



# ARM Cores

## Courses on ARM cores

ACSYS offers a large set of courses on ARM processor cores.

Each course details both hardware and software implementation of these cores.

Programming examples are provided to clarify the operation of complex assembly instructions and to explain the parameterizing of the ARM linker.

Vous pouvez visualiser les descriptifs détaillés des différents cours en utilisant la barre de navigation ci-dessus. Vous pouvez également cliquer sur les références des cours dans les descriptions ci-dessous.

**AAA - ARM Cortex-A and R Architecture** This course explains the ARM Cortex-A and R global architecture. It provides the prerequisites needed to start learning the various specific cores.

**AAM - ARM Cortex-M Architecture** This course explains the ARM Cortex-M global architecture. It provides the prerequisites needed to start learning the various specific cores.

**CM33SW - Cortex-M33 Software Development** This course covers the Cortex-M33 ARMv8 core

**R0 - ARM fundamentals** This course covers ARM architecture V4T and V5TE fundamentals

**R1 - ARM7/9 implementation** This course covers ARM7TDMI and ARM966/946/926 cores.

**R2 - ARM11 implementation** This course covers ARM1136 and ARM1176 CPUs

**RA0 - Cortex-A5 implementation** This course covers the ARM Cortex-A5 CPU

**RA1 - Cortex-A8 implementation** This course covers the Cortex-A8 high-end ARM core

**RA2 - Cortex-A9 implementation** This course covers both Cortex-A9 single and multiple core high-end ARM CPUs

**RA3 - Cortex-A15 implementation** This course covers Cortex-A15 high-end ARM CPU

**RA4 - Cortex-A7 implementation** This course covers Cortex-A7 ARM CPU

**RA5 - Cortex-A17 implementation** This course covers the Cortex-A17 cluster

**RA6 - CORTEX-A57 implementation, ARM Architecture V8** This course covers the Cortex-A57 and AARCH64

**RA7 - CORTEX-A53 implementation, ARM Architecture V8** This course covers the Cortex-A53 and AARCH64

**RA8 - CORTEX-A72 implementation, ARM Architecture V8** This course covers the Cortex-A72 and AARCH64

**RA9 - CORTEX-A73 implementation, ARM Architecture V8** This course covers the Cortex-A73 and AARCH64

**RC0 - VFP programming** This course explains how to use VFP instructions to boost multimedia algorithms

**RC1 - NEON programming** This course explains how to use NEON SIMD instructions to boost multimedia algorithms

**RI0 - AXI3 / AXI4 INTERCONNECT** This course covers the AXI bus protocol, described in ARM AMBA v3 and v4

**RM0 - Cortex-M0 / Cortex-M0+ implementation** This course covers both Cortex-M0 and Cortex-M0+ ARM CPUs

**RM1 - Cortex-M1 implementation** This course covers the Cortex-M1 ARM core targeting FPGA SoCs

**RM2 - Cortex-M3 implementation** This course covers the Cortex-M3 ARM core

**RM3 - Cortex-M4 / Cortex-M4F implementation** This course covers both Cortex-M4 and Cortex-M4F (with FPU)

ARM core

**RM4 - Cortex-M7 implementation** This course covers the Cortex-M7 V7E-M compliant CPU

**RR0 - Cortex-R4 implementation** This course covers the Cortex-R4 ARM core

**RR1 - Cortex-R5 implementation** This course covers the Cortex-R5 / Cortex-R5F ARM cores

**RR2 - Cortex-R7 implementation** This course covers the Cortex-R7MP ARM cores

**RS1 - Cortex-A9 & Cortex-A5 software implementation** This course describes the architecture of Cortex-A5/A9 and provides coding guidelines