Associate of Science in Computer Web Support & Database Administration
*Requirement: 30 units of major, 27 units of G.E. and 3 units of any GE/CS/CIS->total 60 units

Certificate of Achievement in Computer Web Support & Database Administration
*Requirement: 21 units of core courses and 9 units of elective courses->total 30 units

Computer Web Support and Database Administration Required and Elective Courses

Course Number	Core or Elective	Course Title	Units	Year 1 Semester1
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 105	Core	Intro to Data Analytics Techniques and Tools	3	Y 1 S 1
CIS 124	Core	Data Analytics (Advanced Excel and Access	3	Y1 S 1
CIS 219	Core	Introduction to Oracle: SQL and PL/SQL	3	Y1 S 2
CIS 150	Core	Advanced Web Development using JavaScript and Ajax	3	Y1 S2
CS 112	Core	Programming in JavaScript	3	Y1 S2
		Restricted Elective Course List: 9 units		
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
		Total Major Units	30	
G.E.		General Education	27	
Degree Elective		**Unrestricted Elective Courses** 12 units of CS and/or CIS and/or G.E. courses	3	
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.