



DATABASE MANAGEMENT

Associate In Science Degree & Certificate Curriculum Requirements

DATABASE MANAGEMENT

The database management major is intended for students wishing to upgrade or acquire new skills in the fields of database administration, database developer, database applications design, and programming with database management systems. The course of study includes a foundation in database theory and design, and the industry standard database language. Depending on the elective option chosen, there are further courses in programming, database administration or database developer.

CAREER OPPORTUNITIES

The use of database systems is growing even more rapidly than the computer field in general. Specific jobs open to graduates of the program are in database administration, database developer, application design, & applications programming.

CERTIFICATE REQUIREMENTS*

All certificates require English 110, or ESL 25 or equivalent as well as Math 101 or equivalent.

ORACLE DATABASE ADMINISTRATION:

SKILLS CERTIFICATE (15 units)

This Certificate contains coursework for the exam(s) one needs to take for the Oracle 10g Certified Associate and Oracle Professional Database Administrator credential.

CIS 52B	Oracle SQL	(5 units)
CIS 52E	Oracle Database Administration I	(5 units)
CIS 52F	Oracle Database Administration II	(5 units)

ORACLE DATABASE ADMINISTRATION:

CAREER CERTIFICATE (40 units)

CIS 52A	Intro to Data Management Systems	(5 units)
CIS 52B	Oracle SQL	(5 units)
CIS 52C	Data Modeling & Relational dB Design	(5 units)
CIS 52E	Oracle Database Administration I	(5 units)
CIS 52F	Oracle Database Administration II	(5 units)
CIS 52J	Oracle PL/SQL	(5 units)
CIS 68A	Introduction to Linux and UNIX	(5 units)
CNET 50	Fundamentals of DataComm & Networking	(5 units)

ORACLE DATABASE DEVELOPER: SKILLS CERTIFICATE (15 units)

This Certificate contains the coursework for the exams one needs to take for the Oracle 10g "Developer Certified Associate" and "Forms Developer Certified Professional" credential. It is recommended that the candidate take CIS 52A and CIS 52C prior to beginning this sequence.

CIS 52B	Oracle SQL	(5 units)
CIS 52J	Oracle PL/SQL	(5 units)
CIS 52K	Oracle Forms	(5 units)

ORACLE DATABASE DEVELOPER:

CAREER CERTIFICATE (40 units)

CIS 52A	Intro to Data Management Systems	(5 units)
CIS 52B	Oracle SQL	(5 units)
CIS 52J	Oracle PL/SQL	(5 units)
CIS 52K	Oracle Forms	(5 units)
CIS 68A	Introduction to Linux and UNIX	(5 units)

Electives (select three):

CIS 52C	Data Modeling & Relational dB Design	(5 units)
CIS 52M	Oracle Reports	(5 units)
CIS 62A	Data Warehousing & Data Mining	(5 units)
CIS 68E	Programming in PERL	(5 units)
CIS 27A**	Computer Science I: JAVA	(5 units)

** CIS 27P can be taken in lieu of CIS 27A if the student has Object Oriented programming knowledge

OPEN SOURCE DATABASES: SKILLS

CERTIFICATE (15 units)

This certificate will familiarize the student with open source databases, their creation and administration and enable them to build powerful and dynamic database driven websites. It is recommended that the candidate take CIS 52A and CIS 52C prior to beginning this sequence

CIS 52N	MySQL and PHP	(5 units)
CIS 52Q	MySQL: in depth	(5 units)
CIS 52P	PHP: in depth	(5 units)

MICROSOFT DATABASE ADMINISTRATION:

SKILLS CERTIFICATE (15 units)

This certificate will familiarize the student with the administration of databases in a Microsoft environment & prep the student for the Microsoft Certified IT Professional credential.

CIS 54C	SQL server database design	(5 units)
CIS 54D	Microsoft SQL Server 2005	(5 units)
CIS 54E	SQL server database administration	(5 units)

ASSOCIATE DEGREE REQUIREMENTS*

The Associate of Science degree in Database Management requires the following:

- English 1A, ESL 26, or equivalent.
- Mathematics proficiency: Math 103, 105 or equivalent.
- A minimum of 90 total units including:
 - all General Education requirements (see reverse)
 - a career certificate in either database administration OR database developer
 - electives and other graduation requirements as appropriate

* All courses pertaining to the major must be taken for a letter grade. In addition, a GPA of 2.0 or higher is required in all Core and Support courses for the Degree or Certificate. 50% of the major units must be taken within CTIS division.