

Database Management (A25150)

The Database Management curriculum prepares graduates for employment with organizations that use database management system software to process, manage, and communicate information. Additionally, the curriculum provides the student with a foundation to begin professional certification with Microsoft or ORACLE database programs.

Course work includes terminology and design, database administration, backup and recovery, performance and tuning, database programming and tools, and related topics. Studies will provide an opportunity for students to implement, support, and manage industry standard database systems.

Graduates should qualify for a wide variety of database and computer related entry-level positions that provide opportunities for advancement with increasing experience and ongoing training.

Degree Awarded

The Associate in Applied Science Degree in Database Management is awarded by the College upon successful completion of this program.

Admissions

- A high school diploma or equivalent is required.
- Placement tests determine placement in English (ENG), mathematics (MAT), and CIS 115.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

Notes

The Database Management program is in the Information Technology Division. For more information, call 704.330.6549 or visit us at www.cpcc.edu/it

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
CIS 115 Introduction to Programming & Logic	2	2	0	0	3
CTS 285 Systems Analysis & Design	3	0	0	0	3
DBA 110 Database Concepts	2	3	0	0	3
DBA 115 Database Applications	2	2	0	0	3
DBA 120 Database Programming I	2	2	0	0	3
DBA 210 Database Administration	2	3	0	0	3
DBA 230 Database in Corporate Environments	3	0	0	0	3
DBA 240 Database Analysis/Design	2	3	0	0	3
DBA 289 Database Project	1	4	0	0	3
NOS 110 Operating System Concepts	2	3	0	0	3
SEC 110 Security Concepts	3	0	0	0	3
CIS 110 Introduction to Computers	2	2	0	0	3

Networking

Students must select one of the following courses:

NET 110 Networking Concepts	2	2	0	0	3
NET 125 Networking Basics	1	4	0	0	3

Business

Students must select one of the following courses:

BUS 110 Introduction to Business	3	0	0	0	3
CTS 115 Information Systems Business Concepts	3	0	0	0	3

Major Electives

Students must select 9 SHC from the following courses:

CSC 139 Visual Basic Programming	2	3	0	0	3
CSC 151 JAVA Programming	2	3	0	0	3
CSC 153 C# Programming	2	3	0	0	3
DBA 220 Oracle DB Programming II	2	2	0	0	3
DBA 221 SQL Server DB Programming II	2	2	0	0	3

DBA 223 MySQL DB Programming II	2	2	0	0	3
DBA 112 Database Utilization	2	2	0	0	3

**This prefix is limited to a maximum of 3 credit hours.

General Education Requirements

ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
OR					
ENG 113 Literature-Based Research	3	0	0	0	3
OR					
ENG 114 Professional Research and Reporting	3	0	0	0	3
COM 110 Introduction to Communication	3	0	0	0	3
OR					
COM 120 Interpersonal Communication	3	0	0	0	3
OR					
COM 231 Public Speaking	3	0	0	0	3

Mathematics

Students must select a minimum of three (3) credit hours of approved mathematics courses from the list at the end of this section of the catalog.

Humanities/Fine Arts

Students must select a minimum of three (3) credit hours of approved humanities/fine arts courses from the list at the end of this section of the catalog.

Social/Behavioral Sciences

Student must select a minimum of three (3) credit hours of approved social/behavioral science courses from the list at the end of this section of the catalog.

Total Credit Hours

69

Database Management Certificates (C25150)

Database Management Certificate with a Specialization in Basic Database Management (C25150-C1)

The Database Certificate is designed to prepare the individual to use databases more effectively as an end-user and to design, normalize, and program databases. This certificate will introduce the student to Personal Computer (PC) and Main-frame database software, four database models, database design tools, design and normalization criteria, and database languages such as Structured Query Language (SQL).

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
CIS 110 Introduction to Computers	2	2	0	0	3
DBA 110 Database Concepts	2	3	0	0	3
DBA 112 Database Utilization	2	2	0	0	3
DBA 115 Database Applications	2	2	0	0	3
DBA 120 Database Programming I	2	2	0	0	3
Total Credit Hours					15

Database Management Certificate with a Specialization in Oracle Database Certified Associate (C25150-C2)

The Oracle Certificate Program helps the IT industry make distinctions by establishing a standard of competence in key entry level and professional job roles. The oracle Certification program begins with the Associate level.

The OCA Certificate is designed to prepare individuals to take the required Oracle certification examinations. This certificate will introduce the student to Oracle database structure, database model, database programming, and administrative issues. By earning OCA, individuals can gain increased entry level job opportunities in the IT area and have a foundation of knowledge that will allow them to act as a team member working with database administrators or application developers.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
DBA 110 Database Concepts and Applications	2	3	0	0	3
DBA 112 Database Applications	2	2	0	0	3
DBA 115 Database Programming I	2	2	0	0	3
DBA 210 Database Administrative Issues I	2	2	0	0	3
Total Credit Hours					12

Database Management Certificate with a Specialization in Oracle Database Administrator Certified Professional (C25150-C3)

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
DBA 230 Database in Corporate Environments	3	0	0	0	3
DBA 220 Oracle Database Programming II	2	2	0	0	3
DBA 270 Oracle Database Performance Tuning	2	3	0	0	3
DBA 260 Oracle Database Administrative Issues II	2	3	0	0	3
Total Credits Hours					12

Database Management Certificate with a Specialization in Data Modeling and Relational Database Certificate (C25150-C4)

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
DBA 110 Database Concepts	2	3	0	0	3
DBA 112 Database Utilization	2	2	0	0	3
DBA 115 Database Applications	2	2	0	0	3
DBA 230 Database in Corporate Environments	3	0	0	0	3
DBA 240 Database Analysis and Design	2	3	0	0	3
DBA 289 Database Project	1	4	0	0	3
Total Credit Hours					18