GNU / Linux

SCHOOL
Polytech Graduate School of Engineering

CAMPUS
Belle-Beille

LEVEL
3rd year Bachelor's degree

OPEN TO EXCHANGE STUDENTS
Yes

SEMESTER
Fall (S1)

> **Degree course:** Graduate School of Engineering - Automation and Computer Engineering
> **Teaching unit:** UE 5.3 Génie informatique
> **Course language:** English
> **Duration (hours):** 20
> **ECTS:** 2
> **Teacher(s):** Nicolas Delanoue

> **Assessment:**
> **Teaching methods:**

☒ Continuous assessment	☒ Lecture course	8 hours	☐ Case study
☐ Final exam	☒ Tutorial course	12 hours	☐ Project
	☐ Practical work	hours	

COURSE DESCRIPTION

Unix :
- - User and administrator (root)
- - Filesystem and permissions
- - Command for managing files and directories

Shell : flow redirection, pipeline
- - Regular expressions and manipulation of file data
- - Shell scripts
- Python
- - Data types, control flow and files
- Python-Unix coupling
- - Interoperability between Python program and Unix commands
- - Graphical user interface and Unix commands
- - Network, web and Unix commands

OBJECTIVES

Knowledge of concepts and commands regarding the Unix operating system. Use of the shell and Python for different activities (e.g. search on the filesystem, file editing, permission modifications, user creation).

PREREQUISITES

algorithmics and programming

SELECTİVE BİBLİOGRAPHY

Introduction to Unix, Jerry Peek, Grace Todino and John Strang, Editions O'Reilly -
- Python for Unix and Linux System Administration, Efficient Problem Solving with Python, Noah Gift, Jeremy M. Jones, O'Reilly Media, 2008 -