The Java programming environment has become the primary choice for robust, large-scale business systems and is gaining popularity in embedded systems for portable computing devices. The advent of faster processors and less expensive mass storage has allowed Java to transcend the language’s original limitations, and Java’s platform independence makes it suitable for developing web services and global enterprise applications. Additionally, many smaller systems and even hand-held devices can benefit from applications written in Java.

**WHO SHOULD ENROLL**
Practicing Java programmers and software engineers who want to expand their knowledge of the advanced capabilities that are available with the Java programming language and development environment will find this program valuable. It is also ideal for graduates of the Java Programming Certificate Program who want to continue their education and acquire new skills.

**PROGRAM BENEFITS**
- Use advanced features of the Java programming language to develop complex software for business, science, and technology applications to advance within your field
- Develop software in Java for web services, distributed enterprise systems, and web-enabled Internet applications such as electronic business
- Use Java to access, manipulate, and execute business rules using data stored in distributed database systems

**CERTIFICATE ELIGIBILITY AND REQUIREMENTS**
The Java Enterprise Development Certificate Program is designed for Java programmers who have achieved a level of knowledge and experience equivalent to that of Oracle’s Java Certificate.

If you already have some Java EE knowledge, you can request a waiver of the overview course. You still need to complete the remaining required courses and three electives. Requests for a waiver can be submitted via email to grubeh@uci.edu. Please provide a detailed explanation of why you do not need to take this course.

Students must complete 5 required courses (8.5 units) and 6.5 units of elective courses with a grade of “C” or higher in each course in order to become eligible for the certificate program.

All requirements must be completed within 5 years after the student enrolls in his/her first course. Students not pursuing the certificate program are welcome to take as many individual courses as they wish.
**COURSE #** | **REQUIRED COURSES** | **UNITS**
---|---|---
I&C SCI X460.67 | Web Development Using Java EE 7 | 1.5
I&C SCI X460.69 | Spring Framework | 2.5
I&C SCI X460.60 | Effective Persistence with JPA (Hibernate) | 1.5
I&C SCI X460.64 | Java Enterprise Architecture | 1.5
I&C SCI X460.68 | Java Web Services | 1.5

**COURSE #** | **ELECTIVE COURSES** | **UNITS**
---|---|---
I&C SCI X460.71 | Continuous Delivery with Java Microservices | 1
I&C SCI X460.72 | Angular | 1.5
I&C SCI X494.81 | Concepts of Service-Oriented Architecture (SOA) | 1.5
I&C SCI X460.53 | Cloud Computing Platform as a Service (PaaS) | 1.5
I&C SCI X494.91 | The Scrum Framework for Agile Project Management | 2.5
I&C SCI X494.85 | Agile Software Design and Programming | 2.5

**PROGRAM FEES**
The total cost of the program varies depending on the elective courses chosen. Actual fees may differ from the estimate below. Fees are subject to change without prior notice.

Course Fees (10 required and 5 elective units) | $5,990
Candidacy Fees | $125
Textbooks and Materials | $267
Total Estimated Cost | $6,382

**TO ENROLL**
Visit ce.uci.edu/javaee for full course descriptions, instructor biographies, and enrollment information.

**FOR MORE INFORMATION:**
Hally Gruber
gruberh@uci.edu
(949) 824-0222

**ADVISORY COMMITTEE**

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Jeff Shelley, Software Engineer, MedAvant Healthcare Solutions
Hong Tan, Developer, Accenture
Ray Tayek, Independent Consultant