

Unix system administration



SCHOOL

Polytech Graduate School of
Engineering



CAMPUS

Belle-Beille



LEVEL

Engineering 5th year



OPEN TO EXCHANGE STUDENTS

Yes



SEMESTER

Fall (S1)

> **Degree course:** Graduate School of Engineering - Automation and Computer Engineering

> **Teaching unit:** UE 9.4.3 Cyber security

> **Course language:** English

> **Duration (hours):** 20

> **ECTS:** 1

> **Teacher(s):** Alain Godon

> Assessment:

Continuous assessment

Final exam

> Teaching methods:

Lecture course hours

Tutorial course hours

Practical work 20 hours

Case study

Project

COURSE DESCRIPTION

System virtualization: VMware, VirtualBox - System containerization: Docker, Kubernetes - Intrusion detection System: Wazuh, system logs, syslog and ELK export - Automation: Ansible/puppet - Day to day Devop task - Forensics -

OBJECTIVES

The course is focused on virtualization and containerization system and show how to improve and have good secured systems by using logging system, intrusions detectors and make some ethical pentests.

PREREQUISITES

GNU/Linux (UE 5.3), Networking (UE 5.3), Unix Administration (UE 7.4), Cyber security (UE 7.4)-

SELECTIVE BIBLIOGRAPHY

<https://opensource.com/resources/virtualization> - <https://www.edureka.co/blog/chef-vs-puppet-vs-ansible-vs-saltstack/> -