

COMPUTER INFORMATION SYSTEMS

SOUTHWEST



CAREERS IN THIS FIELD

Computer Programmer • Database Administrator

Information Manager • Website Manager

Get the knowledge you need to meet today's business requirements in the computer world. The CIS curriculum is designed to provide a flexible and comprehensive education. You will be instructed in both theoretical concepts and practical applications. You also will become familiar with programming languages, operating systems, database management systems, and web design, as well as application programming concepts and practices.

CONCENTRATIONS IN THIS PROGRAM

DATABASE MANAGEMENT

The focus of the Database Management concentration is learning to work with the storage and management of electronic data. Emphasis is placed on learning database management systems software and understanding and recommending user system requirements and data storage methods.

PROGRAMMER/ANALYST

Interested in learning a different language? Just like humans, computers speak their own languages. This concentration places emphasis on developing advanced programming skills, and mastering a variety of computer languages.

WEB MANAGEMENT

Web sites must be both appealing and functional. This concentration will help you develop the skills necessary to manage great Web sites. Those skills include graphic design, understanding of operating systems, principles in eBusiness, and programming techniques.

DATABASE *(certificate only)*

Leads to employment in a computer information systems related profession, completion of an AAS degree in Computer Information Systems, and/or taking the Visual Basic certification exam.

JAVA PROGRAMMING *(certificate only)*

Leads to employment in a computer information systems related profession, completion of an AAS degree in Computer Information Systems, and/or taking certification exams in Java, certified Internet Webmaster (CIW) Foundations, and/or I-NET+.

VISUAL PROGRAMMING *(certificate only)*

Leads to employment in a computer information systems related profession, completion of an AAS degree in Computer Information Systems, and/or taking the Visual Basic certification exam.

WEB MANAGEMENT *(certificate only)*

Leads to employment in a computer information systems related profession, completion of an AAS degree in Computer Information Systems, and/or taking certification exams in CompTIA Network+ and/or CompTIA Linux+.

ASSOCIATE OF SCIENCE (AS) DEGREE

Two-year Associate of Science programs typically contain 40 percent or more general education, with the balance in technical and profession courses. The coursework provides students with a foundation for transfer to a related baccalaureate program at a four-year institution, and equips students with skills for the job market.

ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE

Two-year Associate of Applied Science degree programs prepare students for careers, career changes and career advancement. AAS programs may also prepare students for transfer to four-year institutions. The program content, which is approximately 30 percent general education, provides depth and breadth in conceptual and professional/technical skills. Professional/technical courses equip students with the skills to obtain employment and to advance in the workforce.

TECHNICAL CERTIFICATE (TC)

One-year Technical Certificate programs provide education in conceptual and technical skills for specific occupations. Each program contains a sequence of required courses in a recognized concentration within a program.

CERTIFICATE (C)

Certificates are sequences of technical and professional courses. They provide access to targeted, short-term workforce training, and completers may sit for specific certification exams. Certificate programs generally take less than one year to complete.



ASSOCIATE OF APPLIED SCIENCE 61 credit hours**Core Classes**

CINS 101	Introduction to Microcomputer
CINS 102	Information Systems Fundamentals
CINT 106	Microcomputer Operating Systems
ENGL 111	English Composition
IVYT 1XX	Life Skills Elective
MATH 1XX	Mathematics Elective
ACCT 101	Financial Accounting
CINS 113	Logic, Design, and Programming
CINT 121	Network Fundamentals
	Humanities/Social & Behavioral Sciences Elective
	Life/Physical Sciences Elective
CINS 125	Database Design and Management
BUSN 101	Introduction to Business
COMM 101	Fundamentals of Public Speaking
ECON XXX	Economics Elective
CINS 203	Systems Analysis and Design
CINS 157	Web Site Development
CINS 279	Capstone Course

***Database Management**

CINS 131	Structured Query Language
CINS 205	Database Design
CINS 225	Advanced Database Design
CINT 251	Introduction to Security Systems

***Programmer/Analyst**

CINS 131	Structured Query Language
CINS 136	Introduction to Java Programming
CINS 137	Visual Basic Programming
CINS 236	Advanced Java Programming
OR	
CINS 237	Advanced Visual Basic

Web Management

CINS 136	Introduction to Java Programming
OR	
CINS 137	Visual Basic Programming
CINT 201	Advanced Operating Systems: Linux
CINS 257	Advanced Web Site Development
CINS 259	Web Administration

*Partial Listing of Electives, see advisor for more information

ASSOCIATE OF SCIENCE 65 credit hours**First Semester**

CINS 101	Introduction to Microcomputers
ENGL 111	English Composition
IVYT 1XX	Life Skills Elective
MATH 136	College Algebra
PSYC 101	Introduction to Psychology
	History Elective

Third Semester

ACCT 101	Financial Accounting
CINS 136	Introduction to Java Programming
CINS 137	Visual Basic Programming

ECON 201	Principles of Macroeconomics
	Western Culture I Elective

Second Semester

BUSN 102	Business Law
CINS 113	Logic, Design, and Programming
COMM 101	Fundamentals of Public Speaking
ECON 202	Principles of Microeconomics
ENGL 112	Exposition and Persuasion
	Arts Elective

Fourth Semester

ACCT 102	Managerial Accounting
CINS 203	Systems Analysis and Design
CINS 236	Advanced Java Programming
OR	
CINS 237	Advanced Visual Basic
CINS 279	Capstone Course
OFAD 216	Business Communications
	Life/Physical Science Elective

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To learn more about employment and salary information for careers in this field, visit the U.S. Department of Labor's Bureau of Labor Statistics website at bls.gov and the official career site of the State of Indiana, indianacareerconnect.com.

Ivy Tech Community College is accredited by North Central Association of Colleges and Schools.

