

CS-323

**Introduction to operating systems**

Zwaenepoel Willy

| <b>Cursus</b>          | <b>Sem.</b> | <b>Type</b> |
|------------------------|-------------|-------------|
| Communication systems  | BA6         | Opt.        |
| Computer science minor | E           | Obl.        |
| Computer science       | BA6         | Obl.        |
| HES - IN               | E           | Obl.        |

|                            |                     |
|----------------------------|---------------------|
| Language of teaching       | English             |
| Credits                    | 3                   |
| Session                    | Summer              |
| Semester                   | Spring              |
| Exam                       | During the semester |
| Workload                   | 90h                 |
| Weeks                      | 14                  |
| <b>Hours</b>               | <b>3 weekly</b>     |
| Courses                    | 2 weekly            |
| Exercises                  | 1 weekly            |
| <b>Number of positions</b> |                     |

**Summary**

Introduction to basic concepts of operating systems.

**Content**

Function and general structure of an operating system.  
 Process management.  
 Memory management.  
 File systems.  
 Virtualization and virtual machines.

**Keywords**

Operating systems

**Learning Prerequisites****Required courses**

CS-206 Parallelisme and concurrency  
 CS-207 Systems programming

**Learning Outcomes**

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

- Manage key components of operating system

**Teaching methods**

Lectures and exercises.

**Expected student activities**

Attendance at lectures and completing exercises.

**Assessment methods**

Midterm and final during the semester.  
 50% midterm, 50% final.

**Supervision**

|              |     |
|--------------|-----|
| Office hours | Yes |
| Assistants   | Yes |
| Forum        | Yes |

## Resources

### Bibliography

Operating Systems : Three Easy Pieces, R. Arpaci-Dusseu and A. Arpaci-Dusseu (free online book).  
Slides available on Moodle.

### Ressources en bibliothèque

- [Operating Systems : Three Easy Pieces / Arpaci-Dusseu](#)

### Références suggérées par la bibliothèque

- [Operating Systems Concepts / Silberschatz](#)