Associate of Science in Computer Web Support & Database Administration
*Requirement: 30 units of major, 18 units of G.E. and 12 units of any GE/CS/CIS.

Certificate of Achievement in Computer Web Support & Database Administration
*Requirement: 18 units of core courses and 12 units of elective courses.

Computer Web Support and Database Administration Required and Elective Courses

Course Number	Core or Elective	Course Title	Units	Semester Sequence
CIS 120	Core	Introduction to Databases	3	Y 1 S 1
CIS 148	Core	Introduction to Web Development HTML5 & CSS	3	Y 1 S 1
CIS 150	Core	Advanced Web Development using JavaScript and Ajax	3	Y 1 S 2
CIS 219	Core	Introduction to Oracle: SQL and PL/SQL	3	Y 1 S 2
CIS 237	Core	Installing, Configuring and Administering Microsoft SQL Server	3	S 2 or S3
CS 112	Core	Programming in JavaScript	3	S 2 or S3
		Restricted Elective Course List: 12 units		
CIS 101	Elective	Introduction to Computers and Their Uses	3	Y 1 S 1
CIS 104	Elective	Microcomputer Application Software	3	Y 1 S 1
CS 140	Elective	Programming for Mobile Application	3	Y 1 S 1
CIS 190	Elective	E-Commerce Essentials	3	Y 1 S 1
CIS 192	Elective	Introduction to Cloud Computing	3	Y 1 S 2
CIS 193	Elective	Database Essentials in Amazon Web Services	3	Y 1 S 2
CIS 194	Elective	Computer Engines in Amazon Web Services	3	Y 1 S 2
CIS 195	Elective	Security in the Cloud	3	Y 1 S 2
G.E.		General Education	18	
Degree Elective		**Unrestricted Elective Courses** 12 units of CS and/or CIS and/or G.E. courses	12	
Total Degree Units	Core and Elective		60	

It is recommended that students meet with a counselor to develop a Student Educational Plan (SEP) or contact CS division chair via ChiangAS@wlac.edu for course advice.