## **Business Application and Database Management Certificate of Achievement**

Major Code: 0701.00 Total Units: 16 units

This program is intended for students interested in business application, database design & programming and e-commerce. Students will be instructed in designing and maintaining databases that are used to serve dynamic data to websites.

## **Semester 1:**

**Total Units** 

**Total Certificate Units** 

| Course<br>CIS 120<br>Elective *                           | Intro to Database                       | <b>Units</b><br>3<br>3 |
|---|---|------------------------|
| Total Units   |   | 6                      |
| Semester 2:<br>Course<br>CIS 219<br>CIS 237<br>Electives* | Intro to Oracle<br>Microsoft SQL Server | <b>Units</b> 3 3 4     |

\*Electives: Choose an additional 7 units from the following courses

10

16

| CIS 185 | (Direct Study- Computer Science - Information Technology) |
|---------|---|
| CIS 285 | (Direct Study- Computer Science - Information Technology) |
| CIS 101 | (Intro to Computers and their uses                        |
| CIS 104 | (Microcomputer Application Software)                      |
| CIS 190 | (E-Commerce Essentials)                                   |
| CIS 150 | (Advanced Website Dev. using Java script and Ajax)        |
| CIS 115 | (Advance Linux Operating System and Applications)         |
| CIS 211 | (Security+ Certification Preparation)                     |
| CIS 147 | (Introduction to Web Page Design)                         |
| CIS 148 | (Intro to Web Dev using HTML and CSS)                     |
| CS 119  | (Programming in Python)                                   |
| CS 213  | (Advanced Programming in Java)                            |
| CS 140  | (Programing for Mobile Application)                       |
| CS 141  | (Advance Programing for Mobile Devices)                   |