

Specialization

Java Development

This specialization develops your ability to master Java fundamentals, create efficient algorithms, and build versatile applications while gaining a competitive edge through hands-on practice. The Java Development specialization consists of three required courses.

Total Units: 8

Learning Outcomes:

- Demonstrate proficiency in core Java programming across foundational and advanced language features.
- Apply object-oriented design principles and efficient data structures to develop non-trivial Java applications.
- Incorporate generics, multithreading, networking, database connectivity, and GUI components to meet real-world development needs.
- Use modern development practices and tools, including AI-assisted programming, to write, improve, and debug high-quality Java code.



*Courses may have prerequisites; review the course page before enrolling. A checkmark indicates the course is typically offered during that term.**

Required Courses

8 Units | 3 Courses

| COURSE NAME & NUMBER | UNITS | FALL | WINTER | SPRING | SUMMER |
|--|-------|------|--------|--------|--------|
| Java Programming I CMPR.X412 | 2.0 | ✓ | ✓ | ✓ | ✓ |
| Java Programming II CMPR.X413 | 3.0 | | ✓ | | ✓ |
| Data Structures and Algorithms Using Java CMPR.X407 | 3.0 | ✓ | | ✓ | |

Completion Review

Once all specialization requirements have been met and your final grades are posted, please access your Student Portal to enroll in the "[Specialization in Java Development Completion Fee](#)" to begin the review process. Please allow 4-6 weeks to receive your certificate.