	SFBU Bachelor of Science in Computer Science (BSCS)						
	SFBU Degree Requirements	Required SFBU course or course category	Specific Antelope Valley College Course(s) (2021 – 2022 Catalog)	CSU GE Breadth ¹ equivalent	C-ID ² equivalent		
	English Language & Communications & Critical Thinking (12 semester credits)	ENGL101 Expository Writing	ENGL 101 College Composition	A2/A3	ENGL100		
		ENGL115 Public Speaking	COMM 101 Introduction to Public Speaking	A1	COMM 110		
		ENGL425 Modern American Literature	ENGL 222 American Literature, 1865– Present	C2	ENGL 135		
semester Units)		3 additional credits in area	Any course with a CSU GE A1, A2 and/or A3 designator	A1/A2/A3	n/a		
ster	Mathematics & Natural Sciences (16 semester credits in BSCS)	MATH201 Calculus I	MATH 150 Calculus & Analytic Geometry	n/a	MATH 210		
eme		MATH202 Calculus II	MATH 160 Calculus & Analytic Geometry	n/a	MATH 220		
(40 s		MATH203 Linear Algebra	MATH 220 Linear Algebra	n/a	MATH 250		
ments		MATH208 Probability and Statistics	MATH 115 Statistics or MATH 116 Introduction to Statistics Using R	n/a	MATH 110		
General Education Requirements (40		PHYS201/201L Physics I with Lab	PHYS 110 General Physics or A course with a CSU GE Breadth designator B1 or B2 (with B3 for lab) that earned at least 4 semester units	B1, B3	PHYS 205		
catic	Arts & Humanities (6 semester credits)	6 credits in area	Any course with a CSU GE C1 and/or C2 designator	C1/C2	n/a		
l Edu							
Genera	Social Sciences (6 semester credits)	6 credits in area	6 semester credits Any course(s) with CSU GE Breadth Area D	D	n/a		

 $^{^{\}rm 1}$ Courses without a CSU GE Breadth Designator will be evaluated individually $^{\rm 2}$ Courses without a C-ID designator will be evaluated individually

Major Course Requirements (65 credits BSCS)					
Core Course Requirements	BUS450 Professional and Technical Writing	ENGL 115 Introduction to Technical Communication	n/a	BUS 115	
(50 units BSCS)	CE305 Computer Organization	CIS 123 Assembly Language & Computer Architecture	n/a	COMP 142	
	CS200 Discrete Logic	CIS 121 Computer Mathematics	n/a	COMP 152	
	CS230/230L Linux & Shell Scripting/Lab	CA 157 Introduction to Linux (Meets CS230L requirement; SFBU lecture course needed for hour deficiency)	n/a	n/a	
	CS250/250L Introduction to Programming/Lab	CIS 111 Introduction to Programming & Algorithms or CIS 177 Introduction to Python Programming (Either meet CS250L requirement; SFBU lecture course needed for hour deficiency)	n/a	n/a	
	CS350/350L Data Structures/Lab	CIS 113 Data Structures (Meets CS350L requirement; SFBU lecture course needed for hour deficiency)	n/a	COMP 132	
	CS360/360L Programming in C and C++/Lab	CIS 161 Introduction to C Programming and CIS 173 Introduction to C++ Programming	n/a	COMP 122	
	CS457/457L Data Modeling & Implementation Tech/Database Technologies Lab	CA 132 Oracle SQL Database Management (Meets CS457L requirement; SFBU lecture course needed for hour deficiency)	n/a	n/a	
	CS480/480L Java and Internet Applications/ Java Programming Lab	CIS 175 Advanced Java Programming (Meets CS480L requirement; SFBU lecture course needed for hour deficiency)	n/a	n/a	
	P450 Career Development	HD 103 Career Planning	n/a	n/a	
	All other major course requirements not listed above (27 units)	No equivalent courses	n/a	n/a	
Specialization Course Requirement	CE450 Fundamentals of Embedded Engineering	ELTE 180 Microprocessor Systems	n/a	n/a	

(15 units BSCS)	CS470 Network Engineering and Management	CA 171 Introduction to Networking	n/a	n/a
	Complete three additional Specialization Courses (9 units)	No equivalent courses	n/a	n/a
Electives	15 semester credits in area	15 semester credits Any course identified as transferable to CSU or UC.	n/a	n/a

	SFBU Bachelor of Science in Business Administration (BSBA)					
SFBU Degree Requirements		Required SFBU course or course category	Specific Antelope Valley College Course(s) (2021 – 2022 Catalog)	CSU GE Breadth ¹ equivalent	C-ID ² equivalent	
	English Language & Communications & Critical Thinking (12 semester credits)	ENGL101 Expository Writing	ENGL 101 College Composition	A2/A3	ENGL100	
ts)		ENGL115 Public Speaking	COMM 101 Introduction to Public Speaking	A1	COMM110	
·Uni		ENGL425 Modern American Literature	ENGL 222 American Literature, 1865– Present	C2	ENGL 135	
semester Units)		3 additional credits in area	Any course with a CSU GE A1, A2 and/or A3 designator	A1/A2/A3	n/a	
	Mathematics & Natural Sciences (9 semester credits in BSBA)	MATH208 Probability and Statistics	MATH 115 Statistics or MATH 116 Introduction to Statistics Using R	n/a	MATH 110	
General Education Requirements (36		PHYS 101 Introduction to Physical Sciences	PHYS 101 Introductory Physics <u>or</u> transfer courses acceptable in lieu of: Physical Sciences or Biological Sciences (CSU areas B1, B2 or IGETC areas 5A, 5B)	B1, B2	n/a	
		3 additional credits in area	Any course with a CSU GE Breadth designator B1, B2, B3, and/or B4	B1/B2/B3/ B4	n/a	
al Educ	Arts & Humanities (6 semester credits)	6 credits in area	Any course with a CSU GE C1 and/or C2 designator	C1/C2	n/a	
Genera	Social Sciences (9 semester credits)	9 credits in area	9 semester credits Any course(s) with CSU GE Breadth Area D	D	n/a	
	Major Course Requirements (60 credits BSBA)					
	e Course	ACC110 Financial Accounting I	ACCT 201 Financial Accounting	n/a	ACCT 110	
	quirements credits BSBA)	BAN199 Excel for Finance, Accounting & Analytics	BIP 112 MS Excel I and (BIP 122 MS Excel II or CA 121 Microcomputer Spreadsheets)	n/a	n/a	

 $^{^{\}rm 1}$ Courses without a CSU GE Breadth Designator will be evaluated individually $^{\rm 2}$ Courses without a C-ID designator will be evaluated individually

	BLAW310 Introduction to Business Law	BUS 201 Business Law	n/a	BUS 125
	BUS450 Professional & Technical Writing	ENGL 115 Introduction to Technical Communication	n/a	n/a
	ECON201 Principles of Macroeconomics	ECON 101 Principles of Macroeconomics	n/a	ECON 202
	ECON202 Principles of Microeconomics	ECON 102 Principles of Microeconomics	n/a	ECON 201
	IT221 HTML & CSS Web Page Construction	DM 127 Web Design & Production I	n/a	n/a
	MGT310 Principles of Management	MGT 101 Principles of Management	n/a	n/a
	MKT310 Principles of Marketing	MKTG 101 Principles of Marketing	n/a	n/a
	P450 Career Development	HD 103 Career Planning	n/a	n/a
	All other major course requirements not listed above (18 units)	No equivalent courses	n/a	n/a
Specialization Course Requirement (15 units BSBA)	CPT401 Curricular Practicum	BUS199 Occupational Work Experience or MGT199 Occupational Work Experience or MKTG199 Occupational Work Experience	n/a	n/a
	CPT402 Curricular Practicum	BUS199 Occupational Work Experience or MGT199 Occupational Work Experience or MKTG199 Occupational Work Experience	n/a	n/a
	IT223 SQL & Relational Databases	CA 132 Oracle SQL Database Management	n/a	ITIS 180
	IT335 Python Introduction for Commerce	CIS 177 Introduction to Python Programming	n/a	ITIS 180
	Complete two additional Specialization Courses (6 units)	No equivalent courses	n/a	n/a
Electives	24 semester credits in area	24 semester credits Any course identified as transferable to CSU or UC.	n/a	n/a