Telecommunications and Information Management (TIM)
Career Pathways

Telecommunications - Convergence Technology

- Provide support for audio, data, video, and image technologies that work synergistically to connect people in new ways
- Install or integrate communication and entertainment systems in a home
- Design the performance features of critical communication technologies, including satellite communications, fiber optics, cellular & 3G wireless services, geographic information systems (GIS), HDTV and advanced digital media, and the Internet and intelligent networking
- Design voice and data communication systems
- Supervise the installation of communication systems and provide maintenance and other services to clients after systems are installed

Job Titles: Convergence Technician, Home Technology Integrator, Convergence Technology Specialist, Convergence Technology Consultant, VoIP and IPTV Communications Manager, Broadcast/Cable Television Manager, Cellular and Wireless Communications Manager

Information Assurance and Security

- Implement information security processes and technology to ensure confidentiality, integrity, and availability of data and network systems
- Conduct internal and external vulnerability scans and audits and respond to IT threats
- Create and distribute reports detailing vulnerabilities, recommended remediation actions, and track the status of remediation actions; Conduct security research and disseminate information to keep abreast of new threats and vulnerabilities
- Ensure systems are maintained and operated in accordance with security plan
- Educate users about computer security


Employment Projection
Network systems and data communications analysts represent the second fastest growing job during 2008-2018 (53.4% increase) projected by the U.S. Department of Labor.

Telecommunications and Information Management (TIM)
Career Pathways

Telecommunications Management

• Manage the operation and maintenance of an organization's telecommunication infrastructure in one or more of the following sectors: broadcast television, telephony, satellite communication, cellular and wireless communication and the Internet
• Develop new telecommunications laws, policies, and regulations
• Manage a team of telecommunications technicians and analysts who maintain and support the telecommunication infrastructure within an organization
• Research and oversee implementation of new technologies
• May be involved in strategic planning, finance and budgeting, marketing, and leadership and small business consulting

Job Titles: Telecommunications Policy Analyst, Telecommunication Project Manager, Telecommunications Manager

Network and Computer Systems Administration
Data Communications

• Design, install, configure, and support an organization's local-area network (LAN), wide-area network (WAN), Internet, intranet, and other data communications systems
• Perform network modeling, analysis, and planning
• Research and recommend network and data communications hardware and software
• Maintain network hardware and software
• Monitor network performance to ensure network availability to all system users and perform necessary maintenance to support network availability
• Plan, coordinate, and implement network security measures

Job Titles: Network Administrator, Computer Systems Administrator, Systems Administrator, Network Systems and Data Communications Analyst, Network Architect

Employment Projection
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