

UCIRVINE | EXTENSION

**Oracle Application
Development
Certificate Program**



University of California, Irvine | P.O. Box 6050, Irvine, CA 92616-6050
www.extension.uci.edu

UC Irvine Extension

Certificate Program in Oracle Application Development

PROGRAM OBJECTIVES

The Certificate Program in Oracle Application Development provides the knowledge and skills needed to develop software applications that work with an Oracle database. Students learn to use Oracle tools to create forms, generate reports, and apply business rules. In addition, the courses help students prepare for the Oracle Developer certification exams. This program uses official curricula that we obtain from Oracle University through our membership in the Oracle Workforce Development Program.*** We offer the same courses that Oracle offers at Oracle University***

Objectives:

- Create forms for an Oracle database
- Create reports using data in an Oracle database
- Create applications that implement business rules for both input (Oracle forms) and output (Oracle reports) data streams
- Perform data backup and recovery procedures
- Gain the knowledge needed to become an Oracle Certified Professional

PROGRAM NEED

Nearly every organization has a need for data storage and manipulation. This data might consist of customer information, supplier information, or product manufacturing data. As a company grows and tries to serve more customers, and as the nature of manufacturing and delivery processes concomitantly becomes more complex, the ability to store and access information quickly becomes crucial. Relational databases provide the best available solution to this data storage problem. For large companies or large eBusiness operations, robust, scalable database systems provide the best solution where data and data accessibility are mission-critical elements. Most often, companies will adopt a corporate standard revolving around a particular vendor. Oracle is usually the database of choice when data storage needs are large and when the ability to fine-tune performance is necessary. As businesses seek ways to serve more customers more efficiently, the need to implement and maintain large-scale, secure databases continues to grow. Today, personalized service over the Internet is becoming the norm, and this requires sophisticated database technology along with skilled people to administer it. Given the growing need for business solutions such as Oracle, the demand for trained and knowledgeable database administrators is expected to grow over the next decade. From the perspective of the student, knowledge of Oracle is important. However, gaining recognition from Oracle by way of certification is also an important factor. Adding the Oracle logo to one's resume symbolizes a higher degree of knowledge and competence using Oracle products.

The courses in this certificate program are identical to those offered by Oracle University and through our participation in the WDP, we use the same Oracle courseware***. These courses provide the best way to prepare for the Oracle certification exams. With UC Irvine Extension, you get the best of both worlds: a certificate granted by UC Irvine Extension and the knowledge needed to become certified by Oracle.

PROGRAM DESCRIPTION

In order to receive the Certificate in Oracle Application Development, students must complete at least 15 units of coursework with a grade of "C" or better in each course (see Table, page 4).

PROGRAM BENEFITS:

- UC Irvine Extension is an Oracle Certified Partner***
- UC Irvine Extension is the #1 provider for Oracle training in the country*
- Oracle certified course materials direct from Oracle***
- Hands-on practice in an Oracle-certified lab***
- Course led by an Oracle Master Certified instructor with 15 years experience in Oracle
- Enrolled students receive free Oracle software***
- Prepare for the Oracle certification exams for database administration
- Receive 25% discount on Oracle certification exams***

PROGRAM FEES

Your total cost may vary substantially depending on the specific courses you choose. Starting at \$1,375-\$1,495 for Oracle courses (3.5 Units). Online courses are \$795 each. Note that parking is free for all Oracle courses conducted at EmpowerTrain in University Tower, across the street from the UCI campus in Irvine.

Course fees (One general and 4 Oracle courses)	\$6,555
Candidacy Fee	\$125
Textbooks ¹	\$75
Parking (\$34 per quarter) ²	\$68

¹ The cost of course books are included in the course fees for all Oracle certified courses. The \$75 amount included here represents a book you might have to purchase for one of the general database courses.

² Parking at EmpowerTrain is free so there will be no parking charges associated with Oracle courses. However, if you take either or both of the general database courses on the UCI campus, you *will* have to pay a parking fee.

*Oracle Workforce Development Program(WDP)

**Enrollment granted on a space-available basis.

UC Irvine Extension

Certificate Program in Oracle Application Development

Total Estimated Cost **\$6,823**

Your actual cost could be more or less than this amount (most likely less because this is a conservative estimate).

REQUIRED COURSE DESCRIPTIONS

Oracle Database 11g: Introduction to SQL I&CSCI X440.55 (3.5 Units)

In this course, students learn the concepts of relational databases. This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and create database objects. Students learn to control privileges at the object and system level. This course covers creating indexes and constraints, and altering existing schema objects. Students also learn how to create and query external tables. Students learn to use the advanced features of SQL in order to query and manipulate data within the database, use the dictionary views to retrieve metadata and create reports about their schema objects. Students also learn some of the date-time functions available in the Oracle Database. This course discusses how to use the regular expression support in SQL. *Prerequisites: Familiarity with data processing concepts and techniques.*

Oracle Database 11g: Program with PL/SQL I&CSCI X440.58 (3.5 Units)

This course introduces students to PL/SQL and helps them understand the benefits of this powerful programming language. Students learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Students learn to create anonymous PL/SQL blocks as well as stored procedures and functions. Students learn to develop, execute, and manage PL/SQL stored program units such as procedures, functions, packages, and database triggers. Students also learn to manage PL/SQL subprograms, triggers, declaring identifiers and trapping exceptions. Students are introduced to the utilization of some of the Oracle-supplied packages. *Prerequisites: Oracle 11g: Introduction to SQL.*

Oracle Application Express 3.0 Developing Web Application I&CSCI X440.60 (3.5 Units)

This course is designed to introduce the students to Oracle Application Express 3.0. The course covers various Application Express components and wizards to build applications and database objects that are easy to deploy. The students learn how to build forms and reports and incorporate different types of items and shared components. Creating and utilizing various

navigation components as well as session management and debugging are discussed. In addition, students incorporate access control, and session protection to enforce application security. Once the application is complete, students learn how to define their packaged application and export the application. Students will also use all the Utilities and Report capabilities that Oracle Application Express provides to build a robust application. The audience for this course includes: Forms Developer, Reports Developer, Application Developers, PL/SQL Developer.

ELECTIVE COURSE DESCRIPTIONS

Designing Relational Databases I&CSCI X426.81 (3.0 Units)

If you need to learn more about the design of relational database systems, this course is for you. You'll explore how the relational database approach is used in both open and closed systems and on both mainframe and client/server platforms, and learn about the design of systems of all sizes including standalone, workgroup, departmental, and enterprise-wide applications. You'll also learn how to incorporate data from legacy systems as well as how to develop entirely new systems. You'll have the opportunity to design a relational database model in class and refine it for a real-world system or case study. Topics include an overview of database systems, defining business entities, entity relationship modeling (ERM) for top-down analysis, defining relational database tables and attributes, conversion of logical design to physical design, normalization of tables, and using structured query language (SQL) to process data and generate reports. *Prerequisites: coursework or experience in programming using a high-level programming language.*

Oracle Database 11g: Oracle Database 11g: Administration Workshop I I&C SCI X440.56 (3.5 Units)

This course is designed to give students a firm foundation in basic administration of Oracle Database 11g. In this class, students learn how to install and maintain Oracle Database 11g. Students gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Students learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques. Topics in this course include: Oracle database architecture, Oracle Net services, database storage structures, backup and recovery, data and concurrency, undo data, performance and database diagnostic. The lesson topics are reinforced with structured hands-on practices. *Prerequisites: Oracle 11g: Introduction to SQL.*

***Oracle Online track not included

LIST OF COURSES

Catalog Number	REQUIRED COURSES
I&CSCI X440.55	Oracle Database 11g: Introduction to SQL (3.5 units)
I&CSCI X440.58	Oracle Database 11g: Program with PL/SQL (3.5 units)
I&CSCI X440.60	Oracle Application Express 3.0 Developing Web Application (3.5 units)
	Elective Courses (4.5 Units Minimum Required)
I&CSCI X426.81	Designing Relational Databases (3.0 units)
I&CSCI X440.92	Oracle Database 11g: SQL Tuning (3.5 units)
Coming Winter	Oracle Database 11g: Advanced PL/SQL (3.5 units)
Coming Winter	Oracle Advanced Application Express (3.5 units)
I&C SCI X440.56	Oracle Database 11g: Administration Workshop I (3.5 units)
Catalog Number	ONLINE TRACK REQUIRED COURSES
I&C SCI X440.80	Oracle Database 11g: Introduction to SQL- Part 1 (1.5 units)
I&C SCI X440.81	Oracle Database 11g: Introduction to SQL- Part 2 (1.5 units)
I&C SCI X440.82	Oracle Database 11g: Program with PL/SQL- Part 1 (1.5 units)
I&C SCI X440.83	Oracle Database 11g: Program with PL/SQL -Part 2 (1.5 units)
Coming Winter	Oracle Web Development with Application Express- Part 1 (1.5 units)
Coming Winter	Oracle Web Development with Application Express- Part 2 (1.5 units)
Coming Winter	Oracle 11g SQL Tuning-Part 1- (1.5 units)
Coming Winter	Oracle 11g SQL Tuning-Part 2- (1.5 units)
	ELECTIVE COURSES
I&C SCI X426.81	Designing Relational Databases (3.0 units)
Coming Winter	Oracle Database 11g: Advanced PL/SQL- Part 1 (1.5 units)
Coming Winter	Oracle Database 11g: Advanced PL/SQL- Part 2 (1.5 units)
I&C SCI X440.84	Oracle Database 11g: Administration Workshop 1-Part 1 (1.5 units)
I&C SCI X440.85	Oracle Database 11g: Administration Workshop 1-Part 2 (1.5 units)
Coming Winter	Oracle Advanced Application Express-Part 1 (1.5 units)
Coming Winter	Oracle Advanced Application Express-Part 2 (1.5 units)
See www.extension.uci.edu for the Oracle Online Track course descriptions	

UNIVERSITY OF CALIFORNIA, IRVINE
UNIVERSITY EXTENSION

APPLICATION FOR CANDIDACY

Certificate Program in Oracle Application Development

This form must be submitted, along with a filing fee of \$125, prior to completion of the third course in the Program.

NAME Mr. Mrs. Ms.

HOME ADDRESS

CITY

STATE

ZIP

PHONE: DAY

EVENING

SOCIAL SECURITY NUMBER

JOB TITLE

EMPLOYER

EMPLOYER ADDRESS

Payment must be included with application.

MY CHECK FOR \$125 IS ENCLOSED (Payable to Regents of University of California).
CANDIDACY FEE IS NONREFUNDABLE AND NONTRANSFERABLE.

CHARGE TO: VISA MASTERCARD AMERICAN EXPRESS

ACCOUNT NUMBER

EXP DATE

AUTHORIZED SIGNATURE

Mail To:

University of California, Irvine
University Extension
PO Box 6050, Irvine, CA 92616-6050
FAX (949) 824-2090

Revised 7/29/09