

CS-323(a) **Operating systems implementation**

Cursus	Sem.	Type
Communication systems	BA6	Opt.
Computer science	BA6	Opt.

Language of teaching	English
Credits	4
Session	Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	14
Hours	2 weekly
Project	2 weekly
Number of positions	

Remark

pas donné en 18-19

Summary

Implementation of basic concepts of operating systems in Linux

Content

Implementation of system calls, interrupt handling, process and memory management and file systems

Keywords

Operating systems implementation, Linux

Learning Prerequisites

Required courses

CS-206 Parallelisme and concurrency
 CS-207 Systems programming
 CS-323 Operating systems (preferably to be taken concurrently)

Strictly no admission without concurrent or prior CS-323.

Learning Outcomes

By the end of the course, the student must be able to:

- Implement key components of operating systems

Teaching methods

Introduction and discussion of assignments in exercise sessions.

Expected student activities

Attendance at exercise sessions.
 Implementation of several programming projects.

Assessment methods

Programming assignments.

Equal value for each assignment.

Supervision

Office hours	Yes
Assistants	Yes
Forum	Yes

Resources

Bibliography

Operating Systems : Three Easy Pieces, R. Arpaci-Dusseau and A. Arpaci-Dusseau (free online book).
Linux Kernel Programming, 3rd Edition, R. Love.
Slides available on Moodle.

Ressources en bibliothèque

- [Operating Systems : Three Easy Pieces / Arpaci-Dusseau](#)
- [Linux Kernel Programming / Love](#)