UCL Université catholique de Louvain

# LSINF1124

*2010-2011*

# Programming project

| 5.0 credits | 0 h + 60.0 h | 2q |
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| Teacher(s) : | Saerens Marco ; |
| Language : | Français |
| Place of the course | Louvain-la-Neuve |
| Inline resources: | > http://www.icampus.ucl.ac.be/claroline/course/index.php?cid=SINF2125 |
| Prerequisites : | -- concepts of programming systems (e.g. FSAB1402)<br>-- programming in a high-level langage as Java (e.g. SINF1151 or FSAB1401) |
| Main themes : | -- Realization (analysis, design, implementation, tests and documentation) of a technological application based on an object-oriented language (Java)<br>-- Use of program modeling tools<br>-- Use of tools helpful to develop programs : compiler, preprocessor, debugger, tools to handle files, test tools, ... |
| Aims : | Students completing successfully this course will be able to<br>-- carry successfully through a computer system project of reduced extent<br>-- use correctly and efficiently one or more programming languages suitable to a given type of applications<br>-- handle various tools that facilitate program design and development<br>*The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".* |
| Evaluation methods : | project report and presentation |
| Teaching methods : | Students choose between several development projects, each project aims to:<br>-- become familiar with a database manager and data using SQL.<br>-- structure information in XML.<br>-- analyze and model the problem in UML.<br>-- implement an application that exploits the information in the database<br>Each project includes<br>-- writing a user interface.<br>-- defining and writing queries to the database (embedded SQL).<br>-- impleming algorithms operating data retrieved from the database (eg, implementing a solution to the "traveling salesman problem").<br>-- Web-enabling the application (made "available on intranet - CGI, applets, etc.).<br>-- implementing a network mode and / or artificial intelligence. |
| Content : | -- Problem analysis<br>-- Design of implementation (for example UML class diagrams)<br>-- Java programming (+ libraries, for example SWING)<br>-- Documentation (preconditions, postconditions, invariants, alternatives, algorithms)<br>-- Tests (for example, JUnit) |
| Cycle and year of study : | > Master [120] in Linguistics<br>> Master [120] in Information and Communication Science and Technology<br>> Bachelor in Engineering<br>> Bachelor in Computer Science<br>> Bachelor in Engineering : Architecture<br>> Bachelor in Economics and Management<br>> Bachelor in Mathematics |
| Faculty or entity in charge: | INFO |