linfo1252

2023

Informatic Systems

5.00 credits	30.0 h + 30.0 h	Q1

Teacher(s)	Riviere Etienne ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	This course assumes that the student already masters the programming skills in C language targeted by LEPL1503 and the algorithmic notions covered by the LEPL1402. *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.*
Main themes	• Levels of abstraction in computer systems • Processor architectures • Machine language, assembly language and C language • Roles and functions of operating systems • Using the features of an operating system in applications • Processes and threads: concepts, problems and solutions • Multi-processor systems
Learning outcomes	**At the end of this learning unit, the student is able to :**
	1	Given the learning outcomes of the "Bachelor in Engineering" program, this course contributes to the development, acquisition and evaluation of the following learning outcomes: • AA1.1, AA1.2 • AA2.4-7 • AA4.1, AA4.4 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: • S1.I4 • S2.2-4 • S5.2, S5.5 Students who have successfully completed this course will be able to • explain which functions are fulfilled by the different levels of the hierarchy ranging from the physical machine to the level on which the applications are based • explain the main architectures of operating systems and processors, as well as the main devices and techniques used to realize them • use and effectively implement the various services and functions offered by processors and operating systems

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Data Science : Statistic	DATS2M	5		🔍
Specialization track in Computer Science	FILINFO	5		🔍
Bachelor in Computer Science	SINF1BA	5	LEPL1402 AND LEPL1503	🔍
Mineure Polytechnique	MINPOLY	5		🔍