



Faculty of Applied Sciences

INGI2114 Computer system design

[30h+30h exercises] 5 credits

This course is taught in the 1st semester

Teacher(s): Olivier Bonaventure, Marc Lobelle (coord.), Peter Van Roy
Language: French
Level: Second cycle

Aims

- To compare various types of operating systems to understand their advantages and drawbacks
- To understand and explain the main problems that are solved by an operating system and show how those problems are solved with their advantages and drawbacks
- To identify the main configuration and management choices for systems

Main themes

- Processes and threads : concepts, problems and solutions
- Memory management
- Input-Output
- Multiprocessor systems
- Security and fault-tolerance
- Principles of system management

Content and teaching methods

see "Main themes"

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

- Prerequisite:
 - * INGI2113 Structures et utilisation des systèmes informatiques
 - or
 - * LINF1252 Introduction aux systèmes informatiques Marc Lobelle

- References

Mandatory Book:

Tanenbaum, A. S., "Modern Operating Systems (second edition)" , Prentice Hall Inc, 2001.