



# Syllabus: "Introduction to Java Programming"

International School, winter semester 2023/24 Mr. Nathar Shah

# (a) Inhalt und Ansatz | Content and Approach

- In this course the students will learn to:
  - Write object-oriented programs using the Java language
  - Debug and compile using programming environments such as Netbeans
  - Create robustness in the Java programs using exception handling
  - Interact with file systems to read and write files.
- Teaching methods used are both lectures and hands-on lab learning. At the end of the course, there will be a Multiple-Choice Question (MCQ) examination.
- The course will be offered as an online session.
- Students require at least an advanced level of English to follow the lessons. No prior programming knowledge is required.
- Regular attendance (at least 80% of all sessions) is required for exam admission.
- For the successful completion of the course, the student will be awarded (3) ECTS. Therefore, students should be prepared to spend considerable time working with the study content.
- Participants are required to register for the course via StudIP, where all teaching resources will be made available. If there are problems with the registration via StudIP please contact (Nathar Shah) via nathar.shah@gmail.com

### (b) Qualifikationsziele | Learning Objectives

- To understand and apply object-oriented paradigm towards problem solving.
- To practice coding with operators, data types, control stuctures, scopes, methods, arrays, classes, objects, access modifiers, inheritance, polymorphysim, abstract classes, and interfaces.
- To demostrate program roboustness using execption handling.
- To interact with file system using Java I/O to read and write files.

### (c) Kursstruktur | Course Structure

 The class will be held three times a week (each class will be for 90 minutes) from Oct 23 to November 13, 2023. We will have classes on Mondays (2pm – 3.30pm), Wednesdays (2pm-3.30pm), and Fridays (2pm-3.30pm). The online access to the course will be made available via StudIP.

#### (d) Kontakt | Contact

• Email: nathar.shah@gmail.com

#### (e) Studien- und Prüfungsleistungen | Course Assessment

- The final exam is an online MCQ exam about sixty minutes (60 Min) about the material learned in the course.
- The Exam will be held on November 27, 2023. The online access will be announced over StudIP.
- For the successful completion of the course, the student will be awarded (3) ECTS.