

# iTEC Engineering

## WE ARE ITEC ENGINEERING

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As a partner with many years of experience in the fields of avionics, energy, and medical control, we will accompany you in the development of safety-critical and high-availability systems in both civilian and military fields right up to the production stage.

Interdisciplinary thinking, HW & SW know-how, as well as in-depth process knowledge from the aviation industry (178B / C, DO254, ABD100, AB200, ARP4754, ARP4761, etc.) ... create the perfect foundation for the realization of your goals.

We will assist you in the analysis, monitoring, validation, verification ... of your documents and processes and their implementation.



## SERVICES

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### Product Development

- Computer-aided systems and subsystems and equipment (DAL)
- Embedded system ( $\mu$ -controller PIC, ATMEL, AVR, Raspberry Pi)
- Complex signal analysis
- Autonomous learning systems (AI) using neural networks and genetic algorithms

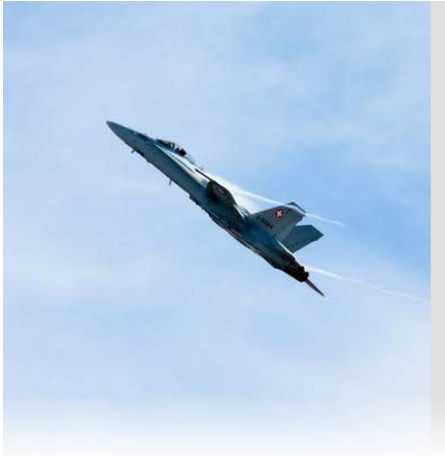
### Development of cross-platform software

- Windows
- Linux (Ubuntu)
- MacOS

for

- the visualization of process data in real time
- the configuration / control of real-time systems
- Post-process data analysis and data porting





**System Engineering to DO 178B/C, DO254, ABD0100, AB0200, ARP4761, ARP4754 etc. over the entire life cycle**

- Analysis
- Design
- Conception
- Monitoring
- Process optimization
- V & V of safety-critical HW & SW
- Consideration of human factor aspects
- Implementation
- Qualification
- Project acceptance
- Reverse engineering



Project planning

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Quality Management

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Definition of milestones

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Compilation of the project team

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Monitoring the project's progress

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Establishment of the necessary processes for the management and security of information flow

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Budget management

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Handling negotiations

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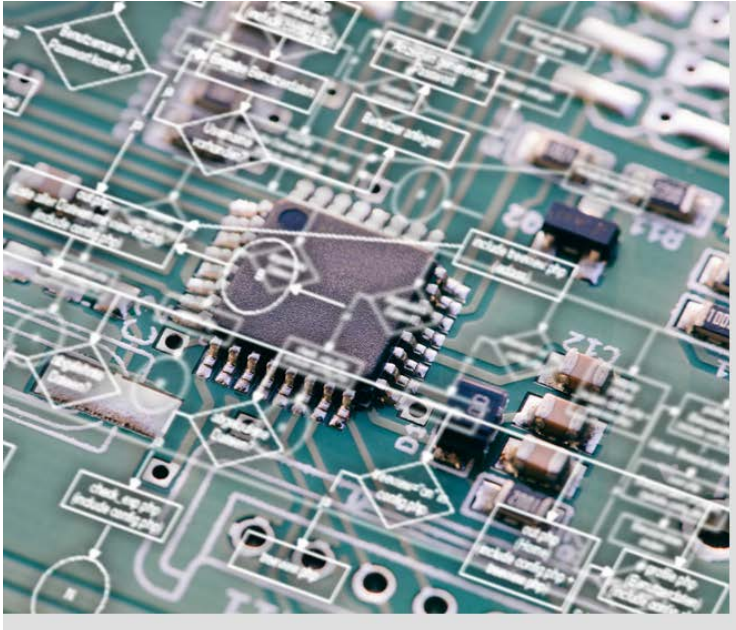
Presentation of project results

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Final report

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Complete documentation of all project planning



Analysis of complex issues

Requirement Based Engineering

Project management

Software design development

Programming

Validation & Verification

Configuration management

Documentation

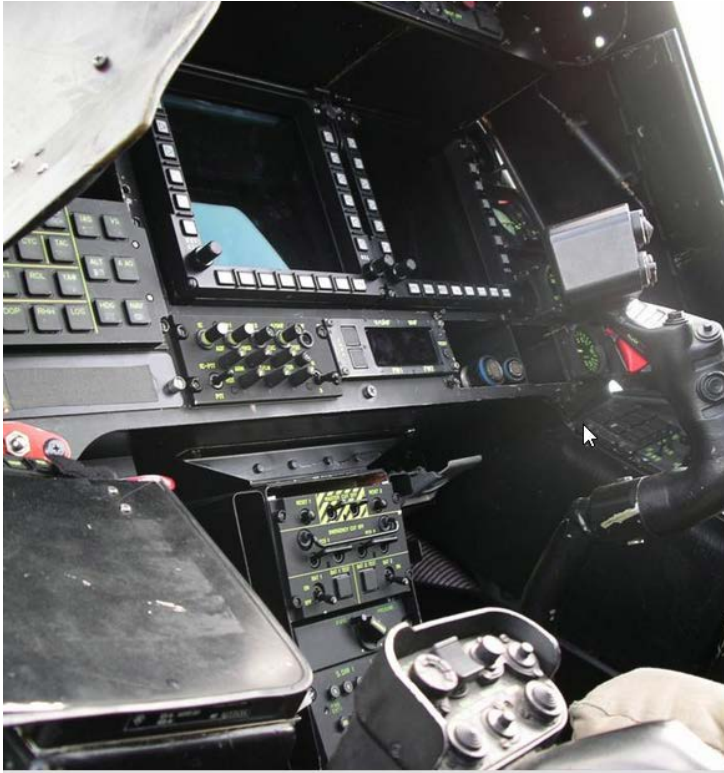
Expert training of customers in the use  
of the software developed

## SOFTWARE

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Our experience in software development is far beyond the understanding of a few programming languages. We are familiar with the advantages and disadvantages of a variety of languages and software architectures, and always adopt the best tools for the project at hand.

For more information, please refer to Skills



Analysis

Design

Conception

Monitoring

Process optimization

V & V of safety-critical HW & SW

V & V documentation

V & V human factor aspects

Realization

Certification support

Qualification

Project acceptance

## AVIONICS



We offer excellent know-how in the development of electrical and electronic systems and equipment which is used on board of aircraft, including flight instruments. System Engineering to DO 178B/C, DO254, ABD100, AB200, ARP4761, ARP4754 etc. over the entire life cycle.



Condition monitoring system (CMS)

Visualization systems / components  
(HW & SW)

Measure and control (HW & SW)

AI-based analysis systems

## ENERGY



We develop hardware and software for data acquisition, control and visualization in the field of energy generation, monitoring and distribution.





# SKILLS

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Our extensive experience with different programming languages, hardware and software architectures, operating systems and computer architectures (CPUs and microcontrollers) in various projects in accordance with the applicable standards enables us to realize your goals.

