Computer Information Systems (CIS) – A.A.S. Degree Program

This program is designed to provide the student with strong academic preparation in both business and liberal arts and sciences. The curriculum:

(a) provides an in-depth understanding of the principles of information systems, systems analysis, and computer programming;

(b) expands knowledge of practical computing techniques by providing many "hands-on" projects and applications; and

(c) enables students to use the computer as an effective management decision-making tool. Five large microcomputer laboratories support the curriculum. Upon graduation, the student has the option of immediately entering a job in the field of information systems or entering a four-year school or college to complete studies toward the baccalaureate degree.

Typical employment opportunities include: business programmer (trainee), computer program coder, data processing librarian, junior systems programmer, computer console operator, computer sales trainee, programming librarian, junior systems analyst, systems control clerk, management information systems assistant, and microcomputer support specialist.

REQUIREMENTS FOR THE A.A.S. DEGREE

GENERAL EDUCATION CORE REQUIREMENTS		*Credits*
EN-101,102	English Composition I, II	6
	Mathematics*	3-4
	Students may select one of the following:	
MA-260*	Pre-calculus and Elements of Calculus for Business Students*	4
	or	
MA-321*	Mathematics in Contemporary Society*	3
	or	
MA-128*	Calculus for Technical and Business Students*	4
———	Humanities elective	3
———	Laboratory Science	4
SS-211§ or 212§	Economics	3
SS- or HI-	Social Sciences§ or History elective§ (HI-100 series)	3
	Sub-total	22-23

REQUIREMENTS FOR THE MAJOR		
BU-101	Principles of Accounting I	4
BU-201	Business Organization and Management	3
BU-203	Principles of Statistics	3
BU-500	Introduction to Microcomputer Applications	3
BU-509§	Projects in Data Processing	3
BU-520	Introduction to Computer Programming for Business	3
	Sub-total	19

OPTIONAL TRACKS (Choose A or B)

The 41-42 credits in the Core and Major Requirements, plus the courses and credits listed under ONE of these tracks, complete the requirements for the A.A.S. degree.

A. OPTIONAL TRACK IN COMPUTER PROGRAMMING		*Credits*
BU-502	COBOL Programming	3
BU-504	Systems Analysis and Design with Business Applications	3
BU-521	Business Programming with Objects	4
BU-522	Business Programming with Visual Languages	3
BU-532§	Microcomputer Operating Systems and Utility Software	3
BU-	Business elective †	2-3
	Computer Programming Track Sub-total	18-19

B. OPTIONAL TRACK IN MICROCOMPUTER APPLICATIONS SOFTWARE		*Credits*
BU-508	Data Base Management Systems	3
BU-530	Spreadsheet Applications	3
BU-532§	Microcomputer Operating Systems and Utility Software	3
BU-534	Local Area Network Management	3
BU-859	Desktop Publishing (Software)	3
BU-	Business elective †	3-4
	Microcomputer Applications Software Track Sub-total	18-19

Total Credits Required.....60

** Students should see an adviser regarding selection of mathematics courses, especially if they plan to transfer to four-year colleges. Students who take MA-321 must complete 19 credits in the optional tracks.*

§ Sections of this course denoted as "WI" may be taken to partially satisfy the Writing Intensive Requirements.

Two (2) Writing Intensive classes are required for the Associate degree. *See page 69.*

A Certificate Program in Computer Information Systems is also offered by the Department of Business. See certificate programs.

† Suggested Business electives for CIS: BU-524 Web Page: Design and Applications (Recommended for Microcomputer Applications Track)
BU-525 Web Page Programming (Recommended for Computer Programming Track)

A. *SUGGESTED COURSE SEQUENCE*

COMPUTER INFORMATION SYSTEMS (CIS)
Optional Track in Computer Programming

Semester 1		*Credits*
EN-101	English Composition I	3
Students may select one of the following:		
MA-260*	Pre-calculus and Elements of Calculus for Business Students*	4
	or	
MA-321*	Mathematics in Contemporary Society*	3
	or	
MA-128*	Calculus for Technical and Business Students*	4
BU-201	Business Organization and Management	3
BU-500	Introduction to Microcomputer Applications	3
BU-520	Introduction to Computer Programming for Business	3
	Sub-total	15-16
Semester 2		
EN-102	English Composition II	3
SS- *or* HI-	Social Sciences or History elective (HI-100 series)	3
BU-203	Principles of Statistics	3
BU-502	COBOL Programming	3
BU-532	Microcomputer Operating Systems and Utility Software	3
	Sub-total	15
Semester 3		
SS-211 *or*	Introduction to Macroeconomics *or*	
SS-212	Introduction to Microeconomics	3
BU-101	Principles of Accounting I	4
BU-504	Systems Analysis and Design with Business Applications	3
BU-522	Business Programming with Visual Languages	3
BU-	Business Elective	2-3
	Sub-total	15-16
Semester 4		
_____	Humanities elective	3
_____	Laboratory Science	4
BU-509	Projects in Data Processing	3
BU-521	Business Programming with Objects	4
	Sub-total	14
Total Credits Required		**60**

** Students should see an adviser regarding selection of mathematics courses, especially if they plan to transfer to four-year colleges. Students who take MA-321 must complete 19 credits in the optional track.*

B. *SUGGESTED COURSE SEQUENCE*

COMPUTER INFORMATION SYSTEMS (CIS)
Optional Track in MicroComputer Applications Software

Semester 1		*Credits*
EN-101	English Composition I	3
Students may select one of the following:		
MA-260*	Pre-calculus and Elements of Calculus for Business Students*	4
	or	
MA-321*	Mathematics in Contemporary Society*	3
	or	
MA-128*	Calculus for Technical and Business Students*	4
BU-201	Business Organization and Management	3
BU-500	Introduction to Microcomputer Applications	3
BU-520	Introduction to Computer Programming for Business	3
	Sub-total	15-16
Semester 2		
EN-102	English Composition II	3
SS *or* HI	Social Sciences *or* History elective (HI-100 series)	3
BU-203	Principles of Statistics	3
BU-530	Spreadsheet Applications	3
BU-532	Microcomputer Operating Systems and Utility Software	3
	Sub-total	15
Semester 3		
SS-211 *or* 212	Economics	3
BU-101	Principles of Accounting I	4
BU-508	Data Base Management Systems	3
BU-534	Local Area Network Management	3
BU-859	Desktop Publishing (Software)	3
	Sub-total	16
Semester 4		
_____	Humanities elective	3
_____	Laboratory Science	4
BU-509	Projects in Data Processing	3
BU-	Business Elective (s)	3-4
	Sub-total	13-14
Total Credits Required		**60**