



Faculté des sciences appliquées

FSA

LINF2224 **Méthode de programmation : preuves et schémas**

[30h+15h exercices] 4 credits

This course is taught in the 2nd semester

Teacher(s): Charles Pecheur
Language: french
Level: 2nd cycle course

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.

Content and teaching methods

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

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

FSA3DS/IN	Diplôme d'études spécialisées en sciences appliquées (informatique)	(4 credits)
INFO23	Troisième année du programme conduisant au grade d'ingénieur civil informaticien	(4 credits)
LINF22/GN	Deuxième licence en informatique (informatique générale)	(4 credits)
LINF22/GS	Deuxième licence en informatique (informatique de gestion)	(4 credits)