UCLouvain

linfo2142

2021

Computer networks: configuration and management

5.00 credits	30.0 h + 30.0 h	Q1

Teacher(s)	Bonaventure Olivier ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	• network architectures and the role of virtual networks • quality of service • provision of multicast • network reliability • principles of network management
Learning outcomes	**At the end of this learning unit, the student is able to :** Given the learning outcomes of the "Master in Computer Science and Engineering" program, this course contributes to the development, acquisition and evaluation of the following learning outcomes: • INFO1.1-3 • INFO2.2-4 • INFO5.2, INFO5.4-5 • INFO6.1, INFO6.3, INFO6.4 Given the learning outcomes of the "Master [120] in Computer Science" program, this course contributes to the development, acquisition and evaluation of the following learning outcomes: • SINF1.M1 • SINF2.2-4 • SINF5.2, SINF5.4-5 • SINF6.1, SINF6.3, SINF6.4 Students completing successfully this course will be able to • design, deploy and manage data networks • explain the threats against networks and the defense strategies • deploy mechanisms to ensure quality of service, security and reliability
Evaluation methods	• Oral exam (60%) • Projects (35%) • Peer-reviews (5%) Organized by groups students, the project won't be able to repeated in the second session.
Teaching methods	• Inverted clasroom • Network design and management project in small groups
Content	• BGP • Traffic control in IP networks • IP Mutlicast • MultiProtocol Label Switching • BGP/MPLS VPNs • Evolution of the Internet architecture
Inline resources	https://moodle.uclouvain.be/course/view.php?id=2046
Bibliography	Slides available on moodle reference articles available on moodle
Faculty or entity in charge	INFO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Computer Science and Engineering	INFO2M	5		🔍
Master [120] in Computer Science	SINF2M	5		🔍