

Northwestern Polytechnic University (NPU) & Foothill College

NPU Bachelor of Science in Computer Science (BSCS)					
NPU Degree Requirements	Required NPU course or course category	Specific Foothill College Course(s) (2020 – 2021 Catalog)	CSU GE Breadth ¹ equivalent	C-ID ² equivalent	
General Education Requirements (40 semester Units)	Area A: English Language Communication & Critical Thinking (12 units)	ENGL 101 Expository Writing	ENGL 1A Composition & Reading <u>or</u> ENGL 1AH Honors Composition & Reading	A2/A3	ENGL 100/ ENGL 110
		ENGL 115 Public Speaking	COMM 1A Public Speaking <u>or</u> COMM 1AH Honors Public Speaking	A1	COMM 110
		ENGL 425 Modern American Literature	ENGL 45B Survey of American Literature II: 1865 To the Present <u>or</u> ENGL 45BH Honors Survey of American Literature II: 1865 To the Present	C2	ENGL 135
		3 additional credits in area	Any course with a CSU GE A1, A2 and/or A3 designator	A1/A2/A3	n/a
	Area B: Mathematics and Natural Sciences (16 units)	MATH 201 Calculus I	MATH 1A Calculus <u>or</u> MATH 1AH Honors Calculus I	n/a	MATH 210
		MATH 202 Calculus II	MATH 1B Calculus <u>or</u> MATH 1BH Honors Calculus II	n/a	MATH 220
		MATH 203 Linear Algebra	MATH 2B Linear Algebra	n/a	MATH 250
		MATH 208 Probability and Statistics	MATH 10 Elementary Statistics	n/a	MATH 110
		PHYS 201/201L Physics I with Lab	PHYS 4A General Physics (Calculus), <u>or</u> 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
	Area C: Arts & Humanities (6 units)	6 credits in area	Any course with a CSU GE C1 and/or C2 designator	C1/C2	n/a

¹ Courses without a CSU GE Breadth Designator will be evaluated individually

² Courses without a C-ID designator will be evaluated individually

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Area D: Social Sciences (6 units)	6 credits in area	6 semester credits Any course(s) with CSU GE Breadth Area D	D	n/a
Major Course Requirements (65 credits BSCS)				
Core Course Requirements (50 units BSCS)	BUS450 Professional and Technical Writing	ENGL 50C Technical Writing	n/a	BUS 115
	CE305 Computer Organization	C S 10 Computer Architecture & Organization	n/a	COMP 142
	CS 200 Discrete Logic	MATH 22 Discrete Mathematics or MATH 22 Discrete Mathematics	n/a	COMP 152
	CS230/230L Linux & Shell Scripting/Lab	C S 30A Introduction to Linux and C S 30B Linux Shell Programming	n/a	n/a
	CS250/250L Introduction to Programming/Lab	C S 3A Object-Oriented Programming Methodologies in Python and C S 21A Python for Programmers	n/a	n/a
	CS350/350L Data Structures/Lab	C S 1M Intermediate Algorithm & Data Structure Methodologies in Java and (C S 2M Intermediate Algorithm & Data Structure Methodologies in C++ or C S 3M Intermediate Algorithm & Data Structure Methodologies in Python)	n/a	COMP 132
	CS360/360L Programming in C and C++/Lab	C S 2A Object-Oriented Programming Methodologies in C++ <i>Meets CS360 requirement; CS360L requirement not met</i>	n/a	COMP 122
	CS455 Algorithms & Structured Programming	C S 1C Advanced Data Structures & Algorithms in Java, or C S 2C Advanced Data Structures & Algorithms in C++, or C S 3C Advanced Data Structures & Algorithms in Python	n/a	n/a
	CS457/457L Data Modeling & Implementation Tech/Database Technologies Lab	C S 31A Introduction to Database Management Systems <i>Meets CS360 requirement; CS360L requirement not met</i>	n/a	n/a

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	CS480/480L Java and Internet Applications/ Java Programming Lab	C S 1A Object-Oriented Programming Methodologies in Java	n/a	n/a
	CS487 Object-Oriented Design and Implementation	C S 21B Intermediate Python Programming	n/a	COMP 132
	P450 Career Development	CRLP 7 Self-Assessment	n/a	n/a
	All other major course requirements not listed above (12 units)	No equivalent courses	n/a	n/a
Specialization Course Requirement (15 units BSCS)	CS470 Network Engineering and Management	C S 50A Network Basics (CCNA)	n/a	n/a
	CS 477 Ethical Hacking & Penetration Testing	C S 53C Ethical Hacking	n/a	n/a
	CS485 JavaScript & Internet Programing	C S 22A Javascript for Programmers	n/a	n/a
	Complete Five Specialization Courses (15 units)	Equivalent courses listed above	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

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NPU Bachelor of Science in Business Administration (BSBA)					
NPU Degree Requirements	Required NPU course or course category	Specific College of Foothill College Course(s) (2020 – 2021 Catalog)	CSU GE Breadth ¹ equivalent	C-ID ² equivalent	
General Education Requirements (36 semester Units)	Area A: English Language Communication & Critical Thinking (12 units)	ENGL 101 Expository Writing	ENGL 1A Composition & Reading <u>or</u> ENGL 1AH Honors Composition & Reading	A2/A3	ENGL 100/ ENGL110
		ENGL 115 Public Speaking	COMM 1A Public Speaking <u>or</u> COMM 1AH Honors Public Speaking	A1	COMM 110
		ENGL 425 Modern American Literature	ENGL 45B Survey of American Literature II: 1865 To the Present <u>or</u> ENGL 45BH Honors Survey of American Literature II: 1865 To the Present	C2	ENGL 135
		3 additional credits in area	Any course with a CSU GE A1, A2 and/or A3 designator	A1/A2/A3	n/a
	Area B: Mathematics and Natural Sciences (16 units)	MATH 208 Probability and Statistics	MATH 10 Elementary Statistics	n/a	MATH 110
		6 additional credits in area	Any course with a CSU GE Breadth designator B1, B2, B3, and/or B4	B1/B2/B3/ B4	n/a
	Area C: Arts & Humanities (6 units)	6 credits in area	Any course with a CSU GE C1 and/or C2 designator	C1/C2	n/a
	Area D: Social Sciences (6 units)	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)				
		ACC110 Financial Accounting I	ACTG 1A Financial Accounting I	n/a	ACCT 110

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² Courses without a C-ID designator will be evaluated individually

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Core Course Requirements (45 credits BSBA)	BAN199 Excel for Finance, Accounting & Analytics	MATH 67 Enhanced Mathematics Learning with Mathematica	n/a	n/a
	BLAW310 Introduction to Business Law	BUSI 18 Business Law I	n/a	BUS 125
	BUS450 Professional & Technical Writing	ENGL 50C Technical Writing	n/a	n/a
	ECON201 Principles of Macroeconomics	ECON 1A Principles of Macroeconomics	n/a	ECON 202
	ECON202 Principles of Microeconomics	ECON 1B Principles of Microeconomics	n/a	ECON 201
	FIN310 Fundamentals of Finance	BUSI 60 Fundamentals of Finance	n/a	n/a
	IT221 HTML & CSS Web Page Construction	GID 57 Website Design & Development II, <u>or</u> GID 58 Web Design & Development III, <u>or</u> GID 77 Advanced Website Design & Development**	n/a	n/a
	MGT 310 Principles of Management	BUSI 90A Principles of Management**	n/a	n/a
	MGT 480 Entrepreneurship	BUSI 95 Entrepreneurship-The Business Plan	n/a	n/a
	MKT310 Principles of Marketing	BUSI 59 Principles of Marketing**	n/a	n/a
	P450 Career Development	CRLP 7 Self-Assessment	n/a	n/a
	All other major course requirements not listed above (12 units)	No equivalent courses	n/a	n/a
Specialization Course Requirement (15 units BSBA)	ACC120 Managerial Accounting	ACTG 1B Financial Accounting II <u>or</u> ACTG 1BH Honors Financial Accounting II	n/a	ACCT 120
	ACC450 Cost Accounting	ACTG 1C Managerial Accounting <u>or</u> ACTG 1CH Honors Managerial Accounting	n/a	n/a
	ACC490 Introduction to Taxation	ACTG 67 Tax Accounting	n/a	n/a

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	IT223 SQL & Relational Databases	C S 31A Introduction to Database Management Systems <u>or</u> CS 84B Database-Drive WEB Application Development	n/a	ITIS 180
	IT335 Python Introduction for Commerce	C S 3A Object-Oriented Programming Methodologies in Python <u>or</u> C S 21A Python for Programmers	n/a	ITIS 180
	IT337 JavaScript	C S 22A Javascript for Programmers	n/a	n/a
	IT461 Interaction Design (IxD)	GID 55 User Experience (UI/UX) Design		
	Complete Five Specialization Courses from above (15 units)	Equivalent courses listed above	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

**Transferred course may be deficient in units transferred, the deficiency can be fulfilled by (a) transfer of a similar course, or (b) by an NPU course as determined during the admissions evaluation.