LELEC1102

2010-2011

PROJECT IN ELECTRICITY 2 : PHYSICS OF ELECTRICITY

3.0 credits	0 h + 45.0 h	1q

Teacher(s) :	Craeye Christophe ; Flandre Denis ; Janvier Danielle (coordinator) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Identical to the contents of the course
Aims :	After this course the students will be able to : - understand and model an electrical phenomenon - simulate this phenomenon using a numerical software *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 :	This project consists of a detailed electrical analysis of a physical phenomenon, such as an electromagnetic transmission problem, an electric or magnetic field distribution or a p-n junction, and the development of a model for this phenomenon. The second phase of the project consists in using an of the shelf software to simulate the phenomenon and validate the model. Teaching method : - a bibliographical study based on the description of the problem - an in depth understanding of the physical phenomenon - a modelisation of the problem - the implementation of the model in the chosen software - test and validation of the model, using the software
Other infos :	Prerequisite : Physical electronics (ELEC1330), Electromagnetics (ELEC1350), Electricity : advanced topics (ELEC1755), or equivalent Observation : This project is carried out by groups of 3 to 4 students Assessment : The evaluation of the students will be based on various elements : the work during the semester, the final demonstration, the interim reports and the final report, the final presentation.
Cycle and year of study :	> Bachelor in Engineering
Faculty or entity in charge:	ELEC