

UE Software security, secure programming and computer forensics



Level
Baccalaureate
+5



ECTS
3 credits



Component
UFR IM2AG
(informatique,
mathématiques
et
mathématiques
appliquées)



Semester
Automne

- > **Teaching language(s):** English
- > **Dual language:** Full english
- > **Teaching method:** In person
- > **Teaching type:** Conference and seminars
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** GBX9SY01

Presentation

Description

The goal of this course is to enable students to acquire the following concepts:

- know how to identify the strengths/weaknesses of a programming language from the point of view of security;
- know the main causes and consequences of the usual software vulnerabilities
- know the protection mechanisms provided by the compilers, by the OS - understand the main techniques of code analysis for security (their interests, their limits)

Course parts

| | | |
|----|---------------------|-------|
| CM | Lectures (CM) | 19,5h |
| TP | Practical work (TP) | 19,5h |

Recommended prerequisites

Programming, compilation

Period : Semester 9

Skills

Knowledge of the operating mechanisms of a program; protection techniques (at the level of code, compiler, execution platform); tools for analysing code for security ;

Bibliography

Writing Secure Codes" (M. Howard and D. LeBlanc, MicroSoft)

Useful info

Contacts

Program director

Laurent Mounier

✉ Laurent.Mounier@univ-grenoble-alpes.fr

Place

> Grenoble

Campus

> Grenoble - University campus



Know more

http://www-verimag.imag.fr/~mounier/Enseignement/Software_Security/