

DATABASE MANAGEMENT

Curriculum Guide for Academic Year 2021-2022

Table of Contents

Associate in Science Degree, p. 1
 Database Management Courses, p. 1
 Certificate of Achievement, p. 2
 Certificates of Accomplishment, p. 2
 Basic Databases, p. 2
 Android App Developer, p. 2
 Career Opportunities, p. 2
 Program Mission and Outcomes, p. 2
 Legend, p. 3

Students planning to **transfer** to a four-year college or university should refer to the ASSIST web site at www.assist.org and **consult a counselor** before beginning a program of study. Please call 562-938-4561 (LAC) or (562) 938-3920 (PCC) to schedule an appointment. Students may also wish to visit the Transfer Center on either campus.

Program of study leading to:
Associate in Science (A.S.) Degree

| DATABASE MANAGEMENT COURSES | | UNITS | In Progress | Completed Grade |
|------------------------------------|--|--------------|--------------------|------------------------|
| BCOM 15 | Business Communications | 3 | | |
| COSA 50 | Introduction to IT Concepts and Applications | 4 | | |
| COSA 25 | Microsoft Access for Windows | 3 | | |
| COSN 205 | UNIX/LINUX Fundamentals | 4 | | |
| COSN 251 | Database Essentials in Amazon Web Svcs. | 3 | | |
| COSP 38 | Database Concepts | 4 | | |
| COSP 237 | Database Programming with SQL | 4 | | |
| Subtotal Units | | 25 | | |

For graduation with an **Associate in Science (A.S.) Degree with a major in Database Management**:

- Minimum Unit Requirements:** §Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012). For this degree, complete a minimum of 60 units in courses numbered 1-599. Please note that additional elective units may be required to meet this minimum based upon courses selected to fulfill General Education for the Associate Degree.

Database Management Units 25 Units
General Education/A.S. § 19 Units

- Scholarship:** Maintain an **overall grade point average (GPA) of 2.0** ("C" average) based on all accredited college work applied to the degree, no matter where completed. For this **field of concentration, complete each course above with a grade of "C" or better**, or "P" if course is graded on a P/NP basis.
- Residence for the Degree:** Complete at least 12 semester units of the required 60 semester units in residence at Long Beach City College in order for the college to grant an Associate of Arts and/or an Associate of Science Degree.
- Residence for the Field of Concentration:** Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12.5 units** of the 25 must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.
- General Education and Proficiency Requirements:** Complete the required A.A./A.S. General Education and Proficiency requirements*, otherwise known as "Plan A". For Plan A requirements, refer to the general catalog or view it online at <http://osca.lbcc.edu>.

Program of study leading to:
Certificate of Achievement

REQUIRED COURSES—Complete the 25 units of required courses as listed in the Associate Degree requirements box.

TOTAL UNITS 25

| | |
|--|--|
| | |
|--|--|

For graduation with a **Database Management Certificate of Achievement**:

1. Complete each of the **REQUIRED COURSES** listed above with a **minimum grade of "C"**.
2. Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12.5 units** of the required **25 units** must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.
3. Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu/> . Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

Program of study leading to:
Certificates of Accomplishment

Certificate: Database Administration Specialist 4080

REQUIRED COURSES

| | | UNITS | In Progress | Completed Grade |
|--------------------|------------------------------|----------|-------------|-----------------|
| COSA 25 | Microsoft Access for Windows | 3 | | |
| COSP 38 | Database Concepts | 4 | | |
| TOTAL UNITS | | 7 | | |

Certificate: SQL Programmer Specialist 4158

REQUIRED COURSES

| | | UNITS | In Progress | Completed Grade |
|-----------------------|-------------------------------------|----------|-------------|-----------------|
| Take one sequence of: | | | | |
| COSP 237 | Introduction to Oracle SQL & PL/SQL | 4 | | |
| TOTAL UNITS | | 4 | | |

For graduation with a **Certificate of Accomplishment**:

1. Complete the above required courses with a minimum grade of "C", or "P" if course is graded on a P/NP basis.
2. Fifty percent (50%) or more of the required units must be completed in residence at LBCC.

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu>

Career Opportunities

This **Associate Degree or Certificate of Achievement** is a two-year program leading to the Associate in Science (A.S.) degree. The Database Management Systems concentration includes coursework in the design, development and maintenance of relational databases. The program is designed to prepare students for employment in a computer field following graduation. Students wishing a Bachelors' degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses.

Program Mission and Outcomes

This program will provide students with a strong foundation in the design and management of database systems in a business environment. In-depth practice of Structured Query Language (SQL) is provided in the context of business-related case studies. The Database Management program covers advanced database concepts, including database administration, database technology, database web programming and selection and acquisition of database management systems. Supporting courses allow students to gain a thorough understanding of necessary business communication skills, operating systems, programming logic and system design.

Outcomes:

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the data needs of an organization or company, and determine how to best organize and store the data in logical, secure and accessible structures.
- Design web applications to access and manipulate data using MS Access, MySQL, MS SQL Server and PHP.
- Understanding the roles and responsibilities of a database administrator. Have the ability to troubleshoot systems.

Certificate of Accomplishment Outcomes (Database Administrator Specialist):

- Demonstrate the ability to install database software on a computer system and configure it for use.

Certificate of Accomplishment Outcomes (SQL Programmer Specialist):

- Design, run, and analyze new and existing SQL programs according to commonly practiced industry standards.

Legend

† This course has a prerequisite. Prerequisite courses must be complete with at least a “C” or “P” grade. Refer to the General Catalog (<http://www.lbcc.edu/cat/index.html>), the Schedule of Classes (<http://schedule.lbcc.edu/>), or the online Credit Course Outline (<http://wdb-asir.lbcc.edu/coursecurriculum/courseetails/>) for specific prerequisite information.