ENGINEER
Production - Maintenance

DEGREE QUALIFICATION THROUGH APPRENTICESHIP in Bordeaux

Training certified by the C.T.I. (Engineering Qualifications Committee) Engineering degree from ENSAM (Ecole Nationale Supérieure d'Arts et Métiers) specializing in Mechanics, in partnership with ITII Aquitaine (Institut des Techniques d'Ingénieur de l'Industrie)

TRAINING OBJECTIVES

To train field engineers who will be able to:

- Organize, optimize and supervise the means and manufacturing processes to improve the company's competitiveness.
- Organize and supervise maintenance activities with the aim of increasing reliability on production means' and costs' management
- Justify an investment opportunity and take part in the industrialization of production means (including robots, automated systems...)
- Guarantee the respect of the company's regulatory constraints concerning QHSE*
- Master Project Management

*Quality, Hygiene, Safety, Environment

In accordance with the company's strategic choices :

Option A : Industrial performance management

- Diagnose and define an industrial performance strategy
- Deploy and lead an approach of continuous improvement
- Accompany change using a skills based approach

Option B : Integration of innovative technologies

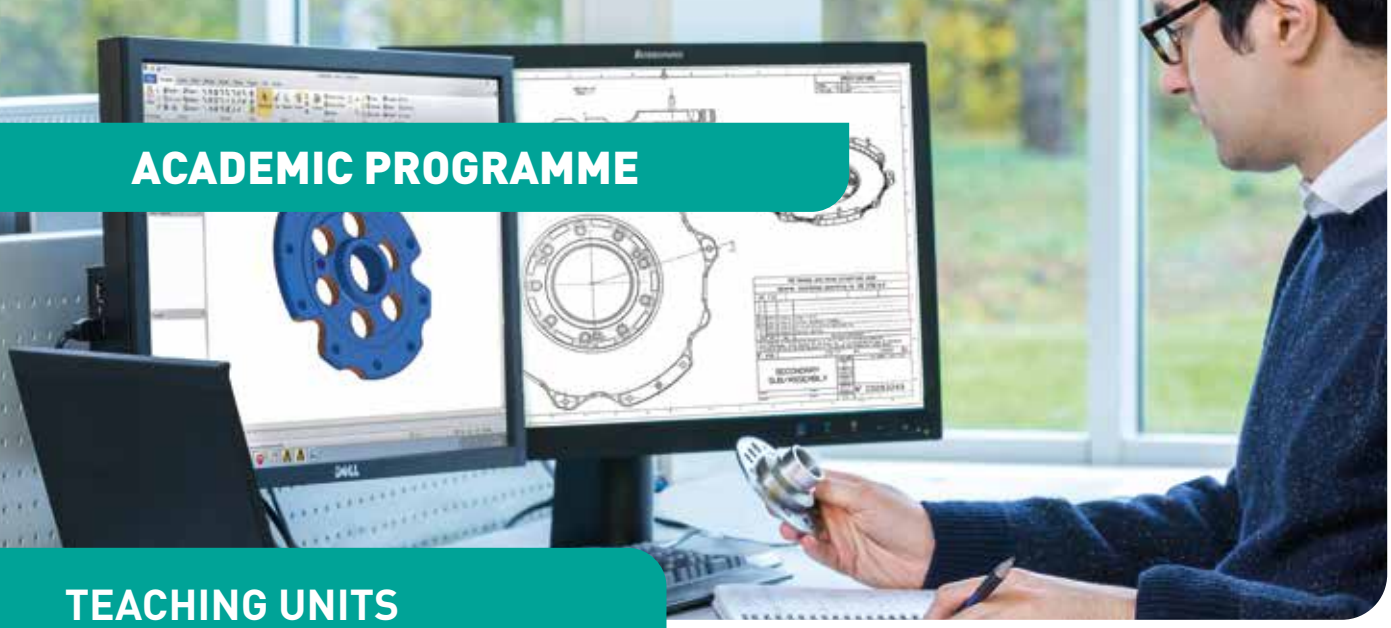
- Integrate technologies that will allow the company to become more competitive
- Set up monitoring systems to ensure the process' reliability and the product quality
- Encourage the spread of new technologies in the company and help the teams master them

> ADMISSION

- Be in possession of a level 2 or 3 qualification: BTS, DUT, Science or technical degree or equivalent before July
- Be under 30 years old when signing the apprenticeship contract
- Pass the entry tests and interviews
- Sign an apprenticeship contract with a company

MARCH	Deadline for applications
MARCH/APRIL	Interviews and eligibility
MAY > SEPT.	Signing of the apprenticeship contract
OCTOBER	Beginning of the training

Application files available at **www.formation-maisonindustrie.com**



ACADEMIC PROGRAMME

TEACHING UNITS

SCIENTIFIC
- Mathematics, Mechanics, Physics
- Materials, Strength of materials, CAD
- Communication sensors and procedures
- Automatism, Electrotechnics
- Fluid and Vibrational mechanics
- Industrial thermics

INDUSTRIAL
- Management and organization of the Production
- Management and organization of the maintenance
- Project Management
- Methods and manufacturing processes
- Quality, Safety, Environment
- Innovation, technology watch/surveillance
- Metrology & 6 Sigma
- Information systems
- Supply chain

MANAGEMENT
- Management, communication
- Managing a team
- Teamwork
- Pedagogy and didactics
- Employment law, company regulations
- Human resources Management
- Accounting and financial management
- Strategic choices
- Company creation and takeover
- English + TOEIC

OPTION A : 120 hours
- Strategic Diagnostic on Performance improvement
- Management of Progress plans
- Change management through a skill approach (Forward planning of employment and skills)
- CAPM and production organization

OPTION B : 120 hours
- Ergonomy
- Work related risk assessment
- Introduction to Robotics/industrial cobotics
- Risk analysis related to the integration of robotos/cobots
- Integration project

TIMETABLE - TRAINING/WORK (in hours)

1ST YEAR
Sept → August

50 weeks: 675 h at school + Time spent in the company

2ND YEAR
Sept → August

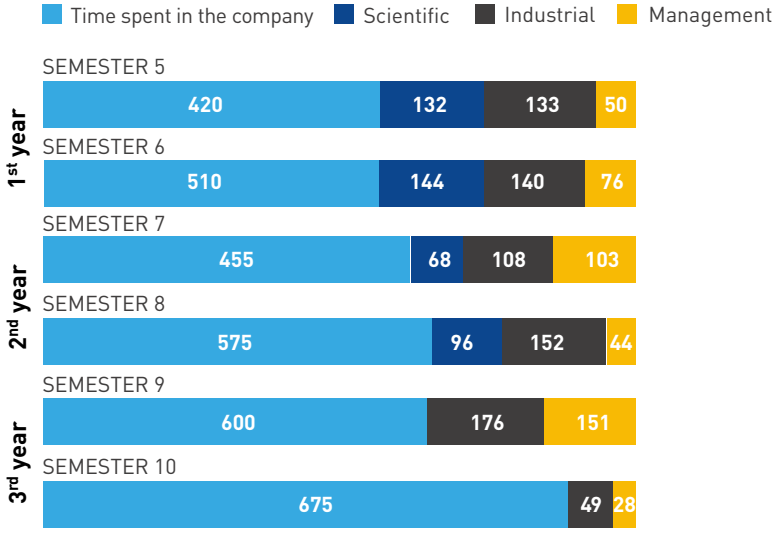
52 weeks: 575 h at school + Time spent in the company

3RD YEAR
Sept → Sept

54 weeks: 400 h at school + Time spent in the company

Time spent in school
Time spent in the company

NUMBER OF HOURS COURSES BY SUBJECT (in hours)



option A or B = 120h between semester 8 and semester 9

IN COMPANY TRAINING

ADVANTAGES

A TRAINING WHICH IS BOTH FREE AND REMUNERATED

AN INTERNATIONAL DIMENSION

The compulsory foreign internship is a rewarding experience, essential both for obtaining the degree and for pursuing a career in engineering. It must last at least 12 weeks and can be split up, for example, into 2 different periods of six weeks each.

PERSONAL PROJECT

As part of the Project Management training a personal project is to be completed:

- A participation in the **World Skills France** competition
- Involvement in a project of international solidarity
  Example : **technical support to Madagascan villages** (giving access to electricity, water, hygiene and health)
- Development & leadership of the **alumni network for ex-apprentices**
- **Participation in voluntary raids**

BAB EL RAID
L'AVENTURE DE TOUS LES DÉFIS

4L TROPHY
Desert Adventure!

INDUSTRIAL PROJECTS CARRIED OUT IN THE COMPANY

During the final two years, an industrial project is realized for the company, under the supervision of the apprenticeship tutor and supported by the teaching tutor.

EXAMPLES

Study and deployment of a control and assembly line in accordance with the « FACTORY OF THE FUTURE »

Study on the reliability of a paper machine's rotations and vibrational instrumentation

Implementation of an MSP (Management System Plan)

Improvement of the Factory's Production equipment availability

Optimization of the manufacturing quality and availability of a chip board line

Deployment of a cooperative CMMS, a first step towards predictive maintenance

Reduction of material losses in a company from the agro-food sector through a continuous improvement approach (6 Sigma)

Setting up a policy of task reduction and Lean Manufacturing in a SME

Implementation of a « Health and safety Management System » approach at work

Decision to set up an organization and a working approach in order to increase the skills of operators and the operational results

Eduniversal 2018-2019 ranking

TOP 10 2018-2019

Engineering schools specializing in aeronautics, mechanics & Automotive - Post-prepa

7 ★★★

Arts et Métiers Paris Tech
Engineer with a specialization in mechanics in partnership with ITII Aquitaine, Champagne-Ardennes and « PACA » area

WHAT HAPPENS NEXT?

PROFESSIONAL EMPLOYMENT OR FURTHER STUDIES
IN FIGURES

76,7 %
at the end of the training

98 %
6 months after the end of the training

36 K€
gross annual salary after the training

50 %
employment contracts are signed with the company who offered the apprenticeship

Average of the last 3 years

INFORMATION AND APPLICATION

Application files available at
www.formation-maisonindustrie.com

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JOB PROSPECTS

Within the various industrial sectors in France and internationally (service or manufacturing industries): aeronautics and space, automotive and equipment manufacturers, electronics and micro-electronics, transformation industries, chemical and petro chemical industries, the agro-industrial industry.

PRODUCTION:
Engineer responsible for the production and its improvement

MAINTENANCE:
Maintenance engineer in production or maintenance service companies

METHODS:
Engineer responsible for the improvement of products and processes

INDUSTRIALIZATION:
Engineer responsible for products and processes industrialization

SAFETY:
Engineer responsible for the development of a safety policy and industrial risk management

ENGINEERING AND CONSULTING:
Organisation analysis, technical projects

Q.S.E.:
Engineer responsible for the setting up of an intergrated management policy based on quality, security and environment

2020
Recruitement of the 25th class

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