Certificate/Associates Degree (AS) - IT Cybersecurity 23-24
Recommended Plan of Study - Counseling

Term 1 (Fall/Spring: Max. 19 units, 12-15 units recommended)	Units
Prog. Elective: CA 107, Microcomputer Hardware & Software Support	4
CA 157, Introduction to Linux	3
AVC G.E. Area D1 ENGL 101	3
AVC G.E. Area E #HD 101	3
Electives: #BIP 110, 120, 130	3
#Recommended Total	16

Term 2 (Fall/Spring: Max. 19 units, 12-15 units recommended)	Units
CA 170, Virtualization and Cloud Essentials	3
CA 171, Introduction to Networking	3
AVC G.E. Area D2 #Transfer Level Math	4
Electives: #CA 153	3
Total	13

Term 3 - Summer: Max. 15 units, 12 units recommended	Units
AVC G.E. Area C #MUSC 101	3
AVC G.E. Area B #POLS 101	3
AVC G.E. Area F #BUS 212	3
Total	9

Term 3 (Fall/Spring: Max. 19 units, 12-15 units recommended)	Units
CA 175, Administering Windows Server	3
CA 182, Network Security - CCNA Security	3
CA 183, Security Counter Measures	3
AVC G.E. Area A #BIOL 104	3
Total	12

Term 4 (Fall/Spring: Max. 19 units, 12-15 units recommended)	Units
#CA 165+, Digital Forensics Fund. or CA 166, Cloud Security Fund.	3
Prog. Electives: # CA 179, Cybersecurity Operations - CCNA-	3
Prog. Electives: # CA166, Cloud Security Fundamentals	3
Elective #CA185 - Network Security - CCNA Security	3
Total	12

Graduate

Take Summer classes if needed to complete the program in a timely manner.

The state requires **all students to have a Comprehensive Educational Plan.** Make a counseling appointment **as soon as enrollment is established on any term. Come by the Counseling Center or call. Online Counseling is available: https://www.avc.edu/studentservices/counseling**

IT Cybersecurity Certificates Required Courses:	Units
CA 157, Introduction to Linux (Formerly CIS 157)	3
CA 165+, Digital Forensics Fundamentals *or*	3
CA 166, Cloud Security Fundamentals	
CA 170, Virtualization and Cloud Essentials	3
CA 171, Introduction to Networking	3
CA 175, Administering Windows Server	3
CA 182, Network Security	3
CA 183, Security Counter Measures	3
21 units for the certificate, 30 units for the degree - Total Units:	21

Program Electives: (complete 9 units for the Major only)

CA 107, Microcomputer Hardware and Software Support	3
CA 131, Relational Database Management and Design	3
CA 159, SUSE Linux Server Administration	3
CA 165, Digital Forensic Fundamentals	3
CA 166, Could Security Fundamentals	3
CA 176, Windows Server Networking	3
CA 179, Cybersecurity Operations -CCNA-Cyberops	3

Other Requirements:
• Minimum grade of "C" required on each course
• Refer to catalog or online website for course listings and descriptions
• A maximum of 6 pass/no pass units will be accepted for this certificate
• Maximum of 12 pass/no-pass units accepted for the Degree
• Minimum of 9 units must be completed at AVC for the major/certificate
• Refer to catalog or online website for course listings and descriptions
• Substitutions, with prior permission, may be made for certain courses that may not be offered in a two-year period.

AS General Education: 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

Area A Natural Sciences: (min. 3 units)

ANTH 101, 101L
ASTR 101+, 101L+
BIOL 100, 101+, 101L+, 102, 103, 104, 110+, 120+, 201+, 202+, 204+, 205+
CHEM 101+, 102+, 110+, 120+, 210+, 220+
ELTE 101
ERSC 101+
GEOG 101+, 101L+, 102, 102L+
GEOL 101+, 101L+, 102+, 102L+
PHYS 101, 102+, 110+, 120+, 211+
PSCI 101

Area B Social & Behavioral Sciences: (min. 3 units)

AJ 201, 204, 206
ANTH 102, 103, 110, 112, 140
BUS 101, 212
CFE 102, 103+
COMM 217+
DFST 105, 106, 110
ECON 100, 101+, 102+, 110
GEOG 105, 106, 110
HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 114, 116+, 118, 119
POLS 101, 103, 200, 201+, 202+, 203+
PSY 101, 200+, 201+, 212+, 230+, 232, 233+, 234+, 235+, 236+
SOC 101, 105, 110, 111, 112, 115, 116, 120, 200+

Area C Humanities: (min. 3 units)

ART 100, 101, 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+, 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, 108, 110, 111, 113, 115, 118, 119
LATN 101, 102+, 201+
MUS 101, 105, 111, 121+, 131, 132+, 151+, 153+, 185+, 231+, 232+, 251A+, 251B+, 253A+, 253B+
MUSC 102, 103, 107,108, 109
NF 150
PHIL 105, 106, 108, 109
PHOT 107
PHTC 101, 150+, 201+
SPAN 101, 110SS, 102+, 201+, 202+, 210SS+, 220SS+
THA 101, 102, 103, 110, 115A, 115B+, 116A+, 116B+, 117A+, 117B+, 118A+, 118B+, 121A, 121B, 130, 133, 225+, 239

Area D Language & Rationality: (min. 3 units from (1) and 3 units from (2))

1. *Academic Composition:* Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing.
    ENGL 101+

2. Communication and Analytical Thinking

BUS 113+

CA 103

CS 120, 121, 122, 123

COMM 101, 107, 109, 112, 114, 115, 217+, 219+

ENGL 102+, 103+

GEOG 201, 205

MATH 110+, 115+, 116+, 120+, 124+, 128+, 135+, 140+, 148+

150+, 160+, 220+, 230+, 250+

PHIL 101, 106, 110, 201+

Area E - Additional Breadth: (min. 3 units)

From areas A**, B**, C**, D2,** or

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 DA102-205, except 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.

*** Courses must be taken from a discipline not previously selected.**

Area F Diversity Studies: (min. 3 units)

ANTH 102, 112	FTV 201, 203
BUS 212	HE 201+
CFE 116+	HIST 110, 111, 113
COMM 114, 217+, 219+	MUSC 107, 108
DFST 105, 106	POLS 202+
ECON 110	SOC 105, 110, 116
ENGL 250+, 253+, 256+, 257+, 259+	THA 239

Proficiency Requirements

Proficiency requirements exist for the areas of Writing and Math. Students must demonstrate competency in each of these areas in order to be eligible for the associate degree.

A. WRITING

Completion of ENGL 101 with a minimum grade of "C." NOTE: ENGL 101 may be taken with the Pass/No Pass option; however, students are cautioned that other colleges and universities may not accept ENGL 101 courses taken on a Pass/No Pass basis, especially for satisfaction of general education and major

B. MATHEMATICS

Completion of MATH 102 or higher or CIS 121 with a satisfactory grade or placement by AVC assessment into a math course higher than MATH 102.

***Fulfilling proficiencies** will not require any extra units if the competencies are demonstrated by including the required courses in the general education, or major requirements, or by satisfying the reading proficiency through AVC's policy.

Electives: The remaining number of units (up to a minimum of 60) are considered electives. Any course that has already been counted toward (1) the general education requirements, or (2) the major, cannot be used as an elective. Any course with a designation of "AVC" at the end of a course description can be used as an elective.

Grade Point Average Requirement: An overall grade point average of 2.0 ("C" average) is required.

Double Counting: While a course might 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.

Students who complete the IT Cybersecurity certificate have enhanced employability in cyber security and computer networking, and in a similarly titled positions. The IT Cybersecurity certificate prepares students to begin a career working with associate-level cybersecurity analysts within security operations centers where responsibilities include detecting cybersecurity breaches and effectively responding to security incidents.

• **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

Requirements for Two or More Associate Degrees: To be eligible for multiple associate degrees, a student must have completed all of the graduation requirements for each degree.

Transfer: Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center or the Counseling Center and consult with a counselor as soon as possible to develop a plan of studies. Additional preparation for the major information on official transfer articulation agreements from AVC to many CSU/UC campuses can be found at the following Web site: www.assist.org

The "**Catalog Rights Policy**" sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor.

Advisory: A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

Prerequisite: A condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites are enforced and a student will be blocked from enrolling or involuntarily dropped after enrolling if the student does not meet the stated prerequisite. A student must complete a course prerequisite with a satisfactory grade of A, B, C or P (pass).

Corequisite: A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. Corequisites are enforced and a student will be blocked from enrolling if the student does not