




5.0 credits	30.0 h + 30.0 h	2q
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Teacher(s) :	Bonaventure Olivier ;
Language :	Français
Place of the course	Louvain-la-Neuve
Inline resources:	https://moodleucl.uclouvain.be/course/view.php?id=9197
Prerequisites :	Within SINF1BA : LSINF1101 <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>
Main themes :	-- Levels of abstraction in computer systems -- Processor architectures -- Machine language, assembly language and C language -- Roles and functions of operating systems -- Using functions of an operating system in applications -- Processes and Threads: Concepts, Problems and Solutions -- Multiprocessor 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 Engineering" 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 completing successfully this course will be able to -- explain what functions are performed by different levels of the hierarchy from the physical machine level up to the layer that contains the applications. -- explain the main architectures of operating systems and processors -- use and implement efficiently the various functions and services provided by the processors and operating systems <i>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".</i>
Evaluation methods :	-- Written exam (60%) -- Projects (20%) group of 2 students. -- Reviews of other individual student projects (20%) Individual reviews can not be represented in the second session. The mark of project can be replaced by an individual project in the second session.

Teaching methods :	Magistral courses and sessions proved by appointed guardian Projects by group
Content :	see "Main themes"
Bibliography :	Reference book : -- Systèmes informatiques, Olivier Bonaventure, -- lecture notes, -- http://sites.uclouvain.be/SystInfo/
Other infos :	http://sites.uclouvain.be/SystInfo/ Background: -- Good basic knowledge of programming and algorithmics, and practical experience in programming with a high-level programming language are required to start this course.
Faculty or entity in charge:	INFO

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Linguistics	LING2M	5	LSINF1103	
Minor in Computer Sciences	LINFO100I	5	LSINF1101	
Minor in Engineering Sciences: Computer Sciences	LSINF100I	5	-	
Bachelor in Computer Science	SINF1BA	5	LSINF1101	