

INNOVE
• Research contracts
• Expertises
• Technological platforms

PARTICIPATE
• Apprenticeship tax
• Sponsorship
• Training
• Governance

INTERNATIONAL WITHIN THE SCHOOL

Aware of the global challenges that every engineer now faces, ENIT offers rich intercultural experiences, which are essential for engineers who are open to the world and capable of thriving in multicultural environments.

The school offers the opportunity for international mobility to its students and teacher-researchers. Its foreign cooperation policy is based on the signing of cooperation agreements and European projects. It has established partnerships with 161 universities in 37 countries.

INTERNATIONAL STUDENT MOBILITY

ENIT has introduced international mobility for a minimum duration of 16 weeks, as part of an internship and/or semester of study. This is certainly an added value for the future professional careers of our students.

The school has its own financial support system for international mobility.

THE STUDY SEMESTER

Courses taken at a partner institution abroad are validated as an integral part of the ENIT students’ curriculum. In parallel, the school welcomes many foreign students each year for one semester of courses, particularly within the framework of the cooperation programmes with Latin America (FITEC programmes).

« EUROPEAN PROJECT SEMESTER »

This unique programme, aimed at engineering students, brings together 19 universities and schools in 12 countries across Europe. For one semester, students follow courses and work in groups on industrial projects, exclusively in English. ENIT is the only school in France to offer EPS, and each year welcomes up to 30 students and sends more than 40 students to the network’s institutions.

INTERNERSHIPS AND GRADUATION PROJECTS

ENIT allows its students to carry out both their 2nd and 3rd year internships and their final year project. Students go to Europe (Spain, Germany, England, Netherlands) and outside Europe (Argentina, Canada, South Africa, USA).

THE DOUBLE DIPLOMA

In order to give their career path an international dimension, ENIT students can have the opportunity of obtaining a double degree by completing part of their course at one of the 13 partner institutions abroad. ENIT has also established a complementary agreement with a Canadian institution allowing French students to obtain a master’s degree in Canadian professional engineering.

OUR AREAS OF EXPERTISES

• Mechanics
• Materials (metallic, polymers, agrosourced)
• Processes (Additive manufacturing / Machining)
• Robotics
• Power / Mechatronics
• Digital
• Virtual Reality, Augmented Reality
• Artificial Intelligence
• Intelligent systems

Airbus is proof, if necessary, of the diversity and richness of career opportunities that the general and technical training from ENIT provides.

In fact, more than 180 ENIT engineers have established themselves in the company’s very varied fields, ranging from research and technology to customer services, including design office, methods, purchasing, planning, logistics, production, general resources, management control, sustainable development and information systems. A high level of professional success has been achieved in management, project management, strategy and expertise.

In addition to technical know-how, Airbus is looking for engineers with increasingly high levels of behavioural skills, interpersonal skills, agility, collaboration, creativity and initiative to support the ongoing digital revolution in an international environment. These elements are being integrated more and more into ENIT’s training and apprenticeship curriculum.

Jean-Claude Viguer, Senior Vice President AIRBUS

MORE INFORMATION
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RESEARCH WITH AN INTERNATIONAL DIMENSION

The professor-researchers of the Production Engineering Laboratory carry out teaching or research missions in partner institutions abroad and collaborate on international research programs.

The school also welcomes many foreign researchers who come to train at the I.L.T. share their work and contribute to the training of our students.
Thanks to Enit I was able to complete an EPS semester in Valencia in Spain and a double degree at the UICM in Argentina. These two experiences were highly complementary. The EPS semester helped me to improve my English and to develop project management skills. My year in Argentina for the double degree, allowed me to live totally immersed in another country. I followed courses oriented toward industrial engineering and did an internship in a large vineyard where I learned about new working methods. Today thanks to these experiences I speak three languages fluently and hope to become a business engineer. International experiences are a real opportunity for students and a plus for their future!

Nicolas, 23 ans, semestre 9