RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

UNIVERSITÉ MARIE & LOUIS PASTEUR

UFR STGI BELFORT-MONTBÉLIARD

BAC+3

BACHELOR

Engineering Sciences

Specialization: Electrical Engineering and Energy

Overview

The Bachelor in Engineering Sciences is a course which leads to different careers, whether in academia, teaching technology or foundation sciences, or in industry as an engineer. This course becomes progressively more specialised so that you can work at your own pace. You will also have the opportunity to go abroad as part of your studies thanks to different exchange programs.

The course is made up of two years of common curricular modules before you specialize in the third year. You will be allowed to choose what you specialize in, in accordance with your career choices.

The foundation core modules include mathematics, mechanics, computing skills, research methods, tools and techniques for project management and introduction to thermal energy and electrical energy systems.

As of the third year, in Belfort, these courses become two distinct options: Thermal power and Energy systems or Electrical Engineering and Energy.

UFR STGI
Department of Sciences and Energy
Marie and Louis Pasteur University
2 rue Chantereine
90000 Belfort
stgi.umlp.fr

Contact
Bachelor's Sciences and Energy office
scolaritelicencesciences.stgi@umlp.fr
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Intership period
6 to 8-weeks internship during semester 6

Further studies
Master's Degree in Thermal Power Engineering and Energy Systems at the UFR STGI

BACHELOR
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Outline of the training

The two specializations of the Bachelor's degree in Engineering Sciences are in harmony with:
- the Master's degree offer at UFR STGI,
- the different fields of research of the academic staff,
- the industrial employment area in Nord Franche-Comté region.

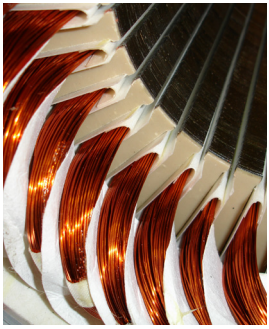
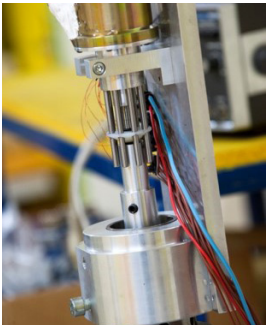
During the third year, the training includes an intership which allows you to put the skills acquired during the studies into practice, participate in the functioning of a company, show initiative and better define your career choices.

Skills the student will acquire

- Applying a scientific method to problem-solving.
- Carrying out and analysing a study on Energy systems
- Planning and leading projects.
- Preventing industrial risk factors and understanding technical, organizational and human factors.
- Applying security measures and keeping up-to-date with regulations as well as putting preventative measures in place.
- Being able to communicate in both written and spoken English in a clear and precise way

Course content

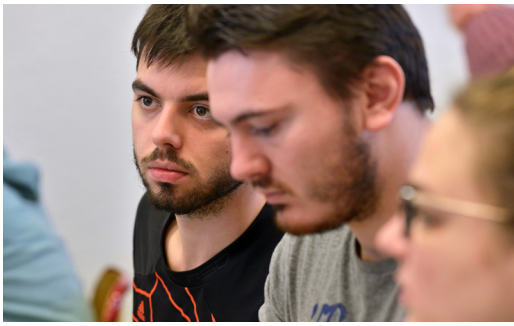
Mathematical tools – Automation and industrial data processing – Measurements and instrumentation - Signals and control engineering – Electrical circuits and systems – Thermal components and systems – Electro-mechanical and mechanical systems – Electrical energy production and storage – Electrical systems technologies – Research, design and project management - English and corporate culture.

Entry requirements

In first year, admission via Parcoursup for all the holders of a general Baccalauréat specialized in one or two specialties (Physics-Chemistry or SPI or NSI...) and graduates from a technology baccalauréat in STI2D.

In second or third year, admission based on application file for those who studied a degree, a preparatory scientific class, a BTS or BUT in the fields of sciences, electrical engineering systems or Electronic/ Automation.



Further studies

- Master's specialized in electronic, electrical energy, automation, renewable energy, industrial systems maintenance
- Engineer in the fields of electrical engineering and industrial systems engineering
- Quality management system and business management

Career opportunities

- Qualified technician in methods and research
- Assistant engineer (design, quality, control)
- Scientific presenter
- Laboratory technician
- Maintenance technician
- Technical sales representative
- Project manager

Business sectors

- Specialized activites, scientific and technological
- Electricity and air-conditioning production and distribution
- Production and water distribution, waste water treatment, waste management and clean-up
- Manufacturing business
- Construction and building industry

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2024 school year group photo

Find all the information on our website:
stgi.umlp.fr

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