

**Course Description:** Red Hat Linux Programming Essentials is an intensive hands-on course designed to rapidly train key skills for developing applications and programs on Red Hat Linux. This 5-day course provides hands-on training, concepts, demonstrations, with emphasis on realistic labs and programming exercises. Upon completion of the course students will have learned and practiced the essential skills required to develop programs for Linux systems.

**Who Should Attend:** C programmers (with UNIX or Linux workstation power user skills) interested in beginning to develop applications on Linux will benefit from taking this course.

**Prerequisites:** Students should have experience in C programming, RH133 or equivalent UNIX or Linux workstation user skills for developers, shell scripting in a UNIX or Linux environment, and experience with editors such as vi, emacs.

**Benefits of Attendance:** Upon completion of this course, students will be able to:

- Understand and use all of the concepts and skills essential to programming and software development for Linux-based applications.

### Course Outline:

Tools And Methods For Developing C Programs For Linux

Shell Programming Essentials

Makefiles

Version Control

Compiling, Linking And Debugging

Linux Standards And Compliance

File Access System Calls And I/O

Programming File And Directory System Services

Processes Management And Creation

Signals, Signal Handlers And Alarms

Inter-process Communication (Shared Memory, Semaphores, Messages)

Threads

Semaphores

Pipes And FIFOs

Shared Memory

Message Queues

Sockets

Red Hat Package Manager (RPM)

Multiplexed And Asynchronous I/O