

TenHz Linux Advanced Training Class Schedule

Day 1	Outline: Embedded Linux Concepts and Development Environment
A.M.	1. TenHz Linux Introduction
	2. Linux Organizations and Terms
	3. Embedded Linux Development Environment
	4. Linux Application Programming Introduction
	5. Application Programming Topic 1: File I/O and Standard I/O Stream
P.M.	6. Application Programming Topic 2: Static Library and Shared Libs
	7. Application Programming Topic 3: Process management and IPC
	8. Application Programming Topic 4: POSIX Signals and Timers
	9. Linux Kernel: Multi-processes and Multi-threads
	10. Linux Kernel: Thread Scheduling and PThreads API
	→ Labs and Q&A
Day 2	Outline: Linux Kernel Techniques and Device Driver
A.M.	11. Linux Kernel Configuration, Customization and Building
	12. Device Driver Programming Basics
	13. Device Modules and Kernel Module Manipulation
	14. Character Device Driver: Linux Driver Structure
	15. Kernel Memory Management Model
P.M.	16. Communications between Applications and Kernel
	17. Advanced Memory Management: mmap and DMA
	18. Kernel Time and Timers
	19. Synchronized and Asynchronized I/O Operations
	20. Kernel TCP/IP Protocol Stack Model and Netdevice Driver
	→ Labs and Q&A
Day 3	Outline: Linux Device Driver, Kernel Porting and Product Integration
A.M.	21. Device Interrupt Handling and Soft Interrupt Mechanism
	22. Kernel Synchronization Techniques and Data Protection
	23. Peripheral Bus Device Drivers: PCI and USB Drivers
	24. Kernel and Driver Debugging Techniques
P.M.	25. Embedded Linux Final Products Integration and Deployment
	26. Linux Kernel Booting Process Analysis
	27. Linux Kernel Porting Guidelines
	28. Summary and Thoughts
	→ Labs and Q&A