

Faculty of Applied Sciences



LINF2224 Programming methods

[30h+15h exercises] 4 credits

This course is taught in the 2nd semester

Teacher(s): Charles Pecheur
Language: French
Level: Second cycle

Aims

- To refine and formalize programming and proof methods sketched informally in bachelor courses, and apply them in a systematic way to more complex problems.
- To become familiar with software design patterns that can be re-used in different contexts.

Main themes

- Study and application of program proof methods: inductive assertions, wp-calculus, structural induction.
- Study and application of programming patterns.

Content and teaching methods

see "Main themes"

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

References:

- (1) D. Gries, The Science of Computer Programming, Springer-Verlag, 1981
- (2) E. Gamma, R. Helm, R. Johnson & J. Vlissides, Design Patterns - Elements of Reusable Object-Oriented Software, Addison-Wesley, 1995

Other credits in programs

FSA3DA	Diplôme d'études approfondies en sciences appliquées	(4 credits)
INFO22	Deuxième année du programme conduisant au grade d'ingénieur civil informaticien	(4 credits)
INFO23	Troisième année du programme conduisant au grade d'ingénieur civil informaticien	(4 credits)