



Cybersecurity Certificate

This one-year and fully online certificate provides graduates with the skills needed to defend networks and information systems against cyber-attacks. Students receive extensive hands-on experience and develop the knowledge and abilities necessary to succeed in the protection of an organization's data and operations. It is a rigorous program designed to help students master cybersecurity fundamentals by applying industry-accepted and emerging practices to solve real-world security problems. Upon completing the program, students will be able to evaluate security trends, recognize best practices, and understand Information Technology security products and threats.

Total Units: 29.5

First Year

Semester 1

7 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*
CISC 310¹ Z Introduction to Computer Information Science	3	Advisory: familiar with basic functions of word process, spreadsheet, web browser software applications	F(O), S(O), Su(O)
CISC 360² Z Information & Communication Technology Essentials (A+)	4	Advisory: CISC 302 & 310	F(O,P)

Z At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

¹ or CompTIA IT Fundamentals

² or COMPTIA A+

Semester 2

6.5 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*
CISN 304¹ Networking Technologies	3	Advisory: CISC 310	F(O,P), S(O)
CISN 341² Z CISCO Networking Academy (CCNA) tm : Networking Theory and Routing Technologies	3.5	Co-req: CISN 304	F(O)

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Career

Options/Outlook:

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses. **Career opportunities may require more than two years of college study.**

A sample of reported job titles:

Security analyst, network system security administrator, security policy analyst, information security analyst, data security administrator information security officer, information security specialist, information system security analyst, IT security analyst, IT specialist, network security analyst.

Projected job openings in US (2021-2031):

19,500

Projected growth in US (2021-2031):

35% growth

Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

¹ or CompTIA Network+

² or CISCO CCENT

Year 2

Semester 3

6 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISN 300 Network Systems Administration	3	Advisory: CISC 310	S(O), Su(O)
CISS 310 Network Security Fundamentals	3	Advisory: CISN 300 & 304	F(O), S(O), Su(O)

Semester 4

10 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CISS 316¹ Z Cisco Networking Academy™: CCNA Cybersecurity Operations	3	Advisory: CISN 304 & CISS 310	Check Class Schedule for offering
CISS 327² Z Cisco Networking Academy™: CCNA Security: Implementing Network Security	3.5	Advisory: CISN 304 & CISN 341	Check Class Schedule for offering
CISN 342² Z CISCO Networking Academy (CCNA)™: Enterprise Networking, Security, and Automation	3.5	CISN 341	Check Class Schedule for offering

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^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

*(O) = online available (P) = partially online

1 or CCNA CyberOPS

2 or CCNA Security

Median Salary in California with advanced degree (2021):

\$102,600/yr

Source:

<https://www.onetonline.org/link/summary/15-1122.00>

About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course

availability or financial aid applicability.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.