The Oracle Academy: Software, Training, Resources, and More

Introduction to Computer Science: Curriculum Overview

Our curriculum enhances the rigor and relevance of academic programs by integrating technical subject matter and professional skills that employers are demanding in the 21st century workplace. Using the latest online learning technologies, students demonstrate valuable skills that apply to a variety of career pathways, including database administrator, software engineer, systems analyst, and information systems manager.

Student-focused curriculum

This professionally designed curriculum is geared to meet the learning needs of a variety of students, from those interested in gaining broad exposure to business and technical skills to students planning on pursuing a technical education or career. It blends virtual and face-to-face training, hands-on exercises, assessments, and project based learning experiences while allowing teachers and students to easily access the curriculum through a web browser by leveraging Oracle’s latest technologies.

Preparation for higher education and employment

Students learn and apply higher-order thinking skills that mirror the level of excellence expected in higher education and the 21st century workplace. A strong emphasis is placed on students demonstrating employability skills, such as critical thinking, problem solving, resume building and interviewing, group collaboration and project management.

Industry certification

Upon completion of each course, students have the opportunity to pursue Oracle certification – a distinction that provides an additional competitive edge in the job market.

Aligned to educational standards

The Oracle Academy curriculum was written with leading instructional design principles in mind and complies with select international, national, and local standards (please contact your local Oracle Academy representative for further details). Each lesson can be assessed for its conceptual approach, modality, Bloom’s taxonomy, assessment type, behavioral objectives, and related professional skills.
“It’s been quite exciting to see new opportunities that have opened for my students as a result of their Oracle Academy experiences. The real-world technical skills they learn boost their confidence and give them a competitive edge for their future.”

Robin Smith
Teacher
Arnold R. Burton Technology Center

COURSES:

Database Design and Programming with SQL – 150 hours

This vendor-neutral, two-part course teaches Data Modeling and Structured Query Language (SQL). In the Database Design curriculum, students learn to analyze complex business scenarios and create a data model, a conceptual representation of an organization’s information. In the Database Programming with SQL curriculum, students implement their database design by creating a physical database using SQL, the industry-standard database programming language.

Upon completion of this course, students have the opportunity to take the certification exams listed below. To earn the industry certification Oracle Database SQL Certified Expert, students must successfully complete the proctored Oracle Database SQL Expert exam. The two online exams can be taken as pre-requisites for other certifications, such as the Oracle Database Certified Associate and the Oracle PL/SQL Developer Certified Associate.

- 1Z0-007 Introduction to Oracle9i SQL (online)
- 1Z0-051 Oracle Database 11g: SQL Fundamentals I (online)
- 1Z0-047 Oracle Database SQL Expert (proctored)

Database Programming with PL/SQL – 150 hours

This course covers PL/SQL, a procedural language extension to SQL. Through an innovative project-based approach, students learn procedural logic constructs such as variables, constants, conditional statements, and iterative controls. Upon completion of this course, students have the opportunity to take the certification exams listed below. To earn the industry certification Oracle PL/SQL Developer Certified Associate, students must successfully complete one SQL exam and one PL/SQL exam from the lists below.

SQL exams:
- 1Z0-007 Introduction to Oracle9i SQL (online)
- 1Z0-051 Oracle Database 11g: SQL Fundamentals I (online)
- 1Z0-047 Oracle Database SQL Expert (proctored)

PL/SQL exams:
- 1Z0-144 Oracle Database 11g: Programming with PL/SQL (proctored)
- 1Z0-147 Programming with PL/SQL (proctored)

Accessing a lesson preview*

1. Visit http://academy.oracle.com
2. Select Introduction to Computer Science
3. Click “Student Sign In” on the right
4. Enter the following information for “iLearning Sign In”
   User for iLearning is oracle.academy
   Password is oracle

* Please note that the Oracle Academy makes regular enhancements to the curriculum that are not always reflected in the preview.

Contact Us

To learn more, visit http://academy.oracle.com.