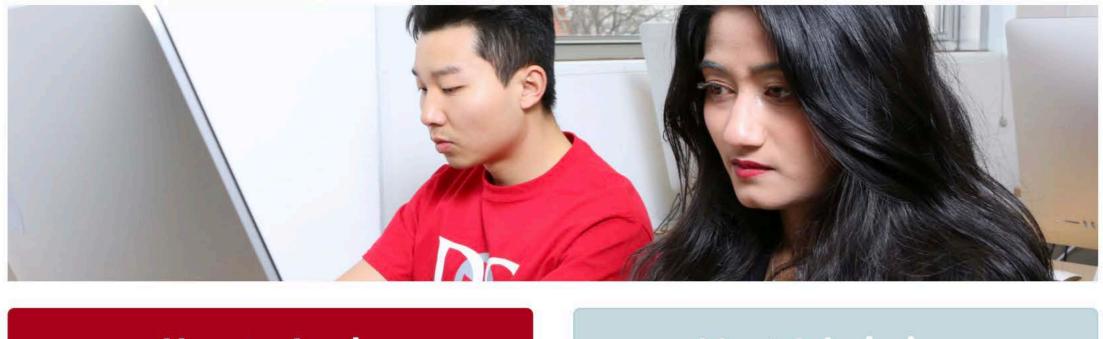
Course of Study

Degree Requirements

Career Paths

IS Advisory Board



How to Apply

Bachelor's in Information Systems

Want to have a career in technology? Our innovative, new Bachelor of Science in Information Systems program will provide you with the opportunity to work with cutting-edge technology and will prepare you for well-paying management opportunities in the information systems industry.

This degree is for learners interested in current technology — especially the area of understanding how computers process, manage and communicate information. Through this program, you will gain training that allows you to succeed in the workplace, as well as a developed ability to apply theories and concepts to an information systems-centered work environment.

Information Systems Program Learning Outcomes

In addition to the general education learning outcomes - communication skills, technology and information literacy skills, symbolic problem solving, analytical thinking, personal and interpersonal skills, academic inquiry, and values - upon successful completion of the Bachelor of Science in Information Systems, students will demonstrate:

- 1. An ability to communicate effectively on multidisciplinary teams with a wide range of people.
- 2. An ability to use the techniques, skills, and modern computing tools necessary for technological practice.
- 3. The aptitude to analyze qualitative and quantitative data to make informed decisions.

Meet Admissions

- 4. An ability to ethically design a system, component, or process to meet desired needs within realistic constraints.
- 5. The capacity to function effectively on teams that understand the impact technology has in a local, national, and global context.
- 6. Recognition of the need for, and willingness to engage in life-long learning through a continuous investigation of contemporary issues.
- 7. The capacity to make informed decisions in computing practice based on an understanding of professional, legal, and ethical responsibilities.

Partnership Highlight

BARR Advisory, a Kansas City-based cybersecurity auditing and consulting firm, has partnered with Donnelly College to offer scholarship support for qualified students in the IS program, internships where our students can gain valuable hands-on experience and consultation on curiculum development to make sure students are workforce-ready.

Check with Financial Aid for more information about scholarship opportuniteis.

Check with Career Services for more information about internships.

BARR Advisory is a leading provider of IT governance, risk and compliance services for today's nimble enterprise.



Need more information? Contact:

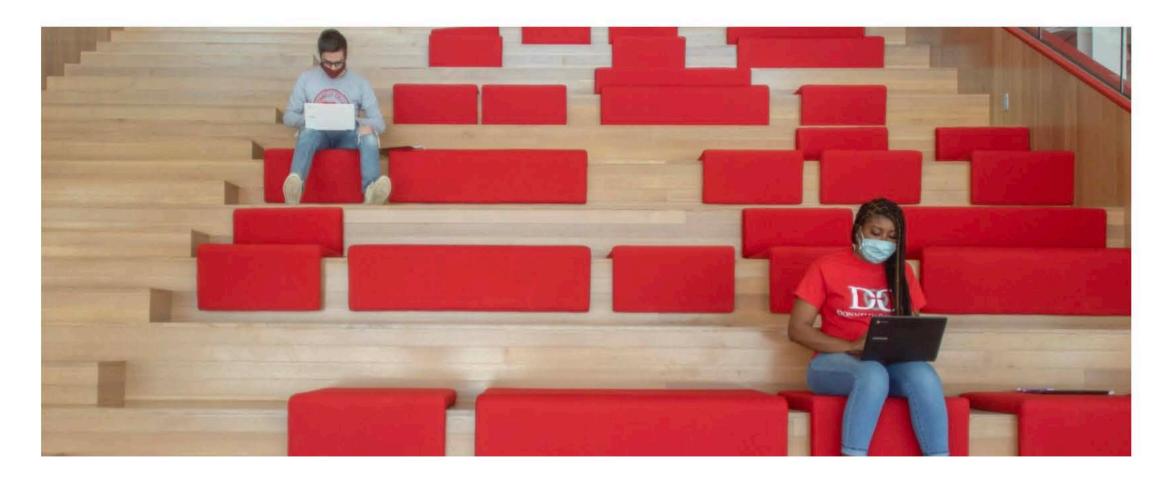
Donnelly Admissions admissions@donnelly.edu (913) 621-8706

Course of Study

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Courses

Suggested Course of Study (Associate of Science & Bachelor's of Science in Information Systems) Suggested Course of Study (Associate of Arts & Bachelor's of Science in Information Systems)

Required Courses (15 credit hours)

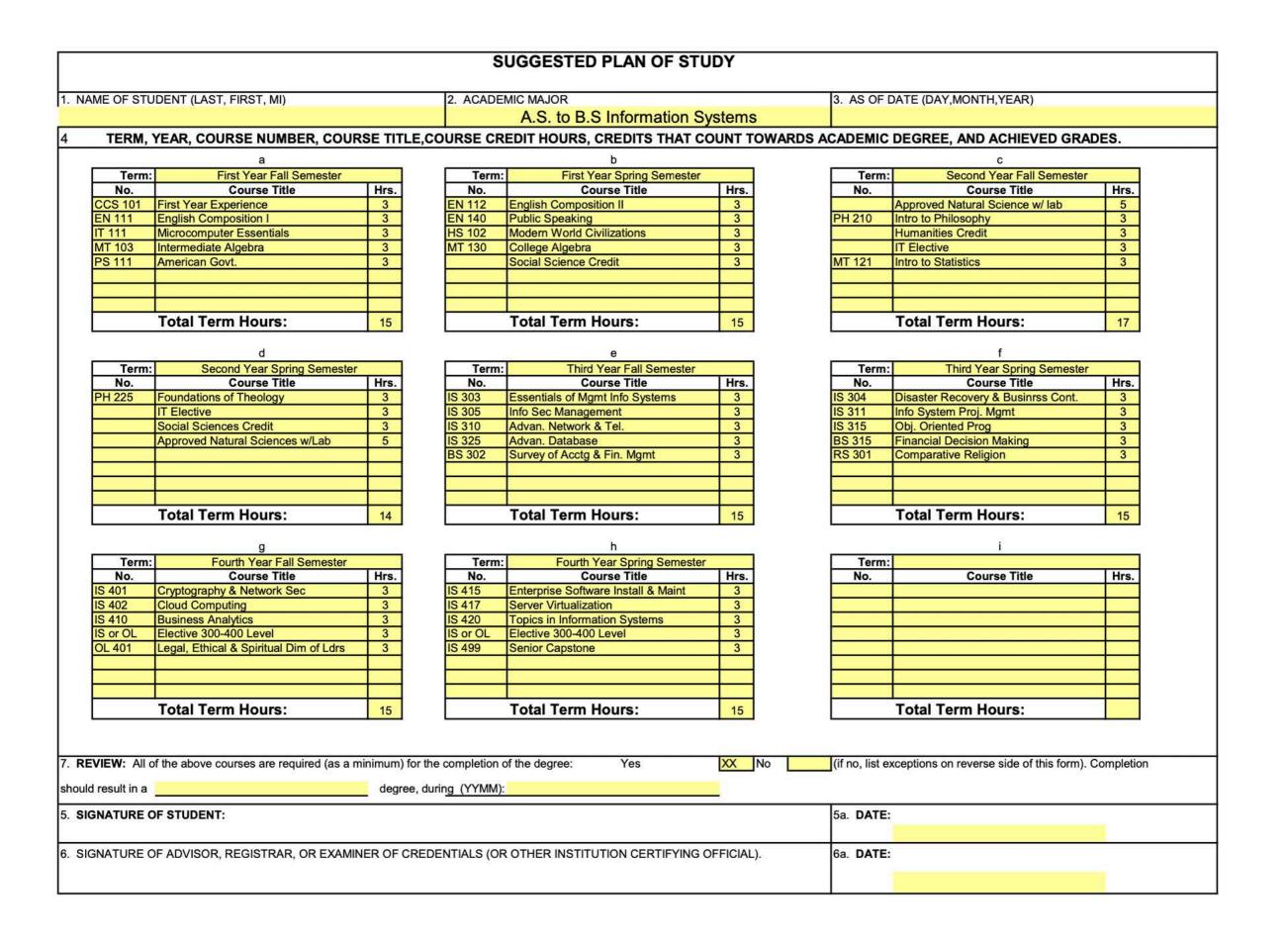
- BS 302: Survey of Accounting & Financial Management
- BS 315: Financial Decision Making
- MT 121: Introduction to Statistics
- OL 401: Legal, Ethical, and Spiritual Dimensions of Leadership
- RS 301: Comparative Religions

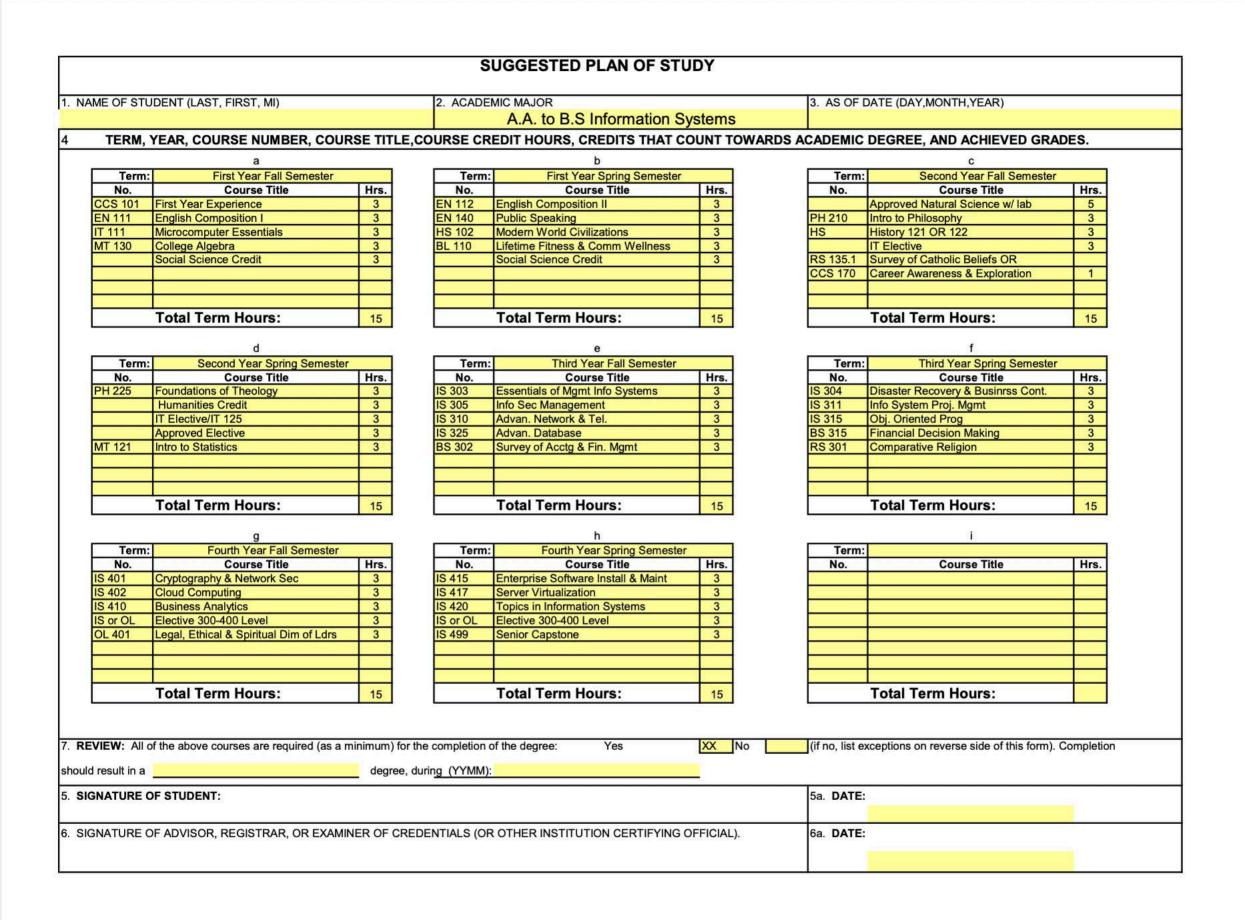
Concentration Courses (42 credit hours)

- IS 303: Essentials of Management Information Systems
- IS 304: Disaster Recovery and Business Continuity
- IS 305: Information Security Management
- IS 310: Network and Telecommunication II
- IS 311: Information Systems Project Management
- IS 315: Object-Oriented Programming
- IS 325: Advanced Database
- IS (0): Cryptography and Notwork Socurity Eupdamontals

- IS 410: Business Analytics
- IS 415: Enterprise Software Installation and Maintenance
- IS 417: Server Virtualization
- IS 499: Capstone: An Academic Senior Level Integ.
- IS 300-499 Elective*
- IS 300-499 Elective*

*See Donnelly College Catalog for list of approved electives.



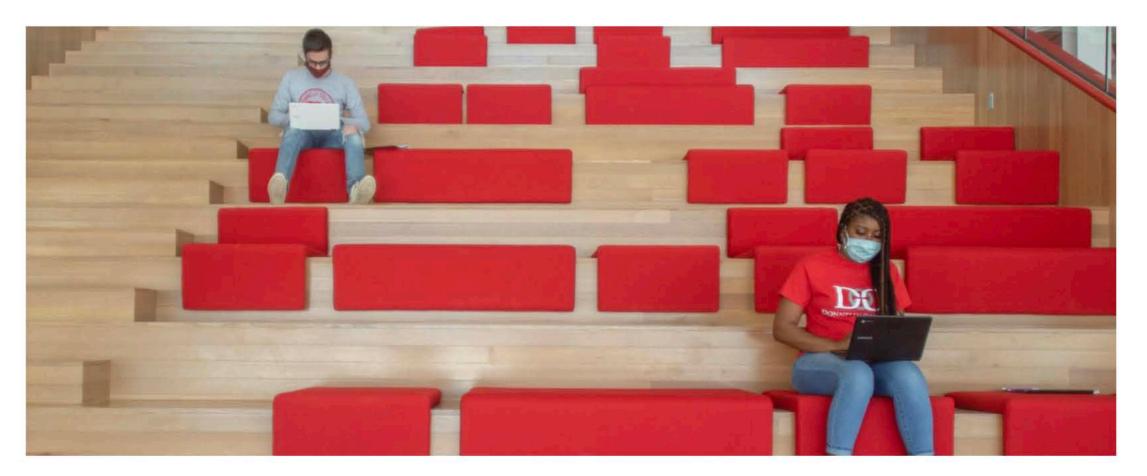


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Bachelor's in Information System

Requirements:

- 1. Completion of a general education curriculum leading to an Associate of Arts or Associate of Science in Information Technology or a related field.
- 2. Completion of required coursework with a cumulative GPA of 2.0 or higher.
- 3. Completion of at least 42 credit hours of concentration courses with a grade of C or better.
- 4. Completion of at least 120 college-level credit hours.
- 5. Completion of at least 45 upper-division credit hours.
- 6. Completion of the last 30 credit hours at Donnelly College.
- 7. Satisfactory completion of a Mathematics course with MT 103 Intermediate Algebra as its prerequisite.
- 8. Satisfactory completion of two Science courses with a laboratory, or the completion of two Mathematics courses with MT 103 – Intermediate Algebra as a prerequisite, or the completion of two computer programming language courses.
- 9. Satisfactory completion of an upper-division Religion course.

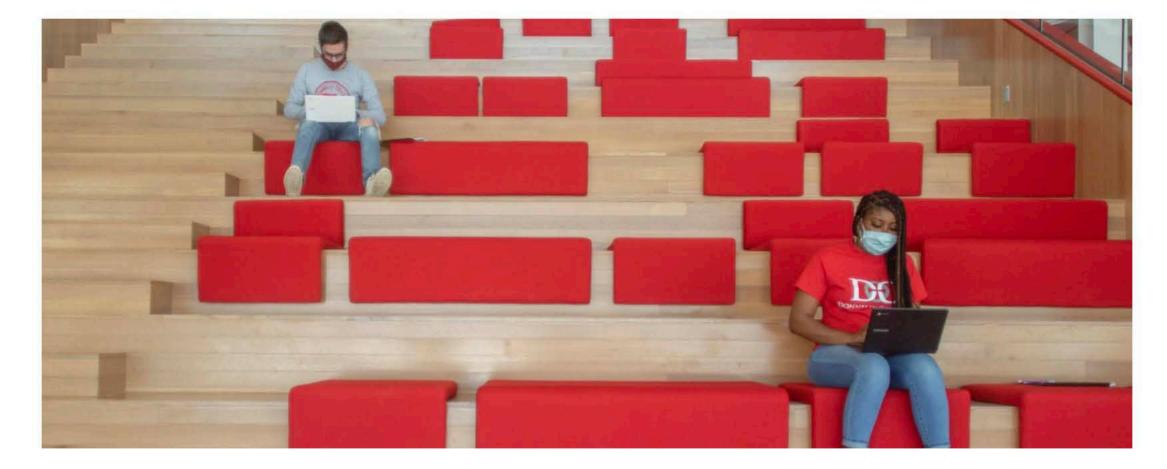
*See Donnelly College Catalog for list of approved concentrations.

Course of Study

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Career Paths

IS Advisory Board



Career Paths

An Information Systems degree from Donnelly College programs prepares students to be leaders in the Information Systems field. Donnelly alums can be found across the region and the county making companies and organizations and communities better. Here are just a few local examples:

- Cerner
- Unified Government of Wyandotte County and Kansas City, Kansas
- Kansas City, Kansas Public Schools
- Amazon.com and many more!

Possible career paths:

With a degree in Information Systems you will have a wide array of career paths to choose from. Check out information from the United States Bureau of Labor Statistics on just a few.

- Information Systems Manager
- Computer Network Architects
- Computer Programmers
- Computer Support Specialists
- Computer Systems Analysts
- Database Administrators

• Database Administrators

- Information Security Analysts
- Network and Computer Systems Administrators
- Web Developers

Information Systems Managers

Is Information Systems Managment for you?

Computer and information systems managers, often called information technology (IT) managers or IT project managers, plan, coordinate, and direct computer-related activities in an organization. They help determine the information technology goals of an organization and are responsible for implementing computer systems to meet those goals.

Duties

Computer and information systems managers typically do the following:

- Analyze their organization's computer needs and recommend possible upgrades for top executives to consider
- Plan and direct the installation and maintenance of computer hardware and software
- Ensure the security of an organization's network and electronic documents
- Assess the costs and benefits of new projects and justify funding on projects to top executives
- Learn about new technology and look for ways to upgrade their organization's computer systems





2019 Median Pay	\$146,360 per year
Entry Level Education	Bachelor's Degree
On the Job training	None
Related Work Experience	5 years or more
Number of jobs, 2020	461,000
Job outlook, 2020-29	10%
Employment Change, 2019-29	48,100

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

- Determine short- and long-term personnel needs for their department
- Plan and direct the work of other IT professionals, including computer systems analysts, software developers, information security analysts, and computer support specialists
- Negotiate with vendors to get the highest level of service for the organization's technology

Job Outlook

Employment of computer and information systems managers is projected to grow 10 percent from 2019 to 2029, much faster than the average for all occupations.

Computer Network Architect

Is this career right for you?

Computer network architects design and build data communication networks, including local area networks (LANs), wide area networks (WANs), and Intranets. These networks range from small connections between two offices to next-generation networking capabilities such as a cloud infrastructure that serves multiple customers. Network architects must have extensive knowledge of an organization's business plan to design a network that can help the organization achieve its goals.

Duties

Computer network architects typically do the following:

- Create plans and layouts for data communication networks
- Present plans to management and explain why they are in the organization's best interest to pursue them
- Consider information security when designing networks
- Upgrade hardware, such as routers or adaptors, and software, such as network drivers, as needed to support computer networks
- Research new networking technologies to determine what would best support their organization in the future

Job Outlook

Employment of computer network architects is projected to grow 5 percent from 2019 to 2029, faster than the average for all occupations.



2019 Median Pay	\$112,690 per year
Entry Level Education	Bachelor's Degree
On the Job training	None
Related Work Experience	5 years or more
Number of jobs, 2020	160,100
Job outlook, 2020-29	5%
Employment Change, 2019-29	8,000

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Quick Facts: Computer Network Architects

Computer Programmers

Is Computer Programming for you?

Computer programmers write and test code that allows computer applications and software programs to function properly. They turn the program designs created by software developers and engineers into instructions that a computer can follow. In addition, programmers test newly created applications and programs to ensure that they produce the expected results. If they do not work correctly, computer programmers check the code for mistakes and fix them.

Duties

Computer programmers typically do the following:

- Write programs in a variety of computer languages, such as C++ and Java
- Update and expand existing programs
- Test programs for errors and fix the faulty lines of computer code
- Create and test code in an integrated development environment (IDE)
- Use code libraries, which are collections of independent lines of code, to simplify the writing



2019 Median Pay	\$86,550 per year
Entry Level Education	Bachelor's Degree
On the Job training	None
Related Work Experience	None
Number of jobs, 2020	213,900
Job outlook, 2020-29	-9% decrease
Employment Change, 2019-29	-20,100

represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Job Outlook

Employment of computer programmers is projected to decline 9 percent from 2019 to 2029.

Computer programming can be done from anywhere in the world, so companies sometimes hire programmers in countries where wages are lower. This ongoing trend is projected to limit employment growth for computer programmers in the United States. However, the high costs associated with managing projects given to overseas programmers sometimes offsets the savings from the lower wages, causing some companies to bring back or keep programming jobs in the United States.



Computer Support Specialist

Is this the right career for you?

Computer support specialists provide help and advice to computer users and organizations. These specialists either support computer networks or they provide technical assistance directly to computer users.

Duties

Computer network support specialists typically do the following:

- Test and evaluate existing network systems
- Perform regular maintenance to ensure that networks operate correctly
- Troubleshoot local area networks (LANs), wide area networks (WANs), and Internet systems

Job Outlook

Employment of computer support specialists is projected to grow 8 percent from 2019 to 2029, En much faster than the average for all occupations. More support services will be needed as organizations upgrade their computer equipment and software. Computer support staff will be needed to respond to the installation and repair requirements of increasingly complex computer equipment and software.



2019 Median Pay
Entry Level Education
On the Job training
Related Work Experience
Number of jobs, 2020
Job outlook, 2020-29
nployment Change, 2019-29

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Quick Facts: Computer Support Specialists

\$54,760 per year
Bachelor's Degree
None
None
882,300
8%
67,300

Computer Systems Analysts

Is this career right for you?

Computer systems analysts, sometimes called systems architects, study an organization's current computer systems and procedures, and design solutions to help the organization operate more efficiently and effectively. They bring business and information technology (IT) together by understanding the needs and limitations of both.

Duties

Computer systems analysts typically do the following:

- Consult with managers to determine the role of IT systems in an organization
- Research emerging technologies to decide if installing them can increase the organization's efficiency and effectiveness
- Prepare an analysis of costs and benefits so that management can decide if IT systems and computing infrastructure upgrades are financially worthwhile
- Devise ways to add new functionality to existing computer systems
- Design and implement new systems by choosing and configuring hardware and software
- Oversee the installation and configuration of new systems to customize them for the organization
- Conduct testing to ensure that the systems work as expected
- Train the systems' end users and write instruction manuals

Job Outlook

Employment of computer systems analysts is projected to grow 7 percent from 2019 to 2029, faster than the average for all occupations.



Quick Facts: Computer Systems Analysts

2019 Median Pay	\$90,920 per year
Entry Level Education	Bachelor's Degree
On the Job training	None
Related Work Experience	None
Number of jobs, 2020	632,400
Job outlook, 2020-29	7%
mployment Change, 2019-29	46,600

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Database Administrators

Is Database Administration for you?

Database administrators use specialized software to store and organize data, such as financial information and customer shipping records. They make sure that data are available to users and secure from unauthorized access.

Duties

Database administrators typically do the following:

- Ensure that organizational data are secure
- Back up and restore data to prevent data loss
- Identify user needs to create and administer databases
- Ensure that databases operate efficiently and without error
- Make and test modifications to database structure when needed
- Maintain databases and update permissions
- Merge old databases into new ones

Job Outlook

Employment of database administrators is projected to grow 10 percent from 2019 to 2029, much faster than the average for all occupations.



Quick Facts: Database Administrators

2019 Median Pay	\$93,750 per year
Entry Level Education	Bachelor's Degree
On the Job training	None
Related Work Experience	None
Number of jobs, 2020	132,500
Job outlook, 2020-29	10%
Employment Change, 2019-29	12,800

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Information Security Analysts

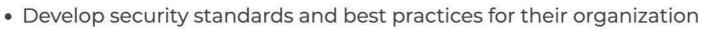
Is Information Security Analysis for you?

Information security analysts plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyberattacks increases.

Duties

Information security analysts typically do the following:

- Monitor their organization's networks for security breaches and investigate a violation when one occurs
- Install and use software, such as firewalls and data encryption programs, to protect sensitive information
- Prepare reports that document security breaches and the extent of the damage caused by the breaches
- Conduct penetration testing, which is when analysts simulate attacks to look for vulnerabilities in their systems before they can be exploited
- Research the latest information technology (IT) security trends



- · Recommend security enhancements to management or senior IT staff
- Help computer users when they need to install or learn about new security products and procedures

Job Outlook

Employment of information security analysts is projected to grow 31 percent from 2019 to 2029, much faster than the average for all occupations.



2019 Median Pay	\$99
Entry Level Education	Bach
On the Job training	
Related Work Experience	Less
Number of jobs, 2020	ł
Job outlook, 2020-29	31
Employment Change, 2019-29	i i i

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.



9,730 per year

nelor's Degree

None

s than 5 years

131,000

1% increase

40,900

Network and Computer Systems Administrators

Is Network and Computer Systems Administration for you?

Computer networks are critical parts of almost every organization. Network and computer systems administrators are responsible for the day-to-day operation of these networks. They organize, install, and support an organization's computer systems, including local area networks (LANs), wide area networks (WANs), network segments, intranets, and other data communication systems.

Duties

Network and computer systems administrators typically do the following:

- Determine an organization's system needs and install network hardware and software
- Make needed upgrades and repairs to networks and ensure that systems are operating correctly
- Maintain network and computer system security
- Evaluate and optimize network or system performance
- Add users to a network, and assign and update security permissions on the network
- Train users in the proper use of hardware and software
- Interpret and solve problems when a user or an automated monitoring system alerts them that a problem exist

Job Outlook

Employment of network and computer systems administrators is projected to grow 4 percent from 2019 to 2029, about as fast as the average for all occupations.



Quick Facts: Network and Computer Systems Administrators

2019 Median Pay	\$99,73
Entry Level Education	Bachelo
On the Job training	N
Related Work Experience	Less th
Number of jobs, 2020	131
Job outlook, 2020-29	31%
Employment Change, 2019-29	40

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.



30 per year

lor's Degree

None

nan 5 years

1,000

increase

0.900

Web Developers

Is Web Development for you?

Web developers design and create websites. They are responsible for the look of the site. They are also responsible for the site's technical aspects, such as its performance and capacity, which are measures of a website's speed and how much traffic the site can handle. In addition, web developers may create content for the site.

Duties

Web developers typically do the following:

- Meet with clients or management to discuss the needs and design of a website
- Create and test applications for a website
- Write code for the website, using programming languages such as HTML or XML
- Work with other team members to determine what information the site will contain
- Work with graphics and other designers to determine the website's layout
- Integrate graphics, audio, and video into the website
- Monitor website traffic

Job Outlook

Employment of web developers is projected to

grow 8 percent from 2019 to 2029, much faster than the average for all occupations.



2019 Median Pa
Entry Level Educat
On the Job traini
Related Work Exper
Number of jobs, 20
Job outlook, 2020
Employment Change, 2

The wage and employment trend information shown here represents historic data and does not guarantee future conditions. Data is downloaded regularly from the US Bureau of Labor Statistics.

Quick Facts: Web Developers

ay 🛛	\$73,760 per year
tion	Associates Degree
ng	None
rience	None
020	174,300
-29	8% increase
2019-29	14,000

Course of Study

Degree Requirements

Career Paths

IS Advisory Board

Information Systems Advisory Board

The purpose of the advisory board is to assist the BSIS program director by reviewing curriculum for relevance to the changing needs of the industry and providing insight into the employment needs and trends in our region. This advisory board will also assist the program director in developing strategic plans and long-term vision by providing an outside perspective and helping guide the development of best practices to enhance the local and regional visibility of Donnelly College.

The following are the major functions of the advisory board:

- 1. Review the goals and objectives of the program and serve as a communication link between the college and the community.
 - 1. Assist in developing, implementing, and revising annual and long-range plans
 - 2. Provide a communication channel between workforce education and the community
 - 3. Serve as an advocate for the program
- 2. Identify community resources that will help support or contribute to the success of the program.
 - 1. Sponsor guest lecturers
 - 2. Assist in obtaining equipment and instructional materials as gifts, on loan, or at a lower cost
 - 3. Sponsor and/or participate in career days
- 3. Assist in recruitment, work-based learning opportunities, and in placing graduates with prospective employers.
 - 1. Help recruit students for the program
 - 2. Assist in identifying opportunities for internships, job shadowing, and/or workplace mentoring
 - 3. Plan/conduct on-site visits
- 4. Review and recommend revisions in program curriculum.
 - 1. Assist with validation of tasks and duties to determine job skills needed in the local workforce
 - 2. Analyze course content, sequence, and length of program
 - 3. Suggest program priorities
 - 4. Help identify and recruit qualified adjunct faculty
 - 5. Evaluate relevance and effectiveness of the program in meeting the needs of business and industry
 - 6. Assist with program review and assessment data analysis
- 5. Review and recommend facility and or equipment improvements.
 - 1. Evaluate and recommend space, equipment, and layout of laboratories
 - 2. Review and evaluate facilities and equipment

Advisory Board Members

- Madi Schulte, madischulte@protonmail.com, JE Dunn Security Analyst
- John Dougherty, jrdougherty17@gmail.com, Unbound Director of Technology Services
- Charles Green, Charles.Green@bsbna.com, BlueScope Database Administrator
- Doug Oliveira, doug.oliveira@caliberfs.com, Caliber Financial Services CTO
- Lisa Stoothoff, lstoothoff@donnelly.edu, COO/Dean Donnelly College
- Darrel King, dking@tgs-mtc.com, TGS Help Desk and Logistics Manager
- Madison Clay, mclay@donnelly.edu, IS and English Instructor Donnelly College
- Diego Payan, dpayan@donnelly.edu, Donnelly College Director of IT
- Msgr. Stuart Swetland, sswetland@donnelly.edu, President Donnelly College
- Emily Matis, ematis@donnelly.edu, Title V Director Donnelly College