UE Introduction to distributed systems

Level
Baccalaureate
+4

ECTS
3 credits

Component
UFR IM2AG
(informatique,
mathématiques
et
mathématiques
appliquées)

Semester
Printemps

> **Teaching language(s):** English

> **Teaching method:** In person

> **Teaching type:** Lectures

> **Open to exchange students:** Yes

> **Code d'export Apogée:** GBIN8U03

Presentation

Description

After presenting the major differences between a centralized system and a distributed one, this option shows students both the "user" and the "designer" side of distributed applications. Students get acquainted with existing distributed middleware and see how the latter tackle the problems of distributed system design. Are discussed the principles of distributed communication, including client/server synchronous architectures and publish/subscribe decoupled ones. The students also zoom into distributed middleware implementation and learn the basics of distributed algorithmics. Working with simple distributed topologies, they get to write simple algorithms and reason about their correctness.

Course parts

CM	Lectures (CM)	15h
TD	Tutorials (TD)	18h

Recommended prerequisites

Java Programming

Period : Semester 8

Seconde chance / Session de rattrapage - Épreuves

Libellé	Nature de l'enseignement	Type d'évaluation	Nature de l'épreuve	Durée (en minutes)	Nombre d'épreuves	Coefficient de l'épreuve	Remarques
				120			

Skills

- Understand the design and algorithmic challenges of distributed systems

- Learn how to use existing middleware to design distributed applications

- Learn how to design and implement simple distributed algorithms

Useful info

Contacts

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Place

❯ Grenoble

Campus

❯ Grenoble - University campus