Network and Information Technology AAS: 354

Total Credits: 60
Catalog Edition: 2019-2020

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

**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)

**Third Semester**
- COMM 108 - Foundations of Human Communication 3 semester hours
- (GEEL)
- 0R
- 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)

**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://cms.montgomerycollege.edu/edu/plain.aspx?id=2439

Related Careers
Some require a Bachelor’s degree.

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: