

The course introduces the participant to Linux Embedded OS. The course focuses on the OS structure. We will see the development environment and Tools the difference between kernel and user space, and embedded considerations. Linux system calls and library functions, how to use them, and their underlying mechanisms are introduced. The course deals with many facets of the Linux operating system, including: Linux kernel structure, I/O, Signals, Processes, Threads, and IPC.

Topics to be covered in Workshop

1. Overview For Embedded Linux
2. Introduction to open source concept
3. Development environment and Tools
4. Linux file system
5. Basics regarding Kernel Space and its interface to User Space
6. Shell and basic shell commands
7. Basic IP Filters
8. Linux Memory Model
9. Linux Scheduling and priorities
10. Comparing Linux to other RTOS
11. Porting considerations from other RTOS (VxWorks) to Linux
12. Tools chain Overview
13. POSIX Threads
14. Synchronization and Communication
15. C Signals
16. /proc and /sys for Kernel 2.6
17. dynamic Modules and Procs

Duration: The duration of this workshop will be two consecutive days, with Eight hours session each day in a total of Sixteen hours.

Eligibility: It's a basic level workshop so there are no prerequisites. Anyone interested, can join this workshop.

Fee: Rs. 1500/- (inclusive of all Taxes) per participant.

Certification Policy:

- Certificate of Merit for all the workshop participants from Illuminated Minds.
- At the end of this workshop, a small competition will be organized among the participating students and winners will be awarded with a '**Certificate of Excellence**'.