COLLEGE OF
ENGINEERING & INFORMATION SCIENCES

Bachelor's Degree Program

COMPUTER INFORMATION SYSTEMS

Specialization: **Systems Analysis and Integration**

ABOUT THIS DEGREE PROGRAM

If you love technology, then you're one of the lucky ones: you can build the skills you need to do what you love in a variety of industries. And the Computer Information Systems program at DeVry University is a great place to start.

In our Computer Information Systems program, you can learn programming languages like C++, C# and Java, giving you the hands-on experience and skills for a career in the technology field. You can learn to write programs, update and expand existing programs, debug programs, and create and test code in an industry standard integrated development environment. Best of all, you can learn by doing: developing, coding, implementing, and testing software and computer programs for a variety of real-world applications.

Virtually every industry relies on computer information systems to help run their business, such as finance, healthcare, business, law, the military and more. At DeVry, you will develop problem-solving, programming, and troubleshooting skills to address 21st century business issues in any of these fields.

DeVry's Computer Information Systems degree program allows you to select a specialization that will focus your education on your specific personal and professional goals, including:

- Computer Forensics
- Cyber Security Programming
- Database Management
- Flex Option
- Information Systems Security
- Software Programming
- Systems Analysis and Integration
- Web Development and Administration
- Web Game Programming

GENERAL EDUCATION COURSEWORK

At DeVry University, we believe in the value of a comprehensive education. This means broadening your knowledge and skill sets beyond the area of your degree program, to help prepare you to succeed in today's diverse and evolving workplace.

From day one, you can learn important analytical and communication skills, such as problem-solving, reasoning and analysis, academic and professional writing, and mathematics and statistics skills. These skills can better equip you to work across cultures and understand a wide range of concepts that influence your area of study.

General Education Coursework:

- Communication Skills
- Humanities
- Mathematics
- Natural Sciences
- Social Sciences

CORE-DEGREE COURSEWORK

ALL of these courses

ACCT301	Essentials of Accounting
BUSN115	Introduction to Business Technology
CEIS100	Introduction to Engineering Technology and Informa-tion Sciences
CIS115	Logic and Design
CIS206	Architecture and Operating Systems with Lab
CIS246	Connectivity with Lab
CIS321	Structured Analysis and Design
CIS336	Introduction to Database with Lab
CIS339	Object-Oriented Analysis and Design
MGMT404	Project Management
SEC280	Principles of Information Systems Security

Listed below are sets of CIS courses, ending in A, B, or C that differ principally in the language/platform used to explore course concepts.

1 of these courses

CIS170A	Programming with Lab
CIS170B	Programming with Lab
CIS170C	Programming with Lab

1 of these courses

CIS247A	Object-Oriented Programming with Lab
CIS247B	Object-Oriented Programming with Lab
CIS247C	Object-Oriented Programming with Lab

1 of these courses

CIS355A	Business Application Programming with Lab
CIS355B	Business Application Programming with Lab

1 of these courses

CIS363A	Web Interface Design with Lab
CIS363B	Web Interface Design with Lab

1 of these courses

CIS407A	Web Application Development with Lab
CIS407B	Web Application Development with Lab

Programs, course requirements and availability vary by location. Some courses may be available online only. All students enrolled in site-based programs will be required to take some coursework online and, for some programs and locations, a substantial portion of the program may be required to be completed online. DeVry's academic catalog, available via devry.edu/catalogs, contains the most current and detailed program information, including admission, progression and graduation requirements. Information contained herein is effective as of date of publishing.

DeVry University

Bachelor's Degree Program | Computer Information Systems

SPECIALIZATION: SYSTEMS ANALYSIS AND INTEGRATION

COLLEGE OF
ENGINEERING & INFORMATION SCIENCES

ABOUT THIS SPECIALIZATION

DeVry University's bachelor's degree program in Computer Information Systems can prepare you with a solid foundation in technical software and programming skills. Our specialization in Systems Analysis and Integration can further focus your studies to align with your personal interests and professional goals.

Systems analysts help companies to make smart decisions about their computer hardware and software choices. They often specialize in a particular area, such as finance, engineering, business or non-profit organizations. They may work with one company or as a consultant to many companies. Systems analysts need both technical knowledge of the latest solutions and good interpersonal skills in order to understand both the individual user and business needs.

As a student in the Systems Analysis and Integration specialization, you can receive hands-on experience in today's operating systems, programming languages and systems solutions, while developing the required "soft skills" of written and verbal communication.

Topics in this specialization include analysis of business needs and systems, contingency planning, complex problem solving, computer hardware and software, and more.

Graduates of DeVry University's Computer Information Systems program with a specialization in Systems Analysis and Integration may consider careers including, but not limited to, the following:

- Application Architect
- Application Designer
- Software Developer
- Systems Analyst
- Systems Consultant
- Systems Integration Manager
- Test Manager

Employment in these occupations may require years of relevant experience.

For comprehensive consumer information, visit devry.edu/studentconsumerinfo. Important information about the education debt, earnings and completion rates of students who attended this program can be found at devry.edu/bcis-ge. For additional program information, visit devry.edu/bcis.

In New York, DeVry University operates as DeVry College of New York.

DeVry University is accredited by The Higher Learning Commission (HLC), www.hlcommission.org. DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus – 2450 Crystal Dr., Arlington, VA 22202. DeVry University is authorized for operation by the THEC. www.tn.gov/thec Nashville Campus - 3343 Perimeter Hill Dr., Nashville, TN 37211. To report unresolved complaints to the Illinois Board of Higher Education, visit their webpage at http://complaints.ibhe.org/ or by mail to the Illinois Board of Higher Education, 1 N. Old State Capitol Plaza, Suite 333, Springfield, IL 62701-1377. Program availability varies by location. ©2016 DeVry Educational Development Corp. All rights reserved. Version 12/08/16

KNOWLEDGE AND SKILLS

SYSTEMS INTEGRATION — Learn to integrate stand- alone systems by applying information systems analysis and design, database management, transaction processing and application development.

ADVANCED TOPICS IN ENTERPRISE ANALYSIS — Explore enterprise analysis tools, methodologies and capacity planning as they relate to information systems, enterprise architecture, and risk analysis and management.

ORGANIZATIONAL PROCESS ANALYSIS — Address analytical techniques used to model process flow. Explore process rules and maturity in the context of characterizing workflow effectiveness and identifying opportunities for process improvement.

BUSINESS CONTINUITY — Focus on preparing for, reacting to, and recovering from events that threaten the security of information and information resources, or that threaten to disrupt critical business functions.

LOGIC AND DESIGN — Gain knowledge of the basics of programming logic, as well as algorithm design and development, including constants, variables, expressions, arrays, files and control structures for sequential, iterative and decision processing. Design and document program specifications using tools such as flowcharts, structure charts and pseudocode.

STRUCTURED ANALYSIS AND DESIGN — Explore the systems analysis and design process using information systems methodologies and techniques to analyze business activities and solve problems. Identify, define and document business problems, and then develop information system models to solve them.

SYSTEMS EVALUATION — Identify measures or indicators of system performance and the actions needed to improve or correct performance relative to the goals of the system.

COMPLEX PROBLEM SOLVING — Identify complex problems and review related information to develop and evaluate options and implement solutions.

INTERACTING WITH COMPUTERS — Use computers and computer systems to program hardware, write software, set up functions, enter data or process information.

PROGRAM-SPECIFIC COURSEWORK

ALL of these courses

SAI430	System Integration with Lab
SAI440	Advanced Topics in Enterprise Analysis
SAI460	Organizational Process Analysis
SEC340	Business Continuity

ALL of these courses

CIS470	Computer Information Systems Senior Project

OR

ALL of these courses

CIS474	Computer Information Systems Senior Project I
CIS477	Computer Information Systems Senior Project II

DID YOU KNOW?

In cooperation with Microsoft®, DeVry University students benefit from a catalog of MSDN® Academic Alliance tools to support gaining hands-on experience using the technology critical to their career path. As a student enrolled in DeVry University's technology–oriented curricula, you will be able to download the software relevant to your classes at no additional cost.

DeVry University

Visit DeVry.edu or call 888.DEVRY.04