CIS - Computer Programmer-SQL Certificate

This certificate is designed for students who have completed the Database Analyst SQL Certificate and aspire to be entry-level programmers using the Structured Query Language (SQL). This is the second in a series of three certificate programs in Relational Database Management Systems. This suggested program course schedule also meets the Certificate for CIS-Relational Database Administration.

Total Units: 19-25

First Year

Semester 1   10 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISC 310 ⓩ Introduction to Computer Information Science	3	Advisory: familiar with basic functions of word process, spreadsheet, web browser software applications	F(O,P), S(O,P), S(O)
CISC 323 Linux Operating System	1		F(O), S(O), Su(O)
CISP 300 ⓩ Algorithm Design/Problem Solving	3	Intermediate Algebra	F, S, Su
CISP 351 Introduction to Relational Database Design and SQL	3		F(P), S(P)

ⓩ At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the ZTC page of the college website.

Semester 2   8-14 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISA 320[1] Introduction to Database Management **or**	1	Advisory: CISC 302 or 310	F(O), S(O), Su(O)
CISP 370[1] Beginning Visual Basic	4	Advisory: CISC 310 or CISP 300	F(O), S(P)
CISC 324 Intermediate Linux Operating System	1	CISC 323	F(O), S(O), Su(O)
CISP 352 Intermediate SQL	3	Advisory: CISP 351	F(O), S(O)

Career Options/Outlook:

Computer Programmers create, modify, and test the code, forms, and scripts that allow computer applications to run. Work from specifications drawn up by software developers or other individuals. May assist software developers by analyzing user needs and designing software solutions. May develop and write computer programs to store, locate, and retrieve specific documents, data, and information. **Career opportunities require more than two years of college study.**

A sample of reported job titles:

Analyst Programmer, Application Programmer Analyst, Computer Programmer, Computer Programmer Analyst, Internet Programmer, Java Developer, Programmer, Programmer Analyst, Web Applications Programmer, Web Programmer

Projected job openings in California (2020-2030):

1,510

Projected growth in California (2020-2030):

-3% decline

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISP 353 Application Development in a Client Server Environment	3	Advisory: CISO 352	S(O)
Elective [2]	0-3		

[1] A minimum of 2 units from these selected courses are required for the Certificate in Computer Programmer-SQL

[2] For the Certificate in CIS-Relational Database Administration, suggest taking CISP 354 Intro to Relational Databased Administration (3 units); Advisory: CISP 352; S(O)

Year 2

Semester 3

1 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISA 321 [1] Intermediate Database Management	1	CISA 320	F(O), S(O)

^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

*(O) = online available (P) = partially online

[1] This is only necessary if CISA 320 was taken in semester 2 to meet the 2 unit requirement.

Median Salary in California with advanced degree (2021):

$105,080/yr

Source:

https://www.onetonline.org/link/summary/15-1131.00

Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course

availability or financial aid applicability.

This map meets the requirement for:

The Certificate of Achievement in CIS-Relational Database Administration with the addition of CISP 354.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.