Crafton Hills College Student Name:

Associate of Science ID #:

COMPUTER INFORMATION SYSTEMS (CIS) Date:

2017-2018 - 59% offered online Counselor:

To complete the requirements for the Associate of Arts for this degree*, a student must:

1. Complete the requirements for an associate degree.
2. **Complete a minimum of twenty-seven to twenty-nine (27-28) units with a "C" or better in each course** in the following major.
3. Complete elective units to meet the minimum 60 units required for the associate degree.

Required Courses: 58% offered online		**Units**	**IP**	**Need**	**Grade**
CIS 095	Employability Skills For Technical Careers	2			
CIS 101 or BUSAD 230	**Introduction to Computer and Information Technology**	**3**			
CIS 130	Hardware and Information Technology	3			
CIS 140	**Introduction to Networks (Cisco CCNA 1)**	**4**			
	Total Required Units:	**12**			

Complete at least three (3) additional units from the following courses:		**Units**	**IP**	**Need**	**Grade**
CIS 104	Object Oriented Programming with Visual Basic	3			
CIS 111	Web Page Programming and Design	3			
CIS 113	Java Programming	3			
CIS 114	C++ Programming I	3			
CSCI 110	**Introduction to Computer Science I**	**3**			
	Total Additional Units:	**3**			

Select ONE area of emphasis from the following three options:

Emphasis in Programming: 50% offered online **Complete at least twelve (12) additional units from the following courses:**		**Units**	**IP**	**Need**	**Grade**
CIS 104	Object Oriented Programming with Visual Basic	3			
CIS 105	Database Concepts and Design	3			
CIS 113	Java Programming	3			
CIS 114 **or** **CSCI 110**	C++ Programming I **or** **Introduction to Computer Science I**	**3**			
CIS 116 **or** **CSCI 120**	C++ Programming II **or** **Introduction to Computer Science II**	**3**			
CIS 117	Scripting	3			
CIS 121	Android Application Development	3			
CIS 125	Introduction to C#.net Programming	3			
CIS 190D	Software Development Internship	1-3			
Math 102	College Algebra	4			
	Total Additional Emphasis Units:	**12-13**			

Emphasis in Web Design: **Complete at least twelve (12) additional units from the following courses:**		**Units**	**IP**	**Need**	**Grade**
CIS 111	Web Page Programming and Design	3			
CIS 117	Scripting	3			
CIS 161	**Website Design & Programming Using Dreamweaver**	**3**			
CIS 162	**Introduction to Flash**	**3**			
CIS 163 **or** CIS 180	Adobe Photoshop **or** Computer Graphics with Adobe Illustrator	1-3			
CIS 190A	Web Master Internship	3			
CIS 211	**Cascading Style Sheet (CSS) Web Design**	**3**			
	Total Additional Emphasis Units:	**12**			

Emphasis in Computer Assisted Graphic Design: **Complete at least twelve (12) additional units from the following courses:**		**Units**	**IP**	**Need**	**Grade**
CIS 162	**Introduction to Flash**	**3**			
CIS 163	Adobe Photoshop	3			
CIS 165	Introduction to 3D Modeling & Animation	3			
CIS 166	Advanced 3D Modeling & Animation	3			
CIS 180	Computer Graphics with Adobe Illustrator	1-3			
CIS 182	Desktop Publishing with Adobe Indesign	1-3			
CIS 184	Photoshop and Digital Photography	3			
CIS 190E	Digital Media Design Internship	1-3			
ART 120	**Foundations of Two-Dimensional Design**	**3**			
Total Additional Emphasis Units:		**12**			

Total Required, Additional, and Emphasis Units:	**27-28**	

**Lower division requirements for students interested in transferring to a four-year institution in this field may differ from Associate degree requirements. Prospective students should complete the general education and lower division requirements of the school to which they will be transferring. See a counselor for details. Information is also available at www.assist.org*

A student receiving a degree in this field will be able to:

- Apply analytical and logical thinking to gathering and analyzing information, designing and testing solutions to problems, and formulating plans
- Discuss the impact of information technology on society and the workplace
- Work collaboratively in a team setting
- Select and evaluate appropriate written communication strategies and styles for a specific purpose
- Demonstrate knowledge of individual parts that make up a stand-alone PC computer system, and the relationships between components
- Create and maintain Web pages
- Demonstrate an understanding of the overall design and components of a LAN and WAN system