

# SYSTEMES, APPLICATIONS MOBILES ET SECURITE



Component  
École Nationale  
Supérieure  
d'Électrotechnique  
d'Électronique  
d'Informatique  
d'Hydraulique  
et des  
Télécommunications

In brief

> **Ametys Code:** N8EN20

## Presentation

### Description

At the end of this UE, the student knows about the stakes at play, the methods and the best practices tailored for systems, security and mobiles application programming ; he knows the major mechanisms underlying these technologies and is able to leverage this knowledge to design and evaluate secured applications for fixed or mobile systems.

The first class introduces the core principles of operating systems (file, process, memory management). The student gets as well the basics in multithread programming.

The second class is dedicated to mobile application design. Labs and project programs are developed for Android systems. The project's aim is to have an application that enables 2 mobile devices to exchange data over a wireless interface (e.g. Bluetooth, WiFi). The last class presents the basics of security for computer systems (definitions, problems and risks) focusing specially on network security.