





# Become an engineer in **Electrical Engineering** and Industrial Computing 2023-2024 through apprenticeship

# **OBJECTIVES** and **SKILLS**

ENSGTI GEII (Génie Electrique et Informatique Industrielle -Electrical Engineering and Industrial Computing) engineers are required to manage the organizational, economic, financial, human and technical aspects of the main fields of action in the production, use, transformation and management of electrical energy.

#### They are thus able to:

- Develop high-tech industrial electrical devices
- Study and design electrical energy supply and conversion equipment
- Design and operate automated systems in industrial environments
- Design and build electrical engineering systems with potential high-voltage supervision
- Manage multidisciplinary projects in an international context



Engineering diploma awarded by ENSGTI and recognized by the French Engineering Qualifications Board.

# 3 years work-study program:

- -> 89 weeks at work
- -> 67 weeks at school (with 284h of Practical work and 286h of project-based learning).

# THE BENEFITS

- Develop strong professional experience and progressive autonomy in the workplace
- Acquire solid academic skills
- Learn by doing and build your career plan
- Benefit from reinforced pedagogical support (tutor in the company and at the school)
- Earn an engineering degree on a salaried basis (monthly salary, paid vacation and social protection)
- Exemption from registration fees (the apprentice must pay the student and campus life contribution)







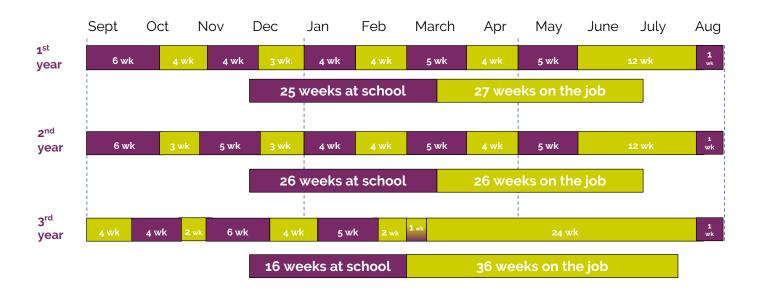






# Work-study CALENDAR

# 89 weeks at work + 67 weeks at the training center



# Summary **PROGRAM**

### 119 ECTS credits earned at the training center

1576 hours of classroom teaching (41% lectures - 41% tutorials - 18% practical work), divided into 3 areas:

- Engineering sciences and techniques (25%): mathematics, scientific computing, programming and computer languages, signal processing
  - Science and technology specialties (61%): analog and digital electronics, components, power electronics, automation, industrial automation, EMC, high voltage, industrial computing (microcontrollers and interfacing, FPGAs, programmable electronics, real-time systems)
    - Languages and engineering culture (14%): English, LV2, accounting management, quality, intellectual property, corporate social responsibility

These courses are supplemented by 286 hours of project-based learning.

## 61 ECTS credits that can be earned on the job

Each semester includes an in-company training unit entitled « Apprenticeship »





















Recruitment for the GEII specialization is open to students who hold the following diplomas:

- BUT\* GEII (Génie Électrique et Informatique Industrielle Electrical Engineering and industrial Computing)
- **BUT\* GIM** (Génie Industriel et Maintenance Industrial Engineering and Maintenance)
- BUT\* MP (Mesures Physiques Physical Measurements)

\*BUT (Brevet Universitaire Technologique – University Technological Certificate)

- L3 in the « Science and Technology » field
- BTS\* in Electrotechnics
- BTS\* in numerical systems (with the electronics and communications options)

\*BTS (Brevet de Technicien Supérieur - Advanced Technician's certificate)

2 other paths are possible:

- Through validation of acquired experience (VAE)
- Through the admission under Interuniversity Cooperation Agreements

The course is accessible to people with disabilities. For further information, contact the «Mission Handicap» team at the Université de Pau et des Pays de l'Adour (handi@univ-pau.fr), which provides support throughout the curriculum.



# **Evaluation MODALITIES**

Exams are organized in the form of continuous assessment of knowledge.

Examination procedures (number of tests, nature, duration, coefficients and respective places of written and oral tests) are posted on the ENSGTI premises each year, no later than 30 days after the start of the academic year.

They can also be consulted in the curriculum program.

In addition, an electronic apprentice logbook (LEA) is used throughout the 3-year program to assess skills acquired on the job and keep track of activities.

#### The candidate must have:

- Under 30 when signing apprenticeship contract
- Signed a 3-year apprenticeship contract with a company (if possible before the start of training and no later than 3 months after the start of the school year)

#### Cost of the training for the company:

■ Please contact the apprentice-training center (contact details on the back)

## Recruitment **PROCEDURES**

- Download application form and instructions on the **ENSGTI** website
- Application form submission : between January 31 and June 14, 2024
- Eligibility commission: between March 22 and June
- Admission orals: between March 29 and June 28. 2024
- Academic admission results: between March 31 and June 30, 2024



# **BRIDGES** and **REORIENTATION**

In the event of a necessary reorientation, the ECTS accumulation can be used as a bridge to university courses of equivalent level. In such cases, applications will be examined on a case-by-case basis.

## **SECTORS** of **ACTIVITY** and **PROFESSIONAL OPPORTUNITIES**



#### **TRANSPORTS**

-> Design of on-board electronic and computer systems (navigation systems, autopilots, instrumentation)

<u>Careers:</u> Aeronautical electrical systems engineer, Power electronics engineer, System integration engineer



#### **ELECTRICAL ENERGY AND ENVIRONMENT**

-> Electrical power generation, transmission and distribution / Distribution substation design / Network management / Building electricity Careers: Electrical project manager, Electrical and control design engineer, Building environmental quality project engineer



#### INDUSTRIAL COMPUTING

-> Electronic board programming / Industrial and IT network management / Automation / Industrial process control Careers: Industrial supervision and automation engineer, VHDL/FPGA development engineer, Industrial IT engineer



#### **HIGH-VOLTAGE ELECTRICAL SYSTEM**

-> Design and sizing of HV installations / Design and construction of HV systems / HV instrumentation Careers: Electrical engineer, High current electrical engineer, High voltage electrical test engineer

# Our privileged **PARTNERS**

















# **SUCCESS** rates, **FURTHER STUDIES** and professional **INTEGRATION**

As the course starts in September 2021, ENSGTI does not yet have data on the success rate, further studies or professional integration of graduates.



- Ville de Pau Pyrénées Tourisme
- Université de Pau et des Pays de l'Adour
- Food service / Accomodations

**ENSGTI** (École Nationale Supérieure en Génie des Technologies Industrielles) Rue Jules Ferry - BP 7511 - 64075 PAU cedex - Tél : +33 (0)5 59 40 78 00 ensgti.univ-pau.fr

#### **Contacts**

Education manager: Thierry REESS ensgti.scol@univ-pau.fr

Direction FTLV (Formation continue et apprentissage - Continuing education and apprenticeship): 05.59.40.78.88 <a href="mailto:accueil.forco@univ-pau.fr">accueil.forco@univ-pau.fr</a>

CFA (Centre de Formation des Apprentis - Apprentice training center) : 05.59.40.76.75 <u>alternance@univ-pau.fr</u> Handicap mission : 05.59.40.79.00 <u>handi@univ-pau.fr</u>













