


5.00 credits

30.0 h + 30.0 h

Q2

Teacher(s)	Bonaventure Olivier (coordinator) ;Legay Axel ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	This course assumes that you have acquired the fundamental concepts of programming (object-oriented), as well as the notions of analyzing a computer problem, designing, specifying and implementing a solution as taught in course LEPL1401 (or LINFO1101); as well as the transversal skills as developed in Projects 1 and 2 (LEPL1101 and LEPL1102).
Main themes	<ul style="list-style-type: none"> - embedded programming in C language - implementation and testing of programs and algorithms - memory management - interfacing with sensors - Informatic project
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>At the end of the course, the student will be able to:</p> <ul style="list-style-type: none"> - develop a program in C language - verify by tests the correct functioning of a program - compare, analyze and criticize different programs 1 - choose the metrics to measure the effectiveness of a program - document a program, its installation and its use - give constructive feedback - use a professional collaborative software development system <p>AA of the baccalaureate program: 2.2; 2.4; 2.5; 2.6; 2.7; 2.8; 3.2; 3.3; 4.2 4.3; 4.4; 4.5; 5.1</p>
Evaluation methods	See French document
Teaching methods	Project-based learning in groups
Content	Project organized in several phases <ul style="list-style-type: none"> - individual learning of the C language - improvements of existing algorithms in C and comparison of programs inside the group - development of an embedded solution - peer-review of other groups' programs and improvement of the group's program
Inline resources	https://sites.uclouvain.be/SyllabusC/ https://moodle.uclouvain.be/course/view.php?id=3842
Bibliography	Syllabus Langage C, accessible via https://sites.uclouvain.be/SyllabusC/
Faculty or entity in charge	BTCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Engineering	FSA1BA	5		
Bachelor in Computer Science	SINF1BA	5		