

## Faculty of Applied Sciences



### LINF2255 Software engineering project

[0h+60h exercises] 5 credits

This course is taught in the 1st semester

**Teacher(s):** Robert Darimont (supplée Axel Van Lamsweerde), Axel Van Lamsweerde (coord.)  
**Language:** French  
**Level:** Second cycle

#### Aims

- To acquire the technical and managerial background required for the successful completion of a complex software project from requirements engineering to architectural design to implementation and deployment.
- To put the methods and techniques learned in INGI2251 ("Software Engineering : Development Methods") into practice.
- To experience the non-technical aspects of software engineering: team work, documentation management, meeting deadlines, defining project milestones, communicating results at reviews, etc.

#### Main themes

- Development of a large-scale, real-world application under semi-professional working conditions.
- Application of software engineering techniques for building and analysing the requirements document, for building and analysing an abstract model of the software, for designing a software architecture that meets the non-functional requirements, for designing various types of test cases, and for implementing and testing the final software product.

#### Content and teaching methods

Students are working in teams of 6-7 under supervision of a project manager (this role is being held by a research assistant). The requirements document and the software architecture are elaborated jointly by the entire team; work units are subsequently distributed among team members; the same module may circulate among different members - for specification, programming, test case design, etc.

Examples of systems developed in the past include an e-voting system, an ambulance despatching system, a distributed meeting scheduler, a distributed resource management system for cybernomads, a hospital management system, a library management system, a system for managing student registrations, etc.

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

- Prerequisite:  
INGI 2251 Software Engineering : Development Methods.

- Evaluation :

Students are graded on a team basis (according to the quality of the deliverables and of the processes followed) and on an individual basis (according to the degree of involvement and the quality of individual sub-reports).

#### Other credits in programs

LINF22/GN	Deuxième licence en informatique (informatique générale)	(5 credits)	Mandatory
LINF22/GS	Deuxième licence en informatique (informatique de gestion)	(5 credits)	Mandatory