

2024-2025 TTC Catalog

Cybersecurity

Associate in Applied Science in Cybersecurity

63 Credit Hours

The Cybersecurity program prepares students for entry level careers in cybersecurity, network security, computer/digital forensics, information assurance, and other cyber defense positions. Students will learn the principles and techniques used to identify, search, seize, and analyze digital media and to conduct cyber investigations of endpoint vulnerabilities and attacks. Courses will provide instruction in file access and reconstruction, digital forensics analysis, cryptography, programming, network systems operations and security, network traffic monitoring and threat detection, incident response, risk assessment, and contingency planning. Students enrolled in this program will have access to resources provided by TTC's academic partners including: Cisco, Microsoft, VMware, CompTIA, Red Hat, and Amazon Web Services (AWS).

General Education Requirements

ENG 101 English Composition I 3

IDS 109 First Year Experience Seminar 3

MAT 110 College Algebra 3

or

MAT 120 Probability and Statistics 3

or

MAT 155 Contemporary Mathematics 3

REQ HUM Select from 3
[Humanities](#)

REQ SSC Select from 3
[Behavioral/Social
Sciences](#)

Total: 15

Major Requirements

CPT 282 Information Systems Security 3

CRJ 232 White Collar Crime Investigation 3

or

CRJ 233 Cyber Crimes and the Law 3

CYB 269 Digital Forensics 3

CYB 285 Cybersecurity Capstone 3

IST 165 Implementing and Administering Windows Directory Services 3

IST 166 Network Fundamentals 3

IST 190 Linux Essentials 3

IST 191 Linux System Administration 3

IST 193 Linux Security Administration 3
IST 201 Cisco Internetworking Concepts 3
IST 202 Cisco Router Configuration 3
IST 291 Fundamentals of Network Security I 3
IST 293 IT and Data Assurance I 3
IST 294 IT and Data Assurance II 3

Total: 42

Electives

Select two courses from the following:

CPT 162 Introduction to Web Page Publishing 3
CPT 180 Shell Scripting 3
CPT 202 SQL Programming I 3
CPT 209 Computer Systems Management 3
CPT 242 Database 3
CPT 298 Introduction to Software as a Service (SaaS) 3
CWE 113 Cooperative Work Experience 3
CWE 123 Cooperative Work Experience 3
CYB 201 Cybersecurity Operations 3
CYB 286 CYB 286 Cybersecurity Internship I 3
ENG 260 Advanced Technical Communications 3
HSM 101 Introduction to Homeland Security 3
HSM 104 Terrorism and Homeland Security 3
HSM 203 Intelligence Analysis and Security Management 3
HSM 206 Critical Infrastructure Protection 3
IST 192 Linux Network Applications 3
IST 198 Cloud Essentials 3
IST 206 Cisco Remote Access 3
IST 253 LAN Service and Support 3
IST 298 Advanced Cloud Computing 3

Total: 6

Admission Requirements

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.