



## Faculty of Applied Sciences

### SINF1124 Programming project

[0h+60h exercises] 5 credits

This course is taught in the 2nd semester

**Teacher(s):** Marco Saerens  
**Language:** French  
**Level:** First cycle

#### Aims

- \* To carry successfully through a computational project of reduced extent
- \* To use correctly and efficiently one or more programming languages suitable to a given type of applications
- \* To handle various tools that facilitate program design and development

#### Main themes

- \* Realization (analysis, design, implementation, tests and documentation) of a technological application based on an object-oriented language (Java)
- \* Use of program modeling tools
- \* Use of tools helpful to develop programs : compiler, preprocessor, debugger, tools to handle files, test tools, ζ

#### Content and teaching methods

- \* Problem analysis
- \* Design of implementation (for example UML class diagrams)
- \* Java programming (+ libraries, for example SWING)
- \* Documentation (preconditions, postconditions, invariants, alternatives, algorithms)
- \* Tests (for example, JUnit)

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

##### \* Prerequisite

- (1) LINF1150 Introduction à l'algorithmique et la programmation: 1ère partie B. LeCharlier
- (2) LINF1251 Introduction à l'algorithmique et à la programmation : 2ème partie P. VanRoy

##### \* Reference

- (1) Martin Fowler , "UML Distilled " , 0-201-32563-2
- (2) David Flanagan , "Java in a Nutshell " , 0-596-00283-1 .

##### \* Evaluation

Based of a project performed individually.

#### Other credits in programs

<b>FSA13BA</b>	Troisième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil	(5 credits)	
<b>SINF11BA</b>	Première année d'études de bachelier en sciences informatiques	(5 credits)	
<b>SINF12BA</b>	Deuxième année d'études de bachelier en sciences informatiques	(5 credits)	Mandatory
<b>SINF13BA</b>	Troisième année d'études de bachelier en sciences informatiques	(5 credits)	
<b>SINF1PM</b>	Année d'études préparatoires au master en sciences informatiques (60 et 120)	(5 credits)	