NETWORK AND INFORMATION TECHNOLOGY AAS: 354
Total Credits: 60
Catalog Edition: 2020-2021

Program Description

This curriculum provides students a broad coverage of technical understanding of computer technology, networking and security as well as the communication skills and professionalism required of all entry-level IT professionals. Skills included software and hardware installation, network configuration and diagnosing, security and forensics fundamentals, and virtualization and cloud computing implementation, with more of a "hands-on" orientation focused on scenarios in which troubleshooting and tools must be applied to resolve problems.

Program Outcomes

Upon completion of this program a student will be able to:

- Install, maintain and evaluate computer networks.
- Describe network architecture concepts, including topology, protocols, components, and principles.
- Demonstrate best practices in the use of lab equipment and network hardware.
- Create a detailed plan showing the steps necessary to implement a network security system.
- Test and configure network services, devices, and peripherals.
- Review data and identify relevant evidence using current forensic tools.
- Describe the evolution of cloud computing and major methods of deployment.
- Design and implement cloud applications that can scale up on a VM (Virtual Machine and out across multiple VMs.

Program Advisors

Germantown and Takoma Park/Silver Spring

- Dr. David Hall, 240-567-7827, David.Hall@montgomerycollege.edu

Rockville

- Dr. Nawal Benmouna, 240-567-5230, Nawal.Benmouna@montgomerycollege.edu

For more information, please visit https://www.montgomerycollege.edu/academics/programs/network-and-wireless-technologies/network-and-information-technology-aas-degree.html

To view the Advising Worksheet, please visit https://www.montgomerycollege.edu/_documents/counseling-and-advising/advising-worksheets/current-catalog/354.pdf

2020-2021

Program Advising Guide
An Academic Reference Tool for Students

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NETWORK AND INFORMATION TECHNOLOGY
ASSOCIATE OF APPLIED SCIENCE: 354

NETWORK AND INFORMATION TECHNOLOGY AAS: 354

Suggested Course Sequence

A suggested course sequence for full-time students follows. All students should review this advising guide and consult an advisor.

First Semester

- ENGL 101 - Introduction to College Writing *3 semester hours* *
- NWIT 101 - Introduction to the Internet of Things (IoT) *3 semester hours*
- NWIT 105 - Introduction to Cloud Computing *3 semester hours*
- NWIT 127 - Microcomputer Essentials *3 semester hours*
- Mathematics foundation *3 semester hours (MATF)*

Third Semester

- COMM 108 - Foundations of Human Communication *3 semester hours*
- (GEEL)
- OR
- COMM 112 - Business and Professional Speech Communication *3 semester hours*
- (GEEL)
- CMSC 253 - UNIX/LINUX System Administration *4 semester hours*
- NWIT 203 - Microsoft Windows Server *3 semester hours*
- Arts or humanities distribution *3 semester hours (ARTD or HUMD)*

Second Semester

- NWIT 130 - Network Cabling Technology *3 semester hours*
- NWIT 151 - Introduction to Networking *3 semester hours*
- NWIT 170 - Network Operating Systems *3 semester hours*
- NWIT 173 - Network Security *3 semester hours*
- English foundation *3 semester hours (ENGF)*

Fourth Semester

- NWIT 204 - Network Virtualization and System Administrator *4 semester hours*
- NWIT 264 - Network Forensics *3 semester hours*
- Behavioral and social sciences distribution *3 semester hours (BSSD)*
- Natural sciences distribution with lab *4 semester hours (NSLD)*
- NWIT or CMSC elective *3 semester hours*

Total Credit Hours: 60

*ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or NWIT or CMSC elective.

Transfer Opportunities

Montgomery College has partnerships with multiple four-year institutions and the tools to help you transfer. To learn more, please visit https://www.montgomerycollege.edu/transfer or http://artsys.usmd.edu.

Get Involved at MC!

Employers and Transfer Institutions are looking for experience outside the classroom.

MC Student Clubs and Organizations: https://www.montgomerycollege.edu/life-at-mc/student-life/

Related Careers

Some require a Bachelor's degree.
Computer Systems Analyst, Computer Programmer, Software Developer, Network and Computer Systems Administrator, Computer Network Architects, Software Quality Assurance Engineer and Tester.

Career Services

Montgomery College offers a range of services to students and alumni to support the career planning process. To learn more, please visit https://www.montgomerycollege.edu/career

Career Coach

A valuable online search tool that will give you the opportunity to explore hundreds of potential careers or job possibilities in Maryland and the Washington D.C. metropolitan area. Get started today on your road to a new future and give it a try. For more information, please visit

Notes: