

**COMPUTER INFORMATION SYSTEMS
COMPUTER INFORMATION SYSTEMS (CIS)
(HEGIS 5101)**

This curriculum is designed to prepare graduates for employment opportunities in computer systems and data processing. Positions as programmers and technicians are available in various sectors of business, particularly insurance, banking, public utilities, retailing, and manufacturing firms. Schools, colleges, and government agencies also employ such individuals. Students entering this curriculum should have successfully completed elementary algebra or Sequential Math Course I.

The Associate in Applied Science (A.A.S.) degree is awarded upon completion of the requirements for this program.

Upon successful completion of the CIS program, graduates should be able to:

- Develop a creative and structured approach to solving a business problem by configuring alternate IT approaches.
- Write, test and debug a program that utilizes basic programming fundamentals such as variable declaration, iteration, conditionals, array manipulation, basic computational constructs and relational database connectivity.
- Solve a business problem or capitalize on a business opportunity utilizing the appropriate commercially available software and hardware solutions.
- Submit an analysis of a business problem/opportunity and design an IT system using industry standard techniques to satisfy the problem/opportunity.
- Identify and differentiate the basic components of computer system hardware, system software and data communication technologies from a data perspective.
- Identify the major knowledge paths in the field of information technology and acquire the necessary technical and communication skills required for future career growth.
- Identify the legal issues and moral issues facing society as a result of the IT field and contrast the various viewpoints on each issue.

Courses should be selected in consultation with an advisor.



Course No.	Descriptive Title	Cr.Hrs.
FIRST SEMESTER		
ENG 101	Composition I	3
BHS 103	Social Problems in Today's World	3
CIS 100	CIS Introductory Seminar	1
CIS 111	Computer Systems and Applications	3
CIS 112	Computer Programming I	4
Math (b)		<u>3</u>
	TOTAL	17
SECOND SEMESTER		
ENG 102	Composition II	3
CIS 114 or CIS 117	Computer Programming in C Data Communication Concepts	3
CIS 123	Computer Programming II	3
CIS 124	Computer Operating Systems	3
CIS Elective (c)		<u>3</u>
	TOTAL	15
THIRD SEMESTER		
CIS 214 or CIS 216	C++ Object Oriented Programming Windows Server	3
CIS 213	Data Management Concepts	3
CIS 212	Systems Analysis and Design	3
CIS Elective (a)		3
CIS 200 Level Elective		3
Math/Science (b, c)		<u>3-4</u>
	TOTAL	18
FOURTH SEMESTER		
ECO 105, GOV 121, HIS 104, HIS 108		3
CIS 223	Computer Projects and Applications	3
CIS 200 Level Elective		3
WFE 101	Lifetime Wellness and Fitness	3
Free Elective (d)		<u>3-4</u>
	TOTAL	15
	TOTAL CREDIT HOURS	65

a. Elective courses: (a) courses applicable in all programs (See page 97); (b) all courses designated CIS. Three elective credits must be chosen from courses applicable in all programs. Students should note that the program requires 6 credits of 200 level CIS courses. Elective courses may need to be chosen to fulfill the prerequisites of the upper level courses.

b. Mathematic courses: MAT 100, MAT 110, MAT 118, MAT 125, MAT 184, MAT185, MAT 221. Students must meet course prerequisites.

c. Science courses: Applicable four-credit courses in astronomy, biology, chemistry, geology, physical sciences, physics.

d. See page 98 for a full discussion of the free elective requirement. The subject area for Computer Information Systems includes all courses labeled CIS.