

## Programming

Ac6 provides courses on all programming technologies, from architecture to low-level debug for embedded and real-time systems.

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

**Methods - Modeling, analysis and development methodologies** The complexity of computer systems led more and more to the use of standard tools to support their specification, design and development. These tools are based, where possible, on standard methods and languages .

**Ac6-training** offers training on the most common modeling language UML (*Unified Modeling Language*); these courses are tailored to the industrial and embedded systems environment and the specific needs of real-time applications.

We also offer training on management tools for the software development process, as *Eclipse*.

**Safety and security - Embedded security** Embedded security is the practice of protecting embedded systems from cyber threats. These systems are found in a wide range of devices, including smartphones, automobiles, and medical equipment, and they are often used in critical applications. 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. Our courses are designed to provide professionals with the knowledge and skills they need to design and implement secure embedded systems.

**Languages - Embedded and Real-Time Programming Languages** **ac6-formation** provides trainings on the various languages used in embedded systems. We propose courses on C, C++, Java and Python. Our courses are tailored to the use of these languages in the embedded world context, with exercises targeting these environments.

**Real-Time - Programmation et conception temps réel** Creating systems that work in real-time is a specific challenge. That's why **ac6-training** provides a range of courses to explain you all the specific techniques and tools to use in this context.

**Internet - Techniques et protocoles de communication** Internet est de plus en plus omniprésent; il est maintenant inévitable dans les systèmes embarqués.

**Programmable Logic - Programming and using programmable logic components** Embedded systems increasingly combines programmable electronics and software. These two components of the system contribute critically to the proper functioning of the system and must be designed and controlled not only separately but also in their interactions. **Ac6-training** offers practical training courses to enable you to master the implementation of programmable logic components and their interactions with the software components of your systems.