UC San Diego
EXTENDED STUDIES

Java Programming
Specialized Certificate

What is Java Programming?

Java is a high-level object-oriented programming language developed by Sun Microsystems. Oracle acquired Sun Microsystems in January of 2010 and now owns Java. Java uses the Java Virtual Machine (JVM) to interpret its code making it a highly flexible language that runs on a multitude of computer platforms.

Why Learn Java?

- Java has been around since 1995, contributing to a plethora of documentation and community support to solve just about any obstacle you may encounter while programming in Java
- Java is relatively easy to learn once you've mastered the basics
- Java Integrated Development Environments (IDE) support code completion, syntax highlighting, refactoring, text execution and debugging
- Java's built-in internal Object Oriented best practices ensure you're building maintainable code
- Java has a robust applications programming interface (API) routines, protocols and tools for building software applications
- Java has an awesome toolset at your disposal for just about anything you want to accomplish
- Java is everywhere! There is a push in the Java community for Java to be the leader of Oracle's Internet of Things; securely connect, analyze and integrate real-time IoT data, at scale, between connected devices and your enterprise applications
- Android has embraced Java!
- A search of references to programming languages among job postings on indeed.com ranked Java first among general-purpose programming languages.

Program Audience

Strong skills in Java can support a career developing:

- Android applications
- Servers software at financial services industries
- Third party trading applications
- Java web applications

- J2ME applications
- Embedded applications
- Bid data technologies
- High-performance systems
- Scientific applications

Program Overview
Students will learn and build on their level of Java knowledge through four required courses in this program. They will begin by learning basics of Java, and then learn how apply those tools to write code to be used in multi-platform applications, object oriented programming, advanced concepts including JDBC, threads, inheritance hierarchies, object design principles, and advanced features, including knowledge required to pass Oracle's Certified Professional Java Programmer (OCPJP) exam.

Program Details

Prerequisites
The first core course, Java Programming I: Fundamental Java Concepts requires either the completion of Introduction to Programming Using Java or equivalent programming knowledge. Prospective students must also be familiar with such elementary concepts as variables, constants, arithmetic operations, and logical problem solving before beginning the required courses. All required courses are designed to be taken sequentially and must be taken in the order shown on the course matrix.

The prerequisite is not required in order to complete the certificate. However, it serves as a guideline to students as to the level of knowledge required for students enrolling into the first required course in this program. Those with little to no programming experience must take the Introduction to Programming Using Java course prior to enrolling in Java Programming I: Fundamental Java Concepts. Those who wish to skip the prerequisite may do so without a department waiver. Please email infotech@ucsd.edu if you would like to see the syllabus of the prerequisite course.

Requirements
There are four required courses in the Java Programming certificate program. You should take the program courses in the order listed in the chart below, which shows when and in what format courses are offered.

- Those with little to no programming experience must take the Introduction to Programming Using Java course prior to enrolling in Java Programming I: Fundamental Java Concepts. Those who wish to skip the prerequisite, because they have programming experience, may do so without a department waiver.

Course Title	Course No.	Units	Course Offered			
			Fall	Winter	Spring	Summer
Prerequisite Course						
Introduction to Programming Using Java	CSE-41242	3.0	Online	Online	Online	Online
Required Courses						
Java Programming I: Fundamental Java Concepts	CSE-40479	3.0	In-class	Online	Online	Online
Java Programming II: Core Java Programming	CSE-40480	3.0	Online	Online	Online	Online
Java Programming III: Intermediate Java Programming	CSE-40481	3.0	Online		Online	Online
Java Programming IV: Advanced Java Programming Structures	CSE-40482	3.0	Online	Online		In-class

Length

Most students complete the program in one year or just over one year by taking on course per quarter for four or five consecutive quarters. You have up to five years to complete all requirements for the certificate.

Cost

Each class is currently $725. The total cost of the program is $3,720., which includes the $95 certificate fee. If the Introduction to Programming Using Java course is waivered, the cost of the program is $2,995. Please note that all fees are subject to change and do not include books.

Electives

There are no elective courses in this program.

Frequently Asked Questions

About the Certificate

How do I apply to the certificate Program?

STEP 1: If you have a My Extension account, skip to Step 2. If you do not have a My Extension account, go to myextension.ucsd.edu, click "Create an account" on the right side of the page, and follow the instructions to create an account. Once you have a My Extension account, continue to Step 2.

STEP 2: Click on the "Apply Now" button on the certificate page. Complete the required fields on the application. Then click Save Your Work button. Once you have saved the application, the "Submit" button will appear. Click the "Submit" button to submit your application for review and consideration. Once submitted, your application cannot be changed. You can track the progress of your application at My Extension.

Is there an application fee for the certificate program?

Current application or certificate fees, if any, are listed under the "Apply Now button on the certificate page on our website.

Is this program in-class or online?

The courses in this program are offered in online format only. For online classes, all assignments and test/quizzes are completed online and submitted through Canvas, our online learning management system.

Can the prerequisite be waived if I have taken a programming course elsewhere or have equivalent working knowledge?

The prerequisite is not required in order to complete the certificate. However, it serves as a guideline to students as to the level of knowledge required for students enrolling into the first required course in this program. Those with little to no programming experience must take the Introduction to Programming Using Java course prior to enrolling in the first required course of the program . Those who wish to skip the prerequisite may do so without a department waiver. Please email infotech@ucsd.edu if you would like to see the syllabus of the prerequisite course.

Is financial aid available?

- UC San Diego Division of Extended Studies offers continuing education loans through UC Approved Lenders. Each institution offers low competitive interest rates and flexible payment options. You are also encouraged to contact your personal financial institution about possible lending solutions. Direct links to UC Approved Lenders can be found on our website's Financial Resources page. The Employment Development Department (EDD) provides a comprehensive range of employment and training services in partnership with state and local agencies/organizations. More information is available on their website at edd.ca.gov.

- Career Centers Located throughout San Diego County offer their communities comprehensive employment and training services benefiting both business and job seekers. More information is available on their website at workforce.org.
- Please click here for information about Veteran's Benefits.
- Free Application for Federal Student Aid (FAFSA) funds are limited to degree programs only, and cannot be used for courses or certificate fees at UC San Diego Division of Extended Studies.

Is this certificate program open to non-California residents?
Yes, the program is open to non-California residents, including non-US residents. The tuition is the same for all students. If you have questions about how enrolling in courses may or may not affect your visa status, please contact our International Department at ipinfo@ucsd.edu or (858) 534-6784.

If I work full-time, will I still be able to complete this program?
Yes. Our programs are designed to be working-student friendly and most of our students are working professionals. The courses are typically three units, which amounts to approximately 27-30 hours of class time.

Will I get any hands-on experience in the program?
Most courses combine theory with hands-on exercises.

Is the program accredited?
UC San Diego is accredited by the Western Association of Schools and Colleges (WASC). UC San Diego Division of Extended Studies — like all other UC San Diego schools, colleges, and departments — is accredited by WASC through the University. All courses and certificate programs offered by UC San Diego Division of Extended Studies have been developed and are administered in accordance with Division of Extended Studies policy and the regulations of the Academic Senate of the University of California.

Will this program prepare me for a certification exam?
This program is not aligned with any one certification exam. Our programs are designed to provide students with knowledge that will make them valuable in the workforce.

Do you provide job or internship placement?
No, we do not currently offer job placement assistance, internships, or career services assistance.

About the Courses

When does course enrollment open for each quarter?
Our classes post to our website and become open for enrollment approximately two months prior to the new quarter starting. If you would like to receive an email reminder, you can sign up for our newsletter(s) in My Extension, under the "Preferences" tab.

When should I enroll in a course?
We recommend enrolling as soon as possible, as occasionally classes will reach capacity.

Once I have enrolled in a course, when will I get online access to it?
If you have enrolled at least three days before the course begins, you will have access starting on the first day of class. You should receive an email from Student Services with instructions for how to login to the course. If you have enrolled on or after the start date of the course, you will have access to the course within one business day.

How are the online courses formatted?

Online courses are asynchronous with prerecorded lectures, corresponding PowerPoints, and subsequent materials as provided by the instructor. They have a start and end date but all the lessons are uploaded to our Learning Management System, so that you can learn at your own pace. However, please be aware that you may have weekly assignments, quizzes and/or tests that are due on specific dates. To access your online course, first login to your My Extension account, next select "My Courses" from the menu. From your list of courses, select the course you would like to access, and click the link that appears in the "Location" section. You will then be redirected to the Learning Management System (LMS) where your course is located.

We are currently using Canvas as our (LMS) for all our online courses. While students do not get access to their respective courses until the first day of the course, we encourage students who are new to Canvas to click on the following link to Canvas and: Take the free tour of Canvas.

For online courses, will I ever need to attend in person?

The online courses in this program are offered entirely online. All course requirements, including lectures, tests, quizzes, and assignments will be completed online. You will not be required to attend in person.

What if I am having trouble with my Learning Management System or My Extension?

Please contact Student Services at (858) 534-3400 or unex-reg@ucsd.edu if you experience any issues logging in to any of our systems.

When does enrollment for a course close?

Enrollment in a course may be closed for one or more of the following reasons:

- The course is at capacity. If the course is at capacity you will only be able to join the waitlist. If space becomes available in the course, students on the waitlist are contacted in the order they joined the waitlist.
- The course has progressed to a point where students will no longer be able to make-up missed work and be successful in the course.
- The course is cancelled due to low enrollments.

For all three of these reasons we recommend students enroll early in their courses of interest.

When is the refund deadline for courses?

The refund deadline for courses in this program is typically one week after the start of the course. This allows you to enroll in a course and participate in the course for approximately one week to determine if the course is a good fit. Then, if needed, you may either transfer your enrollment to a different course or submit a drop request. The exact refund deadline for each section is listed in the section notes.

What are the grading options for courses?

You can take courses for one of three options: Letter Grade, Pass/No Pass, or Not for Credit. If you are taking a course towards a certificate you *must* complete your courses for credit (i.e. Pass/No Pass or Letter Grade) and receive a C-/Pass or higher grade. Grades below a C-, No Pass, and Not for Credit will *not* count towards certificate requirements.

How will I receive my final grade?

Once the course is completed, the instructor has 10 working days to submit your grades. After the grades have been posted, you can view and print them via My Extension, your online education management portal. Please contact Student Services at 858-534-3400 or unex-reg@ucsd.edu if you experience any issues with logging in.

What kind of credit do I earn?
The courses in this program are post-baccalaureate, professional-level, credit bearing courses. Credit earned in these courses may lead to the award of a formal certificate by UC San Diego Division of Extended Studies or may be applied toward an academic degree or professional credential, *subject to the approval of the receiving institution*.

If you wish to transfer credit, it is your responsibility to confer with the receiving institution before enrolling, as each individual academic institution decides whether or not to accept Division of Extended Studies credits.

Are courses transferrable?
UC San Diego Division of Extended Studies is not a degree granting institution, however many UC San Diego Division of Extended Studies courses can be transferred to other colleges or universities. The transferability of credit is determined solely by the *receiving* institution. You should discuss how your individual courses will transfer with the Office of the Registrar at the receiving institution *prior to enrolling*.

Can I take a course without registering for the certificate?
Yes, you may take any course in this program without registering for the certificate, provided you have fulfilled any and all prerequisites for the course.

How long is each course?
Three-unit courses run for approximately 8-10 weeks. For exact course dates of upcoming sections, visit the webpage of the course you are interested in taking on our website.

When is each course offered?
Please visit the course page on our website to see when courses are typically offered. You can also see a full program schedule by clicking on the "View Schedule" button under the "Courses" section on the certificate page or on page 2 of this document.

How can I get more information on the specific courses?
Please email unexengr@ucsd.edu to request specific course syllabi.

How many hours can I expect to spend studying outside of class time?
Each student has their own learning style so this can vary greatly. As a rule of thumb, expect to spend an average of two hours studying for every hour you spend in-class.

What are the instructors' credentials?
The program courses are taught by seasoned professionals and overseen by an advisory board of leaders in the field. You can view the advisor list under the "Advisors" section on the certificate page. You can find information about a course instructor, including a biography and credentials, on the course page.

What are the required textbooks for a course?
Instructors will post the current text requirements and recommendations on the course page on our website. Please note the textbooks requirements are subject to change every quarter and different instructors may require different books, even if they are teaching the same course in the same quarter, so be sure to check the textbook requirements *for the section in which you are enrolling*.

Will I be able to order the required textbooks before the class begins?
Yes, you can order the book(s) any time after enrolling in the course. You may order books through the campus bookstore or online retailers, such as Amazon.com.

For More Information

For program specific questions, please visit the certificate page on our website or contact a program representative at unexengr@ucsd.edu or (858) 534-9152. For administrative questions, please contact our Student Services Department at unex-reg@ucsd.edu or (858) 534-3400.