

- Faculté des sciences
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## Operating Systems (3IN1031)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Bachelor en mathématiques</b>	<b>Cours: 2 ph Exercice: 2 ph</b>	Voir ci-dessous	6
<b>Bachelor en systèmes naturels</b>	<b>Cours: 2 ph Exercice: 2 ph</b>	Voir ci-dessous	6
<b>Master en informatique</b>	<b>Cours: 2 ph Exercice: 2 ph</b>	Voir ci-dessous	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

### Période d'enseignement:

- Semestre Printemps

### Equipe enseignante

Lectures: Dr. Valerio Schiavoni  
Assistant(s): Christian Gottel/Simon Queyrut

### Contenu

This course covers the fundamentals of operating systems and their underlying principles: process management and time sharing (including synchronization and scheduling), memory management, storage management. Exercises are based on simulations or simplified computer systems environments and help mastering the concepts presented during the lectures.

### Forme de l'évaluation

Written exam, 2 hours. Weekly quizzes are provided for self-evaluation of students' progress. These quizzes are corrected but are not graded.

### Documentation

Operating System Concepts with Java  
Abraham Silberschatz, Peter B. Galvin, Greg Gagne (Wiley)

The book is mandatory for the course but students do not have to buy it. Books from the library will be available to borrow from the library for the entire semester.

### Pré-requis

- no prior knowledge of operating systems concepts required
- no prior knowledge of UNIX required
- general knowledge of the Java programming language. Students without any knowledge of Java but knowledge of another object-oriented language should not have any problem taking the course, but it is recommended that they contact the instructor, who will provide pointers to documentation/online resources for a self-taught course.

### Forme de l'enseignement

Every week: lecture (1h45), practicals (2h), weekly quiz corrected upon submission, practicals in the form of several mini-projects of 1 to 4 weeks.

URLs	1) <a href="https://moodle.unine.ch/course/view.php?id=8178">https://moodle.unine.ch/course/view.php?id=8178</a>
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