



Regular student 
Civil servant student 
Apprentice student

### **TRAINING** FOR WATER AND ENVIRONMENT ENGINEERS

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## 7 REASONS FOR CHOOSING ENGEES



### **1** The only school to tackle the problem of WATER as a whole

ENGEES is the only school to tackle such a varied range of themes in the water field: both small and large water cycle, equipment and development, risk management, public service and management of public services. This diversity makes it possible to respond to the aspirations and diversity of students and to the needs of the market and employers.

### **2** Taking action to protect the environment

Over the years, the school has consolidated and broadened its areas of focus to include major environmental issues such as resource management (water, waste, etc.), biodiversity protection and solutions to climate change.

#### **3** Diversity

The diversity of profiles at ENGEES (young people holding BTEC (Higher national diploma), bachelor's degrees, preparatory classes, professionals operating in the sector, international exchange students, apprentices, civil servants, etc...) is a mix that is highly appreciated by students and teachers alike. This richness is a constant source of mutual support, cohesion and expression of individual strengths. The male/female ratio is also almost perfect in the different year groups.

#### **4** The winning work-study formula

Students can complete their 3 years of ENGEES engineering training on a

sandwich course working for a local authority or a company. There are plenty of apprenticeships available in the sector! Students quickly find professionals who are delighted to take them on, either on their own or *via* the abundant opportunities offered by the school's partners.

#### **5** Close support

ENGEES is a human-sized school, with classes of around 130 students, and has the desire and ability to support each student's career plan and develop their potential. There is a wide range of study options, both at the school (6 options) and *through* its many partnerships (in France and abroad).

#### **6** Valued skills

As environmental challenges become ever greater, the water and environment sector is under considerable pressure. The cutting-edge expertise acquired at ENGEES, coupled with a cross-disciplinary vision, make ENGEES engineers an invaluable and highly sought-after resource for employers.

#### **7** Stimulating learning environment

When students first arrive, they all mention the very pleasant atmosphere that prevails in the school: family-like and supportive. Strasbourg is also highly appreciated by students. It is regularly ranked among the top 5 cities in France for living and studying.



#### They all say so



"I chose ENGEES because I felt that it offered a wider range of courses and offered opportunities for careers that suited me better. " Marie



"The greatest strength of ENGEES is that it teaches us to work in project mode! That's something I use every day in my job. ENGEES also teaches us to be curious, not just focused on water and the environment. " Amélie

"ENGEES provides us with a generalist profile for the water sector and any other field. This is the strength that I developed at ENGEES, whatever the field, which enables me to understand the problems faced by the people I work with". Antoine



Find all the testimonials

# PRESERVING NATURAL RESOURCES

ENGEES is a school that has been training engineers and professionals in the field of water and environmental protection for more than 60 years. With climate change looming, ENGEES engineers are faced with the challenge of devising innovative and sustainable solutions for human beings and nature, with a focus on preserving the environment and natural resources.

Freshwater is a rare resource that needs to be preserved in lakes, rivers, groundwater and glaciers. It involves preventing pollution, preserving or restoring environments, and efficiently managing water to meet the needs of populations, agriculture and industry. We also have to deal with the consequences of **climate change** (flooding, drought, rising sea levels). Another priority is to satisfy basic human needs in terms of **access to water and sanitation.** 

One of the most important contemporary

challenges is to safeguard nature and biodiversity: endangered species, but also ecosystems, fragmented or degraded, blue-green infrastructure to be restored and preserved, etc. The eutrophication of environments, acidification, soil erosion and sterilisation, and even urban heat islands are also at stake.

Environmental protection also involves the management of urban and industrial waste. The idea is to get firmly into a circular economy that takes in and discharges little, prolongs use and reduces obsolescence.

All these issues have a direct impact on the quality of human life.

#### ENGEES engineers can act. They are trained to address the environmental challenges.

### COMMITTED TO THE GREEN TRANSITION

Given the scope of its activities, awareness of sustainable development issues is almost natural at ENGEES. The school has long incorporated the challenges of green transition not only into its teaching and research, but also into its day-to-day operations.

ENGEES is one of the first engineers school in France to have structured its sustainable development and social responsibility (DD&RS) strategy.



#### OUR CORE VALUES

Solidarity Agility Commitment Excellence



**OUR IDENTITY** 

상 Public school

- 👙 60 years of excellence
- Engineering training accredited by the CTI\* (\*Accreditation authority for French professional engineers)
- Under the supervision of the Ministry of Agriculture
- In partnership with the University of Strasbourg

ENGEES was one of the first 10 higher education institutions to be awarded the DD&RS label in May 2016. It was ranked as the No. 1 engineering school most committed to the ecological and societal transition in 2022 (Echos Start / Change Now).

#### HOW DO STUDENTS GET INVOLVED IN THE PROCESS?

- Participation in decision-making bodies and working groups.
- Mobilisation through associations.
- Promotion and support for personal initiatives: involvement of students in networks, participation in challenges, etc.
- Signature of the school's ecoresponsibility agreement.

# THE 3-YEAR ENGINEERING PROGRAM

### **REGULAR, CIVIL SERVANT OR APPRENTICE STATUS**



Only for regular students and students with civil servant status.

- Only for students with apprentice status.
- \* Programme available in English.

### SHAPING YOUR FUTURE

At ENGEES, each student can build his or her own career path depending on what he or she wants to do. The first three semesters are used to learn progressively the basic technical and scientific skills that define the identity and stature of an ENGEES engineer. Students then start their 'specialisation' during the second semester of the second year, when they choose one of the school's advanced fields of study. In 3rd year, students continue their specialisation at ENGEES. 6 in-depth pathways are available. Students can also complete their 3rd year in a partner institution in France or abroad.



With an engineering degree awarded by ENGEES, you have all the assets you need to become a key professional, capable of addressing the challenges and issues faced by our societies in the field of water and sustainable development.

# THE 6 SPECIALISATION **COURSES AT ENGEES**



Urban hydraulics: mastering the hydrological aspects of drinking water networks, sewerage systems and canalized rivers.

1D and 3D modelling of hydraulic drainage structures as well as modelling of solid (waste, sediment) and dissolved (pollutants) transport in such structures. Situational assessments of structures and networks using modelling at all scales in sanitation, drinking water and rivers.



#### Hvdrosvstems management: managing surface and groundwater in natural or anthropised environment. 😹

Hydrology, extreme event forecasting, widespread pollution management and environmental restoration. Regulations, knowledge of French and European players, issues and constraints relating to this management.



Advanced die design of fields and starting up. Technical, legal, managerial and institutional approaches. Treatment of micropollutants, optimisation of energy systems, recycling of nutrients, decentralised management (source separation of urine and faeces), industrial water.

#### Management of water network services and systems (drinking water, wastewater)

Technical, reactive or scheduled drinking water and wastewater systems management, governance and service performance. Risk analysis and infrastructure asset management methodologies. Phasing of works, regulatory context, dimensioning or diagnosis of hydraulic structures.



#### Ecology/ecological engineering: restoration and protection of natural ecosystems.

Waste management: collecting,

treatment and recycling of urban

and industrial waste.

Challenges, regulations and prevention.

Organisation, collection, recycling and

reuse of waste. Circular economy, bio-

logical and physico-chemical treatment of waste. Thermal treatment, special

waste and acceptability. Waste storage.

Ecological engineering, environment restoration, species/environment management and conservation, community ecology, land-use planning, ecological continuity, quantitative and theoretical approaches.

From semester 8, trainees with regular and civil servant status can study in a partner institution, in France or abroad, as part of an exchange or double-degree program.

Rogramme available in English





# DOUBLE DEGREES AND SPECIALISATION IN A PARTNER INSTITUTION

#### **Double degrees in France**

Masters degrees awarded by the University of Strasbourg

- Engineering and Geosciences for the Environment (ISIE)

- Digital Mechanics for Engineering (MNI)

- Computational engineering

- Energy Law and Management and Sustainable Development

- Geography, Planning, Environment and Development

- Earth Observation & Geomatics

School even the set of the City of Paris (+1 year)\*

Master of Business Administration (MAE) at EM Strasbourg or MAE engineer Manager Alsace Tech (+1 year)\*.

SeaTech engineer (+1 year)\*

#### International double degrees

Engineering degree from the Universidad Nacional del Litoral in "Water Resources" or "Environmental Management" -Santa Fé - Argentina (+1 year)\*

Engineering degree from the Universidade Federal de Santa Catarina (UFSC) in "Sanitary and Environmental Engineering" - Florianopolis - Brazil (+1 year)\*

 Master's degree or DESS from Ecole de Technologie Supérieure (ETS) in "Renewable Energy", "Construction Engineering" or "Environmental Engineering"
 Montreal - Canada (+1 year)\*

Master's degree at the Universidad de Cantabria in "Coastal Engineering", "Environmental Engineering" or "Integrated Management of Water Resources" -Santander - Spain (+1 year)\*.

Master Of Science (MSc) at Cranfield University in "Water & sanitation for Development", "Advanced water management" or "Water and wastewater engineering" - Cranfield - Great Britain (+1 year)\*.



Master's degree in "Applied Environmental Sciences" at the University of Science and Technology of Hanoi (USTH), in Hydrology-Oceanography or Environmental Management - Hanoi - Vietnam (+6 months)\*.

#### Other academic mobilities in France

There are many other courses on offer in conjunction with our French partner institutions, such as AgroParisTech, the University of Montpellier, Bordeaux Science Agro, ENTPE, EIVP, ENSG, Institut Agro Dijon and others, depending on the student's individual plans.

#### Other academic mobilities abroad

Nany study partnerships are available in nearly 15 countries, supported by various scholarship programmes (Erasmus+, regional or ministerial scholarships): Argentina, Belgium, Brazil, Canada, Germany, Great Britain, Morocco, Norway, Poland, Spain, Sweden, Switzerland, Vietnam, Italy, Senegal. \*Double degrees that extend the duration of the course are not accessible to civil servant students.



# COMBINING TECHNICAL AND HUMAN TO TACKLE THE CHALLENGES OF CLI

ENGEES' activities are based not only on its mastery of the latest scientific approaches and emerging technologies, but also on its understanding of the ongoing issues and changes in society as well as in the environment. The aim is to ensure that everyone is well prepared to face tomorrow's challenges in these forward-looking fields.

Here is a non-exhaustive list of possible applications of an ENGEES engineer's scientific and technical skills:

#### **1** WATERSHED

Designing models of hydrodynamic behavior in natural and artificial environment in line with climate change, and preventing catastrophic events. Conducting a watershed hydrological balance (runoff, evapotranspiration, infiltration, precipitation).

#### **2** WATER ABSTRACTION

Groundwater pumping station [2b] Surface water pumping station [2a] Establishment, management and protection of drinking water abstraction sites, while preserving water resources (avoiding overexploitation and depletion).

#### **3 SURFACE WATERS**

#### Rivers, lakes.

Analyzing and diagnosing the hydromorphological, phyisico-chemical and biological features of continental aquatic environments. Analyzing human activity impacts.

#### 14 WETLAND

Characterizing a wetland and its benefits (flood control, low-water support, self-purification capacity; biodiversity reservoir).

#### **15 MANAGEMENT OF FLOODS**

Preventing and managing flood risk in a city. Implementation of a prevention plan, systems and structures to manage rainwater and flooding (wetlands, dams, levees, stormwater basins, etc.).

#### 16 MULTI-STAKEHOLDER PROJECT MAN-AGEMENT

Knowing, communicating, interacting and working with a wide range of stakeholders to successfully complete a project: elected officials, foresters, farmers, citizens, naturalists, site managers, government services (Dreal, DDT)...

#### **17 BLUE - GREEN INFRASTRUCTURE**

Recognizing interactions between species and understanding biodiversity and its uses. Maintaining ecological continuity and recreating pathways between aquatic and terrestrial environments.

#### **4** PROTECTIVE INFRASTRUCTURES

Levee [4a] / Retention basin [4b] Project ownership and project management for the construction of small hydraulic structures, and management of maintenance/repair issues. Managing their environmental impact (sediment deficit, bank degradation, destabilization of structures, worsened downstream flooding, etc.).

#### 5 HYDROELECTRIC PLANT

Managing and operating hydraulic structures. Optimizing a system's energy performance.

**2**b

#### 18 MANAGEMENT OF AQUATIC AND TERRESTRIAL ENVIRONMENTS

Managing aquatic and terrestrial environments (waterways, lakes, wetlands) to achieve good ecological standards and enhance biodiversity.

#### **19 RENATURATION/RESTORATION**

Using ecological engineering to restore natural ecosystems. Developing impact assessment methods.

As students develop they will be able to so more closely by specmany partner estable • coastal manageme • geomatics / geo-e • construction / advar

advanced manage

# SKILLS MATE CHANGE

#### 6 RAINWATER

Managing rainwater, collecting, treating and limiting the impact of urban discharges during rainy seasons. Reducing impermeability of basins, improving infiltration.

#### 7 FISH LADDER

Choosing and sizing structures to ensure ecological continuity.

#### 8 INDUSTRIAL TREATMENT PLANT

Providing resource management solutions for a factory/ industry: rainwater harvesting, sanitation systems in compliance with current regulations. 9 INDUSTRIAL AND HOUSEHOLD WASTE MANAGMENT

Providing and improving household and industrial waste management: collection, sorting.

#### **10 CIRCULAR ECONOMY**

Optimizing waste and facilities management as part of a circular economy approach.

#### **11 INCINERATOR**

Optimizing operation and energy recovery (energy, heat, etc.) while controlling risks and nuisances.

#### 12 LANDFILLING

Waste storage and biogas recovery.

#### 13 COMPOSTING / ANAEROBIC DIGESTION

Recovering organic waste: producing compost for agriculture (composting), and biogas for electricity, heat and fuel (anaerobic digestion).

# A COMPREHENSIVE AND CROSS-CUTTING VISION

ENGEES engineers must be able to demonstrate cutting-edge expertise. More generally, they must be able to take a cross-disciplinary view of the issues, using the most appropriate scope for solving the problems: the catchment area for water, the ecological units for nature, the living areas for public services.

To achieve this, ENGEES engineers are given courses throughout their studies that enable them to develop cross-disciplinary skills in:

- Understanding the institutional and human environment
- 🖇 Innovation
- Management / Governance
- Communication
- Adaptation to professional environments
- International context
- Entrepreneurship

#### 23 DRINKING WATER AND WASTEWATER NETWORKS

Designing the connection of a new district to drinking water and wastewater networks. Optimizing the management of water networks within a city and providing technical solutions in normal, excess or water shortage conditions.

#### 24 ECOLOGICAL ASSET MANAGEMENT

Forecasting and ensuring the sustainability of water networks: diagnostics, development, operation, renewal, implementation of automated measurement systems.

#### **25 AGRICULTURAL POLLUTION**

Conducting a diagnostic of inputs (pesticides, fertilizers) in a given environment and understanding their movement. Providing solutions to reduce their impact.

21

o their career plans, cudy certain subjects cialising in one of the ishments: ent,

nvironmer

nced civil engineering, ment (financial)...

#### 20 GROUNDWATER

Mastering hydrogeological models and groundwater hydrodynamics.

#### **21 TREATMENT PLANT**

Drinking water [21a]/Wastewater [21b] Expertise in water treatment techniques. Sizing and management of wastewater and drinking water treatment plants. Managing discharge zones [21c], pollutants and micropollutants.

#### 22 WATER TOWER

Ensuring diagnostics (structural and functional) and over-time management (insufficient volume, wear, risk, damage) of storage structures.



	REGULAR STUDENT STATUS	CIVIL SERVANT STUDENT STATUS	APPRENTICE STUDENT STATUS
Teaching hours in class	1970 h of training (TD, TP, lectures, group projects) excluding internship period		1800 h of training at ENGEES (TD, TP, lectures)
Participation within a professional structure	9 to 11 months of internships distributed over the 3 years		15 day/15 day sandwich course within a company or public authority for 3 years
3rd year	The 3 <sup>rd</sup> year in one of the 6 advanced courses at ENGEES, or in a partner institution in France or abroad	The 3 <sup>rd</sup> year in one of of the 6 advanced courses at ENGEES, or in a partner institution in France or abroad (except for double diplomas extending the course)	The 3 <sup>rd</sup> year in one of the 6 advanced courses at ENGEES only
International	Compulsory semester abroad (intership or study period)		Compulsory 4-week international mobility
Gap year	Yes (Between the 2 <sup>nd</sup> and the 3 <sup>rd</sup> year)	NO	NO
Compensation	NO	A compensation for 3 years	An apprentice's salary for 3 years
School fees	Annual school fees (except for scholarship holders)*.	0 €	0€
Professions and careers	A wide range of national and international career opportunities	8 years payable to the State after graduation. Candidates are offered to take up their first position in a government department from a shortlist.	A wide range of national and international career opportu- nities

#### 3 statuses but 1 promotion

Although there are three statuses, they all form a single promotion. Many courses are taught in common, especially lectures, and the skills required on graduation are identical. As a result, everyone will graduate with exactly the same diploma: the ENGEES engineering degree.

<sup>\*</sup> About 1,800 euros ; special fees apply for international students. More information on our website.

# REGULAR STUDENT, CIVIL SERV-ANT, APPRENTICE... WHAT ARE THE DIFFERENCES?

Depending on your original training and admission path, you can choose to complete your course as a regular student, apprentice student or civil servant student. This choice is made at the time of the competitive entrance examination: when choosing schools for external PCGE (Preparatory Classes for the Grandes Ecoles) competitive entrance examinations, or when registering for "entrance examinations based on qualifications". Each status has its particularities!

#### THE PARTICULARITY OF CIVIL SERVANT STUDENTS.

20 students from certain preparatory classes are eligible for civil servant status. They follow the same curriculum as trainees with regular status, but with a few special features: conference on careers and internships adapted to their future status. These students are paid throughout their studies. In return, they must attend classes diligently and serve the state for 8 years after graduation, working for the Ministry of the Environment. They must accept a position within a government service, Departmental Directorate of Territories (DDT), Regional Directorate for Environment, Development, and Housing (RDEDH)... This choice is made during the 3<sup>rd</sup> year from a closed list of positions. Students can also pursue a doctorate via a CER (Continuing Education through Research) program. Examples of positions awarded in previous years in the public sector:

- Project Manager Natura 2000, Resources Department
- Head of Water and Risk Office
- Head of Rainwater Sanitation, Water Department
- Aquatic Environment Project Manager, water and subsoil department
- 🚯 Flood Risk Officer



Distribution of students based on their status

#### Student

1330 h of scientific and technical training

**400 h** of economic and social, human and cultural training

of foreign languages

40 weeks

Apprentice

1282 h

of scientific and technical training

323 h social, of economic and social, human and cultural training

195 h anguages

82 weeks in a company



# EXCITING CAREERS IN A GROWTH SECTOR

After graduating, engineers enter the job market, both in France and abroad. Career opportunities can be found in:

the private sector (engineering and consulting firms, independent consultants, agricultural professional organizations, nature reserves...)

96%\*

Professional placement rate at 6 months

93%\*

of young people in employment found a job before graduation

GEC (Grandes Ecoles Conference) 2023 survey

Iocal authorities (regions, departments, municipal technical services, association of municipalities)

the public or parapublic sector (water agencies, equipment companies, mixed economy companies...) and the state public sector.



Distribution of graduates by sector



Water and the environment are promising and fast-growing sectors in which ENGEES engineers can easily find employment. They can find a job that matches their skills and ambitions.

#### Graduate's field of employment\*



\*GEC (Grandes Ecoles Conference) 2023 survey

### A WIDE RANGE OF CAREERS

Depending on the chosen advanced training path, ENGEES engineers are offered a wide variety of careers.

😵 Quality Manager for drinking water

Project Manager in Hydromorphology and Hydraulics

Mission Officer for ecological continuity studies

Agronomy Advisor – animation of abstraction areas

Hission Officer for bio-waste

Hission Officer for sanitation and diffuse pollution

Mission Officer for "wind energy and biodiversity" Engineer in contaminated sites and soils

Research engineer on air quality modelling

Hission Officer for National Low-Carbon Strategy

Bigineer in recycling and recovery

🗳 Hydraulic Studies Officer

Technical-commercial engineer – treatment systems

🛞 Ecological Engineer

Project Manager (installation of drinking water networks)

### What our alumni think about us



#### Manager of waste collection/ processing

"I work directly with users, taking note of incidents and handling them. I also visit the site to validate the services provided by the various service providers. I am also in charge of preparing the technical and administrative documents for public contracts (...)".

**Amélie Guigueno,** Graduated from ENGEES in 2015, is in charge of the waste collection/processing department at the Paris-Saclay urban community.



### Project manager - rehabilitation of works

"I am in charge of carrying out studies for the renovation of underground structures. For example, the rehabilitation of a rainwater or wastewater collector that is not performing well. It involves carrying out a diagnosis by going down into the structure, making recommendations for work, quantifying them and sizing them up".

**Clothilde Bourrassin,** ENGEES engineer, graduated in 2012/2015, works as a project manager in an engineering office.



### Local drinking water plant manager - hydraulics

"I supervise the entire operating water unit under the Haute Marne department. This includes managing the drinking water and wastewater networks and the plants used to treat drinking water and wastewater. It involves 18 employees: financial management of the unit, technical management of operations and staff management (...). "

**Julien Bossi,** Engineer, graduated from ENGEES in 2014. Local plant manager for drinking water at Véolia Côte d'or



Find all the testimonials on our Youtube channel

# FINDING ONE'S WAY: KEEPING CLOSE CONTACT WITH PROFESSIONALS

Close links with industry professionals throughout the training program enable each student to find his or her own path. There is almost continuous contact and exchange with the professional world, whether through contact with outside experts for half of the courses, 'careers' presentations and company visits, or internships and projects for regular and civil servant students. The school's teams: teaching staff, corporate and community services, as well as the **alumni association** - all provide support to help students to build their career plans and to find internships and jobs.

### A POWERFUL NETWORK OF GRADUATES

A network of 6,000 graduates in touch *through* our alumni association (AMENGEES)



ENGEES builds long-term relationships with companies and local authorities in order to better match educational content and promote the professional integration of young graduates.

- 10-month internship. (students and student civil servants)
- 200 professional and expert speakers
- 300 partner companies and local authorities: job advertisements, apprenticeships, internships or tutored projects (company day)
- 1 business forum Forum Alsace Tech, the largest in the Grand-Est region.
- 1 / 3 of the course is taught by experts and professionals: managers from the private and public sectors.
- 363 hours devoted to project development and professional preparation. (excluding work placements : professional meetings and career guidance, communication, personal and professional development, building individual projects)







### FOCUS ON PROJECT-BASED WORK

Regular and civil servants will work on applied group projects during their curriculum. These "project-based" experiences are much appreciated by the students, and are highly formative. The apprentices will tackle projects within their host structure.



RIVER PROJECT (1<sup>st</sup> YEAR OF ENGINEERING)

"The 1<sup>st</sup> year students are conducting a complete engineering study on the development of a village against flooding. In several stages, they carry out hydrological, ecological and hydromorphological studies, as well as 1D digital modeling to determine flooded areas and volumes to be stored, etc. Last but not least, the students suggest measures such as a dike or a discharge channel to limit flooding and protect homes".

Guilhem Dellinger, River Project Manager.



"I really enjoyed this project because it was comprehensive and covered a wide range of areas (diagnosis of hydraulic structures, creation of estimates, creation of site schedules, etc.). We really had to pay attention to every detail of the land while responding to the demands of the people involved." Tara LAUR, ENGEES 2nd year engineering student.

#### **TUTORED PROJECT**

In 3<sup>rd</sup> year, students work in small groups, under the supervision of a lecturer from the school, to solve a specific problem faced by a company or local authority. The project is monitored jointly by the company and the school. 120 hours are devoted to this project. The subjects are diverse: study of the performance of planted filters, observation of rainfall intensity using cell phone network relay antennas, assessment of experimentation with social water pricing...

# BECOMING AN ENGINEER THROUGH APPRENTICESHIP

ENGEES future engineers benefit from a complete professional experience. The projects are carried out at the company and co-assessed with the school, enabling skills to be applied directly in the field in a real-life situation.

**During their training, apprentice engineers are paid by the company.** Candidates admitted to the school will be required to sign an apprenticeship contract in order to join the program on a permanent basis.

It is also possible to find a German host organization, while pursuing your studies at ENGEES.

### A CLOSE SUPPORT

As soon as students are recruited, the school supports them in their search for a company in which to do their apprenticeship: help with writing CVs, cover letters and interview procedures, access to job opportunities.

### FOCUS ON THE "WASTE" APPRENTICESHIP GARBOLOGIST APPRENTICE

The garbologist is an expert in waste management, whether industrial or domestic. He is in charge of preventing environmental pollution. His job is to implement methods and means of protection to reduce the environmental risks associated with waste. as well as to monitor facilities (for waste treatment, sorting, recovery or disposal) that may cause environmental damage. Students interested in this career can join a public or private will benefit from a specially adapted program at ENGEES, enabling them to take courses on the theme from their first year.

#### I am an apprentice engineer at ENGEES



"The school has always supported me in my search for companies. As part of my apprenticeship, I carry out diagnoses of drinking water networks, and issue contracts for the construction of reservoirs (...) ".

#### Lucie

"When you're in a company, you're given assignments to complete. It's very formative, because it allows us to apply what we've seen at school. "

#### Benjamin



Find all the testimonials on our Youtube channel

100% of apprentices have found a company

During the 3 years of training, each apprentice is monitored twice by:

a tutor from the school (a lecturer). He monitors the apprentice's academic and professional progress, and ensures that the expected knowledge and skills are acquired.

an apprenticeship supervisor. He is the apprentice's reference within the company for the 3 years of training.





### WORK-STUDY RHYTHM



# RESEARCH AT THE CORE OF TRAINING



Half of the teaching is carried out by the school's lecturers, who are part of **4 research units.** They supervise students' projects throughout their training and foster links between research, teaching and the professional world.

- Sanitation, rainwater management and urban flooding - ICube's MecaFlu team (CNRS, ENGEES, INSA Strasbourg, University of Strasbourg...)
- Analysis of environmental management situations - SAGE (ENGEES, INRAE)
- Modelling hydrosystems under climatic constraints - ITES (CNRS, ENGEES, University of Strasbourg)
- Restoration and evaluation of hydro-ecosystems - LIVE (CNRS, ENGEES, University of Strasbourg)

#### UNIQUE FACILITIES IN EUROPE

ENGEES laboratories are equipped with advanced study and modeling facilities that benefit students during their training:

- 🗳 flood model,
- large hydraulic platform capable of handling high flow rates,
- 🗳 clean rooms,

- real-scale experimental sites: rainwater treatment in residential areas and road networks (with the Strasbourg Eurometropole), remediation of agricultural pollution (with the Rouffach agricultural college), river restoration (with National Electricity Company),
- platform dedicated to the complete physical, chemical and isotopic analysis of trace elements and organic pollutants.

### DOCTORATE -ENGINEER

Some ENGEES engineers pursue a doctorate to become highly specialised doctorate-engineers. Many of them choose to enroll in ENGEES laboratories where, alongside other doctorate students, they are supervised by the school's lecturers. The range of subjects is wide: the school's main themes (hydraulic modelling, treatment, contaminant transport, etc.), and more broadly, everything related to water and the environment (ecology of aquatic ecosystems, effects of fish dams, coastal geomorphology, etc.). At the end of their doctorate, just under half of them continue in research, at least for the duration of a post-doctoral contract, while the others join a company, particularly those who have benefited from a **Research Training Industrial Agreement** (Cifre doctorate). It is also possible for civil servants trained at the school to pursue a doctorate.





Nicolas Reiminger did a Cifre thesis with AIR&D, a start-up created from the expertise of ENGEES researchers : "I'm continuing to improve a tool I started developing during my final year project at ENGEES. It is a 3D digital modeling tool for calculating pollutant dispersion in urban areas".



# **AROUND THE WORLD**

ENGEES promotes the international scope of its engineering training. In addition to mobility and internships abroad, this includes foreign language courses in the curriculum, international-oriented modules, and the presence of international students in the school's courses.

168 hours of compulsory English + 7 languages for the choice of second language.

B2 level in English required for graduation (equivalent to **TOEIC**<sup>®</sup> **score of 785**).

2 specialisation courses taught in English (water treatment and hydrosystem management)

About 70 international students each year.

#### INTERNATIONAL MOBILITY

A semester of mobility abroad is a **compulsory** part of the engineering curriculum. This is achieved through internships abroad and/or study semesters at partner universities. It is also possible to take a gap year (in France or abroad) between the 2nd and 3rd years.

For engineering apprentices, compulsory international mobility takes place in a subsidiary of the host company, or in other public or private structures.

### **CROSS-BORDER**

Thanks to its geographical location, ENGEES is naturally inclined to build cross-border relationships with neighboring countries. Internships, studies and cross-border apprenticeships in Germany are therefore strongly promoted. They can be supported by cross-border research projects (INTERREG) led by the school's lecturers.

### **GLOBE-TROTTING STUDENTS**

#### My cross-border apprenticeship

"My AbiBac enabled me to join a German company on a work-study placement, in the fields of electrical, mechanical and hydraulic engineering and international process automation. The knowledge acquired at ENGEES enables us to adapt to the diversity of the fields we study. In Germany, the apprenticeship culture has been around for a long time. It's very easy to find colleagues available to answer our questions and share their knowledge."

Audrey, 3rd year engineering apprentice.

#### A double degree in Canada

"I did a double degree in Construction Engineering. So, now I have a real master's degree in civil engineering. I've also seen a different system for acquiring skills and a different way of running courses. On a personal level, it allowed me to experience expatriate life and learn a new way of doing things.

Marie completed a double degree at ETS in Montreal (Canada).

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### WELCOME TO FOREIGN STUDENT

International mobility students benefit from a close, personalized support program.

They are offered two ENGEES advanced courses in English. The school has been awarded the "Bienvenue en France" (welcome to France) label for its hospitality program.

Admission requirements are detailed on the next page.



"At my university, we worked less with software. Here, there are facilities for the whole class and teachers to work together on projects using software."

**Fernanda,** a student from UFSC (Florianópolis - Brazil), who came on mobility at ENGEES.



Video testimonials from international students are available "I like the way the projects and tutorials are organized. Working in a group with the support of teachers is very interesting"

> Ndeye Siga, Polytechnic School in Thiès, Senegal.

Internship in Colombia on a humanitarian and sustainable development project "The three of us worked on a project called "OASIS". We helped develop the first prototype to make a school with around 200 children, self-sufficient in electricity, water and food. Our aim is to size this "OASIS" in line with the expectations and tastes of the local population. "

**Camille, Fanny and Neville** completed their practical engineering internship (2<sup>nd</sup> year) at Bogotá's EAN private university.

#### A double degree in Brazil

"This double degree has given me a lot. I feel I've changed a lot, evolved. I want to travel the world, discover other cultures and help with projects related to my training. I know that there will be work for me in Brazil, and I have the feeling that I'll be more useful in countries in the South, where sanitation still needs to be developed."

Benjamin studied at the UFSC in Florianópolis.

#### A semester in Dresden

"The diversity of student profiles in the Master's program has given us an enormous amount of open-mindedness. In particular, through exchanges with foreign students who had professional experience in developing countries. We've also all acquired a fluency in English that will benefit us greatly. We're delighted to have discovered the Erasmus spirit. "

Julie-Anne, Paul, Valéria and Mathilde attended the Hydro Science and Engineering Master's course in Dresden (Germany) during their final year of engineering studies.



R Number of students who did an internship abroad (2<sup>nd</sup> or 3<sup>rd</sup> year internships) by destination between 2016 and 2021

European Union: Germany 31, Andorra 1, Austria 8, Belgium 19, Bulgaria 1, Denmark 13, Spain 16, Estonia 1, Finland 21, Greece 4, Italy 12, Ireland 37, Lithuania 1, Luxembourg 7, Netherlands 22, Poland 8, Czech Republic 7, Sweden 59.

**ACT TO AVOID, REDUCE AND COMPENSATE EMISSIONS FROM INTERNATIONAL AIR TRAVEL** ENGEES has deployed a specific scholarship to encourage students to choose low-carbon means of transport.

As a last resort, in order to offset the carbon emissions generated by the international travel of its staff and students, ENGEES is pursuing a carbon compensation program through various projects in Alsace carried out with partners. ENGEES is a pioneer in this type of compensatory approach.

# HOW INTERNATIONAL STUDENTS CAN ENROLE IN THE ENGEES ENGINEERING PROGRAMME?

#### "ADMISSION SUR TI-TRE"

ENGEES organises the "Admission sur titre" (AST) entrance examination based on qualifications, which is open to foreign students. This examination is open to students with 2 to 3 years of higher education in the fields of the environment, biology, chemistry, geology, science or waste management. After a pre-selection of applications, candidates who are eligible for the examination are called to an oral test at ENGEES. The purpose of this interview is to assess the candidate's motivation, career plans and ability to follow an engineering course.

Minimum French level required: B2

#### 2<sup>ND</sup> YEAR ENTRANCE (MASTER LEVEL)

Students with a scientific master's degree can join the training directly in 2<sup>nd</sup> year. In this case, they are admitted via:

- the "concours D" entrance examination - specific enrolment procedures for double degrees.

Students with a foreign degree must have it recognised by the ENIC-NARIC France centre, which will allow them to continue their studies in France.

Students can also enter the ENGEES engineering programme via the national entrance examinations. More information on our website.



#### Proportion of double degree and international mobility students at ENGEES

We welcomed 31 international students during the 2023/2024 academic year, including:



If exchange students
 If of them were in double degree





### APPLY FOR A DOUBLE DEGREE!

Students from the partner establishments listed below can join ENGEES directly in the 2<sup>nd</sup> year of the curriculum, through international double-degree programs: - National University of the Littoral in Argentina (water ressources and environmental engineering courses)

- Federal University of Santa Catarina in Brazil (health and environmental engineering courses)

- Hassan II Institute of Agronomy and Veterinary Medicine in Morocco (rural engineering courses)

- Ecole Polytechnique of Thies in Senegal (civil engineering courses)

They benefit from specific recruitment processes.

#### APPLY FOR AN INTER-NATIONAL MOBILITY

International students from partner institutions are also welcome to attend one or two semesters of courses, notably as part of exchange programs (Erasmus +, BRAFITEC, ARFITEC, BRAFAGRI...).

Find the list of our partner establishments on our website



"ENGEES is one of the leading schools in the field of water, infrastructure and public works. Thanks to this course, I was able to integrate quickly into professional life and learn the basics necessary to be operational in a company". Youness, double degree student.



Find more testimonials on our website



"I was able to obtain a CNRS thesis in hydrology following this diploma, and it was thanks to the hydrology and river hydraulics courses I took at ENGEES (as well as the school's reputation) that my profile was selected".

Malak, Moroccan double degree student



"I learnt French and got to know the French education system. Today, I maintain research partnerships with French laboratories".

Flavia, Brazilian international exchange student.



Further information on the ENGEES website under "International/studyingat-the-ENGEES"



Co-funded by the European Union





# ENGEES: A PLACE TO GROW

ENGEES encourages students to get involved in a responsible community life. Art and culture, sports, humanitarian aid, educational activities, environmental initiatives... the diversity of clubs and associations (more than a dozen!) allows everyone to participate in student life according to their tastes and desires. ENGEES considers community life to be a fundamental part of its training program, and has set up a series of activities and projects that unite all students, including the graduation ceremony and baptizing of the incoming class, festive events organized by the "amicale" and sports events (especially the "inter-agro" tournament)...

#### WORTH NOTING

As the school is associated with the University of Strasbourg, its students have access to the university's wide range of sporting activities : archery, climbing, skiing...





To find out more about community life and life at school, take a look at the **alpha brochure** produced by **our students.** 





## STRASBOURG, A GREEN CITY FOR STUDENTS

European capital in Alsace region, Strasbourg is a city of youth and dynamism. If you're a lover of heritage, culture and the art of living, there's no doubt you'll fall in love! Some will enjoy strolling along the banks of the III river, which flows near the school. This river crosses the Alsace plain, encircling the center of Strasbourg.

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#### WORTH NOTING

To find out more about Strasbourg and student life, see "Strasbourg loves its students". Their website and social networks are full of practical information and tips.

#### THE PERKS OF LIVING IN STRASBOURG

- Germany 5/10 min away (tram/bike)
- 🔮 45 min from EuropaPark
- 🚯 11 museums
- Its Christmas market
- A large and dynamic student population (over 55,000)
- A resolutely green city where cycling is everywhere
- The wine road
- Between the Vosges and the Black Forest





Qualiopi processus certifié

REPUBLIQUE FRANÇAISE



Membership

FRANCE



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EUR-ACE



