



UNIVERSITY OF MISKOLC  
FACULTY OF MECHANICAL ENGINEERING  
AND INFORMATICS

# Java programming

GEIAL31A-B2a

---

## Intro

**Tamás Tompa, PhD**

assistant professor

Department of Information Technology

Miskolc, 2026

# What will contains the course?

---

○ This course is a continuation of **Object-Oriented Programming**, it builds on the fundamentals introduced in **OOP** course

- Java platform and language fundamentals
- Object-oriented programming concepts
- Standard Java libraries and APIs
- Data structures and Collections Framework
- GUI programming and event handling
- File, I/O
- Database access with JDBC
- Data formats (XML, JSON, ZIP, PDF)



# Requirements



- Detailed knowledge of the OOP concept and software technology
  
- **Course completion: signature and exam (5 credits)**
  - → signature
    - **Java application development using the learned technologies**
      - deadline: last week of the semester
      - presentation (not in email)
    - attendance at least 70% of laboratory classes (9/13) and 60% of lectures (8/13)
  - → exam
    - practical exam: solving a complex Java programming task (using the learned technologies)



# Contact informations

---

- Office: Informatics Building, 1st floor, Room 105
- email: [tamas.tompa1@uni-miskolc.hu](mailto:tamas.tompa1@uni-miskolc.hu)

# Literature

---



- Lecture and laboratory materials ( <https://users.iit.unimiskolc.hu/~tomp> )
- Cay S. Horstmann - Core Java Volume I – Fundamentals (11th Ed .)
- Herbert Schildt - Java: A Beginner's Guide (8th Ed .)
- Kathy Sierra & Bert Bates - Head First Java (2nd or 3rd Ed.)
- Joshua Bloch - Effective Java (3rd Ed.)
- Herbert Schildt - Java: The Complete Reference (12th Ed.)
- Allen B. Downey & Chris Mayfield - Think Java



---

Thank you for your attention!

*thank you* 😊