

Middle School Career Investigations

Information Technology Pathways

Menu

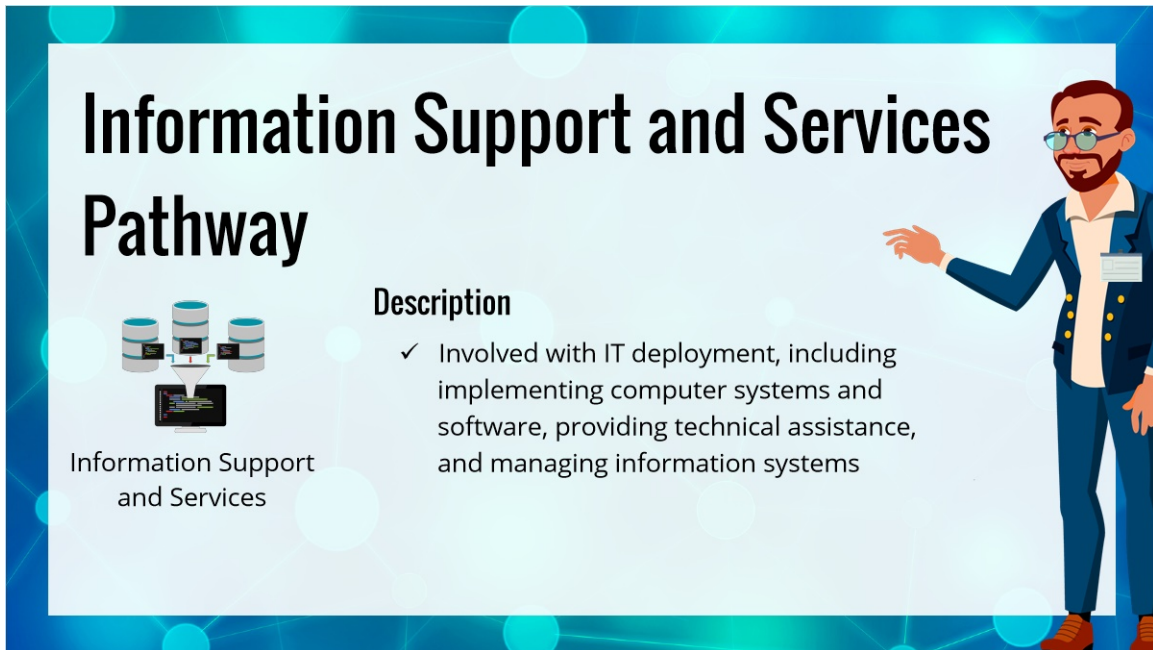


Within the Information Technology Career Cluster, there are four pathways: Information Support and Services, Network Systems, Programming and Software Development, and Web and Digital Communications. Click on each of the icons to learn more about these pathways. Make sure to visit each one.

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Information Technology Pathways

Information Support and Services Description



The graphic features a blue background with a white central panel. On the left, there is an icon of three server racks connected to a laptop, with the text 'Information Support and Services' below it. To the right of the icon is the heading 'Information Support and Services Pathway' in large, bold, black font. Further right is the heading 'Description' followed by a single bullet point: '✓ Involved with IT deployment, including implementing computer systems and software, providing technical assistance, and managing information systems'. On the far right of the panel is a cartoon illustration of a man with a beard and glasses, wearing a blue jacket and a name tag, pointing towards the text.

Information Support and Services Pathway

Description

- ✓ Involved with IT deployment, including implementing computer systems and software, providing technical assistance, and managing information systems

Information Support and Services

Professionals in the Information Support and Services Pathway are involved with IT deployment, including implementing computer systems and software, providing technical assistance, and managing information systems.

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Information Technology Pathways

Information Support and Services Sample Careers



The graphic features a blue background with a white central panel. On the left, there is an icon of three server racks and a laptop, with the text "Information Support and Services" below it. To the right of the icon is the title "Information Support and Services Pathway" in large, bold, black font. Further right is a list of "Sample Careers" in a smaller black font. On the far right of the panel is a cartoon illustration of a man with a beard and glasses, wearing a blue jacket and a name tag, pointing towards the text.

Information Support and Services Pathway

Sample Careers

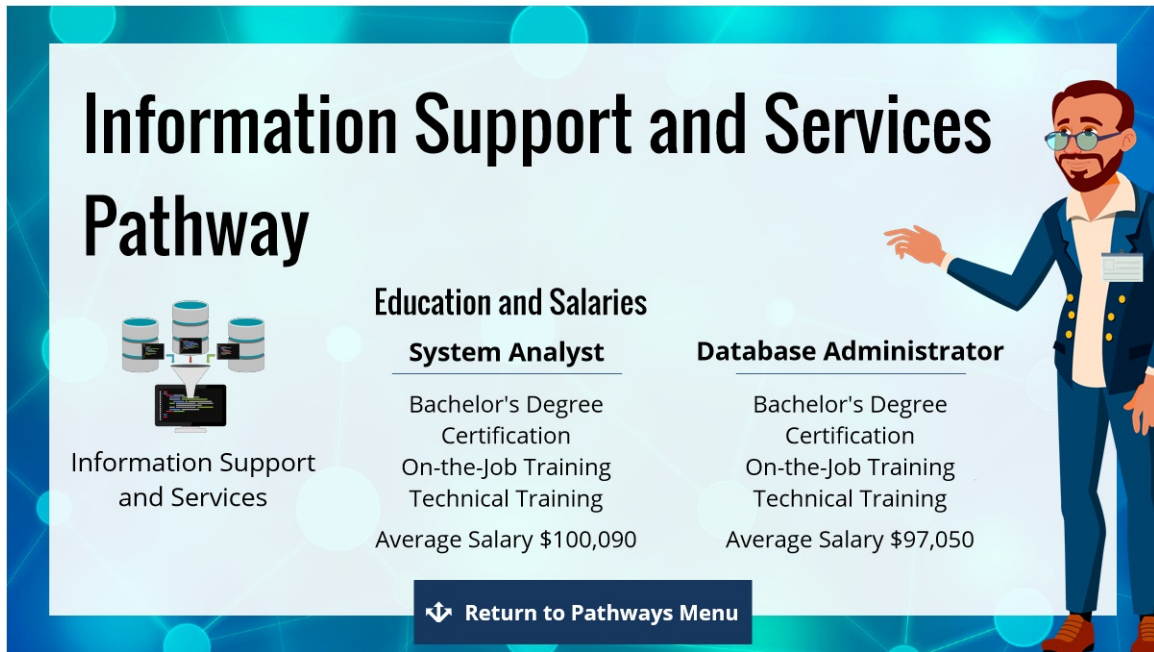
- Applications Integrator
- Communications Equipment Operator
- Computer Support Specialist
- Computer Systems Engineer
- Data Modeler
- Database Administrator
- Database Analyst
- Geographic Information Systems Technician
- Information Systems Security Developer
- Systems Analyst

Sample careers in the Information Support and Services Pathway include Applications Integrator, Communications Equipment Operator, Computer Support Specialist, Computer Systems Engineer, Data Modeler, Database Administrator, Database Analyst, Geographic Information Systems Technician, Information Systems Analyst, Information Systems Security Developer, and Software Test Engineer.

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Information Technology Pathways

Information Support and Services Education and Salaries



The graphic features a blue background with a white central panel. On the left, there is an icon of three server racks and a monitor, with the text 'Information Support and Services' below it. The main title 'Information Support and Services Pathway' is prominently displayed in the upper left of the white panel. To the right, a cartoon character of a man with a beard and glasses, wearing a blue jacket and a name tag, stands with one hand pointing towards the text. Below the title, the heading 'Education and Salaries' is centered. Two columns of text follow, detailing requirements and average salaries for 'System Analyst' and 'Database Administrator'. At the bottom center of the white panel is a dark blue button with a white arrow and the text 'Return to Pathways Menu'.

Information Support and Services Pathway

Information Support and Services

Education and Salaries

System Analyst	Database Administrator
Bachelor's Degree Certification	Bachelor's Degree Certification
On-the-Job Training Technical Training	On-the-Job Training Technical Training
Average Salary \$100,090	Average Salary \$97,050

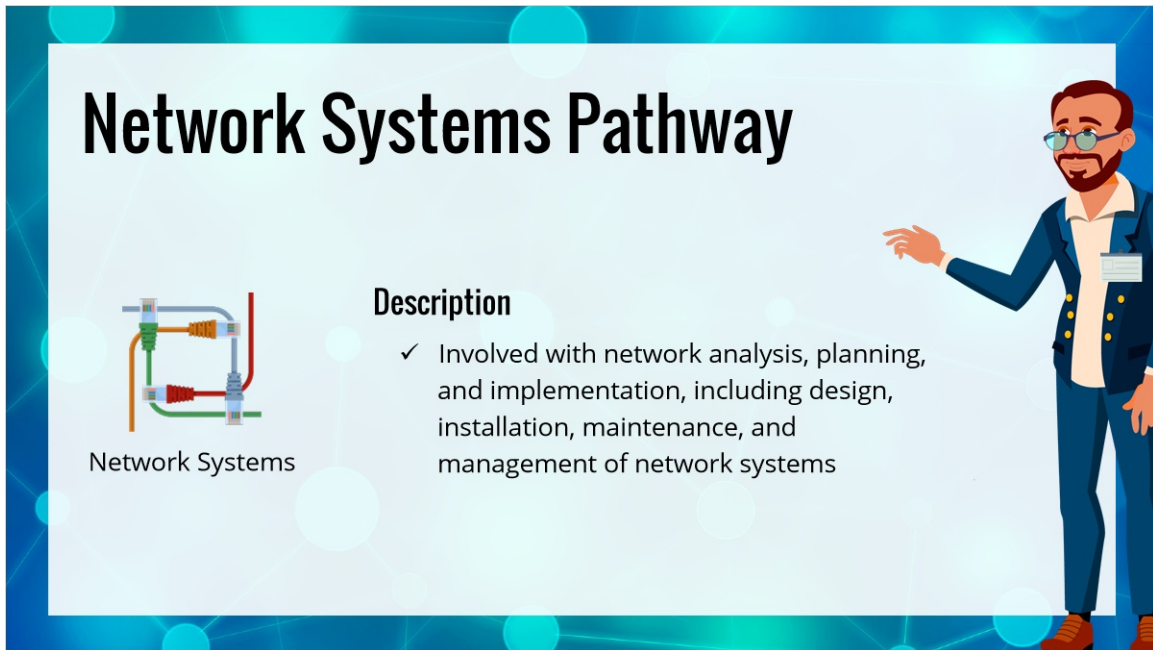
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Most careers in the Information Support and Services Pathway require some level of higher education. A System Analyst requires a Bachelor's Degree, as well as a certification in his or her field, on-the-job training, and technical training. They have an average salary of \$100,090. A Database Administrator requires a Bachelor's Degree, as well as a certification in his or her field, on-the-job training, and technical training. They have an average salary of \$97,050.

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Network Systems Description



The slide features a blue background with a white central area. On the left, there is an illustration of network cables and connectors labeled "Network Systems". To the right of this illustration is the heading "Description" followed by a bulleted list. On the far right, a cartoon character of a man with glasses and a beard, wearing a blue jacket and a name tag, is pointing towards the text.

Network Systems Pathway

Network Systems

Description

- ✓ Involved with network analysis, planning, and implementation, including design, installation, maintenance, and management of network systems

Professionals in the Network Systems Pathway are involved with network analysis, planning, and implementation, including design, installation, maintenance, and management of network systems.

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Information Technology Pathways

Network Systems Sample Careers



The graphic features a blue background with a white central panel. On the left, there is an illustration of network cables and connectors labeled "Network Systems". To the right, a list of "Sample Careers" is provided. On the far right, a cartoon illustration of a man with glasses and a beard, wearing a blue jacket and a name tag, is pointing towards the list.

Network Systems Pathway

Network Systems

Sample Careers


- Computer and Information Systems Administrator
- Computer Operator
- Computer Security Specialist
- Computer Software Engineer
- Computer Support Specialist
- Information Security Analyst
- Network Systems Administrator
- Network Architect
- Network Systems and Data Communication Analyst
- Telecommunications Equipment Installer

Sample careers in the Network Systems Pathway include Computer and Information Systems Administrator, Computer Operator, Computer Security Specialist, Computer Software Engineer, Computer Support Specialist, Information Security Analyst, Network Systems Administrator, Network Architect, Network Systems and Data Communication Analyst, and Telecommunications Equipment Installer.

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Network Systems Education and Salaries



Network Systems Pathway

Education and Salaries

	<u>Network Systems Administrator</u>	<u>Network Architect</u>
 Network Systems	Bachelor's Degree Average Salary \$94,380	Associate Degree Average Salary \$117,700

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There is a range in educational requirements and salaries in the Network Systems Pathway. A Network Systems Administrator requires a Bachelor's Degree and has an average salary of \$94,380. A Network Architect requires an Associate Degree and has an average salary of \$117,700.

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Programming and Software Development Description



Programming and Software Development Pathway

Programming and Software Development

Description

- ✓ Involved with the design, development, implementation, and maintenance of computer systems and software
- ✓ Requires knowledge of computer operating systems, programming languages, and software development

Professionals in the Programming and Software Development are involved with the design, development, implementation, and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages and software development.

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Information Technology Pathways

Programming and Software Development Sample Careers



Programming and Software Development Pathway

Sample Careers

- Applications Integrator
- Computer Software Engineer
- Game Designer or Programmer
- Information Security Analyst
- Network Systems and Data Communication Analyst
- Programmer
- Software Applications Engineer
- Software Test Engineer
- Systems Analyst

Programming and Software Development

The slide features a blue background with a white central area. On the left, there is an icon of a laptop displaying code. On the right, there is a cartoon illustration of a man with a beard and glasses, wearing a blue jacket and blue pants, pointing towards the text. The overall design is clean and professional.

Sample careers in the Programming and Software Development Pathway include Applications Integrator, Computer Software Engineer, Game Designer or Programmer, Information Security Analyst, Network Systems and Data Communication Analyst, Programmer, Software Applications Engineer, and Software Test Engineer.

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Programming and Software Development Education and Salaries

The infographic features a blue background with a white central panel. On the left, a laptop icon is labeled 'Programming and Software Development'. To the right, a cartoon character of a man with glasses and a beard, wearing a blue jacket, stands with one hand pointing towards the text. At the bottom center, a dark blue button with a white arrow and the text 'Return to Pathways Menu' is visible.

Programming and Software Development Pathway

Education and Salaries

Programmer	Information Security Engineer
High School Diploma On-the-Job Training Technical Training Average Salary \$95,520	Bachelor's Degree Average Salary \$110,450

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There is a range in educational requirements and salaries in the Programming and Software Development Pathway. A Programmer requires a High School Diploma, as well as on-the-job training and technical training. They have an average salary of \$95,520. An Information Security Engineer requires a Bachelor's Degree and has an average salary of \$110,450.

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Information Technology Pathways

Web Design and Digital Communications Description

Web Design and Digital Communications Pathway

Web Design and Digital Communications

Description

- ✓ Involved with creating, designing, and producing multimedia like video, audio, and other digital content
- ✓ Develop multimedia products for business, training, entertainment, communications, and marketing

Professionals in the Web and Digital Communications Pathway are involved with creating, designing, and producing multimedia like video, audio, and other digital content. They develop multimedia products for business, training, entertainment, communications, and marketing.

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Information Technology Pathways

Web Design and Digital Communications Sample Careers

Web Design and Digital Communications Pathway


Web Design and Digital Communications

Sample Careers

- Graphic Designer
- Multimedia Artist
- Web Developer
- Webmaster

An illustration of a man with a beard and glasses, wearing a blue jacket and blue pants, pointing towards the slide content.

Sample careers in the Web Design and Digital Communications Pathway include Graphic Designer, Multimedia Artist, Web Developer, and Webmaster.

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Information Technology Pathways

Web Design and Digital Communications Education and Salaries

Web Design and Digital Communications Pathway

Web Design and Digital Communications

Education and Salaries

Web Designer	Multimedia Artist
Associate Degree On-the-Job Training	High School Diploma Technical Training
Average Salary \$85,870	Average Salary \$69,210

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The infographic features a blue background with a white central panel. On the left, there is an icon of a smartphone displaying a shopping cart with a 'BUY' button. On the right, there is a cartoon illustration of a man with a beard and glasses, wearing a blue jacket and blue pants, pointing towards the text. The overall design is clean and professional.

There is a range in educational requirements and salaries in the Web Design and Digital Communications Pathway. A Web Designer requires an Associate Degree, as well as on-the-job training. They have an average salary of \$85,870. A Multimedia Artist requires a High School Diploma and Technical Training and has an average salary of \$69,210.