



Cybersecurity and Information Assurance A.S. Degree

This program prepares IT professionals to apply knowledge and experience in risk management and digital forensics to safeguard infrastructure and secure data through continuity planning and disaster recovery operations. Courses deliver proven methods for information security using software analysis techniques, cloud management, and networking strategies to prevent, detect, and mitigate cyber attacks. This program also provides preparation for several nationally recognized, high-demand certifications in the field of Cybersecurity.

Total Units: 69-70

First Year

Semester 1

12-13 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
CISC 310 ^(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)	CRC Area II(b) & III(b)
CRC Area II(a)-Writing Competency ^(Z)	3	Recommend meeting with a counselor	F, S, Su	CRC Area II(a)
CRC Area II(b)-Math Competency ¹ ^(Z)	3-4	Recommend meeting with a counselor	F, S, Su	CRC Area II(b)
CRC Area V(b)-Social & Behavioral Sciences ^(Z)	3		F, S, SU	CRC Area V(b)

^(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 Suggestion- MATH 400 Calculus I (5 units); Pre-req: MATH 370; F, S, Su

Semester 2

15.5 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
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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

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISC 360 ^Z Information & Communication Technology Essentials (A+)	4	Advisory: CISC 302 & 310	F(O), S(O), Su(O)	
CISN 300 Network Systems Administration	3	Advisory: CISC 310	F(O), S(O), Su(O)	
CISN 304 Networking Technologies	3	Co-req: CISC 323 & 356; Advisory: CISC 302, 308, or 310	F(O), S(O)	
CISC 323 Linux Operating System	1		Check Class Schedule for offering	
CISC 356 Introduction to Local Area Networks	1.5		Check Class Schedule for offering	
CISS 310 Network Security Fundamentals	3	Advisory: CISN 300 & 304	F(O), S(O)	

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Year 2

Semester 3

15.5 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISS 315 Ethical Hacking	3	CISS 310; Advisory: CISS 300	F(O)	
CISS 316 ^Z Cisco Networking Academy™: CCNA Cybersecurity Operations	3	Advisory: CISN 304 & CISS 310	F(O)	
CISN 341 ^Z CISCO Networking Academy (CCNA)™: Networking Theory and Routing Technologies	3.5	CISN 304	F(O)	
CISS 350 Disaster Recovery	3	CISS 310	F(O)	
CISS 353 Management of Information Security	3	CISS 310	F(O)	

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Median Salary in California with advanced degree (2021):

\$102,600/yr

Source:

<https://www.onetonline.org/link/summary/15-1212.00?redir=15-1122.00>

Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

General Education (GE):

Non-specified GE courses identified by CRC Area, CSU Area or IGETC Area without pre- or co-requisite can be taken at any semester.

Honors option:

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

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):

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

Semester 4

13 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISS 321 ^Z Scripting for Cyber Security	3	CISS 315; Advisory: CISN 304 or 341	S(O)	
CISN 342 ^Z CISCO Networking Academy (CCNA)™: Enterprise Networking, Security, and Automation	3.5	CISN 341	S(O)	
CISS 327 ^Z Cisco Networking Academy™: CCNA Security: Implementing Network Security	3.5	Advisory: CISN 304 & CISN 341	S(O)	
CISS 360 Computer Forensics and Investigation	3	CISS 310	S(O)	

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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.

Year 3

Semester 5

13 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CRC Area III(a)-Physical Edu Activity ^Z	1		F, S, Su	CRC Area III(a)
CRC Area IV-Natural Sciences ^Z	3		F, S, Su	CRC Area IV
CRC Area V(a)-American Institutions ^Z	3		F, S, Su	CRC Area V(a)
CRC Area VI-Ethnic/Multicultural Studies ^{1 Z}	3		F, S, Su	CRC Area VI
CRC Area I-Humanities ^{2 Z}	3		F, S, Su	CRC Area I

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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 Suggest selecting a course that will meet both Area V(b) and VI.

² Suggestion-PHIL 310 Intro to Ethics (3 units); F, S, Su

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Counselor Contact: Chris Torres or Ea Edwards | Faculty Contact: Wendell Fishman