IT-SECURITY (151)

151-101. IT Security Essentials. (2 Credits)
IT Security Essentials introduces the basic principles of network and system security. Learn about computer and network vulnerabilities and threats, and how to safeguard technology systems from both internal and external vulnerabilities and threats. Discover security planning, security technology, data confidentiality safeguards, and legal and ethical issues associated with network and system security.
Prerequisites: Computer Skills Assessment70 or College Profi - Comp Skills or Work Experience - Comp Skills or 860-702 with a minimum grade of S
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=101)

151-102. Log and Threat Analysis. (3 Credits)
Network hosts, such as firewalls, switches, routers, servers, workstations and intrusion detection/prevention systems, generate quite a bit of logging data. These data can, and should, be used to analyze network performance, security vulnerabilities, breaches and anomalous activity. Discover how security information and event management (SIEM) tools are used to monitor, analyze and report about logged data, and use the information to make informed decisions based on actual log data.
Prerequisites: 150-157 (may be taken concurrently) with a minimum grade of C and (150-179 with a minimum grade of C or 150-118 (may be taken concurrently) with a minimum grade of C or 150-176 with a minimum grade of C)
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=102)

151-103. Firewall Security. (3 Credits)
Get an introduction to firewall security. Through scenario-based learning, configure, manage and secure the firewall based on individual situations.
Prerequisites: 150-157 with a minimum grade of C and (150-179 with a minimum grade of C or 150-118 (may be taken concurrently) with a minimum grade of C or 150-176 with a minimum grade of C)
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=103)

151-104. Intrusion Detection. (3 Credits)
Discover the tools commonly used to detect network intrusions, and either prevent them or alert staff to the intrusion attempt. Determine the appropriate location for placement of an intrusion detection system (IDS), and tune the rulesets used for an IDS so false positives are reduced. Use a variety of open-source tools, and learn to implement an appropriate IDS for a particular scenario.
Prerequisites: 150-157 with a minimum grade of C and (150-179 with a minimum grade of C or 150-118 (may be taken concurrently) with a minimum grade of C or 150-176 with a minimum grade of C)
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=104)

151-105. Digital Forensics. (3 Credits)
Use a variety of open-source tools to recover artifacts from both Windows and Linux systems, report on findings, and prove the investigations did not alter the original data.
Prerequisites: 150-157 with a minimum grade of C and (150-179 with a minimum grade of C or 150-118 with a minimum grade of C)
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=105)

151-106. Security I. (3 Credits)
Security I introduces the basic principles of network and system security. Learn about computer and network vulnerabilities and threats, and how to safeguard technology systems from both internal and external vulnerabilities and threats. Discover security planning, security technology, data confidentiality safeguards, and legal and ethical issues associated with network and system security.
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=106)

151-107. Web Application Security. (3 Credits)
Explore security surrounding web applications, including fundamentals of HTTP, secure web server configuration and how web applications are created. Search for and exploit vulnerabilities in web applications, learning how to protect and defend against attacks through input sanitization, secure application development and web application firewalls.
Prerequisites: 150-157 with a minimum grade of C and (150-179 with a minimum grade of C or 150-118 with a minimum grade of C) and (150-164 (may be taken concurrently) with a minimum grade of C and 152-101 with a minimum grade of C)
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=107)

151-108. IT Cybersecurity Capstone. (2 Credits)
Showcase your IT knowledge in this independent, self-paced, project-based capstone course. This course requires a minimum of three hours of lab time per week. Work closely with WCTC faculty who will assess program outcomes and encourage student success in the IT career field.
Prerequisites: 150-117 with a minimum grade of C and 151-106 with a minimum grade of C and 150-188 with a minimum grade of C and 150-164 with a minimum grade of C and 150-137 with a minimum grade of C and 150-157 with a minimum grade of C and 150-118 with a minimum grade of C and 152-101 with a minimum grade of C and 107-103 with a minimum grade of C and 151-103 with a minimum grade of C and 151-104 with a minimum grade of C and 150-169 with a minimum grade of C and 151-102 with a minimum grade of C and 151-105 (may be taken concurrently) with a minimum grade of C and 151-107 (may be taken concurrently) with a minimum grade of C and 150-161 (may be taken concurrently) with a minimum grade of C
See sections of this course (http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=151&num=108)