

## **Course Description**

## CTS2440 | Introduction to Oracle: SQL and PL/SQL | 4.00 credits

This is an introductory level course for students majoring in the Oracle Database Administrator and/or Solutions Developer programs. Students will learn the fundamentals of SQL and PL/SQL programming languages including the concepts of relational databases, how to create and maintain database objects, and how to store, retrieve, and manipulate data. Students will also learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Prerequisite: CGS1060.

## **Course Competencies:**

Competency 1: The student will describe relational and object relational database concepts by:

- 1. Creating and managing database objects and using constraints
- 2. Creating views
- 3. Controlling user access
- 4. Interacting with the oracle server

Competency 2: The student will write basic SQL statements using SQL\*Plus by:

- 1. Restricting and sorting data
- 2. Utilizing single row functions
- 3. Displaying data from multiple tables
- 4. Aggregating data using group functions
- 5. Writing subqueries

Competency 3: The student will demonstrate the ability to do basic programming using PL/SQL by:

- 1. Producing readable output with SQL\*Plus
- 2. Manipulating data
- 3. Declaring variables
- 4. writing executable statements
- 5. writing control structures

## **Learning Outcomes:**

- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively

Updated: Fall 2025