


 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.

Programmes in which this activity is taught

INFO2 Ingénieur civil informaticien
LINF2 Licence en informatique

Other credits in programs

INFO21	Première année du programme conduisant au grade d'ingénieur (5 credits) civil informaticien		Mandatory
INFO22	Deuxième année du programme conduisant au grade d'ingénieur civil informaticien	(5 credits)	
LINF21/GS	Première licence en informatique (informatique de gestion)	(5 credits)	
LINF22/GN	Deuxième licence en informatique (informatique générale)	(5 credits)	Mandatory
LINF22/GS	Deuxième licence en informatique (informatique de gestion)	(5 credits)	Mandatory