

Database Certificate

Completion of this certificate, offered through the computer information systems program, will help to prepare students for future careers as database specialists or for one of many other information systems careers in which knowledge of database concepts, products and technologies is important. Students will be able to design and build personal databases using Access. The student will acquire a strong foundational knowledge in an object-oriented programming language (Visual Basic) and will work with Web-enabled databases, SQL and other database products, as well as attaining formal systems analysis and design skills.

(Major Code 5190; State CIP Code 11.0802)

- Gainful Employment - Database (<http://www.jccc.edu/information-systems/ge-voc-database.html>)
- Computing Sciences and Information Technology (<http://www.jccc.edu/computing-sciences-and-information-technology>)

Prerequisites for Required Courses

Prior to beginning the database certificate program, the student must take the following prerequisite or have taken an equivalent transfer course, or have passed the waiver test, or have obtained a waiver from the program administrator.

CPCA 105	Introduction to Personal Computers: Windows	1
or CPCA 106	Introduction to Personal Computers: Macintosh	

First Semester

Full Semester Course:

CS 134	Programming Fundamentals	4
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First Five Week Session:

CPCA 114	Databases I: MS Access*	1
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Second Five Week Session:

CPCA 115	Databases II: MS Access*	2
CWEB 101	Introduction to the Web using Internet Explorer*	1

Third Five Week Session:

CPCA 141	Internet I*	1
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Total Hours		9
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Second Semester

Full Semester Course:

CS 201	Concepts of Programming Algorithms using C#*	4
or CS 205	Concepts of Programming Algorithms using Java*	

First Five Week Session:

CPCA 138	Windows for Microcomputers*	1
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Second Five Week Session:

CWEB 136	Introduction to PHP*	1
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Third Five Week Session:

CWEB 146	PHP with MySQL*	1
CPCA 117	Databases III: MS Access*	1

Total Hours		8
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Third Semester

Full Semester Courses:

CIS 162	Database Programming*	4
CS 236	Object-Oriented Programming Using C#*	4
or CIS 244	Advanced Topics in C# I*	
or CIS 240	Advanced Topics in Java*	

Total Hours		8
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Fourth Semester

Full Semester Courses:

CIS 260	Database Management*	4
CIS 242	Introduction to System Design and Analysis*	3
Total Hours		7

Total Program Hours: 32