

# UE Advanced security



Level  
Baccalaureate  
+5



ECTS  
6 credits



Component  
UFR IM2AG  
(informatique,  
mathématiques  
et  
mathématiques  
appliquées)



Semester  
Automne

- > **Teaching language(s):** English
- > **Teaching method:** In person
- > **Teaching type:** Lectures
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** GBX9SY06

## Presentation

### Description

The advanced security module proposes to investigate deeper certain topics in security which include privacy models (k-anonymity, differential privacy and privacy by design), secure data structures (hash chain, Merkle's tree), (in)secure communication protocols (WEP and WPA protocols) and anti-viruses. The module focuses on several case study on privacy enhancing technologies (PETs), blockchain (along with an overview of cryptocurrencies), wireless attacks with scapy, malware detection using YARA and ClamAV.

### Course parts

CM	Lectures (CM)	24h
TD	Tutorials (TD)	24h

**Period :** Semester 9

### Skills

# Useful info

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## Contacts

Program director

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## Place

› [Grenoble](#)

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## Campus

› [Grenoble - University campus](#)