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

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Place

> Grenoble

Campus

> Grenoble - University campus

Know more

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