

6.0 credits	30.0 h + 30.0 h	2q
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Teacher(s) :	Janvier Danielle ; Vitale Enrico ; Louveaux Jérôme ; Nysten Bernard ; Sobieski Piotr ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<p>Main themes The project is organized in several steps:</p> <ol style="list-style-type: none"> 1. Specification of the global function of a circuit in view of an intended application and workstatement 2. Basic blocs and overall architecture definition 3. Analysis of subparts of the circuit, typically a sensor, by measuring received or obtained signals, along with its theoretical analysis, basic modelling in the context of Physics 4. Global analysis of the circuit: understanding of each function/bloc, interfaces, 5. Basic tests on the circuit prototype 6. Experimental identification of the device characteristics, prototype finalization, PCB production and mounting 7. Comparisons of measured results with performed modelization, critical analysis of quality and adequacy of basic modelling 8. Experimental parametric analysis of several components, limitation of the prototype, of the modelization and of the chosen implementation, evaluation tests
Aims :	<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>
Content :	<p>Content and teaching methods Building on the brilliant initiative and interest of new students in a practical and funny realization, the P2 project has, as main objective, to invite them to discover new concepts and techniques, and also to reinforce old ones, too rapidly surfed or not sufficiently applied. It will be an encounter point for the various objectives of the semester, in a unique realization. Practical realization and laboratory experiments are the basic methodological components of the project, which will lead to a specific circuit design and validation.</p>
Cycle and year of study :	> Bachelor in Engineering
Faculty or entity in charge:	BTCI