

### 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*.

#### Main Courses

**C7 - UML Real-Time** UML for embedded and real-time systems

**C8 - Critical Systems Safety** Embedded systems are more and more critical and subject to safety constraints. This training introduces the main concepts and standards applicable to safety-critical systems.

**C9 - Software Architecture with UML** Embedded systems are increasingly complex and therefore can no more be directly designed using existing schemes. One need to first create a detailed architecture to control and plan their development and integration appropriately. This course will help address these phases efficiently and avoid common pitfalls; it will explain you why Software Architecture is needed and how architecture processes can be implemented in an enterprise environment.

**E1 - Eclipse** Utilisation de l'environnement de développement Eclipse pour C, C++ et Java(TM)

#### Additional Courses

**RT1 - Real Time and Multi-Core programming** Programming Linux real-time and multi-core systems, avoiding common pitfalls Real-time and embedded code, especially targetting multicore processors, cannot be effectively tested; it must be validated before coding. This training help you master multitask and real-time programming of multi-core processors, understanding how to effectively solve problems using the primitives provided by the underlying Operating System.

**RT3 - FreeRTOS Real Time Programming** Real-time programming applied to the FreeRTOS operating system