

CYBER SECURITY ASSOCIATE IN APPLIED SCIENCE DEGREE **(66 CREDIT HOURS MIN.)**

Program Goals & Outcomes

Program goals of the Cyber Security Degree include: (1) preparing students for entry-level employment in positions requiring networking, cyber security, or digital forensics skills; (2) providing coursework for students seeking career advancement; and, (3) offering a customized educational program to allow students to specialize in cyber security or digital forensics. Although transfer to a 4-year college or university is not the primary purpose of this degree, Rose State College holds articulation agreement with the Oklahoma State University Institute of Technology, the University of Tulsa, and the University of Oklahoma.

Upon degree completion, students will be able to:

1. Perform basic networking and operating skills;
2. Evaluate cryptography standards and methodologies;
3. Evaluate and implement policies and procedures for secure computing environment;
4. Analyze and evaluate technologies such as wireless, remote access, and digital forensics investigations;
5. Perform duties of a cyber security technician;
6. Perform enterprise threat assessment duties; and
7. Pass industry certification examinations.

Program Outcomes

Students will be prepared to pass industry certification examinations.

Program Entrance Requirements

Admission to Rose State College

Degree Awarded

Associate in Applied Science and/or
Cyber Essentials Certificate and/or
Cyber Security Certificate

Contact Information

Business & Information Technology Division
(405) 733-7340

Program Director, Professor Ken Dewey
(405) 733-7977

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(405) 736-0348

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GENERAL EDUCATION REQUIREMENTS (21 hours min.) SEMESTER COMPLETED GRADE/CREDIT HRS.

Communications (9 hours)

ENGL 1113 English Composition I+

ENGL 1213 English Composition II+

MCOM 1213 Public Speaking

U.S. History/U.S. Government (6 hours)

HIST 1483 U.S. History to 1877

OR HIST 1493 U.S. History Since 1877

POLS 1113 American Federal Government

General Education (6 hours minimum)

MATH 1483 Functions & Modeling+

OR MATH 1513 College Algebra+

ECON 2103 Personal Finance

PROGRAM REQUIREMENTS (45 hours)

Students must earn a "C" or better in these courses to be eligible for graduation.

CIT 1113 Fundamentals of Programming Logic

OR any Programming Language

CIT 1203 Script Programming

CIT 1503 Network+ Certification Preparation

CIT 1523 Computer Hardware & Operating Systems

CIT 1533 Principles of Cybersecurity

CIT 2053 Network Administration

CIT 2243 Unix®/Linux®

CIT 2323 Security+ Certification Preparation

CIT 2433 Cloud+ Certification Preparation

CIT 2523 Information Security Management+

CIT 2533 Ethics in Information Technology

CIT 2553 Digital Forensics+

CIT 2563 Cryptography & Trusted Systems+

CIT 2603 Ethical Hacking & Systems Defense+

CIT 2633 Enterprise Threat Assessment+

+Check course description for prerequisites that must be met.

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Cyber Essentials Certificate Requirements—18 Hours

The certificate will be awarded upon degree completion unless the student opts out in writing to the Graduation Office before graduation.

SEMESTER COMPLETED GRADE/CREDIT HRS.

Students must earn a “C” or better in this course to be eligible for Certificate.

CIT 2523 Information Security Management+		
CIT 2533 Ethics in Information Technology		
CIT 2553 Digital Forensics+		
CIT 2563 Cryptography & Trusted Systems+		
CIT 2603 Ethical Hacking & Systems Defense+		
CIT 2633 Enterprise Threat Assessment+		

Cyber Security Certificate Requirements—45 Hours

The certificate will be awarded upon degree completion unless the student opts out in writing to the Graduation Office before graduation.

SEMESTER COMPLETED GRADE/CREDIT HRS.

Students must earn a “C” or better in this course to be eligible for Certificate.

CIT 1113 Fundamentals of Programming Logic <u>OR</u> any Programming Language		
CIT 1203 Script Programming		
CIT 1503 Network+ Certification Preparation		
CIT 1523 Computer Hardware & Operating Systems		
CIT 1533 Principles of Cybersecurity		
CIT 2053 Network Administration		
CIT 2243 Unix®/Linux®		
CIT 2323 Security+ Certification Preparation		
CIT 2433 Cloud+ Certification Preparation		
CIT 2523 Information Security Management+		
CIT 2533 Ethics in Information Technology		
CIT 2553 Digital Forensics+		
CIT 2563 Cryptography & Trusted Systems+		
CIT 2603 Ethical Hacking & Systems Defense+		
CIT 2633 Enterprise Threat Assessment+		

+Check course description for prerequisites that must be met.

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Suggested Order of Enrollment

The following courses should be taken in the sequence indicated. Students should enroll in two 16-week classes and four 8-week classes each 16-week term, as well as two 8-week classes during the summer, **to complete the 1-year certificate in time**. Next Generation ACCUPLACER scores in reading and writing are required, or enrollment in developmental courses may be necessary. The “+” symbol represents a prerequisite for the course. Any course offering is subject to change without notice.

Summer Start

<u>1st Semester (Summer)</u>	
CIT 1113 Fundamentals of Programming Logic (8-week) CIT 1503 Network+ Certification Preparation (8-week) CIT 1533 Principles of Cybersecurity (8-week)	
<u>2nd Semester (Fall)</u>	<u>3rd Semester (Spring)</u>
CIT 2053 Network Administration (16-week) CIT 2323 Security+ Certification Preparation (16-week) CIT 2523 Information Security Management+ (1st 8-week) CIT 2563 Cryptography & Trusted Systems+ (1st 8-week) CIT 1203 Script Programming (2nd 8-week) CIT 1523 Computer Hardware & Operating Systems (2nd 8-week)	CIT 2553 Digital Forensics+ (16-week) CIT 2603 Ethical Hacking & Systems Defense+ (16-week) CIT 2433 Cloud+ Certification Preparation (1st 8-week) CIT 2533 Ethics in Information Technology (1st 8-week) CIT 2243 Unix®/Linux® (2nd 8-week) CIT 2633 Enterprise Threat Assessment+ (2nd 8-week)

Fall Start

<u>1st Semester (Fall)</u>	<u>2nd Semester (Spring)</u>
CIT 2053 Network Administration (16-week) CIT 2323 Security+ Certification Preparation (16-week) CIT 1113 Fundamentals of Programming Logic (1st 8-week) CIT 1503 Network+ Certification Preparation (1st 8-week) CIT 1203 Script Programming (2nd 8-week) CIT 1523 Computer Hardware & Operating Systems (2nd 8-week)	CIT 1533 Principles of Cybersecurity (16-week) CIT 2553 Digital Forensics+ (16-week) CIT 2433 Cloud+ Certification Preparation (1st 8-week) CIT 2533 Ethics in Information Technology (1st 8-week) CIT 2243 Unix®/Linux® (2nd 8-week) CIT 2523 Information Security Management+ (2nd 8-week)
<u>3rd Semester (Summer)</u>	
CIT 2563 Cryptography & Trusted Systems+ (8-week) CIT 2603 Ethical Hacking & Systems Defense+ (8-week) CIT 2633 Enterprise Threat Assessment+ (8-week)	

Spring Start

<u>1st Semester (Spring)</u>	<u>2nd Semester (Summer)</u>
CIT 2053 Network Administration (16-week) CIT 2323 Security+ Certification Preparation (16-week) CIT 1113 Fundamentals of Programming Logic (1st 8-week) CIT 1503 Network+ Certification Preparation (1st 8-week) CIT 1203 Script Programming (2nd 8-week) CIT 1523 Computer Hardware & Operating Systems (2nd 8-week)	CIT 1533 Principles of Cybersecurity (8-week) CIT 2563 Cryptography & Trusted Systems+ (8-week) CIT 2523 Information Security Management+ (8-week)
<u>3rd Semester (Fall)</u>	
CIT 2553 Digital Forensics+ (16-week) CIT 2603 Ethical Hacking & Systems Defense+ (16-week) CIT 2433 Cloud+ Certification Preparation (1st 8-week) CIT 2533 Ethics in Information Technology (1st 8-week) CIT 2243 Unix®/Linux® (2nd 8-week) CIT 2633 Enterprise Threat Assessment+ (2nd 8-week)	