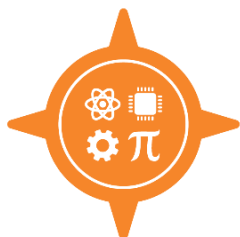


# GUIDED PATHWAY: CYBER SECURITY A.A.S. – CYBER DEFENSE EMPHASIS

ENGINEERING, TECHNOLOGY, MATHEMATICS and SCIENCES CAREER PATH



For more information, visit the [Dallas College Cyber Security webpage](http://www.dcccd.edu/CyberSecurity) [www.dcccd.edu/CyberSecurity] and your academic advisor at the Richland Campus.

This is an example course sequence for students interested in pursuing the Cyber Security – Cyber Defense Emphasis associate degree. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an Associate of Applied Science (A.A.S.) degree in Cyber Security. Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by Dallas College. See catalog for [official degree requirements](#).

The A.A.S. degree in Cyber Security–Cyber Defense Emphasis is designed to prepare students for various entry-level opportunities in the information security sector with emphasis in cyber security. The Cyber Defense emphasis combines both networking and systems administration fundamentals with a focus on defensive strategies to securing networks and systems. Students completing this degree can apply for jobs such as: SOC Analyst, Penetration Tester, Incident Responder. Courses that complete the degree are noted below.

Visit the [NTCCC Transfer Consortium](#) to view guided pathways created for students who complete an A.A.S. degree and the options for transfer to complete a Bachelor of Applied Arts and Science. Speak with an academic advisor at your campus to choose courses that will help you to transfer to a specific university.

<b>Catalog Year</b>	2020-2021	You may use this pathway if you entered Dallas College on or before this date.
<b>Degree Type</b>	Associate of Applied Science	
<b>GPA Requirement</b>	Student must earn a GPA of 2.0 or higher	
<b><a href="#">TSI</a></b>	Must be Complete	

## SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students. This is not an official degree plan. See catalog for [official degree requirements](#).

### AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS

#### SEMESTER 1

**Total Hours: 15**

[ENGL 1301](#) – Composition I *This is a Core course. You must earn a grade of "C" or better.*

[ITCC 1414](#) – CCNA 1: Introduction to Networks

[MATH 1314](#) – College Algebra *This is a Core course. You must earn a grade of "C" or better.*

[ITSC 1416](#) – Linux Installation and Configuration

[POFI 1104](#) – Computer Fundamentals *Students must choose Word Processing Skills or Spreadsheet Skills.*

#### SEMESTER 1 ACTION ITEMS

1. Meet with your advisor to confirm academic and career goals before the end of the semester.
2. Meet with a career advisor or coach to research your career options.
3. Attend an industry related meetup group.
4. Get certified in Redhat or Linux+.

#### SEMESTER 2

**Total Hours: 15**

[ITSY 1400](#) – Fundamentals of Information Security

[ITMT 2405](#) – Designing and Implementing a Server Infrastructure

[ITCC 1440](#) – CCNA 2: Routing and Switching Essentials

[SPCH 1321](#) – Business and Professional Communication *This is a Core course.*

#### SEMESTER 2 ACTION ITEMS

1. Meet with your advisor to request an official program of study audit and confirm or update your academic/career path and program of study.

2. Obtain Security+ certification.
3. Attend an industry related meetup group.
4. Participate in Cyber Security club meetings and competitions.

### SEMESTER 3

**Total Hours: 15**

[ITMT 1457](#) – Administering a Windows Server Operating System

[ITSY 1442](#) – Information Technology Security

[ITSE 1429](#) – Programming Logic and Design

[HUMANITIES/FINE ARTS ELECTIVE](#)\* *This is a Core course.*

\* There are several options to fulfill this requirement. See your academic advisor for a specific list.

#### SEMESTER 3 ACTION ITEMS

1. Meet with a career advisor or coach for assistance in preparing for job search.
2. Obtain CySA+ certification.
3. Attend an industry related meetup group.
4. Participate in Cyber Security club meetings and competitions.
5. Meet with faculty regarding internship opportunities.

### SEMESTER 4

**Total Hours: 15**

[ITSY 2401](#) – Firewalls and Network Security

[ITSC 2425](#) – Advanced Linux

[SOCIAL/BEHAVIORAL SCIENCES ELECTIVE](#) \* *This is a Core course.*

**CHOOSE ONE:** [ITSY 2472](#) – Ethical Hacking and System Defense **OR**

[ITSY 2486](#) – Internship-Computer and Information Security

\* There are several options to fulfill this requirement. See your academic advisor for a specific list.

#### SEMESTER 4 ACTION ITEMS

1. Obtain Pentest+ Certification.
2. See faculty or career services for employment opportunities.
3. Review your degree plan and apply for the Cyber Security A.A.S.
4. Sign up for Commencement.
5. Join the [Alumni Network!](#)

**PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS**