



## Online Training

Ac6 provides courses that you can attend from your own office, on various technologies and tools that are used to build modern embedded systems. These courses are provided as live on-line trainings by one of our instructors in 5 to 6 hours sessions at scheduled dates; they may also be scheduled as company-specific courses on demand.

The courses presented here have been specially adapted for distance learning, with exercises carried out on our farm of online Linux servers, connected, if necessary, to target boards; trainees access their dedicated session through their web browser and the trainer can support and help them by interacting with their session.

Most other courses on our catalog can also be provided on demand in a live-online setup, with an adapted schedule; don't hesitate to contact us if you are interested.

You can see detailed course category descriptions by using the carousel on top. You can also click on category definitions in the briefs hereafter.

**Programmable Logic** The FPGA and VHDL courses covers the design and implementation of digital circuits using FPGA devices and the VHDL hardware description language.

These courses are typically targeted at professionals in the field of electronic engineering, and are designed to provide them with the skills and knowledge they need to design and implement complex digital systems using FPGAs and VHDL.

In an FPGA course, participants will learn about the architecture and features of FPGA devices and how to implement digital circuits using them. The design flow of FPGA-based systems and the use of hardware description languages, such as VHDL, will also be covered. In the other hand, a VHDL course will focus on the specific VHDL hardware description language, including its syntax, data types and design methodologies.

**Languages - Embedded and Real-Time Programming Languages** These courses are designed for developers with a basic understanding of programming concepts and are suitable for a wide range of applications, including the development of real-time systems, firmware, and drivers.

The C, C++ languages, and OpenCL for embedded systems category includes courses on language fundamentals, advanced programming techniques, and the use of these technologies in specific embedded systems applications.

**Safety and security - Secure Embedded Systems** Ensuring the security of embedded systems is important to prevent unauthorized access or manipulation of the system and to protect the confidentiality, integrity, and availability of the system and its data.

There are various approaches to securing embedded systems, including the use of secure processors and specialized security hardware, the implementation of security protocols, and the use of secure coding practices. It is also important to have a system in place for distributing updates and patches to address newly discovered vulnerabilities.

At AC6 Training, we offer a range of courses on embedded security, including courses on secure coding practices, hardware security, and the use of secure processors.

**Real-Time Systems - Design and Program Embedded and Real-Time Systems** An embedded real-time operating system (RTOS) is a software platform that is specifically designed to support the development of real-time applications. These systems are used in a wide range of applications, including aircraft control systems, military systems, industrial control systems, and medical devices.

The courses cover a range of topics related to embedded RTOS, including RTOS fundamentals, RTOS architecture and design, and RTOS development using specific platforms such as FreeRTOS, AzureRTOS ThreadX and ZephyrOS. These courses are designed to provide professionals with the skills and knowledge they need to develop and maintain real-time systems that are reliable, efficient, and scalable.

Moreover as creating systems that work in real-time pose specific challenges ac6 provides also courses to explain you all the specific techniques and tools to use in this context.

**Linux - Installing, programming and writing drivers** Industrial applications are more and more often performed using an embedded version of Linux. In addition, the very specific environment in which run these systems sometimes make it necessary to adapt the Linux installation to the hardware environment.

**Ac6-training** trainings not only teach you how to build applications on embedded Linux, but also how to adapt the operating system to your hardware or environment when the need arises.