



5.00 credits

30.0 h + 30.0 h

Q2

Teacher(s)	Bonaventure Olivier ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	<p>This course assumes that the student already acquired programming skills, algorithmic skills and mastery of the elementary data structures targeted by the LEPL1402 course.</p> <p>Successful completion of LEPL1503 is a plus</p> <p><i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i></p>
Main themes	<ul style="list-style-type: none"> • Role, model and needs of representative distributed applications • Reference model of computer networks • Reliable Transport of Information: Mechanisms and Protocols • Network interconnection, addressing, routing and related problems • Local, metropolitan and long distance networks
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>Given the learning outcomes of the "Bachelor in Engineering" program, this course contributes to the development, acquisition and evaluation of the following learning outcomes:</p> <ul style="list-style-type: none"> • AA.1.1, AA.1.2 • AA2.5-7 • AA3.2 • AA4.1-4 <p>Given the learning outcomes of the "Bachelor in Computer science" program, this course contributes to the development, acquisition and evaluation of the following learning outcomes:</p> <ul style="list-style-type: none"> • S1.17 • S2.2-4 • S4.3 • S5.2-5 • S6.2-3 <p>1</p> <p>Students who have successfully completed this course will be able to</p> <ul style="list-style-type: none"> • Explain the communication needs of the different classes of distributed applications handling data or multimedia streams • Explain the distribution of functions that satisfy these needs in the different layers of the reference model • Explain the realization of these functions in Internet protocols • Choose solutions according to the needs of their application • Quantify the characteristic quantities involved in the networks <p>Students will have developed methodological and operational skills. In particular, they have developed their ability to</p> <ul style="list-style-type: none"> • Argue to highlight the positives and negatives of a solution and make suggestions for improvement; • Write a summary report containing the elements that we wish to highlight.
Bibliography	Computer Networking: Principles, Protocols and Practice (3rd edition), https://beta.computer-networking.info
Faculty or entity in charge	INFO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Computer Sciences	MINSINF	5		
Bachelor in Computer Science	SINF1BA	5	LEPL1402	
Specialization track in Computer Science	FILINFO	5		