




4 credits

22.5 h + 22.5 h

Q1

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| Teacher(s) | Saerens Marco ; |
| Language : | French |
| Place of the course | Louvain-la-Neuve |
| Prerequisites | <i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i> |
| Main themes | This course has the following objectives: <ul style="list-style-type: none"> • Mastering the basic concepts of object-oriented programming languages. • Introduction to the Java programming language. • Solving practical problems by programming. |
| Aims | At the end of this course, students should be able to: <ol style="list-style-type: none"> 1 • Write a program in Java. • Analyze a problem and find a solution through programming. • Undertake a small project in Java. ----- <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> |
| Evaluation methods | Evaluation: A written exam will take place during the review session. Note that this review will focus on solving practical programming in Java (writing methods and classes). We are not asking that the student knows by heart the syntax of Java: the review will be open book, the student will therefore be allowed to use his Java book (among a list provided by the Professor) during the examination. |
| Teaching methods | Lectures, practice in computer rooms and online exercises. |
| Content | <ul style="list-style-type: none"> • Contents of the course: Fundamentals of programming in Java. In particular, basic concepts of programming languages, used in object-oriented programming, illustrated on the Java language (objects, variables, expressions, control structures, data types (arrays, lists, etc), methods, etc). The focus will be on the construction of programs based on practical problems to be solved. • Contents of the practical sessions: Practical sessions (tutorials and exercises, two hours each week), based on the theoretical content, will be organized all along the period. During these sessions, the students are asked to solve exercises with Java, largely inspired by the book by Lewis & Loftus. We will also provide online Java exercises (Inginious). • Practical organization: These exercises are supervised by assistants. Students should have read before the corresponding material in order to solve the problems. |
| Inline resources | The different resources are available on Moodle. |
| Bibliography | • Les différentes ressources sont disponibles sur Moodle. |
| Faculty or entity in charge | ESPO |

| Programmes containing this learning unit (UE) | | | | |
|--|-----------|---------|--------------|---|
| Program title | Acronym | Credits | Prerequisite | Aims |
| Bachelor in Business Engineering | INGE1BA | 4 | LINGE1121 |  |
| Minor in Statistics and data sciences | LSTAT100I | 4 | |  |
| | LSTAT100P | 4 | |  |