



Safety and security

| Course | Duration | Cost | 2024 | | | |
|---|----------|-----------|------|-----------------------|------------|---------|
| | | | July | August | September | October |
| oSEC1 - Secure C/C++ Development for Embedded Systems | 18 hours | 2400 € HT | | 05-07- Online EurAsia | | |
| oSEC2 - Advanced Embedded Systems Security | 12 hours | 2160 € HT | | 08-09- Online EurAsia | | |
| oSEC12 - Comprehensive Secure Systems Programming | 30 hours | 3210 € HT | | 05-09- Online EurAsia | | |
| oSEC3 - wolfSSL for Embedded Security | 18 hours | 2400 € HT | | | on request | |
| oSEC4 - Advanced wolfSSL for Embedded Security | 12 hours | 2070 € HT | | | on request | |
| oSEC34 - Comprehensive Security with WolfSSL | 30 hours | 2930 € HT | | | on request | |
| oSEC5 - Embedded Security for STM32-based devices | 12 hours | 2260 € HT | | | on request | |
| oSEC6 - Embedded Security for NXP i.MX-based processors | 12 hours | 2260 € HT | | | on request | |
| oSEC7 - ARM TrustZone for Cortex-M based devices | 6 hours | 1890 € HT | | | on request | |
| oSEC8 - Secured Embedded Linux Platform Build | 12 hours | 2260 € HT | | | on request | |

Languages

| Course | Duration | Cost | 2024 | | | |
|--|----------|-----------|------|--------|------------|---------|
| | | | July | August | September | October |
| oL2 - C Language for Embedded MCUs | 24 hours | 2360 € HT | | | on request | |
| oL3 - Embedded C++ Programming | 18 hours | 2290 € HT | | | on request | |
| oL9 - Parallel programming with OpenCL | 24 hours | 2400 € HT | | | on request | |
| oL10 - Embedded Modern C++ Programming | 12 hours | 2070 € HT | | | on request | |
| oL30 - Classic and Modern C++ for Embedded Systems | 30 hours | 3070 € HT | | | on request | |

FPGA

| Course | Duration | Cost | 2024 | | | |
|------------------------------|----------|-----------|------|--------|-----------------------|-----------------------|
| | | | July | August | September | October |
| oRV1 - RISC-V Architecture | 18 hours | 2620 € HT | | | 04-06- Online EurAsia | |
| oV1 - VHDL Language basics | 24 hours | 2740 € HT | | | | 07-10- Online EurAsia |
| oV2 - Advanced VHDL for FPGA | 18 hours | 2510 € HT | | | | 28-30- Online EurAsia |

| Real-Time | | | | | | |
|---|----------|-----------|-------------------|-----------------------|-----------------------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| oRT1 - Linux Real-Time and Multi-Core programming | 30 hours | 2790 € HT | <i>on request</i> | | | |
| oRT3 - Real Time Programming with FreeRTOS | 24 hours | 2290 € HT | <i>on request</i> | | | |
| oRT5 - Zephyr Real Time Programming | 30 hours | 3070 € HT | 22-26- Online USA | 26-30- Online EurAsia | | |
| oRT6 - Real Time Programming with Eclipse ThreadX | 18 hours | 2510 € HT | | | 09-11- Online EurAsia | |
| oSTG - STM32 + FreeRTOS + LwIP | 30 hours | 3070 € HT | <i>on request</i> | | | |

| Linux | | | | | | |
|--|----------|-----------|-------------------|--------|-----------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| oD0 - Linux User Mode Programming | 24 hours | 2360 € HT | <i>on request</i> | | | |
| oD1 - Embedded Linux | 12 hours | 2070 € HT | <i>on request</i> | | | |
| oD1Y - Embedded Linux using Yocto | 30 hours | 2930 € HT | <i>on request</i> | | | |
| oD3 - Linux Drivers | 24 hours | 2760 € HT | <i>on request</i> | | | |
| oY1 - Yocto Project Development | 18 hours | 2400 € HT | <i>on request</i> | | | |
| oY2 - Yocto Project Expert | 12 hours | 2070 € HT | <i>on request</i> | | | |
| oY12 - Comprehensive Yocto Project Usage | 30 hours | 3210 € HT | <i>on request</i> | | | |

| Android | | | | | | |
|--|----------|-----------|-------------------|--------|-----------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| G1 - Android Installation | 3 days | 2180 € HT | <i>on request</i> | | | |
| G2 - Android Programming | 5 days | 2790 € HT | <i>on request</i> | | | |
| G3 - Android Internals | 5 days | 3210 € HT | <i>on request</i> | | | |
| G5 - Android for Industrial System Control | 4 days | 2860 € HT | <i>on request</i> | | | |

| Linux | | | | | | |
|--|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| D0 - Linux user mode programming | 4 days | 2360 € HT | | | | <i>on request</i> |
| D1 - Embedded Linux with Buildroot and Yocto | 4 days | 2490 € HT | | | | <i>on request</i> |
| D1S - Embedded Linux with Ac6 System Workbench | 3 days | 2070 € HT | | | | <i>on request</i> |
| D1Y - Embedded Linux with Yocto | 5 days | 2930 € HT | | | | <i>on request</i> |
| D3 - Linux Drivers | 4 days | 2740 € HT | | | | <i>on request</i> |
| D4 - Real-time Linux | 4 days | 2610 € HT | | | | <i>on request</i> |
| D5 - Embedded GUI | 3 days | 2180 € HT | | | | <i>on request</i> |
| D7 - Power Management in Linux Drivers | 2 days | 2160 € HT | | | | <i>on request</i> |
| D8 - USB Linux Drivers | 3 days | 2400 € HT | | | | <i>on request</i> |
| Q1 - Embedded GUIs with Qt | 4 days | 2740 € HT | | | | <i>on request</i> |
| Y1 - Yocto Project Development | 3 days | 2400 € HT | | | | <i>on request</i> |
| Y2 - Yocto Project Expert | 2 days | 2070 € HT | | | | <i>on request</i> |
| Y12 - Comprehensive Yocto Project Usage | 5 days | 3210 € HT | | | | <i>on request</i> |

| RTOS | | | | | | |
|---|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| IOT1 - Internet of Things (IOT) on Microcontrollers | 3 days | 2400 € HT | | | | <i>on request</i> |

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| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| SEC1 - Developing C/C++ Secure Embedded Systems | 18 hours | 2400 € HT | | | | <i>on request</i> |
| SEC2 - Advanced Embedded Systems Security | 12 hours | 2160 € HT | | | | <i>on request</i> |
| SEC12 - Comprehensive Secure Systems Programming | 30 hours | 3210 € HT | | | | <i>on request</i> |
| SEC3 - wolfSSL for Embedded Security | 18 hours | 2400 € HT | | | | <i>on request</i> |
| SEC4 - Advanced wolfSSL for Embedded Security | 2 days | 2070 € HT | | | | <i>on request</i> |
| SEC34 - Comprehensive Security with WolfSSL | 5 days | 2930 € HT | | | | <i>on request</i> |
| SEC5 - Embedded Security for STM32-based devices | 2 days | 2260 € HT | | | | <i>on request</i> |
| SEC6 - Embedded Security for NXP i.MX-based processors | 2 days | 2260 € HT | | | | <i>on request</i> |
| SEC7 - ARM TrustZone for Cortex-M based devices | 1 day | 1890 € HT | | | | <i>on request</i> |
| SEC8 - Secured Embedded Linux Platform Build | 2 days | 2260 € HT | | | | <i>on request</i> |

| Languages | | | | | | |
|---|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| L2 - C language for Embedded MCUs | 4 days | 2360 € HT | | | | <i>on request</i> |
| L3 - Embedded C++ | 3 days | 2290 € HT | | | | <i>on request</i> |
| L4 - Industrial Java | 4 days | 2610 € HT | | | | <i>on request</i> |
| L4G - Java for Android | 2 days | 1970 € HT | | | | <i>on request</i> |
| L5 - Java Temps Réel | 3 days | 2290 € HT | | | | <i>on request</i> |
| L8 - Python | 4 days | 2740 € HT | | | | <i>on request</i> |
| L9 - OpenCL | 3 days | 2400 € HT | | | | <i>on request</i> |
| L10 - Embedded Modern C++ Programming | 2 days | 2070 € HT | | | | <i>on request</i> |
| L30 - Classic and Modern C++ for Embedded Systems | 5 days | 3070 € HT | | | | <i>on request</i> |

| Methods | | | | | | |
|-------------------------------------|----------|-----------|--------------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| C7 - UML Real-Time | 4 days | 2490 € HT | 22-25- Paris | | | |
| C8 - Critical Systems Safety | 3 days | 2400 € HT | | | | <i>on request</i> |
| C9 - Software Architecture with UML | 4 days | 2740 € HT | | | | <i>on request</i> |
| E1 - Eclipse | 3 days | 1750 € HT | | | | <i>on request</i> |

| Real-Time | | | | | | |
|--|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| MC4 - Multi-Core Programming with OSEK/VDX and AutoSAR | 3 days | 2290 € HT | | | | <i>on request</i> |
| RT1 - Real Time and Multi-Core programming | 5 days | 2790 € HT | | | | <i>on request</i> |
| RT3 - FreeRTOS Real Time Programming | 3 days | 2180 € HT | | | | <i>on request</i> |
| RT5 - Zephyr Real Time Programming | 5 days | 3070 € HT | | | | <i>on request</i> |
| RT6 - Real Time Programming with Eclipse ThreadX | 3 days | 2510 € HT | | | | <i>on request</i> |

| FPGA | | | | | | |
|---|----------|-----------|------|--------|------------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| ALT1 - CYCLONE-V CORTEX-A9 HARD PROCESSOR SYSTEM | 5 days | 2790 € HT | | | on request | |
| H1 - Lattice Mico32 FPGA embedded processor | 3 days | 2180 € HT | | | on request | |
| H2 - Lattice Diamond | 2 days | 1880 € HT | | | on request | |
| HX4 - AMD (Xilinx) - Microblaze implementation | 2 days | 1970 € HT | | | on request | |
| HX5 - AMD Zynq All Programmable SoC: Hardware and Software Design | 2 days | 2160 € HT | | | on request | |
| MSP - Microchip SmartFusion2 Programming | 3 days | 2400 € HT | | | on request | |
| RV1 - RISC-V Architecture | 3 days | 2620 € HT | | | on request | |
| V0 - Programmable components fundamentals | 2 days | 2070 € HT | | | on request | |
| V1 - VHDL Language Basics | 4 days | 2740 € HT | | | on request | |
| V2 - Advanced VHDL for FPGA | 3 days | 2510 € HT | | | on request | |
| V3 - Design with SystemC | 4 days | 2490 € HT | | | on request | |

| ARM Cores | | | | | | |
|--|----------|-----------|-----------------------|--------|-----------------------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| AAA - ARM Cortex-A and R Architecture | 4 days | 2490 € HT | | | 16-19- Online EurAsia | |
| AAM - ARM Cortex-M Architecture | 4 days | 2490 € HT | 22-25- Online EurAsia | | | |
| RA0 - Cortex-A5 implementation | 4 days | 2370 € HT | | | on request | |
| RA1 - Cortex-A8 implementation | 3 days | 2080 € HT | | | on request | |
| RA2 - Cortex-A9 implementation | 4 days | 2370 € HT | | | on request | |
| RA3 - Cortex-A15 implementation | 4 days | 2370 € HT | | | on request | |
| RA4 - Cortex-A7 implementation | 4 days | 2370 € HT | | | on request | |
| RA5 - Cortex-A17 implementation | 4 days | 2490 € HT | | | on request | |
| RA6 - CORTEX-A57 implementation, ARM Architecture V8 | 4 days | 2610 € HT | | | on request | |
| RA7 - CORTEX-A53 implementation, ARM Architecture V8 | 4 days | 2610 € HT | | | on request | |
| RA8 - CORTEX-A72 implementation, ARM Architecture V8 | 4 days | 2730 € HT | | | on request | |
| RA9 - CORTEX-A73 implementation, ARM Architecture V8 | 4 days | 2730 € HT | | | on request | |
| RC1 - NEON-v7 programming | 2 days | 1880 € HT | | | on request | |
| RC2 - NEON-v8 programming | 2 days | 1970 € HT | | | on request | |
| RI0 - AXI3 / AXI4 INTERCONNECT | 2 days | 1970 € HT | | | on request | |
| RM0 - Cortex-M0 / Cortex-M0+ implementation | 2 days | 1880 € HT | | | on request | |
| RM1 - Cortex-M1 implementation | 3 days | 2180 € HT | | | on request | |
| RM2 - Cortex-M3 implementation | 4 days | 2490 € HT | | | on request | |
| RM3 - Cortex-M4 / Cortex-M4F implementation | 4 days | 2610 € HT | | | on request | |
| RM4 - Cortex-M7 implementation | 4 days | 2740 € HT | | | on request | |
| RM5 - Cortex-M33 Implementation | 4 days | 2860 € HT | | | on request | |
| RR0 - Cortex-R4 implementation | 3 days | 2180 € HT | | | on request | |

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|--------------------------------|--------|-----------|-------------------|--|--|--|
| RR1 - Cortex-R5 implementation | 3 days | 2290 € HT | <i>on request</i> | | | |
| RR2 - Cortex-R7 implementation | 3 days | 2400 € HT | <i>on request</i> | | | |

STM32

| Course | Duration | Cost | 2024 | | | |
|---------------------------------------|----------|-----------|-------------------|--------|-----------|---------|
| | | | July | August | September | October |
| STG - STM32 + FreeRTOS + LwIP | 5 days | 3070 € HT | <i>on request</i> | | | |
| STR4 - STM32 F0-Series implementation | 4 days | 2740 € HT | <i>on request</i> | | | |
| STR5 - STM32 F1-Series implementation | 5 days | 3070 € HT | <i>on request</i> | | | |
| STR6 - STM32 F2-Series implementation | 4 days | 2740 € HT | <i>on request</i> | | | |
| STR7 - STM32 F4-Series implementation | 4 days | 2610 € HT | <i>on request</i> | | | |
| STR8 - STM32MP15 Implementation | 5 days | 3070 € HT | <i>on request</i> | | | |
| STR9 - STM32 Peripherals | 5 days | 3070 € HT | <i>on request</i> | | | |

TI SoCs

| Course | Duration | Cost | 2024 | | | |
|--|----------|-----------|-------------------|--------|-----------|---------|
| | | | July | August | September | October |
| TI3 - Cortex M4 Texas Instruments Implementation and TI-RTOS | 4 days | 2740 € HT | <i>on request</i> | | | |
| TK1 - KEYSTONE II IMPLEMENTATION | 4 days | 2490 € HT | <i>on request</i> | | | |

NXP ARM

| Course | Duration | Cost | 2024 | | | |
|--|----------|-----------|-------------------|--------|-----------|---------|
| | | | July | August | September | October |
| FA4 - i.MX6 Implementation | 5 days | 2790 € HT | <i>on request</i> | | | |
| FA5 - i.MX8m Implementation | 5 days | 2930 € HT | <i>on request</i> | | | |
| FA6 - i.MX8 Max Implementation | 5 days | 3210 € HT | <i>on request</i> | | | |
| FK1 - Kinetis MCU Implementation | 5 days | 2790 € HT | <i>on request</i> | | | |
| FK2 - Kinetis KL26z MCU Implementation | 4 days | 2490 € HT | <i>on request</i> | | | |
| FQ1 - LS1021A QorIQ implementation | 5 days | 2930 € HT | <i>on request</i> | | | |
| NP1 - LPC21XX/LPC22XX microcontroller implementation | 4 days | 2370 € HT | <i>on request</i> | | | |
| NP2 - LPC17xx microcontroller implementation | 4 days | 2370 € HT | <i>on request</i> | | | |

| NXP Power | | | | | | |
|------------------------------------|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| FCC1 - e500mc implementation | 3 days | 1650 € HT | | | | <i>on request</i> |
| FCC2 - e5500 implementation | 3 days | 2290 € HT | | | | <i>on request</i> |
| FCC4 - e6500 implementation | 3 days | 2290 € HT | | | | <i>on request</i> |
| FCQ1 - P101X QorIQ implementation | 5 days | 2930 € HT | | | | <i>on request</i> |
| FCQ2 - P2020 QorIQ implementation | 5 days | 2930 € HT | | | | <i>on request</i> |
| FCQ3 - P204X QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |
| FCQ4 - P3041 QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |
| FCQ5 - P4080 QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |
| FCQ6 - P5020 QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |
| FCQ7 - T4240 QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |
| FCQ8 - T1024 QorIQ implementation | 5 days | 2930 € HT | | | | <i>on request</i> |
| FCQ9 - T2081 QorIQ implementation | 5 days | 2930 € HT | | | | <i>on request</i> |
| FCQ10 - T1040 QorIQ implementation | 7 days | 3560 € HT | | | | <i>on request</i> |
| FCQ11 - P102X QorIQ implementation | 6 days | 3250 € HT | | | | <i>on request</i> |

| Internet | | | | | | |
|----------------------------|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| STS1 - LwIP Implementation | 2 days | 1970 € HT | | | | <i>on request</i> |

| Connectivity | | | | | | |
|------------------------|----------|-----------|------|--------|-----------|-------------------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| I0 - New digital buses | 1 day | 1500 € HT | | | | <i>on request</i> |
| IA1 - CAN bus | 2 days | 1970 € HT | | | | <i>on request</i> |
| IA3 - MIL-STD 1553B | 2 days | 1880 € HT | | | | <i>on request</i> |
| IC1 - PCI 3.0 | 3 days | 2130 € HT | | | | <i>on request</i> |
| IC4 - PCI Express 3.0 | 4 days | 2490 € HT | | | | <i>on request</i> |
| IM1 - HDMI 1.4a | 2 days | 2070 € HT | | | | <i>on request</i> |
| IP1 - FireWire | 4 days | 2740 € HT | | | | <i>on request</i> |
| IP2 - USB 2.0 | 4 days | 2490 € HT | | | | <i>on request</i> |
| IP3 - USB 3.0 | 4 days | 2740 € HT | | | | <i>on request</i> |

| Network | | | | | | |
|---|----------|-----------|-------------------|--------|-----------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| N1 - Ethernet and switching | 4 days | 2490 € HT | <i>on request</i> | | | |
| N2 - IEEE1588 - Precise Time Protocol | 1 day | 1730 € HT | <i>on request</i> | | | |
| N3 - Ethernet 10 Gigabit | 3 days | 2400 € HT | <i>on request</i> | | | |

| Storage | | | | | | |
|---|----------|-----------|-------------------|--------|-----------|---------|
| Course | Duration | Cost | 2024 | | | |
| | | | July | August | September | October |
| IS2 - eMMC 5.0 | 2 days | 1400 € HT | <i>on request</i> | | | |
| IS3 - Serial ATA III | 2 days | 1880 € HT | <i>on request</i> | | | |
| IS4 - Universal Flash Storage (UFS 2.0) | 3 days | 2180 € HT | <i>on request</i> | | | |
| IS5 - SD UHS II (Ultra High Speed II) | 2 days | 1970 € HT | <i>on request</i> | | | |