

Linux Programming Courses: Sequence Recommendation



The following five courses are recommended to be taken in sequence unless students have prior knowledge of the subject matter:

Sequence Recommendation

Linux Systems Programming

3 UNITS

Learn to program system calls to access the lowest level resources of Linux. This course includes real world examples and a hands-on project.

Course Number 3493

Linux Kernel Architecture and Programming

3 UNITS

This course covers the Linux kernel as well as interfaces and process management. It includes a programming project.

Course Number 1397

Linux Device Drivers

3 UNITS

Acquire the skills needed to analyze, code and debug a Linux device driver. This course covers the driver concept, related kernel topics and interfaces.

Course Number 2470

Linux Device Drivers, Advanced

3 UNITS

This course covers the kernel services and driver details for USB, PCI family (PCI-E, PCIe) subsystems, and frame buffer API, including a driver coding project for a board.

Course Number 1016

Linux Kernel Programming, Advanced

2.5 UNITS

This course builds on the kernel knowledge and provides the next level details needed for real-world Linux product development. The instructor presents practical examples of kernel topics.

Course Number 23103

For students interested in application programming, the following courses can be taken independently:

Embedded Linux Design and Programming

3 UNITS

Learn to install Linux and program and debug applications on an ARM 9 board. This course will get you to speed with embedded Linux. Some knowledge of system programming will be helpful.

Course Number 3364

Linux Based Web Application Development—Apache, MySQL, PHP

3 UNITS

Linux, Apache, MySQL and PHP (LAMP) comprise the most popular Internet platforms. LAMP is low-cost yet robust with complete e-commerce and enterprise capabilities.

Course Number 21958

More Information

To read complete course descriptions visit ucsc-extension.edu/linux. Then browse for courses and schedule.

If you have questions regarding these courses, or the recommended sequence, please e-mail us at extensionprogram@ucsc.edu.

Thank you for studying at UCSC Extension Silicon Valley!

Linux Programming Certificate Requirements

Total: 14 units

GPA: 3.0

C or better in all courses.

Timeline: Complete minimum units/courses within 3 years.

Note: Courses completed more than five years prior to date of certificate issuance cannot be used to fulfill requirements.

How to Apply

Certificate applications can be submitted online. Simply click on the “Declare Candidacy” button found at ucsc-extension.edu/linux. Then, select the “Enroll” button next to the certificate title and follow the instructions.

For information and to register, visit ucsc-extension.edu.

Program Contact Engineering and Technology Department, e-mail extensionprogram@ucsc.edu, or call (408) 861-3860.

For current course information, expanded course descriptions, textbooks, map and directions to our facility and to enroll, visit ucsc-extension.edu.