

Computer Information Systems A.A.S.

Business Information Systems Emphasis

Program Description

Business Information Systems combines the degree programs in programming and operations to allow students to customize their program. This degree provides students with a broad background in applications programming systems and computer operations.

Employment Information

The U.S Bureau of Labor Statistics says computer support specialists and systems administrators are projected to be among the fastest growing occupations over the next 10 years. Job prospects will be best for college graduates who are up to date with the latest skills and technologies, certifications and practical experiences.

Degree Awarded

Associate in Applied Science

For More Information Contact:

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Technical Occupational Specialty

<input type="checkbox"/>	CIS	1123	Programming Fundamentals
<input type="checkbox"/>	CIS	2363	Database Design
<input type="checkbox"/>	CIS	2463	Database Applications
<input type="checkbox"/>	CIS	2513	Principles of Information Systems Security
<input type="checkbox"/>	CIS	2703	Systems Analysis and Design
<input type="checkbox"/>	CIS	2713	Systems Development and Implementation
<input type="checkbox"/>	CIS	2803	Computer Science Project Capstone
<input type="checkbox"/>	ITD	2523	LAN Fundamentals

Select 6 credit hours from the following:

<input type="checkbox"/>	CIS	1533	Visual Basic Programming
<input type="checkbox"/>	CIS	2013	C++ Language Programming
<input type="checkbox"/>	CIS	2023	C#(Sharp)Language Programming
<input type="checkbox"/>	CIS	2323	JAVA

Select 3 credit hours from the following:

<input type="checkbox"/>	CIS	2053	Advanced Visual Basic
<input type="checkbox"/>	CIS	2343	Advanced C+ + Programming
<input type="checkbox"/>	CIS	2433	Advanced C#(Sharp) Language Programming
<input type="checkbox"/>	CIS	2543	Advanced JAVA Programming

Select 3 credit hours from the following:

<input type="checkbox"/>	CIS	1113	Computer Concepts with Applications
<input type="checkbox"/>	CIS	1103	Fundamentals of Computers with Applications
<input type="checkbox"/>	CIS	1323	Internet Fundamentals

Support and Related Courses

<input type="checkbox"/>	BUS	1011	Business Ethics
<input type="checkbox"/>	BUS	2113	Business Communications
<input type="checkbox"/>	TCOM	1523	Electronic Commerce

General Education Requirements

<input type="checkbox"/>	ENGL	1113	English Composition I
<input type="checkbox"/>	HIST	1493	U.S. History Since 1865
<input type="checkbox"/>	MATH	1413	General College Math
<input type="checkbox"/>	POLS	1113	American Government
<input type="checkbox"/>	SPCH	1113	Introduction to Speech Communications

General Education Elective (must be approved by division advisor)

Total to Graduate

36 Credit Hours

Date	Institution

3

3

3

3

3

3

3

3

3

3

3

3

7 Credit Hours

18 Credit Hours

61 Credit Hours

Student Name:	_____
CWID:	_____
Counselor:	_____

CIS 1103 FUNDAMENTALS OF COMPUTERS WITH APPLICATIONS

This course is designed to provide students with an introduction to the fundamentals of computers and their applications in business. Topics include: computer evolution, information processing, computer functions, information systems, program development process, microcomputer systems and applications, data communication, transaction processing and future trends. Theory and hands on computer instruction. This introductory course is intended for students with existing computer skills. Prerequisites: placement test or CIS 1003.

***CIS 1113 COMPUTER CONCEPTS WITH APPLICATIONS**

Provides students with an introduction to concepts and applications of the personal computer in business. Topics include spreadsheets, databases, word processing, ethics, vocabulary, Internet skills and file system management. Theory and hands-on computer instruction is included. Prerequisite: READ 0033 or [R].

CIS 1123 PROGRAMMING FUNDAMENTALS

Designed for both computer science majors and non-majors to give fundamental knowledge of computer programming concepts. Students will learn accepted programming concepts and style. This course involves logic, pseudo-code, flow charts, statement sequencing, conditional statements, loop structures and input/output. Prerequisite: Basic computer knowledge.

***CIS 1533 VISUAL BASIC PROGRAMMING**

A first course in Visual Basic Programming. This course includes graphical user interface design, event driven programming, toolbox controls and properties, basic control structures and dynamic arrays. Programs developed using structured design techniques. Prerequisites: completion of any programming language course with a "C" or better. CIS 1123.

***CIS 2013 C++ LANGUAGE PROGRAMMING**

Introductory course in C++ using object oriented programming. This includes basic control structure, files, input/output, single and multi-dimensional arrays, searching and sorting. Programs developed using structured design techniques. Prerequisite: CIS 1123.

***CIS 2023 C# (SHARP) PROGRAMMING**

Introductory course in C# using object-oriented programming. This includes basic control structures. Programs developed using structured design techniques. Prerequisite: CIS 1123.

***CIS 2053 ADVANCED VISUAL BASIC**

This course is designed to strengthen the student's knowledge of Visual Basic programming and to introduce advanced programming techniques using the Visual Basic programming language. Prerequisite: CIS 1533. Spring only.

***CIS 2323 JAVA**

Introductory course in Java using object-oriented programming. This course includes basic control structures, files, input-output, single arrays, searching, sorting, graphics, event handling, interface components and programming for the Internet. Prerequisites: CIS 1123 and CIS 2013 or CIS 1533.

***CIS 2343 ADVANCED C++ PROGRAMMING**

An advanced course in object oriented programming in the C++ language with a prerequisite of prior programming experience. This course includes dynamic memory allocation, linked list, stacks, queues, binary trees, polymorphism, inheritance and encapsulations. The design process is object oriented. Prerequisite: CIS 2013. Spring only.

***CIS 2363 DATABASE DESIGN**

Provides students with basic knowledge of database planning, design and implementation. Exercises will take the student through database planning, design and construction, implementation and maintenance. Prerequisite: CIS 1113.

***CIS 2433 ADVANCED C# (SHARP) PROGRAMMING**

This course is designed to strengthen the student's knowledge of advanced programming techniques through the study of object-oriented methods in C# (Sharp). The course studies topics such as internet, web, and database applications and applying web-based services with C#(Sharp). Prerequisite: CIS 2023. Spring only

***CIS 2463 DATABASE APPLICATIONS**

The student will use a selected database management program to create and edit database files. The student will also search, organize and build reports, forms and templates with the database files. Prerequisites: CIS 1103 or CIS 1113 and CIS 2363. Spring only

***CIS 2513 PRINCIPLES OF INFORMATION SYSTEMS SECURITY**

This course provides the student with a broad review of the field of information systems security, background on many related elements and enough detail to facilitate an understanding of the field. It covers terminology of information systems security, the history of the field and an overview on how to manage an information systems security program. Prerequisites: CIS 1113 or CIS 1103.

***CIS 2543 ADVANCED JAVA PROGRAMMING**

An advanced course in object-oriented programming in the Java language with a prerequisite of prior programming experience. This course includes dynamic memory allocation, linked list, stack, queues, binary trees, polymorphism, inheritance and encapsulation. The design process is object oriented. Prerequisite: CIS 2323. Spring only.

***CIS 2703 SYSTEMS ANALYSIS AND DESIGN**

Introduction to a methodology for the analysis, design, documentation, implementation and evaluation of computer systems. Included will be topics in techniques for data gathering, file organization and accessing methods. Prerequisites: CIS 1103 or CIS 1113 and three hours of computer applications or programming.

***CIS 2713 SYSTEMS DEVELOPMENT AND IMPLEMENTATION**

Development of data processing system from the analysis of present information flow, system specification and equipment selection to implementation of the system. A continuation of CIS 2703 with practical adaptation and/or experience of the topics previously surveyed. Prerequisite: CIS 2703. Spring only.

***CIS 2803 COMPUTER SCIENCE PROJECT CAPSTONE**

As the capstone course of the Computer Science Program, the student will demonstrate the collected knowledge, skills and techniques acquired in the program courses by working through scenarios. Students will demonstrate problem solving, critical thinking, research techniques and technical writing. Computer ethics and group dynamics will be emphasized to help round out the student's education.

***ITD 1323 INTERNET FUNDAMENTALS**

Introduction to the worldwide computer network. Course uses a hands-on approach to teach students the history and capabilities of the Internet. Students learn the resources available via the World Wide Web and searching capabilities. Prerequisites: placement test or CIS 1003.

***ITD 2523 LAN FUNDAMENTALS**

Course is designed to provide the students with basic knowledge of computer networks. Students will learn the types and methodology of networks. Exercises will involve hands-on use of computer networks. Prerequisite: CIS 1003 or CIS 1113 or CIS 1103.

***TCOM 1523 ELECTRONIC COMMERCE**

Understanding e-commerce (electronic commerce) is essential for success in today's economy. This course explores both sides of business on the Internet, from the viewpoint of the consumer and of a business. Prerequisites: CIS 1103 or CIS 1113. (Same as BUS 1543.)