

Project in Electricity 1 : Electrical circuits

5.0 credits	0 h + 60.0 h	2q
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Teacher(s):	Oestges Claude ; Janvier Danielle (compensates Craeye Christophe) ; Dehez Bruno ; Labrique
,	Francis (coordinator) ; Craeye Christophe ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Identical to the contents of the course
Aims:	At the end of this project, the students will be able - to conceive a small electrical circuit implementing resistors, capacitors, inductors, operational amplifiers, sources and answering to given specifications - so simulate this circuit - to realize this circuit and to test it by using standard measuring equipments. 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".
Content :	- To conceive a circuit answering to speficied requirements - To modelize the circuit. Study of its DC, AC and transient response - To simulate and optimize the circuit - To realize and test the circuit - To explain the differences between the simulated and tested results - To study the limits of the model
Other infos :	This project is scheduled in parallel with the following courses: ELEC1350: Electromagnetism ELEC1370: Electrical circuits and measurements ELEC1755: Electricity: advanced topics A close interaction with these courses will be kept in order to ensure the coherence of the whole Prerequisite: none Assessment: Continuous evaluation based on the work performed during the semester, the reports issued and the oral presentation of the work Support: Definition of the project and informations on the i-campus website of the course
Cycle and year of study :	≥ Bachelor in Engineering : Architecture > Bachelor in Engineering
Faculty or entity in charge:	ELEC