## COMPUTER INFORMATION TECHNOLOGY - INDUSTRY CERTIFICATIONS

Industry certifications validate a candidate's technical knowledge and skills. Many NMC courses include opportunities for students to become certified. For additional information on testing and/or training for any of the certification opportunities listed below, call (231) 995-1169 or email CIT@nmc.edu. NMC is an authorized Certiport, Pearson-VUE, and Prometric testing center.

Cisco CCNA Routing & Switching Certification — The CCNA certification (Cisco Certified Network Associate) indicates a foundation in, and apprentice knowledge of networking. CCNA certified professionals can install, configure, operate LAN and WAN services for small and medium-sized networks, including but not limited to use of these technologies: IP, IPv6, OSPF, Ethernet, Access Lists, Software-Designed Networking, and Network Virtualization.

Cisco Internetworking I (CIT 160), Cisco Internetworking II (CIT 161), and Cisco Internetworking III (CIT 260) are courses offered by the NMC Cisco Networking Academy and provide preparation for the CCNA Routing & Switching Exam.

CompTIA A+ ® Certification – This certification is the industry standard for validating vendor-neutral skills expected of an entry-level IT technician. CompTIA A+ Certification I (CIT 156) and CompTIA A+ Certification II (CIT 157) are NMC courses and provide the necessary preparation to pass the A+ Core 1 and A+ Core 2 Certification exams.

CompTIA Network+ ® Certification – This certification validates technical competency in network infrastructure and support. Those holding Network+ certification demonstrate critical knowledge of network concepts, network installation and configuration, network media and topologies, network management and network security. Networking Technologies (CIT 213) is an NMC course that provides the necessary preparation to pass the Network+ Certification exam.

CompTIA Security+® Certification – This certification validates technical knowledge of an individual with experience in network security. The CompTIA Security+® certification validates technical competency in security and covers industry-wide topics including communication security, infrastructure security, cryptography, access control, authentication, external attack, operational and organization security. Network Security Management (CIT 240)provides the necessary preparation to pass the Security+ Certification exam.

CompTIA PenTest+ ® Certification - This certification validates competencies in penetration testing and vulnerability management. The CompTIA PenTest+ ® certification assesses the most up-to-date penetration testing, and vulnerability assessment and management skills necessary to determine the resiliency of the network against attacks. Security ASMT. and Compliance (CIT 263) is an NMC course that provides the necessary preparation to pass the PenTest+ Certification exam.

 $\begin{tabular}{ll} \textbf{CompTIA CySA+} @ \textbf{Certification} - \textbf{This certification validates} \\ \textbf{competencies in security analytics and threat management}. \end{tabular}$ 

CompTIA CySA+ ® is an IT workforce certification that applies behavioral analytics to networks and devices to prevent, detect, and combat cybersecurity threats. Security Analytics & Assurance (CIT 264) is an NMC course that provides the necessary preparation to pass the CySA+ Certification exam.

CompTIA CASP+ ® Certification - This certification validates competencies in risk management, enterprise security operations and architecture, research and collaboration, and integration of enterprise security. Advanced Enterprise Security (CIT 266) is an NMC course that provides the necessary preparation to pass the CASP+ Certification exam.

CompTIA Linux+® Certification - This certification validates competencies required for a systems administrator supporting Linux Systems. Linux Administration (CIT 256) is an NMC course that provides the necessary preparation to pass the Linux+ Certification exam.

CompTIA Cloud+ ® Certification — This certification validates the skills and expertise of IT practitioners in implementing and maintaining cloud technologies. Cloud+ accredits IT professionals with the constantly changing and advancing knowledge they need to be successful in today's cloud computing environment. Cloud Technologies (CIT 243) is an NMC course that provides the necessary preparation to pass the Cloud+ certification exam.

Microsoft Certified Professional (MCP) – The Microsoft Certified Professional certification is an internationally recognized certification focusing on Microsoft Technologies. Enterprise Solutions (CIT 247), Windows Server Environment (CIT 215), and Windows Server Infrastructure (CIT 246) are NMC courses that provide the necessary preparation to pass the Microsoft MCP certification. Students passing a Microsoft Certified Professional exam associated with each of the courses will earn the Microsoft Certified Solutions Associate (MCSA) certification.

Microsoft Office Specialist (MOS) – Microsoft Office Specialist certification proves expertise in Microsoft applications. Microsoft Office - Word (CIT 119), Microsoft Office - Excel (CIT 210), and Microsoft Office - PowerPoint (CIT 124) are NMC courses that provide the necessary preparation to pass the individual Microsoft Office Specialist certifications.

Microsoft Technology Associate (MTA) – The Microsoft Technology Associate (MTA) certification is an entry-level credential from Microsoft that validates essential technology knowledge, enabling students to explore academic and career options, and take the first step toward building a successful career in technology. MTA certifications are embedded into the CIT Developer and CIT Infrastructure and Security degree programs and certificates.

Students are able to earn the following Microsoft Technology Associate Exams:

**98-361 Software Development Fundamentals** - The certification validates competencies in software development fundamentals. Topics include knowledge of core programming, object-oriented programming, general software development, web applications, desktop applications and databases. Application Development (CIT 195) and Object-Oriented

Programming (CIT 255) are NMC courses that provide the necessary preparation to pass this MTA certification.

- **98-381 Introduction to Programming Using Python** The certification validates competencies in python development fundamentals. Topics include knowledge of data types and operators, decisions and loops, input and output operations, .structured code, error handling, and development tools. Scripting and Automation (CIT 112) or Advanced Database Systems (CIT 228) are NMC courses that provide the necessary preparation to pass this MTA certification.
- **98-382 Introduction to Programming using JavaScript** This certification validates competencies in programming using Javascript. Topics include Operators Methods and keywords, data types and functions, decisions and loops, document object models, and HTML Forms. JavaScript Programming (CIT 190) is an NMC course that provides the necessary preparation to pass this MTA certification.
- **98-364 Database Fundamentals** -This certification validates competencies in Database fundamentals. Topics include database concepts, database objects, data storage, and administering a database. Relational Databases (CIT 178 (https://catalog.nmc.edu/archives/2020-2021/search/?P=CIT%20178)) is the course that provides the necessary preparation to pass this MTA certification.
- **98-383 Introduction to Programming Using HTML and CSS** This certification validates competencies in programming using HTML and CSS. Topics include HTML fundamentals, CSS fundamentals, multimedia, and style web pages using CSS. Web Development (CIT 180) is an NMC course that provides the necessary preparation to pass this MTA certification.
- **98-366 Networking Fundamentals** This certification validates competencies in network fundamentals and concepts. Topics include network infrastructure, network hardware, and protocols and services. Networking Technologies (CIT 213) is an NMC course that provides the necessary preparation to pass this MTA certification.
- **98-367 Security Fundamentals** This certification validates competencies in security fundamentals. Topics include security layers, operating system security, network security and security software. Network Security Management (CIT 240) is an NMC course that provides the necessary preparation to pass this MTA certification.
- **98-365 Windows Server Administration Fundamentals** This certification validates competencies in server administration fundamentals. Topics include server installation, server roles, Active Directory, storage, performance, and maintenance. Enterprise Solutions (CIT 247) provides the necessary preparation to pass this MTA certification.