



Cybersecurity and Information Assurance A.S. Degree - CalGETC

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: 68-70

First Year

Semester 1

16-18 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
CISC 310 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 360 Information & Communication Technology Essentials (A+)	4	Advisory: CISC 302 & 310	F(O), S(O), Su(O)	
CalGETC Area 1A-English Composition	3	Recommend meeting with a counselor	F, S, Su	Cal-GETC Area 1A
CalGETC Area 2-Math & Quantitative Reasoning¹	3-5	Recommend meeting with a counselor	F, S, Su	Cal-GETC Area 2
CalGETC 3A-Arts	3		F, S, Su	Cal-GETC Area 3A

¹ Suggestion- MATH 400 Calculus I (5 units); Pre-req: MATH 370; F, S, Su

Semester 2

18 Units

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

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISN 300¹ Network Systems Administration	3	Advisory: CISC 310	F(O), S(O), Su(O)	
CISN 304² Networking Technologies	3	Co-req: CISC 323 & 356; Advisory: CISC 302, 308, or 310	F(O), S(O)	
CISS 310³ Network Security Fundamentals	3	Advisory: CISN 300 & 304	F(O), S(O)	
CalGETC Area 1B-Critical Thinking & Composition	3		F, S, Su	Cal-GETC Area 1B
CalGETC Area 3B-Humanities	3		F, S, Su	Cal-GETC Area 3B
CalGETC Area 4-Social & Behavioral Science	3		F, S, SU	Cal-GETC Area 4

¹ or Microsoft AZ-800 certification

² or CompTIA Network+ certification

³ or CompTIA Security+ certification

Year 2

Semester 3

18 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISS 315 Ethical Hacking	3	CISS 310; Advisory: CISS 300	F(O)	
CISS 321 Scripting for Cyber Security	3	CISS 315; Advisory: CISN 304 or 341	S(O)	
CISS 350 Disaster Recovery	3	CISS 310	F(O)	

Projected growth in US (2021-2031):

35% growth

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 or Cal-GETC Area without pre- or co-requisites 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.

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CalGETC Area 1C-Oral Communication	3		F, S, Su	Cal-GETC Area 1C
CalGETC Area 4-Social & Behavioral Sciences	3		F, S, Su	Cal-GETC Area 4
CalGETC Area 6-Ethnic Studies	3		F, S, Su	Cal-GETC Area 6

Semester 4

16 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CISS 353 Management of Information Security	3	CISS 310	Check Class Schedule	
CISS 360 Computer Forensics and Investigation	3	CISS 310	S(O)	
CISW 375 Security for Web Development	3	Advisory: CISW 410	Check Class Schedule	
CalGETC Area 5A-Physical Science	3		F, S, Su	Cal-GETC Area 5A
CalGETC Area 5B-Biological Science	3		F, S, Su	Cal-GETC Area 5B
CalGETC Area 5C-Lab	1		F, S, Su	Cal-GETC Area 5C

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.