UCLouvain

linfo1252
2019

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

5 credits	30.0 h + 30.0 h	Q1

⚠ **This learning unit is not being organized during this academic year.**

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
Aims	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 - - - - *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Faculty or entity in charge	INFO

(Aims row marked with the number 1)

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Computer Science	SINF1BA	5	LEPL1402 AND LEPL1503	🔍
Master [120] in Data Science : Statistic	DATS2M	5		🔍
Minor in Engineering Sciences: Computer Sciences (only available for reenrolment)	LSINF100I	5		🔍
Specialization track in Computer Science	LINFO100P	5		🔍