

GUIDED PATHWAY: CYBER SECURITY A.A.S. – SYSTEM SECURITY ADMINISTRATION EMPHASIS (For transfer to National University, BS in Cybersecurity) ENGINEERING, TECHNOLOGY, MATHEMATICS and SCIENCES CAREER PATH



For more information, visit the <u>Dallas College Cyber Security webpage</u> [www.dcccd.edu/CyberSecurity] and your success coach at your campus.

This is an example course sequence for students interested in pursuing the Cyber Security – System Security Administration 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 program in Cyber Security System Security Administration Emphasis is designed to prepare students for various entry-level opportunities in the information security sector with emphasis in secure systems administration. The System Security Administration emphasis combines systems administration fundamentals with the requisite security concepts and best practices required to implement, administer, and harden operating systems. Students completing this degree can apply for jobs such as: System Administrator, Network Defense Technician, Intrusion Detection System Analyst. Courses that complete the degree are noted below.

Visit <u>National University</u> to view more information about transferring to National University. Speak with your success coach to choose courses that will help you to transfer to NU.

| Catalog Y | ear (| 2021-2022 | You may use this pathway if you entered Dallas College on or before this date. |
|--------------|------------|--|--|
| Degree Ty | ype | Associate of Applied Science | |
| GPA Requirem | ent | Student must earn a GPA of 2.0 or higher | |
| | <u>TSI</u> | Must be Comple | ete |

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.

ASSOCIATE OF APPLIED SCIENCE 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.

POFI 1104 - Computer Fundamentals Students must choose Word Processing Skills or Spreadsheet Skills.

ITSC 1416 – Linux Installation and Configuration

SEMESTER 1 ACTION ITEMS

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

SEMESTER 2 Total Hours: 15

ITSY 1400 - Fundamentals of Information Security

ITMT 2405 – Designing and Implementing a Server Infrastructure

SPCH 1321 – Business and Professional Communication This is a Core course.

ITSC 1425 – Personal Computer Hardware

SEMESTER 2 ACTION ITEMS

- 1. Meet with your success coach 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

ITSY 2442 - Incident Response and Handling

ITMT 1457 – Administering a Windows Server Operating System

ITSE 1429 - Programming Logic and Design

HUMANITIES/FINE ARTS ELECTIVE* This is a Core course.

SEMESTER 3 ACTION ITEMS

- 1. Meet with your success 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

ITSC 2425 - Advanced Linux

ITMT 2404 - Implementing an Advanced Server Infrastructure

SOCIAL/BEHAVIORAL SCIENCES ELECTIVE * This is a Core course.

CHOOSE ONE: ITSY 2400 - Operating System Security OR

ITSY 2486 - Internship-Computer and Information Systems Security

SEMESTER 4 ACTION ITEMS

- 1. Obtain Pentest+ Certification.
- 2. See a faculty advisor or your success coach for employment opportunities.
- 3. Review your degree plan and apply for the Cyber Security A.A.S.
- 4. Request final transcripts to be sent to NU.
- 5. Sign up for Commencement.
- 6. Join the Alumni Network!

DALLAS COLLEGE PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS

National University

For questions about the National University portion of this transfer pathway, contact the **Academic Advising Office at (855) 355-6288 or advisor@nu.edu**. It is best to apply to National University a full semester before you plan to transfer. It will help if you submit a copy of this pathway with your application. Each class at National University is one month (4 weeks) long. Students take one class per month. Students can complete 6 courses during each semester. Each class is 4.5 quarter units, which is equivalent to 3 semester units at Dallas College. See catalog for official degree requirements.

BACHELOR OF SCIENCE IN CYBERSECURITY

SEMESTER 1 Total Hours: 27 quarter units

CYB 204 – Operating System Fundamentals (4 weeks)

CYB 206 – Introduction to Cybersecurity (4 weeks)

CYB 213 – Data Fundamentals for Cybersec (4 weeks)

CYB 215 – Fund of Virt and Cloud Comp (4 weeks)

CYB 216 - Programming for Cybersecurity (4 weeks)

CYB 320 - Tech Writing/Proj Mgmt for CYB (4 weeks)

SEMESTER 2 Total Hours: 27 quarter units

CYB 331 - Secure Linux System Admin (4 weeks)

CYB 332 - Secure Windows Administration (4 weeks)

CYB 333 – Security Automation (4 weeks)

CYB 340 – Sys Sec Arch for Cybersec (4 weeks)

^{*} There are several options to fulfill this requirement. See your success coach for a specific list.

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CYB 420 – Sec Audit and Assessments (4 weeks) CYB 450 – Cyber Threat Intelligence (4 weeks)

SEMESTER 3

CYB 451 - Incident Handling/Response (4 weeks)

CYB 452 – Intro to Ethical Hacking (4 weeks)

CYB 453 – Network Defense (4 weeks)

CYB 454 – Cybersec Planning and Policy (4 weeks)

CYB 499A - Cybersecurity Project I (4 weeks)

CYB 499B – Cybersecurity Project II (4 weeks)

SEMESTER 4

Total Hours: 27 quarter units

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CYB 499C - Cybersecurity Project III (4 weeks)

One Concentration or Upper Division Elective course (4 weeks)

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One Upper Division General Elective course (4 weeks)

Please see program catalog for the BSCYB Concentration, Upper Division Elective, and General Education Upper Division courses.

Note: In addition to Preparatory, Major Core, and Upper Division/Concentration Courses for the **Bachelor of Science in Cybersecurity** at National University, all students are required to complete 70.5 quarter units of General Education. Students completing the **Associate of Applied Science in Cyber Security with Emphasis in System Security Administration** at Dallas College will need to complete an additional estimated 51 quarter units (34.5 semester units) of GE to meet program and unit requirements. For more information, please see National University's catalog.

NATIONAL UNIVERSITY PATHWAY TOTAL: 108 QUARTER UNITS

BACHELOR OF SCIENCE DEGREE MINIMUM: 180 QUARTER UNITS

(Transfer Pathway Approved 9.8.2021 by National University)