

## Faculty of Applied Sciences



### INGI2339 Language and translator seminar

[30h] 3 credits

This two-yearly course is taught in 2007-2008, 2009-2010,...

This course is taught in the 2nd semester

**Teacher(s):** Baudouin Le Charlier (coord.), Peter Van Roy  
**Language:** French  
**Level:** Second cycle

#### Aims

- To understand, synthesize and present recent research works on programming languages and translators
- To estimate the state of the art in domain(s) tackled during the seminar and to investigate open questions
- To identify links between questions currently debated about programming languages and translators

#### Main themes

This course is currently devoted to the static analysis of programming languages by abstract interpretation. During the five first weeks, theoretical and practical bases of abstract interpretation are studied, including abstract domains, abstract semantic, and fixpoint algorithms.

Afterwards, students have to complete a project either individually or within a small team including two members. The project amounts to design and implement a static analyser for the programming language SLIP (Simple Language with Integers and Pointers), which they have previously implemented in another course (INGI2132, Programming Languages and Translators).

#### Content and teaching methods

see "Main themes"

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

- Prerequisites:
  - (1) INGI2131 - Concepts des langages informatiques
  - (2) INGI2132 - Langages et traducteurs
- References:
 

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