



## **CURRICULUM GUIDE 2017-2018**

### **DATABASE ADMINISTRATION**

#### **Associate in Science in Database Administration and Certificate of Achievement in 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](http://www.bls.gov)).

#### **Requirements for Associate in Science Degree:**

- a) Complete Major Field courses; either the 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.

#### **Requirements for Certificate of Achievement:**

- a) Complete Major Field courses and either the 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.

#### **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
COMM-125	Career Communication OR	3
ENGL-156	Introduction to Report and Technical Writing	<u>(3)</u>
		18

### **DATABASE ADMINISTRATOR FOCUS**

Complete either the Oracle Database Administrator Focus or the Microsoft Database Administrator Focus.

#### **Oracle Database Administrator Focus**

CNET-138	PL/SQL Programming	4
CNET-140	Linux System Administration I (LPI-1)	<u>4</u>
		8

OR

#### **Microsoft Database Administrator Focus**

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	<u>2</u>
		8

### **SUPPORTING COURSES**

Complete 1-4 units from the following courses:

WEX-195A1	Occupational Work Experience Education OR	1
WEX-195A2	Occupational Work Experience Education OR	(2)
WEX-195A3	Occupational Work Experience Education OR	(3)
WEX-195A4	Occupational Work Experience Education	<u>(4)</u>
		1-4

Complete four units from the following courses:

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
CNET-170	Network Security (Security+)	4
CS-102	Introduction to Computer Programming Using C++	3
CS-104A	Introduction to .NET Programming	4
CS-145	PHP Programming with MySQL	<u>4</u>
		4

Total Required Units: 31-34