

Faculty of Applied Sciences



INGI2141 Computer networks: information transfer

[30h+30h exercises] 5 credits

This course is not taught in 2006-2007

This course is taught in the 2nd semester

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

Aims

- To understand and explain the main requirements of distributed and multimedia applications
- To understand and explain the functions used to fulfill those requirements in the different layers of the networking reference model
- To understand and explain how those functions are implemented in the Internet protocols
- To select the appropriate solution based on the application's requirements

Main themes

- Role, model and requirements of distributed applications
- Reference model used in computer networks
- Reliable transport of information in data networks : mechanisms and protocols
- Interconnection of networks, addressing, routing : mechanisms and protocols
- Local Area, Metropolitan and Wide Area Networks

Content and teaching methods

see "Main themes"

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

- Prerequisite
 - (1) Programming with a high-level language
 - (2) Basic knowledge of hardware and operating systems (LINF1252, INGI2113/INGI2114)
- Reference

J. Kurose, K. Ross, Computer Networking : a top-down approach featuring the Internet, Addison-Wesley, 2002
- Remarque: see also <http://www.icampus.ucl.ac.be/INGI2141>