

Course name	ECE 28200 Unix Programming for Engineers
Credit and contact hours	(1 cr.) Lab 1
Course coordinator's name	Dongsoo S. Kim
Textbook	Bruce Molay, <i>Understanding Unix/Linux Programming. A Guide to Theory and Practice</i> , Prentice Hall, 2003 ISBN: 9780130083968
Course information	<p>ECE 28200 UNIX Programming for Engineers (1 cr.) P: ECE 26100 and ECE 26300. Lab 2. Introduction to the UNIX operating system, including the UNIX file system, as well as UNIX tools and utilities. Introduction to shell programming. The emphasis will be on how these tools/utilities are utilized in the computing engineering field.</p> <p>Prerequisites/ Co-Requisite P: ECE 26100 and ECE 26300</p> <p>Required, Elective, or Selected Elective: EE Elective, CE Required</p>
Goals for the course	<p>Upon successful completion of the course, students should be able to</p> <ol style="list-style-type: none"> 1. Describe the UNIX operating system. [1,2,6] 2. Describe the fundamental UNIX system tools and utilities. [1,2,6] 3. Describe and write shell scripts in order to perform basic shell programming. [1,2,6] 4. Describe the UNIX file system. [1,2,6]
List of topics to be covered	<ol style="list-style-type: none"> 1. Introduction, UNIX Standardization & Implementation 2. Editing and general system usage 3. Regular expressions and commands that use them 4. Scripting and basic shell programming 5. UNIX file system: files, directories 6. Time, users, and groups, system data les 7. Flow control, command line operations 8. Variables, I/O and line processing 9. Multiple le, record locking, memory mapping 10. Processes 11. Inter-process communications 12. Terminals 13. Exam
Syllabi approved by	Dongsoo S. Kim
Date of approval	11/30/2021