

A.S./ Certificate: IT Cybersecurity 24-25



ABOUT THIS MAJOR

Students who complete the IT Cybersecurity Associates degree will become more knowledgeable and enhanced employability in cybersecurity and computer networking. The IT Cybersecurity

Associates degree prepares students for a career working with associate-level cybersecurity analysts within security operations centers, including detecting cybersecurity breaches and effectively responding to security incidents. For more information, visit the [Social and Behavioral Sciences](#) division.

TO EARN A DEGREE A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of 60-semester units
- [2] Completion of General Education Requirements
- [3] Minimum grade point average of 2.0
- [4] A C or better in all courses required for the major

Residency: Minimum of 12 units completed at AVC with a minimum of 9 of those units completed from the certificate/major. (credit earned by examination will not be included in these 12 units) Title 5, Section 54000: <http://ccr.oal.ca.gov>.

*To earn **Certificate only**: only the major & program electives courses are required and a must earn a minimum grade point average of 2.0

AS - IT Cybersecurity [Total Units 31]

Required Courses (25 units)	
CA107 - Microcomputer Hardware and Software Support	4
CA157 - Introduction to Linux	3
CA165 - Digital Forensics Fundamentals	3
CA170 - Virtualization and Cloud Essentials	3
CA171 - Introduction to Networking	3
CA175 - Administering Windows Server	3
CA182 - Network Security	3
CA183 - Security Countermeasures	3

Program Electives- Complete (6 units) from the following:	
CA159 - SUSE Linux Server Administration	3
CA166 - Cloud Security Fundamentals	3
CA176 - Windows Server Networking	3
CA179 - Cybersecurity Operations -CCNA-Cyberops	3
CA185 - Network Security - Firewalls and VPNs	3

RECOMMENDED PATHWAY AS-IT Cybersecurity

The Recommended Plan of Study is determined by the discipline faculty. All **Program Electives** for the Major and **General Education** Courses, Areas A-F, are recommended only. Except for ENGL 101, you can make other selections for this area if you choose ([See back page for options](#)).

- [*] = Courses will fulfill the completion requirements for Major & Gen Ed I
- [#] recommended courses may select other options.
- **Electives** are courses that count toward your credits for graduation, but not specific to degree of study
- Take classes in **Summer** or **Intersession** if needed to complete your degree in a timely manner
- Fall/Spring: Max 19 units, 12-15 units Recommended.

TERM 1	
Course	Units
CA 157	3
CA 107	4
AVC Gen-Ed- AREA D1: ENGL 101	3
AVC Gen Ed- AREA E: #HD 101	3
Total Units	13

TERM 2	
Course	Units
CA 170	3
CA 171	3
CA 165	3
AVC Gen Ed- AREA D2: #MATH 115	4
Total Units	13

SUMMER TERM 1	
Course	Units
AVC Gen Ed- AREA B: # POLS 101	3
AVC Gen Ed- AREA C: # MUS 101	3
Total Units	15

TERM 3	
Course	Units
CA 175	3
CA 182	3
CA 183	3
AVC Gen Ed- AREA A: #BIOL 104	3
Elective	1
Total Units	13

TERM 4	
Course	Units
CA 166	3
CA 179	3
AVC Gen Ed- AREA F: #BUS 212	3
Elective	3
Elective	3
Total Units	15

COUNSELING NOTE SECTION

Prerequisite: If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade to enroll in the next course. A satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop. Title 5, Section 55200(d)

AVC 24-25 CATALOG: [ACADEMIC POLICIES](#)

INFORMATION and RESOURCES

Tutoring Assistance	Career Center	AVC Student Health Services
Transfer Center	Office of Students with Disabilities	Palmdale Center
Basic Needs	Financial Aid	Counseling Division

The State requires ALL STUDENTS to have a Comprehensive Education Plan. You MUST make a counseling appointment as soon as enrollment is established to receive your plan. Stop by the Counseling Center or call 661-722-6300 x 6338 to schedule an appointment.

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2024-2025 AVC General Education Requirements

Advising Form Effective Fall 2024 - Summer 2025

GE AREA	COMPLETED	IN PROGRESS	NEED	<p>The requirements for an AA or AS degree include the following:</p> <ol style="list-style-type: none"> A minimum of 60 semester units; with at least 12 semester units completed in residence at AVC for an AA/AS degree (credit earned by examination will not be included in these 12 units); maximum of 12 pass/no-pass credit units can be accepted towards an AA/AS degree. Refer to each individual program for major requirements. All major courses as specified in the AVC catalog <u>must</u> be completed with a grade of "C" or better. An overall grade point average (GPA) of 2.0 ("C" average) is required. <p>Double counting: While a course may satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement.</p> <p>Prerequisite: If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order to enroll in the next course. A satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop. <i>Title 5, Section 55200(d)</i></p> <p>At least 3 units from each of the following areas below: A, B, C, D1, D2, E, and F. Minimum Total GE Units Required 21</p> <p style="text-align: center;">Legend: () = Newly Approved, Effective Fall 2024</p>
AREA A: NATURAL SCIENCES-Select at least 3 units				
A			<p>ANTH 101,(101H); ASTR 101,(101H); BIOL 100, 101*#, 101L*#, 102, 103, 104, (104H),110, 120, 201, 202, 204, 205; CHEM 101, 102, 110, 120, 210, 220; ELTE 101; ERSC 101; GEOG 101, 102; GEOL 101,(101H), 102; PHYS 101, 102, 110, 120, 211; PSCI 101 *#BIOL 101 & 101L must be taken concurrently</p>	
AREA B: SOCIAL & BEHAVIORAL SCIENCES-Select at least 3 units				
B			<p>AJ 201, 204, 206; ANTH 102, 103, 110, 112,(112H), 140; BUS 101, 212; CFE 102, 103; COMM 217; DFST 105, 106, 110; ECON 100, 101,(101H), 102,(102H), 110; GEOG 105, 106, 110; HIST 101, 102, 104, 105, 107,(107H), 108, (108H),110, (110H), 111,(111H), 113, 114, 116, 118, 119; POLS 101, (101H),103, 200, 201, 202, 203; PSY 101,(101H) 200, 201, 212, 230, 232, 233, 234, 235, 236; SOC 101,(101H), 105, 110, 111, 112, 115, 116, 120, 200</p>	
AREA C: HUMANITIES-Select at least 3 units				
C			<p>ART 100, 101,(101H),102, 103, 104, 106, 110, 113, 120, 132, 135, 136, 137, 140, 145, 150, 163, 170, 210, 213; CHIN 101, 102, 201, 202; COMM 112, 114, 214, 217, 219; DA 101; DFST 101, 102, 105, 106, 201, 202; ENGL 102, 111, 112, 221, 222, 225, 227, 230, 231, 235, 242, 253,(253H), 256, 257, 259, 265, 279 ; FREN 101, 102, 201, 202, 203; FTV 101, 103, 107, 108, 201, 203, 241, 251, 261; GER 101, 102, 201, 202 ; HIST 101, 102, 104, 105, 107,(107H), 108,(108H), 110,(110H), 111,(111H), 113, 115, 118, 119; LATN 101, 102, 201; MUS 101,(101H), 105,(106),(110), 111, 121, 131, 132, 151, 153, 185, 231, 232, 251A, 251B, 253A, 253B; MUSC 102, 103, 107,108, 109,(109); NF 150; PHIL 105,(105H), 106, 108, 109 (130), (140); PHOT 107; PHTC 101, 150, 201; SPAN 101, 110SS, 102, 201, 202, 210SS, 220SS; THA 101,(101H), 102, 103, 110, 115A, 115B, 116A, 116B, 117A, 117B, 118A, 118B, 121A, 121B, 130, 133, 225, 239, (239H)</p>	
AREA D: LANGUAGE AND RATIONALITY Select 3 units from (1) and 3 units from (2). <u>Grade of "C" or better required in Area D1</u>				
D1			<p>D1 Academic Composition: ENGL 101, (101H)</p>	
D2			<p>D2 Communication and Analytical Thinking: BUS 113; CA 103; CS 120, 121, 122, 123; COMM 101,(101H), 107, 109, 112, 114, 115, 201, 217, 219; ENGL 102,(102H), 103,(103H); GEOG 201, 205;MATH, 110, 115,(115H), 116, 120, 124, 128, 135, 140, 148, 150,(150H), 160, 220, 230, 250; PHIL 101, 106, 110, 201,(210)</p>	
AREA E: ADDITIONAL BREADTH Select 3 units from Areas A, B, C, D2, or E *Courses must be taken from a discipline not previously selected				
E			<p>DA 111; HD 100, 101, 102, 103, 105; HE 101, 120, 201; KINT 100; LIB 107, 110; NF 100, 102, 103, 110 Any DA activity course(s) from DA 102-205, <u>except</u> DA 107A-C, 108, 109, and 111 Any Kinesiology Fitness (KINF) activity course, Intercollegiate Athletics (IATH) activity course, or up to 4 units for military experience</p>	
AREA F: DIVERSITY STUDIES-Select 3 units				
F			<p>ANTH 102, 112,(112H); BUS 212; CFE 116; COMM 114, 217, 219; DFST 105, 106 ; ECON 110 ; ENGL 250, 253,(253H), 256, 257, 259; ETHN (110),(111), (112),(113), 257EN;FTV 201, 203; HE 201; HIST 110, (110H),111, (111H), 113 ; MUSC 107, 108; POLS 202; SOC 105, 110, 116; THA 239, (239H)</p>	