## **Database Administration**

## **Certificate of Achievement : Database Administration**

The associate degree and the Certificate of Achievement in Database Administration prepare students to either enter the workforce as an entry-level information and communication technologies (ICT) professional or pursue a baccalaureate degree in computer science. Graduates of the associate degree in Database Administration are prepared and eligible to sit for Microsoft and/or Oracle certification exams. Topics addressed include database administration, Structured Query Language (SQL), programming practices, desktop databases, and information systems management. Database design, installation, programming, security, recovery, and backup are also addressed.

Generally, no courses beyond a high school diploma are needed to be admitted into these programs. However, most courses recommend a background in computer science, information systems, and information and communication technologies.

Most graduates who enter the workforce work as database administrators or database associates. Other possible careers open to graduates of an associate degree in database administration include database program designer, database programmer (application developer), and database analyst.

As the use of technology expands throughout the economy, available positions in database administration are expected to grow 37% by 2016, according to the Bureau of Labor Statistics (www.bls.gov).

- a. Complete Major Field courses and either Oracle or Microsoft Database Administrator focus.
- b. Complete at least six units at Ohlone College.
- c. Maintain a 2.0 grade point average in Major Field and Focus courses.

## Associate in Science: Database Administration

The associate degree and the Certificate of Achievement in Database Administration prepare students to either enter the workforce as an entry-level information and communication technologies (ICT) professional or pursue a baccalaureate degree in computer science. Graduates of the associate degree in Database Administration are prepared and eligible to sit for Microsoft and/or Oracle certification exams. Topics addressed include database administration, Structured Query Language (SQL), programming practices, desktop databases, and information systems management. Database design, installation, programming, security, recovery, and backup are also addressed.

Generally, no courses beyond a high school diploma are needed to be admitted into these programs. However, most courses recommend a background in computer science, information systems, and information and communication technologies.

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As the use of technology expands throughout the economy, available positions in database administration are expected to grow 37% by 2016, according to the Bureau of Labor Statistics (www.bls.gov).

a. Complete Major Field courses; either Oracle or Microsoft Database Administrator focus; and Supporting Courses with a grade of C or better.

b. Complete Ohlone College General Education (Plan A), CSU GE (Plan B), or IGETC (Plan C) requirements. These requirements are specified in the Ohlone College catalog.

c. Complete at least 60 degree-applicable units with a 2.0 grade point average.

d. Complete at least 12 units at Ohlone College.

## **Student Learning Outcomes**

1. Support the data management needs of business through the design, implementation and maintenance of relational databases.

2. Demonstrate appreciation of the ICT career field and the need to be lifelong learners.

Major Field

CNET 135 Oracle Database Administration	2
CNET 136 Oracle Database Backup and Recovery	2
CNET 137 Introduction to SQL	4
CNET 155A Introduction to Networks (CCNA1)	3
CNET 168A Querying Microsoft SQL Server	2
CNET 168B Administering Microsoft SQL Server	2
ENGL 156 Introduction to Report & Technical Writing	3
or	
COMM 125 Career Communication	3
	Total Units = 18
Database Administrator Focus Complete either the Oracle Database Administrator Focus or the Microsoft Data Focus.	abase Administrator
Oracle Database Administrator Focus	8
CNET 138 PL/SQL Programming	4
CNET 140 Linux System Administration I (LPI-1)	4
or	
Microsoft Database Administrator Focus	8
CNET 162 Windows Server Installation and Configuration Administration	2
CNET 164 Windows Server Administration	2
CNET 166 Windows Server - Advanced Services	2
CNET 168C Implementing a Data Warehouse with Microsoft SQL Server	2
	Total Units = 8.00
Supporting Courses	
Complete 1-4 units from the following courses:	1 - 4
WEX 195A1 Occupational Work Experience Education	1
or	
WEX 195A2 Occupational Work Experience Education	2
or	
WEX 195A3 Occupational Work Experience Education	3
WEX 195A4 Occupational Work Experience Education	4
Complete four units from the following courses:	4
CNET 105 IT Essentials (CompTIA A+)	4
CNET 108 IT Project Management	3
CNET 120 VMware: Install, Configure, Manage	2
CNET 122A Information Storage and Management - EMC	
	2
CNET 122B Cloud Infrastructure and Services	2 2
CNET 170 Network Security (Security+)	2 4
CNET 170 Network Security (Security+) CS 102 Introduction to Computer Programming Using C++	2 4 3
CNET 170 Network Security (Security+) CS 102 Introduction to Computer Programming Using C++ CS 104A Introduction to .NET Programming	2 4 3 4
CNET 170 Network Security (Security+) CS 102 Introduction to Computer Programming Using C++	2 4 3 4 4
CNET 170 Network Security (Security+) CS 102 Introduction to Computer Programming Using C++ CS 104A Introduction to .NET Programming	2 4 3 4
CNET 170 Network Security (Security+) CS 102 Introduction to Computer Programming Using C++ CS 104A Introduction to .NET Programming	2 4 3 4 4

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