

$SS201\mu$ Introduction to the Internal Design of Operating Systems Competencies List

This document provides the list of basic and advanced competencies, with a precise description, that can be acquired through the $SS201\mu$ Introduction to the Internal Design of Operating Systems micro-course.

Basic Competencies

Basic competencies are specific to a teaching unit or activity and a 100% mastery level for all of them is required to succeed the teaching unit or activity (10/20).

Code	The learner is able to
OS101	understand and define what is an operating system.
OS102	explain mechanisms used by the operating system to abstract the CPU, the memory and
	the input/output.
OS121	understand how the user mode interacts with the kernel mode and explain the system call
	mechanism.

Advanced Competencies

Advanced competencies could be transversal to several teaching units or activities and increasing the mastery level of any of them is global to all the teaching units and activities where it is declared.

Code	The learner is able to
OS821	retrieve information about the data structures manipulated by Linux with system commands.
OS201	understand and compare the different algorithms used for process scheduling, page replace-
	ment and disk scheduling.
OS129	write a program directly using system calls to perform low-level operations.