

INFORMATION TECHNOLOGY

CYBERSECURITY

Cybersecurity AAS Degree – A25590CS

-Day and Evening

The Cybersecurity degree prepares students for an IT career in digital forensics, network security services, and ethical hacking. Courses include routing and switching, network vulnerabilities, secure communications, system and security administration, data recovery, and computer investigations. Students will work in Microsoft, Linux, and Apple desktop and server operating system environments. Upon completion, students should be prepared for a variety of industry certifications, including: Certified Ethical Hacker, Certified Enterprise Defender, CCNA Security, and Security+.

Program Sequence

FALL SEMESTER

CTI 110	Web, Pgm, & Db Foundation	3
CTI 120	Network and Security Foundations	3
ENG 111	Writing and Inquiry	3
NOS 110	Operating Systems Concepts	3
SEC 110	Security Concepts	3

SPRING SEMESTER

NET 125	Introduction to Networks	3
NET 126	Routing Basics	3
NOS 120	Linux/UNIX Single User	3
NOS 130	Windows Single User	3
CSC 121	Python Programming	3

SUMMER SEMESTER

NOS 125	Linux and UNIX Scripting	3
— —	Mathematics Elective	3

FALL SEMESTER

CCT 121	Computer crime Investigations.....	4
CCT 250	Network Vulnerabilities I.....	3
CTS 115	Info Sys Business Concepts	3
SEC 160	Security Administration I	3

SPRING SEMESTER

CCT 240	Data Recovery Techniques.....	3
CCT 251	Network Vulnerabilities II.....	3
CTS 285	Systems Analysis & Design	3
— —	English and Comm Elective	3
— —	Humanities and Fine Arts Elective	3

SUMMER SEMESTER

— —	Social and Behavioral Sciences Elective	3
— —	Project Elective	2

Graduation Requirements..... 69 Credit Hours

English and Communication Electives

(Choose 3 credit Hrs)

ENG 111	Writing and Research in the Disciplines	3
COM 120	Intro to Interpersonal Communication	3
COM 231	Public Speaking.....	3

Humanities and Fine Arts Electives

(Choose 3 credit Hrs)

HUM 110	Technology and Society.....	3
HUM 115	Critical Thinking	3
PHI 240	Introduction to Ethics	3

Mathematics Electives

(Choose 3 credit Hrs)

MAT 121	Algebra/Trigonometry I.....	3
MAT 143	Quantitative Literacy.....	3
MAT 171	Precalculus Algebra.....	4
MAT 172	Precalculus Trigonometry	4
MAT 271	Calculus I	4

Social and Behavioral Sciences Electives

(Choose 3 credit Hrs)

ECO 151	Survey of Economics.....	3
ECO 251	Principles of Microeconomics	3
PSY 118	Interpersonal Psychology	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Project Electives

(Minimum of 2 credit Hrs)

SEC 285	Systems Security Project (Capstone)	3
WBL —	* Work-Based Learning	2

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 3.

Cyber Operations & Digital Forensics Certificate – C25590CF

This certificate focuses on the skills needed for entry-level work in a Security Operations Center (SOC) maintaining security monitoring tools and investigating suspicious activities. The digital forensics courses supplement this with training for the legal recovery, documentation and investigation of material found in digital devices.

NET 125	Introduction to Networks.....	3
NET 126	Routing Basics.....	3
SEC 160	Security Administration I.....	3
CCT 121	Computer Crime Investigation.....	4
CCT 240	Data Recovery Techniques	3

Requires the following course or industry certification prerequisites:

Course	Industry Certification
CTI-120	Select one set from below: MS MTA Network & MTA Security Fundamentals CompTIA Sec+ and CompTIA Net+

NOS 110 Department Challenge Exam

Graduation Requirements..... 16 Credit Hours

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Penetration Testing & Ethical Hacking – C25590PE

This certificate focuses on the skills Cybersecurity professionals require to look into the vulnerabilities of their organization's systems and networks that a malicious attacker may exploit and develop solutions to prevent data breaches.

CCT	250	Network Vulnerabilities I.....	3
CCT	251	Network Vulnerabilities II.....	3
CSC	121	Python Programming	3
NOS	120	Linux/UNIX Single User	3
NOS	125	Linux and UNIX Scripting	3
NOS	130	Windows Single User	3

Requires the following course:

NOS-110 Department Challenge Exam

Graduation Requirements18 Credit Hours