

Embedded Systems Course Content

Software essentials for Embedded Developers (Target Vertical: Platform with UNIX/Linux based embedded software development)

1. Introduction, Embedded Software development, Languages, Platforms & Development environment. (180 minutes)
2. Introduction to Embedded Software development, Languages, Platforms & Development environment. (120 minutes)
3. Introduction to Embedded Linux, Setting up Linux Box. Core basic commands, utility comaads. (120 minutes)
4. shell scripting in Unix/Linux (240 minutes)
5. GNU toolchain and Development toolchains (180 minutes)
6. Booting and System call interface, programming samples (120 minutes)
7. C for Embedded Basics (840 minutes)
8. C, & C++ introduction, build, Data Declaration and scope, Functions in C++: inline, default argument, Overloading, References, Namespaces, Inbuilt support for object-oriented features, RTTI, exception handling, templates (120 minutes)
9. Functions in C++, Cstyled C++, Namespces in C++ (120 minutes)
10. Class & Objects representation in C++, object and class members (120 minutes)
11. object and class members, ctor, dtros, programmings (120 minutes)
12. object and, ctor, dtros, programmings (120 minutes)
13. class members (120 minutes)
14. Memory management techniques in C++, (120 minutes)
15. Overloading Operators (120 minutes)
16. Encapsulation & Inheritance (120 minutes)

17. abstract class, cast operators and type conversions (120 minutes)
18. STL Design and usage in data handling + Template intro (120 minutes)
19. Template in C++ - function templates algo (120 minutes)
20. Template in C++ - class templates and privacy (120 minutes)
21. Optimization in C/C++ (120 minutes)
22. System call programming, multithreading POSIX (240 minutes) (120 minutes)
23. Cross tool chain development, kernel compilation and testing new kernel images (180 minutes)
24. Cross tool chain development, Arm kernel compilation and testing new kernel images, QEMU setup and ARM configuration test, bootloaders and rootfs (180 minutes)
25. Linux Kernel Modules and Device Drivers Programming (120 minutes)
26. Linux Kernel Modules and Device Drivers Programming, U.M.Linux Development (120 minutes)

[Embedded system Course](#) from Tek Classes will make you master, Enroll today and step ahead towards your career goal.