

1. Embedded Linux Architecture
 - a. Kernel considerations
 - b. Boot loaders and boot configurations
 - c. Filesystem considerations and solid state medias
 - d. Various hardware processors in embedded arena
2. Introduction to ARM architecture
 - a. Various ARM processors and revision
 - b. ARM programming modes
 - c. Register sets and instructions
 - d. Hosting OS on ARM
3. Porting Linux on ARM
 - a. Tool chains
 - b. Choosing kernel configuration
 - c. Cross compilation
 - d. Building RootFS
 - e. Booting Linux & start up
4. Programming on ARM Linux
 - a. Application programming on ARM board & linux
 - b. Interfacing with hardware/GPIO
 - c. Writing small drivers on ARM
5. Debugging
6. Basics of Real Time Linux Considerations
 - a. RTOS concepts
 - b. Real Time Linux
 - c. Typical applications of Real Time

Prerequisite: Linux Kernel & Device driver Programming