



# Oracle Application Express – Application Development Foundations Course Description

# Overview

This course of study introduces students to the techniques and tools required to develop database driven web applications. The course teaches students how to design, develop and deploy beautiful, responsive, database-driven web applications using Oracle Application Express. <u>Oracle Application Express</u> is utilized to provide practical, hands-on, engaging activities. Leveraging project-based learning techniques, students will create and work with projects which challenge them to design, implement, and demonstrate a database-driven web application solution for a business or organization.

## Available Curriculum Languages:

English

## Duration

- Recommended total course time: 90 hours\*
  - \* Course time includes instruction, self-study/homework, practices, projects and assessment

# **Target Audiences**

#### Educators

- Technical, vocational and 2- and 4- year college and university faculty members who teach computer science, information communications technology (ICT), data science, business or a related subject
- Secondary and vocational school teachers who teach computer science, ICT, or a related subject.

#### Students

- Students who wish to learn to learn the techniques and tools to design, build and deploy database driven web applications.
- Students who possess existing SQL and PL/SQL skills
- Students who possess Novice programming skills
- Students who possess an understanding of web applications as an end user or creator

# Prerequisites

#### Required

Oracle Academy - Database Foundations

#### Suggested

- Oracle Academy Database Design & Programming with SQL
- Oracle Academy Programming with PL/SQL

# Lesson-by-Lesson Topics

#### Introduction

- Course Overview
- Getting Started with Oracle Application Express

Create a Basic Database Application

- Using SQL Workshop
- Creating a Database Application

Pages, Reports, and Grids

• Managing Pages in Page Designer

- Developing Reports
- Managing and Customizing Interactive Reports
- Managing and Customizing Interactive Grids

#### Forms and Page Controls

- Creating and Using Forms
- Creating Application Page Controls
- Adding Computations, Processes, and Validations

## Navigation, Themes, and Security

- Implementing Navigation in your Application
- Using Themes and Theme Styles
- Implementing Security in your Application

### Adding to and Migrating an Application

- Adding Additional Pages to your Application
- Creating and Using Dynamic Actions and Plug-ins
- Migrating Application Development between Environments

## **Final Project**

Final Project