

4.0 credits

30.0 h + 20.0 h

2q

Teacher(s) :	Kolp Manuel ; Saerens Marco (compensates Kolp Manuel) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<p>The course comprises:</p> <ul style="list-style-type: none"> <li>-an introduction to computer systems (material components, basic software) - program lifecycles</li> <li>-an introduction to basic concepts of the languages used in object-oriented programming, illustrated with JAVA (objects, variables, expressions, control structures, types of data, methods, etc).</li> <li>-systematic methods of constructing standard programs and algorithms: problem modelling and specification - top-down reasoning and rudiments of UML.</li> <li>-Application to the construction methodical algorithms-types (research, accumulations, sorting, screens, substitution-tution, etc).</li> <li>-Programming a micro-Java application (computer project).</li> </ul> <p>In practice, the module is built around three axes:</p> <ul style="list-style-type: none"> <li>-A academic content (courses);</li> <li>-Work practices used to be exercised in programming;</li> <li>-Work practices used to be exercised in programming;</li> <li>-A draft programming extended over a period of one month.</li> </ul>
Aims :	<p>This module examines basic concepts in Information Technology, such as relational databases and object-oriented programming languages. By the end of this course, in addition to mastering basic concepts in Information Technology, students should be able to:</p> <ul style="list-style-type: none"> <li>write a simple program in JAVA.</li> <li>analyse a problem and find a programming solution.</li> <li>achieve a small computer project in Java.</li> </ul> <p><i>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".</i></p>
Content :	<p>Content of practical exercise sessions.</p> <p>Sessions practical exercises (or tutorials; two hours each week), in connection with the academic content, will be organized. It is programming exercises in Java, largely inspired by the book of Lewis &amp; Loftus.</p> <p>We also expect four sessions during which students program a Java project. The statement of this project of programming will be published during the week preceding the holiday of Easter.</p> <p>Organization of work practices</p> <p>On a period of two hours, the sessions of exercises will be supervised by the assistants. Students will have read the corresponding field to solve (see prerequisites at the beginning of each chapter).</p>
Other infos :	<p>Assessment : A written examination will take place during the session to review. Note that this review will focus on the resolution of cases programming practices in Java (writing methods and classes). We are not asking that the student knows by heart the syntax of Java: the examination will be held in open book; the student will have the manual Java (Lewis &amp; Loftus) during the review.</p> <p>Assessing of work practices</p> <p>An evaluation will be held in the outcome of the draft programming (see Table, project of pro-programming).We should remember that this project will be realized by group of two and will be to write a micro-Java application on the basis of sepcifications. It will therefore appeal to the concepts which have been worked to meetings of previous work practices.</p> <p>At the end of the project, the students must present the micro-application to the teacher who are questioned on the work. This presentation of project will account for 30% of the final score.</p> <p>Assessment final</p> <p>The final evaluation will take into account both the presentation of the project (30%) and written examination final (70%).</p> <p>Support : J.Lewis &amp; W. Loftus, Java Software Solutions, 4th edition. Addison-Wesley.</p>

<p>Cycle and year of study :</p>	<ul style="list-style-type: none"> <li>&gt; <a href="#">Bachelor in Economics and Management</a></li> <li>&gt; <a href="#">Bachelor in Information and Communication</a></li> <li>&gt; <a href="#">Bachelor in Philosophy</a></li> <li>&gt; <a href="#">Bachelor in Pharmacy</a></li> <li>&gt; <a href="#">Bachelor in Engineering : Architecture</a></li> <li>&gt; <a href="#">Bachelor in Computer Science</a></li> <li>&gt; <a href="#">Bachelor in Psychology and Education: General</a></li> <li>&gt; <a href="#">Bachelor in Motor skills : General</a></li> <li>&gt; <a href="#">Bachelor in Human and Social Sciences</a></li> <li>&gt; <a href="#">Bachelor in Sociology and Anthropology</a></li> <li>&gt; <a href="#">Bachelor in Political Sciences: General</a></li> <li>&gt; <a href="#">Bachelor in Mathematics</a></li> <li>&gt; <a href="#">Bachelor in Biomedicine</a></li> <li>&gt; <a href="#">Bachelor in Engineering</a></li> <li>&gt; <a href="#">Bachelor in Religious Studies</a></li> <li>&gt; <a href="#">Master [120] in Environmental Science and Management</a></li> <li>&gt; <a href="#">Preparatory year for Master in Statistics: General</a></li> </ul>
<p>Faculty or entity in charge:</p>	<p>ESPO</p>