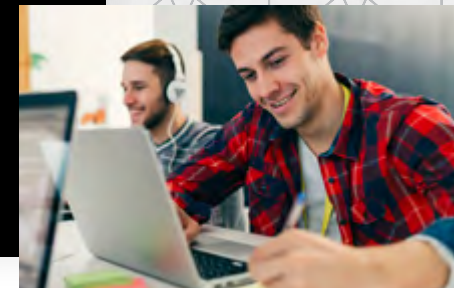


# COMPUTER INFORMATION SYSTEMS

Specialization: Database Management



## ABOUT THIS DEGREE PROGRAM

### TECH CORE A FOUNDATION IN TECHNOLOGY

This program is anchored with Tech Core, curriculum designed to help you build a foundation of interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. You'll learn relevant skills in operating systems, programming, hardware, connectivity and security – giving you a hands-on foundation in engineering technology, information technology and software and information systems.

### A PROGRAM TO FUEL YOUR FUTURE

Learn protocols and techniques necessary to develop and maintain a database management system. You'll also learn about different databases work from the perspective of security, performance, availability and cost and how a variety of databases can be managed together.

### IS THIS PROGRAM FOR YOU?

Want to pursue a career in computer information systems and focus on big data? In this program, you'll focus on databases, database administration, and data privacy and security.

## CAREER OPPORTUNITIES

Graduates of DeVry's [Computer Information Systems degree program with a specialization in Database Management](#) may consider, but are not limited to, the following careers:

- Computer Programmer
- Database Analyst
- Computer Systems Analyst
- Data Security Administrator
- Database Administrator

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in dynamic work environments
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

### TECH CORE

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command line interface (CLI)

### PROGRAM

- Use advanced programming techniques
- Develop applications
- Analyze and design software systems
- Develop web-based interfaces and designs

### SPECIALIZED

- Mine and analyze data
- Program and manage large data systems
- Utilize SQL and advanced practices
- Develop standards, policies and procedures

## QUICK FACTS

**124**  
CREDIT HOURS  
minimum credit hours required for graduation<sup>1</sup>

**10%**  
GROWTH  
nationally from 2019-2029 for Employment of Database Administrators<sup>2</sup>

**2 + 8**  
YEARS MONTHS  
minimum length to graduation<sup>3</sup>

**THREE  
IN  
ONE**

### 3-IN-1

Earn two extra credentials with our unique 3-in-1 design. All courses in our Programming Essentials Certificate and Information Technology & Networking associate degree with a specialization in Information Systems and Programming are embedded within this program. So you can earn a certificate and an associate degree on the way to your bachelor's.

**IoT  
PROJECTS**

### WORK WITH IOT TECHNOLOGIES & SYSTEMS

Immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.

**UP TO \$300**

### CERTIFICATION EXAM REIMBURSEMENT

We reimburse qualified students up to \$300 for the cost of one industry certification exam attempt across a wide range of fields.

**DIVERSITY,  
EQUITY &  
INCLUSION**

### BE AN ACTIVE PART OF AN INCLUSIVE FUTURE

Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These options highlight relevant topics to help empower you to promote an inclusive workplace.

<sup>1</sup> 127 for students enrolled at a Pennsylvania location

<sup>2</sup> <https://www.bls.gov/ooh/computer-and-information-technology/database-administrators.htm>. Growth projected on a national level. Local growth will vary by location.

<sup>3</sup> Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/online-programs.html>.

# Computer Information Systems | Database Management

## ESSENTIALS

**47**  
CREDIT HOURS

### COMMUNICATION SKILLS<sup>1</sup>

ENGL112 <sup>2</sup>	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

**Select one**

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☼

### HUMANITIES<sup>3,4</sup>

LAS432	Technology, Society, and Culture ☼
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**Select one**

ETHC232	Ethical and Legal Issues in the Professions
ETHC334	Diversity, Equity and Inclusion in the Workplace ☼

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society ☼

**Select one**

SOCS325 <sup>5</sup>	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☼

### MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
MATH221	Statistics for Decision Making
PHYS204	Applied Physics with Lab

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem Solving

☼ This icon indicates Diversity, Equity & Inclusion Courses

<sup>1</sup>14 for students enrolled at a New Jersey location.

<sup>2</sup>Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

<sup>3</sup>Students enrolled at a Pennsylvania location must take HUMN451 as part of this requirement.

<sup>4</sup>9 for students enrolled at a Pennsylvania location.

<sup>5</sup>Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.

## TECH CORE

**21**  
CREDIT HOURS

### TECH CORE

CEIS101	Introduction to Technology and Information Systems
CEIS106	Introduction to Operating Systems
CEIS110	Introduction to Programming
CEIS114	Introduction to Digital Devices
NETW191	Fundamentals of Information Technology and Networking
NETW211	Fundamentals of Cloud Computing
SEC285	Fundamentals of Information Security

## PROGRAM

**40**  
CREDIT HOURS

### INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects
CEIS209	Intermediate Programming
CEIS236	Database Systems and Programming Fundamentals
CEIS312	Introduction to Artificial Intelligence and Machine Learning
CIS355A	Business Application Programming with Lab

### APPLICATION DEVELOPMENT

CIS363B	Web Interface Design with Lab
CIS407A	Web Application Development with Lab
WBG310	Interactive Web Page Scripting with Lab

### CAREER PREPARATION

CEIS299	Careers and Technology
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

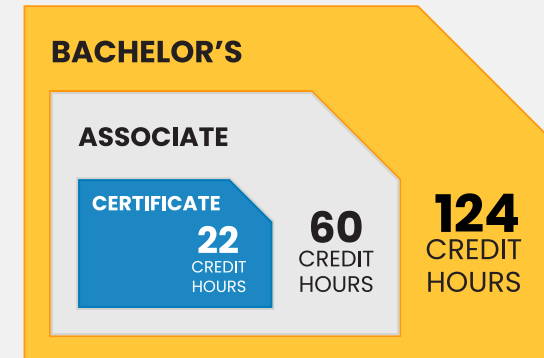
## SPECIALIZED

**16**  
CREDIT HOURS

### DATABASE MANAGEMENT

BIAM410	Database Concepts in Business Intelligence
DBM438	Database Administration with Lab
DBM449	Advanced Topics in Database with Lab
SEC360	Data Privacy and Security

### Demonstrate Skills at Every Step



### EMBEDDED PROGRAMS

Earn two additional credentials with our unique 3-in-1 design. All courses in our Programming Essentials certificate and Information Technology and Networking associate degree are embedded within this program. So you can earn a certificate and an associate degree on the way to your bachelor's degree.

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