

STEM

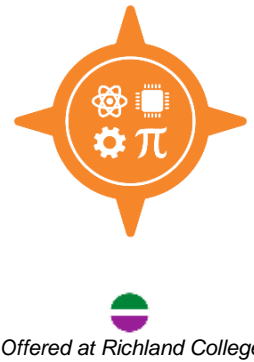
GUIDED PATHWAY: CYBER SECURITY AAS–CYBER DEFENSE EMPHASIS

For more information, visit www.dcccd.edu/cybersecurity and your academic advisor at Richland College.

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 (AAS) degree in Cyber Security ⁱⁱ. For official degree requirements, [click here](#).

The AAS 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. Gainful employment information for this degree can be found at www.dcccd.edu/gainfulemp Courses that complete the Degree (D) are noted below.

Visit www.ntxccc.org/pathways to view guided pathways created for students who complete an AAS degree and the options for transfer to complete a Bachelor of Applied Arts and Science. Speak with an academic advisor at your college to choose courses that will help you to transfer to a specific university.



COLLEGE READINESS REQUIREMENTS

Enrolling in one or more courses may be necessary if assessment activities and previous academic experiences indicate a need for additional knowledge and skills:

READING & WRITING PLACEMENT

MATH PLACEMENT

ENGLISH LANGUAGE PROFICIENCY

TSI READING MET: YES NO
TSI WRITING MET: YES NO

TSI MATH MET: YES NO

ENGLISH PROFICIENCY: YES NO

IF TSI OR ENGLISH LANGUAGE PROFICIENCY NOT MET, INSERT COURSE(S) NEEDED

DREA / DWRI / DIRW (CIRCLE ONE)

DMAT _____

ESOL _____

OTHER: _____

OTHER: _____

OTHER: _____

Exemptions/waivers may exist. Speak with an academic advisor regarding placement in college readiness courses and your ability to enroll in core academic coursework.

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

All maps can be modified to fit the needs of part-time students

D	SEMESTER 1	ACTION ITEMS
♦	ENGL 1301 – Composition I ^{iv} (core course)	<input type="checkbox"/> Meet with your advisor to confirm academic and career goals before the end of the semester. <input type="checkbox"/> Meet with a career advisor or coach to research your career options. <input type="checkbox"/> Attend an industry related meetup group. <input type="checkbox"/> Get certified in Redhat or Linux+.
♦	ITCC 1414 – CCNA 1: Introduction to Networks	
♦	MATH 1314 – College Algebra ^{iv} (core course)	
♦	ITSC 1416 – Linux Installation and Configuration	
♦	POFI 1104 – Computer Fundamentals ^v	
TOTAL SEMESTER CREDIT HOURS: 15		
D	SEMESTER 2	ACTION ITEMS
♦	ITSY 1400 – Fundamentals of Information Security	<input type="checkbox"/> Meet with your advisor to request an official program of study audit, confirm or update your academic and career path and program of study. <input type="checkbox"/> Obtain Security+ certification. <input type="checkbox"/> Attend an industry related meetup group. <input type="checkbox"/> Participate in Cyber Security club meetings and competitions.
♦	ITMT 2405 – Designing and Implementing a Server Infrastructure	
♦	ITCC 1440 – CCNA 2: Routing and Switching Essentials	
♦	SPCH 1321 – Business and Professional Communication (core course)	
TOTAL SEMESTER CREDIT HOURS: 15		
D	SEMESTER 3	ACTION ITEMS
♦	ITMT 1457 – Administering a Windows Server Operating System	<input type="checkbox"/> Meet with a career advisor or coach for assistance in preparing for job search. <input type="checkbox"/> Obtain CySA+ certification. <input type="checkbox"/> Attend an industry related meetup group. <input type="checkbox"/> Participate in Cyber Security club meetings and competitions. <input type="checkbox"/> Meet with a faculty regarding internship opportunities.
♦	ITSY 1442 – Information Technology Security	
♦	ITSE 1429 – Programming Logic and Design	
♦	Humanities/Fine Arts Elective ^{vi} (core course)	
TOTAL SEMESTER CREDIT HOURS: 15		
D	SEMESTER 4	ACTION ITEMS
♦	ITSY 2401 – Firewalls and Network Security	<input type="checkbox"/> Obtain Pentest+ Certification. <input type="checkbox"/> See faculty or career services for employment opportunities. <input type="checkbox"/> Review your degree plan and apply for graduation. <input type="checkbox"/> Sign up for commencement. <input type="checkbox"/> Join the Alumni Network!
♦	ITSC 2425 – Advanced Linux	
♦	ITSY 2472 – Ethical Hacking and System Defense OR ITSY 2486 – Internship-Computer and Information Security	
♦	Social/Behavioral Sciences Elective ^{vi} (core course)	
TOTAL SEMESTER CREDIT HOURS: 15		
AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS		

ⁱ Degree plans may change in later catalogs. You may use this pathway if you entered one of the seven colleges on or before this date.

ⁱⁱ Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by Richland College.

ⁱⁱⁱ This is not an official degree plan. For official degree requirements, [click here](#).

^{iv} You must earn a grade of "C" or better in English 1301 and MATH 1314.

^v Students must choose Word Processing Skills or Spreadsheet Skills.

^{vi} There are several options to fulfill this requirement. See your academic advisor for a specific list.