

Unix System Administration

1. **Course number and name:** 020ADUES3 Unix System Administration

2. **Credits and contact hours:** 4 ECTS credits, 2x1:15 contact hours

3. **Name(s) of instructor(s) or course coordinator(s):** Roua El Chamaa

4. **Instructional materials:** lab experiments; slides; in-class problems

5. **Specific course information**

a. **Catalog description:**

Unix fundamentals - Shell and basic commands – File system – User management
Text editors - Shell scripting - Processes – Permissions – System configuration -
Periodic tasks – Network configuration – System security

b. **Prerequisites:** None

c. **Required** for CCE students

6. **Educational objectives for the course**

a. **Specific outcomes of instruction:**

- Understand how UNIX-based systems operate.
- Install a Linux operating system.
- Use and administer a Linux operation system.
- Produce and debug scripts: text processing with AWK.
- Manage network services.
- Secure a system and a network.

b. **PI addressed by the course:**

PI	1.1	1.3	2.3	7.1
Covered	x	x	x	x
Assessed	x	x	x	

7. **Topics and approximate lecture hours**

- Introduction to UNIX and Linux (1 lecture)
- Install a Linux operating system, use of basic commands (3 lectures)
- File management (2 lectures)
- Access rights (1 lecture)
- Text editors (3 lectures)
- Lab1: File management, access rights, text editors (2 sessions)
- Shell scripting (3 lectures)
- User administration (2 lectures)
- Process management (1 lecture)

- Network administration (4 lectures)
- Lab2: Shell scripting, user administration, network administration (2 sessions)