



SC

## SC1251 Compléments de programmation

[15h] 1 credits

This course is taught in the 2nd semester

**Teacher(s):** Marcel Lebrun  
**Language:** french  
**Level:** 1st cycle course

**Aims**

The main objective is problem-solving by using computer tools. The course is to be considered as a workshop where students deepen their knowledges about computing languages (mainly Pascal), programs libraries and scientific softwares tools.

**Main themes**

- Complements about procedures and functions
- Files and transfer
- Programs libraries
- Integrating softwares and approaches

Project-based learning is the main method used in this course. As examples, we mention : simulating diffraction patterns, friction modelisation, Monte-carlo simulation in particles diffusion, elaborating statistical tables and probabilistic events, programming numerical methods, etc.

**Content and teaching methods**

The course objective is the development by students of their programming skills using computing languages, softwares like spreadsheets and scientific simulations tools. The course is organised as a workshop where students develop their own projects mainly based on others lectures (mathamatics, physics #).

**Other credits in programs**

<b>MATH12</b>	Deuxième candidature en sciences mathématiques	(1 credits)
<b>PHYS12</b>	Deuxième candidature en sciences physiques	(1 credits)