ENGINEERING / R&D

ALTELIOS TECHNOLOGY GROUP
Your Key to Success

ABOUT US

Altelios Technology is an expert in the fields of **innovation**, **new technologies**, **energy** and **operational safety**.

Our employees contribute to the realization of **exciting** and **innovative** technological projects to anticipate the evolutions that will make the future.

We are based in **France** and **Europe** with our 5 Locations :
Boulogne-Billancourt, **Lyon**, **Clermont-Ferrant, Lille** and **Brussels**.

ENGINEERING SECTOR / R&D

Our Engineering/R&D team supports our customers in the design, development and manufacturing of products and mechanical systems. Our expertise focuses on the following areas:

- **MECHANICAL ENGINEERING AND INDUSTRIALIZATION**
- **ELECTRONIC ENGINEERING**
- **COMPUTER ENGINEERING**
- **SYSTEM ENGINEERING**

SKILLS

MECHANICAL ENGINEERING AND INDUSTRIALIZATION

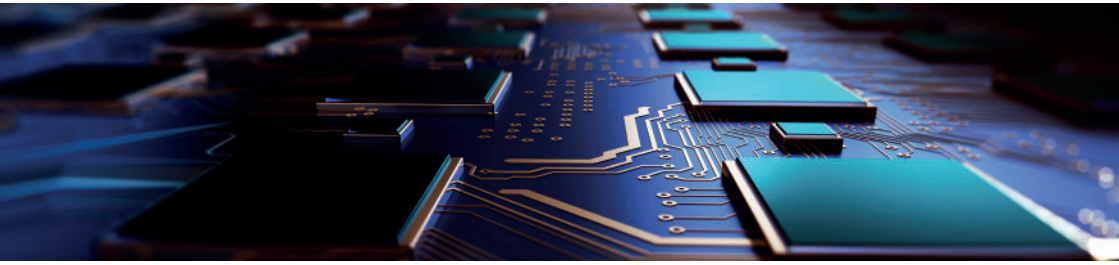
We bring expertise and know-how that is naturally integrated in many fields (automotive, rail, aeronautics, biomechanics, robotics, etc.), by intervening throughout the life cycle of industrial products through the different phases of a project: research and development, pre-project, production, exploitation, etc.

Our main jobs in mechanical engineering:

- Mechanical project management
- 2D/3D CAD Mechanical Studies
- Study of mechanical/electronic equipment architectures
- Specification of mechanical and mechatronic systems
- Design (Functional Analysis, FMEA, CAD)
- Calculation (Finite Element Structure, RDM, Thermal)
- Testing (specification/piloting/testing)
- Bancs de Tests

Catia, CREO, Mechatronics & Mechanics, Solidworks, Simulation, Modelling, etc.

ELECTRONIC ENGINEERING



Our services cover the entire life cycle of an electronic solution. We accompany you as soon as the study of your project and provide you with all the necessary technical assistance. Our consultants work through the different phases of a project (telecoms, multimedia, defence, etc.).

Our main business lines in electronic engineering:

- Definition of electronic architecture
- Design and development of electronic cards
- Simulation and Sizing
- Qualification, approval of equipment
- Monitoring of pre-series and start-up
- Power electronics (power supply, power converters)
- Analog Electronics (sensors, acquisition, motor control)
- Digital Electronics (Fast Electronics, FPGA, ASIC)

Analog, Power, FPGA, Servo, Safety, Firmware, Kernel, Driver, BSP...

COMPUTER ENGINEERING

We support our clients in the design, development and manufacture of embedded or application software, mainly in industrial environments. They operate in constrained environments, either by the need for performance or by a strong normative framework.

Our main jobs in software engineering:

- Development of solutions on embedded Linux platform
- Development of critical embedded software and Real Time
- Low level software development (firmware, drivers)
- Development of communication software
- Application and visualization software development (GUI)
- Development of image and signal processing software
- Integration of Data Science solutions (deep learning, machine learning, etc.)

C++, Python, embedded C, FreeRTOS, STM32, Boost, STL, Network Protocols, etc..

SYSTEM ENGINEERING

Our employees are involved in the design, development and implementation of complex software-intensive infrastructures, which require the implementation of a large number of systems, subsystems and equipment with many interfaces.

Our main business lines in system engineering:

- Requirements Management
- Functional and logical architecture
- Integration, Verification, Validation, Qualification (IVVQ)
- Design of control systems
- Interface design