DeAnza College

Academic Year
2014 - 2015

Computer Information Systems
Database Design

21250 Stevens Creek Blvd.
Cupertino, CA 95014
408-864-5678
www.deanza.edu

CIS Coordinator	Business & Computer	Counseling Center	Career Services Info.
408-864-8877	Systems Division	Student & Community	Student & Community
Bldg. F5 Rm. F51i	Bldg. L1 Rm. L14	Services Bldg. 2nd Fl.	Services Bldg. 2nd Fl.
	408-864-8797	408-864-5400	408-864-5400

Please visit the Counseling Center to apply for certificates and degrees, and for academic planning assistance.

Certificate of Achievement Level Requirements
A minimum "C" grade in each major course.
Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

Database Design for Developers (Oracle)
Certificate of Achievement
The Database Design for Developers Certificate of Achievement includes database management system fundamentals, SQL, PL/SQL and performance tuning. Students become proficient in organizing essential information and abstract relationships into a database. They also learn to update, maintain, and repair databases and improve database performance. Database skills are applied by Software Engineers, Business Analysts, Database Architects, Database Administrators, Database Designers and Reporting Analysts.

Student Learning Outcomes - upon completion, students will be able to
- prepare and review a database design that includes logical and system representations.
- design, code and debug SQL and PL/SQL programs.
- apply performance tuning techniques to large-scale database applications.
- create, design and debug intermediate level programs with basic C programming language.
- create a database that is optimized to meet defined technical requirements.

1. Meet the requirements for this certificate level.
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 22A and CIS 22B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)	
CIS 15BG	Intermediate Problem Solving in C (4.5)	
or		
CIS 22A	Beginning Programming Methodologies in C++ (4.5)	
CIS 22B	Intermediate Programming Methodologies in C++ (4.5)	

Complete four (4) courses from the following: 15.5-17.5

CIS 64A	Database Management Systems (4.5)	
CIS 64B	Introduction to SQL (4.5)	
CIS 64C	Introduction to PL/SQL (4.5)	
CIS 64D	Database Tuning (3)	
CIS 64E	Introduction to Large Scale Processing Systems (4)	
CIS 64F	Introduction to Big Data and Analytics (4)	

Total Units Required 24.5-26.5