



Bachelor of Science in Cybersecurity Pathway: Coastline Community College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at Coastline Community College.

Coastline Community College	National University
Equivalent Transfer Course	Preparatory Courses Required
CST C230 Introduction to Security	CYB 200 Introduction to Cybersecurity
CST C177 Configuring Microsoft Windows 8 AND CST C191 COMPTIA LINUX+	CYB 211 Operating System Fundamentals
CST C201C CCNA 1: Introduction to Networks	CYB 212 Introduction to Networking
CST C260 CISSP (Certified Information Systems Security Professional)	CYB 213 Data Fundamentals for Cybersecurity
CST C231 COMPTIA Advanced Security Practitioner OR MATH C160 Introduction to Statistics	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
CST C222 Installing/Configuring Windows Server 2012	CYB 215 Fund of Virtualization and Cloud Comp
CIS C157 Microsoft SQL Database Development	CYB 216 Programming for Cybersecurity

Note: Requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: College of the Canyons

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at College of the Canyons.

College of the Canyons	National University
Equivalent Transfer Course	Preparatory Courses Required
CMPNET 171 Security	CYB 200 Introduction to Cybersecurity
CMPNET 191 LINUX/UNIX 1: Preparation for LPIC-1 AND CAWT 105 Microsoft Windows	CYB 211 Operating System Fundamentals
CMPNET 151 CCNA PREP 1 OR CMPNET 154 CCNA R&S: Introduction to Networks	CYB 212 Introduction to Networking
CMPNET 171 SECURITY+ CERTIFICATION	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent College of the Canyons Course</i> OR MATH 140(H) Introductory Statistics (Honors)	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
<i>No Equivalent College of the Canyons Course</i>	CYB 215 Fund of Virtualization and Cloud Comp
<i>No Equivalent College of the Canyons Course</i>	CYB 216 Programming for Cybersecurity

Note: These requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: Cypress College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at Cypress College.

Cypress College	National University
Equivalent Transfer Course	Preparatory Courses Required
CIS 190C Cybersecurity Competition Fundamentals	CYB 200 Introduction to Cybersecurity
CIS 110C Linux Operating System AND CIS 161C PC Operating System	CYB 211 Operating System Fundamentals
CIS 230C Cisco Networking 1	CYB 212 Introduction to Networking
CIS 195C Network Security	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent Cypress College Course</i> OR MATH 120 Introduction to Probability and Statistics	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
CIS 201C Microsoft Virtualization and Cloud Deployment	CYB 215 Fund of Virtualization and Cloud Comp
CIS 247C Python Programming	CYB 216 Programming for Cybersecurity

Note: There requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: Long Beach City College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at Long Beach City College.

Long Beach City College	National University
Equivalent Transfer Course	Preparatory Courses Required
COSS 271 Network Security Fundamentals	CYB 200 Introduction to Cybersecurity
COSN 210 LINUX Server Administration AND COSN 225 Microsoft Windows Client	CYB 211 Operating System Fundamentals
COSN 10 Networking Fundamentals	CYB 212 Introduction to Networking
COSS 271 Network Security Fundamentals	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent Long Beach City College Course</i> OR STAT 1/1H Elementary Statistics/Honors Elementary Stats	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
COSN 250 Introduction to Cloud Computing	CYB 215 Fund of Virtualization and Cloud Comp
<i>No Equivalent Long Beach City College Course</i>	CYB 216 Programming for Cybersecurity

Note: There requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: Mt. San Jacinto College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at Mt. San Jacinto College.

Mt. San Jacinto College	National University
Equivalent Transfer Course	Preparatory Courses Required
<i>No Equivalent Mt. San Jacinto College Course</i>	CYB 200 Introduction to Cybersecurity
CSIS-118B Computer Organization & Assembly Language AND CSIS-151 Using the OS Command Line Interface	CYB 211 Operating System Fundamentals
<i>No Equivalent Mt. San Jacinto College Course</i>	CYB 212 Introduction to Networking
<i>No Equivalent Mt. San Jacinto College Course</i>	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent Mt. San Jacinto College Course</i> OR MATH-140 Introduction to Statistics	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
<i>No Equivalent Mt. San Jacinto College Course</i>	CYB 215 Fund of Virtualization and Cloud Comp
<i>No Equivalent Mt. San Jacinto College Course</i>	CYB 216 Programming for Cybersecurity

Note: These requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: Riverside Community College

To earn a bachelor's degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university's general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University's Foundation Technology courses to equivalencies identified Riverside Community College.

Riverside Community College	National University
Equivalent Transfer Course	Preparatory Courses Required
CIS-27 Information and Network Security	CYB 200 Introduction to Cybersecurity
CIS-21 Introduction to Operating Systems	CYB 211 Operating System Fundamentals
CIS-26A Cisco Networking Academy 1A	CYB 212 Introduction to Networking
CIS-26F Cisco Networking Security	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent Riverside Community College Course</i> OR MAT-12/12H Statistics/ Honors Statistics	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
<i>No Equivalent Riverside Community College Course</i>	CYB 215 Fund of Virtualization and Cloud Comp
CIS-5 Programming Concepts and Methodology I: C++	CYB 216 Programming for Cybersecurity

Note: These requirements are subject to change. Please see National University's online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: San Diego City College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at San Diego City College.

San Diego City College	National University
Equivalent Transfer Course	Preparatory Courses Required
INWT 101 Introduction to Information Security	CYB 200 Introduction to Cybersecurity
INWT 145 Linux+ Certification Training	CYB 211 Operating System Fundamentals
INWT 120 Network+ Certification Training	CYB 212 Introduction to Networking
INWT 140 Security+ Certification Training	CYB 213 Data Fundamentals for Cybersecurity
INWT 170 Cybersecurity Analyst+ (CSA+) Certification Training	CYB 214 Quant Tools for Cybersecurity Pro
OR	OR
MATH 115 Gateway to Experimental Statistics	MTH 210 Probability & Statistics
OR	
MATH 119 Elementary Statistics	
<i>No Equivalent San Diego City College Course</i>	CYB 215 Fund of Virtualization and Cloud Comp
CISC 179 Python Programming	CYB 216 Programming for Cybersecurity

Note: There requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



Bachelor of Science in Cybersecurity Pathway: Sierra College

To earn a bachelor’s degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university’s general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University’s Foundation Technology courses to equivalencies identified at Sierra College.

Sierra College	National University
Equivalent Transfer Course	Preparatory Courses Required
CIS 0147 Introduction to Information Systems Security	CYB 200 Introduction to Cybersecurity
CIS 0141 Installing, Configuring and Administering a Client OS AND CIS 142 Systems and Network Administration OR CSCI 0050 Introduction to Unix/Linux	CYB 211 Operating System Fundamentals
CIS 0065 Computer Network Fundamentals	CYB 212 Introduction to Networking
<i>No Equivalent Sierra College Course</i>	CYB 213 Data Fundamentals for Cybersecurity
<i>No Equivalent Sierra College Course</i> OR MATH 0013 Elementary Statistics	CYB 214 Quant Tools for Cybersecurity Pro OR MTH 210 Probability & Statistics
CIS 0151 Information Storage and Management	CYB 215 Fund of Virtualization and Cloud Comp
CSCI 0012 Programming Concepts and Methodology I	CYB 216 Programming for Cybersecurity

Note: These requirements are subject to change. Please see National University’s online General Catalog for official record of requirements for the year you are admitted.



MEMORANDUM OF AGREEMENT

THIS MEMORANDUM OF AGREEMENT (“MOA”) between NATIONAL UNIVERSITY (“NATIONAL”) a non-profit, public benefit corporation, organized under the laws of the State of California, United States of America, and San Diego City College, a post-secondary California Community College, is made as of this ____ day of _____, 20____ with reference to the following facts:

ARTICLE 1 **RECITALS**

1.1 National University is an independent institution of higher education accredited by the Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (“WASC”) and other accrediting agencies. National maintains its administrative offices in La Jolla, California, and has 27 campuses located throughout California and in Nevada. It is dedicated to making lifelong learning opportunities accessible to a diverse population of learners.

1.2 National University offers both undergraduate and graduate degree programs in the College of Letters and Sciences, and five schools: the School of Business and Management, the School of Education, the School of Engineering and Technology, the School of Health and Human Services, and the School of Media and Communication. National offers courses in a traditional classroom setting, delivered in a one-course-per-month format and various online programs delivered via the Internet and other digital technologies. A list of the current courses and programs offered by National can be found on its website at www.nu.edu.

1.3 National University is an affiliate of the National University System (“NUS”). The National University System is an alliance of operationally-independent and separately-accredited entities offering a variety of educational programs to diverse constituencies. The National University System includes National University, John F. Kennedy University, National University International, National University Virtual High School, National University Academy, Spectrum Pacific Learning Company, LLC, WestMed College, the Center for

Integrative Health, National University System Institute for Policy Research, and the National University Golf Academy.

1.4 San Diego City College is a post-secondary California Community College that serves the needs of students, its community college district and its communities by offering associate degrees, continuing education programs, career and technical education, and economic development.

1.5 National and San Diego City College representatives will exchange information about their institutions as required to facilitate this agreement and the projects described herein.

1.6 National and San Diego City College believe that an affiliation between the two institutions will provide opportunities consistent with their missions, including diversifying their academic program offerings, broadening their student populations, and providing expanded opportunities for students.

1.7 National and San Diego City College agree that it is to their mutual benefit to establish an affiliation as outlined in this MOA.

1.8 It is the express intent of the parties that the relationship contemplated by this MOA be conducted and implemented in a manner that is in strict compliance with the Higher Education Act of 1965, as amended, 20 U.S.C. §§ 1001, *et seq.* (“HEA”) and its implementing regulations.

ARTICLE 2 **PURPOSE**

2.1 The purpose of this MOA to acknowledge that students of San Diego City College, in order to pursue a baccalaureate degree, may enroll in National courses concurrent with their enrollment at San Diego City College or may transfer to a National baccalaureate degree program following completion of a certificate or associate’s degree program at San Diego City College. San Diego City College students must meet all National requirements and guidelines for admission to National University.

ARTICLE 3 **ELEMENTS**

3.1. To be eligible for application to an advance start bachelor’s program at National, the student enrolling must either submit proof of having been awarded an associate’s degree

from San Diego City College or be currently enrolled as a student at San Diego City College pursuing a transferable associate's degree. If a student chooses to enroll concurrently, he/she must sign a release of records to enable National and San Diego City College to coordinate student records and advising.

3.2. A student will be accepted into the National University advanced start baccalaureate option if the student has completed an associate degree program (AA, AAS, AS, or specialized associate degree) , which will be transferred for up to 60 semester units (or 90 quarter units); or if the student has completed a CSU General Education Breadth or IGETC certification, which will be block transferred for up to 60 semester units (or 90 quarter units) to meet National University lower division General Education requirements (the student will only need to fulfill the General Education upper division component).

3.3. San Diego City College students must fulfill National requirements, which entail completion of no less than 25-percent of their program requirements at National including a minimum of 50-percent of the major requirements, including the capstone course if required at National. Units earned through any combination of Transfer Credit, Challenge Credit or Experiential Credit will not exceed 75-percent of total credits required for graduation.

ARTICLE 4 **PROGRAMS**

4.1 National will offer the Bachelor of Science in Information Technology Management, Bachelor of Business Administration and the Bachelor of Arts in Early Childhood Education to San Diego City College's students at San Diego City College located at 1313 Park Boulevard, San Diego, California 92101. National University's General Catalog ("Catalog") in effect at the time each Student enrolls will govern all Program requirements for Students, including, but not limited to, required courses.

ARTICLE 5 **ACADEMIC RESPONSIBILITY**

5.1 National shall have exclusive control over all academic issues, which shall include, without limitation: selection of course content and required textbooks; delivery of instructional programs; selection, approval and payment of faculty; admission, registration, and

retention of students; evaluation of students prior education; evaluation of students progress; scheduling of courses; awarding academic credit; and conferring degrees.

ARTICLE 6 **TERMS**

6.1 In addition to the discount identified in paragraph 6.2 of this MOA, National University will extend its *Transfer to Triumph Scholarship* program, established under the MOU between the California Community Colleges Chancellor's Office and National University, and National University's *Promising Scholar* scholarship to transfer students from San Diego City College who enroll in National University courses offered at San Diego City College's campus.

6.2 San Diego City College students, employees and alumni will be eligible to receive a ten (10%) percent discount on the cost of National University tuition for all National courses in the Program (Article 4) taken onsite/hybrid at San Diego City College's campus. This discount does not apply to National courses taken online or at any site other than San Diego City College's campus.

6.3 National will offer the Program at San Diego City College for the term of this Agreement unless the enrollment in any Program falls below twelve (12) students during any two (2) consecutive months; in which case, National may terminate the effected Program, at its sole discretion.

6.4 The term of this Agreement shall be four (4) years, commencing on June 30, 2013, provided that either party may terminate this Agreement, without cause, at any time, upon thirty (30) days prior written notice to the other party. If the Agreement is terminated or if the Program is discontinued due to low enrollment, students may complete the Program at any National University campus or center at the standard, non-discounted tuition rate.

ARTICLE 7 **FACILITIES**

7.1 Classroom Space and Equipment (*e.g.*, computers, VCRs, overhead projectors, etc.). San Diego City College will provide one classroom during the Saturday session at no cost to NU. The goal at this time is to provide the classes as hybrid with Saturday meetings.. The parties will agree on use of classroom space, equipment, and any fees associated with such use, prior to classes being scheduled.

ARTICLE 8
INDEMNIFICATION

8.1 Each party shall indemnify and hold harmless the other party and its affiliates, agents, employees and representatives from and against any and all liabilities, loss, costs, damages, or expenses, including attorney's fees, which it or either of them may hereafter incur, suffer, or shall be required to pay by reason of: (i) any grossly negligent or intentional misrepresentation made by a party; or (ii) the breach of any binding covenant or condition in this MOA.

Recipients. All notices or other communications given under this MOA shall be in writing, addressed to the following:

If to National, to:

Richard Carter, Executive Vice President for Business and Regional Operations
National University
11355 North Torrey Pines Road
La Jolla, California 92037-1011
Phone: (858) 642-8593
Fax: (858) 642-8711

If to San Diego City College, to:

Terrence Burgess, College President
1313 Park Boulevard
San Diego, California 92101
Phone: 619-388-3400

San Diego City College

National University

By: _____
Terrence Burgess

By: _____
Richard Carter

Title: College President

Title: Executive Vice President for Business
and Regional Operations

Date: _____

Date: _____

2018-2019 General Education/Preparation

&

Major Articulation Agreement(s)

Date: 10/15/18

Transfer Institution: **Sierra College**

National University

General Education Bachelor Degrees

Gen Ed AREA/UNITS	National University	NU Course Title	Sierra College
<p>*HONORS COURSEWORK* Any Honors section of the same course will fulfill the same requirement Courses designated with an asterisk (*) may be counted in one area only</p>			
Area A	ENGLISH COMMUNICATION – (Minimum 15.00 quarters)		
<i>A1a</i> 6.0	ENG 100 + ENG 101	Effective College English I & II (3 quarter units each)	ENGL 0001A
<i>A1b</i> 4.5	ENG 240 <i>or</i> ENG 334A	Advanced Composition <i>or</i> Technical Writing <i>(Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)</i>	ENGL 0001C or ENGL 0001B* <i>or</i> NONE
<i>A2</i> 4.5	COM 101 <i>or</i> COM 103 <i>or</i> COM 120	Intro to Oral Communication <i>or</i> Public Speaking <i>or</i> Intro to Interpersonal Comm	NONE <i>or</i> COMM 0001 <i>or</i> COMM 0008
Area B	MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (Minimum 4.5 quarter units)		
	MTH 204	Mathematics for Science	MATH 0017
	MTH 209A MTH 301	Fundamentals of Mathematics I Fundamentals of Mathematics II	MATH 0019 NONE
	MTH 210 BST 322	Probability & Statistics Intro to Biomedical Statistics	MATH 0013 or PSYC 0142 or SOC 0015 NONE
	MTH 215 <i>or</i> MTH 216A <i>and</i> MTH 216B	College Algebra & Trigonometry <i>or</i> College Algebra I (3 quarter units) <i>and</i> College Algebra II (3 quarter units)	MATH 0029 <i>or</i> MATH 0012 <i>and</i> MATH 0027
	MTH 220	Calculus I	MATH 0030, MATH 0016A
	CSC 208	Calculus for Comp. Science I	MATH 0030
	MNS 205	Intro to Quantitative Methods	MATH 0042

Gen Ed AREA/UNITS	National University	NU Course Title	Sierra College
Area C	INFORMATION LITERACY -- (Minimum 4.5 quarter units)		
	ILR 260	Information Literacy	SKDV 0020 and ENGL 0001C or 0001B*
Area D	ARTS, HUMANITIES, AND LANGUAGES – (Minimum 18 quarter units in at least 2 areas)		
	ARTS		
*Completion of either course will meet one General Education Area D(Art) requirement	ART 100	Introduction to Art History	ARHI 0110 & ARHI 0120
	ART 200	Visual Arts	ART 0002 or ART 004A
	FYA 101	First-Yr Sem: Arts & Human	NONE
	MUS 100 MUS 300 MUS 327+	Fundamentals of Music Film Music World Music	MUS 0002 NONE NONE
	THR 200	Theater Arts	THEA 0013
	HUMANITIES		
	HIS 233 HIS 234	World Civilizations I World Civilizations II	HIST 0050 HIST 0051
	JRN 200 LIT 100 LIT 345	History of Journalism Introduction to Literature Mythology	NONE ENGL 0001B* NONE
	ACEX 2101X	Philosophy of Coaching	NONE
	PHL 100 PHL 337	Introduction to Philosophy Ethics	PHIL 0006 NONE

Gen Ed AREA/UNITS	National University	NU Course Title	Sierra College
	LANGUAGES		
	ASL 120 ASL 220 ASL 320	American Sign Language I American Sign Language II American Sign Language III	DFST 0001 DFST 0002 NONE
	SPN 100 SPN 101 SPN 200	Beginning Spanish I Beginning Spanish II Intermediate Spanish I	SPAN 0001 SPAN 0002 SPAN 0003
	Students may also satisfy Area D Foreign Language requirements with 9 quarter units of computer languages		
	CSC 242	Intro to Programming Concepts <i>Prerequisite: MTH215</i>	CSCI 0066
	CSC 252	Programming in C++ <i>Prerequisite: CSC242</i>	NONE
	CSC 262	Programming in Java <i>Prerequisite: MTH 215</i>	CSCI 0012
Area E	SOCIAL & BEHAVIORAL SCIENCES <i>(Minimum 13.5 quarter units)</i>		
	COM 100	Intro to Mass Communication	COMM 0070
	COM 220	Media Literacy	COMM 0012, AAD 0012
	COM 380+	Democracy in the Info. Age	NONE
	ECO 203 ECO 204	Principles of Microeconomics Principles of Macroeconomics	ECON 001B ECON 001A
	EDA 200	Schools of the World	NONE
	FYS 102	First-Yr Sem: Social Sciences	NONE
	HIS 220A HIS 220B HIS 300	United States History I [+] United States History II [+] Roots of Western Civilization	HIST 0017A, HIST 0018A HIST 0017B, HIST 0018B NONE
	ACEX 2100X	History of Sport	NONE
	POL 100	Introduction to Politics	NONE
	POL 201	American Politics	POLS 0001
	PSY 100	Introduction to Psychology	PSYC 0010
	SOC 100 SOC 260 SOC 350+	Principles of Sociology [+] Cultural Anthropology Cultural Diversity	SOC 0001 ANTH 0002 NONE

Gen Ed AREA/UNITS	National University	NU Course Title	Sierra College	
Area F	PHYSICAL & BIOLOGICAL SCIENCES <i>(Minimum 6 quarter units required [Note: one science lab is required])</i>			
	BIO 100 BIO 100A	Survey of Bioscience Survey of Bioscience Lab <i>(1.50 quarter units)</i>	BIOL 0011 (Lab included)	BIOL 0010 NONE
Completion of BIOL 0001, 0002 & 0003 at Sierra College will grant BIO 161, 162, 163 & 169A at National University	BIO 161 BIO 162	General Biology 1 General Biology 2	BIOL 0001 (Lab included) NONE	
	BIO 201 BIO 201A BIO 202 BIO 202A	Human Anatomy and Physiol I Human Anatomy and Physiol Lab I <i>(1.50 quarter units)</i> Human Anatomy and Physiol II Human Anatomy and Physiol Lab II <i>(1.50 quarter units)</i>	BIOL 0005 (Lab Included) and BIOL 0006 (Lab Included)	BIOL 0007A (2.5 sem units) AND BIOL 0007B (2.5 sem units) (each course includes a lab) and BIOL 0006 (Lab Included)
	BIO 203 BIO 203A	Introductory Microbiology Introductory Microbiology Lab <i>(1.50 quarter units)</i>	BIOL 0004 (Lab Included)	BIOL 0008A (2.5 sem units) AND BIOL 0008B (2.5 sem units) (each course includes a lab)
	CHE 101 CHE 101A	Introductory Chemistry Introductory Chemistry Lab <i>(1.50 quarter units)</i>	CHEM 2A (Lab included)	
Completion of CHEM 0001A & CHEM 0001B or CHEM 0003A & 0003B and CHEM 1B at Sierra College will grant CHE 141, 142, 143 & 149A at National University	CHE 141	General Chemistry 1	CHEM 0001A (Lab included) or CHEM 0003A & 0003B (each course includes a lab)	
	CHE 142	General Chemistry 2	CHEM 0001B (Lab included)	
	EES 103 EES 103A	Fundamentals of Geology Fundamentals of Geology Lab <i>(1.50 quarter units)</i>	ESCI 0001 ESCI 0001L	
	PHS 104 PHS 104A	Introductory Physics Introductory Physics Lab <i>(1.50 quarter units)</i>	PHYS 0010 PHYS 0010L	
Completion of PHYS 105 & 105L and PHYS 110 & 110L at Sierra College will grant PHS 171, 172, 173 & 179A at National University	PHS 171 PHS 172	General Physics 1 General Physics 2	PHYS 0105 PHYS 0110	

Gen Ed AREA/UNITS	National University	NU Course Title	Sierra College
Area G	LIFELONG LEARNING AND SELF DEVELOPMENT <i>(Minimum 4.50 quarter units)</i>		
	COH 100	Personal Health	HED 0002
	COH 201	Integrative Health	NONE
	COH 317	Public Health Nutrition	NONE
	COH 318	Drug Use and Abuse	NONE
	COH 319	Human Sexuality	NONE
	ENG 201	Fiction Writing I	ENGL 0021
	ENG 202	Poetry Writing I	ENGL 0020
	ENG 203	Screenwriting I	NONE
	ENG 375	Nature Writing	NONE
	FFL 100	Foundation to Academic Success	NONE
	FYP 103	First-Yr Sem: Psychology	NONE
	GLS 150	Global Issues and Trends	ANTH 0014
	MUS 200	Music Composition	NONE
	NSG 280	Human Lifecycle Development	PSYC 104
	PHL 238	Logical & Critical Thinking	NONE
Area A-G	GENERAL EDUCATION <i>(Minimum 4.50 quarter units)</i>		
Also see <u>Special Note</u> below	<i>Before selecting Area A-G courses ***Contact National University Advisor/Counselor*** regarding National University's 300 level Upper Division General Education requirement course(s)/option(s)</i>		
	ART 315	Film as Art	NONE
	ART 329+	World Art	NONE
	BRO 210	History of Television	NONE
	COM 360+	Representation in the Media	NONE
	COM 380+	Democracy in the Info. Age	NONE
	EES 301	Earth and Planetary Sciences	NONE
	EES 322	Oceanography	NONE
	EES 335	Environmental Sciences	NONE
	ENG 375	Nature Writing	NONE
	FYM 104	First-Yr Sem: Math & Sci	NONE
	HIS 300	Roots of Western Civilization	NONE
	JRN 350	Youth and the News	NONE
	LIT 311	British Literature I	NONE
	LIT 312	British Literature II	NONE

	LIT 321	American Literature I	NONE
	LIT 322	American Literature II	NONE
	MUS 326+	American Music	NONE
	PHL 320+	World Religions	NONE
	PHL 375	Environmental Ethics	NONE
	PHS 102	Survey of Physical Science	CHEM 0140, PHYS 0140
	PSY 300	Social Psychology of Sport	NONE
	PSY 301	Child Development	NONE
	SCI 300+	Geography	NONE
	SOC 325	Popular Culture	NONE
	SOC 327	Arab Culture	NONE
	SOC 336+	American Film and Society	NONE
	SOC 344	Marriage, Sex and the Family	NONE
	SOC 350+	Cultural Diversity	NONE
	SOC 352	Modern Chinese Culture	NONE

+Diversity Enriched Offering

*** **Special Note:** Students who complete all General Education coursework at the community college will be required to take one upper division general education elective for their program to meet the upper division general education requirement. Listed 300 level NU courses are for informational and planning purposes only and are not articulated with community college transfer coursework.

Remedial courses taken to achieve minimum levels of collegiate level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement

COLLEGES OF LETTERS AND SCIENCES (COLS)**Bachelor of Arts in English with an Inspired Teaching and Learning Preliminary Single Subject Credential (California)**

D	LIT 100	Introduction to Literature	ENGL 001B*
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Bachelor of Arts in Global Studies

G	GLS 150	Global Issues and Trends	ANTH 0014
D	HIS 234	World Civilizations II	HIST 0051

Bachelor of Arts in History

A1	ENG 240	Advanced Composition	ENGL 0001C or ENGL 0001B*
E	HIS 220A	United States History I [+]	HIST 0017A or HIST 0018A
E	HIS 220B	United States History II [+]	HIST 0017B or HIST 0018B
D	HIS 233	World Civilizations I	HIST 0050
D	HIS 234	World Civilizations II	HIST 0051

Bachelor of Arts in Interdisciplinary Studies

E	HIS 220A <i>or</i> HIS 220B	United States History I [+] <i>or</i> United States History II [+]	HIST 0017A or HIST 0018A <i>or</i> HIST 0017B or HIST 0018B
D	LIT 100	Introduction to Literature	ENGL 001B*

Bachelor of Arts in Interdisciplinary Studies with an Inspired Teaching and Learning Preliminary Multiple Subject Teaching Credential (California)

D	LIT 100	Introduction to Literature	ENGL 001B*
B	MTH 209A	Fundamentals of Mathematics I	MATH 0019

Bachelor of Arts in Political Science			
E	POL 100	Introduction to Politics	NONE

Bachelor of Arts in Psychology			
B	MTH 210	Probability and Statistics	MATH 00013 or PSYC 0142 or SOC 0015
E	PSY 100	Introduction to Psychology	PSYC 0100

Bachelor of Arts in Sport Psychology			
B	MTH 210	Probability and Statistics	MATH 00013 or PSYC 0142 or SOC 0015
E	PSY 100	Introduction to Psychology	PSYC 0100

Bachelor of Arts in Sociology			
B	MTH 210	Probability and Statistics	MATH 00013 or PSYC 0142 or SOC 0015
E	SOC 100	Principles of Sociology [+]	PSYC 0100

Bachelor of Arts in Spanish with Optional Inspired Teaching and Learning Preliminary Single Subject Teaching Credential (California)			
D	SPN 100	Beginning Spanish I	SPAN 0001
D	SPN 101	Beginning Spanish II	SPAN 0002
D	SPN 200	Intermediate Spanish I	SPAN 0003
-----	SPN 201	Intermediate Spanish II	SPAN 0004
D	LIT 100	Introduction to Literature	ENGL 001B*

Bachelor of Arts in Strategic Communications			
A1	ENG 101	Effective College II <i>(3 quarter units)</i>	ENGL 0001A
A2	COM 103	Public Speaking	COMM 0001

SCHOOL OF BUSINESS AND MANAGEMENT (SOBM)

Bachelor of Arts in Integrated Marketing Communication			
A1	ENG 101	Effective College English II <i>(3 quarter units)</i>	ENGL 0001A

Bachelor of Arts in Management			
E	ECO 203	Principles of Microeconomics	ECON 0001B
E	ECO 204	Principles of Macroeconomics	ECON 0001A
----	LAW 204	Legal Aspects of Business I	BUS 0048

Bachelor of Business Administration			
<small>MNS 205 must be taken if student does not have transfer credits for MNS 205 or MTH 210 or MTH 215 or MTH 220.</small>			
	MNS 205	Intro to Quantitative Methods	MATH 0042
E	ECO 203	Principles of Microeconomics	ECON 0001B
E	ECO 204	Principles of Macroeconomics	ECON 0001A
----	ACC 201	Financial Accounting Funds.	BUS 0001 and BUS 0002
----	ACC 202	Managerial Accounting Funds.	BUS 0003
----	LAW 204	Legal Aspects of Business I	BUS 0048

Bachelor of Science in Accountancy			
<small>Students must have completed ACC 201 or its equivalent with a minimum grade of "C" within two years of taking any of the following accounting courses, unless a grade of 75 or better is received on an appropriate challenge exam.</small>			
<small>**Eligible for Credit-By-Exam wavier: Contact Faculty Advisor</small>			
B	MNS 205 or MTH 215	Intro to Quantitative Methods College Algebra & Trigonometry	MATH 0042 or MATH 0029
E	ECO 203	Principles of Microeconomic	ECON 0001B
E	ECO 204	Principles of Macroeconomics	ECON 0001A
----	ACC 201**	Financial Accounting Funds.	BUS 0001 and BUS 0002
----	ACC 202	Managerial Accounting Funds	BUS 0003
----	LAW 204	Legal Aspects of Business I	BUS 0048

Bachelor of Science in Financial Management

MNS 205 must be taken if student does not have transfer credits for MNS 205 or MTH 210 or MTH 215 or MTH 220.

B	MNS 205	Intro to Quantitative Methods	MATH 0042
E	ECO 203	Principles of Microeconomics	ECON 0001B
E	ECO 204	Principles of Macroeconomics	ECON 0001A
----	ACC 201	Financial Accounting Funds.	BUS 0001 and BUS 0002
----	ACC 202	Managerial Accounting Funds.	BUS 0003
----	LAW 204	Legal Aspects of Business I	BUS 0048

Bachelor of Science in Organizational Leadership

No Transferable Courses- see Cat 82 for major requirements

SANFORD COLLEGE OF EDUCATION (SCOE)

Bachelor of Arts in Early Childhood Education (BAECE)

----	ECE 201	The Growing Child: Zero to 8	HDEV 0009
----	ECE 210	Child, Family, School and Comm	HDEV 0004
----	ECE 211	Diversity: Development & Ed.	HDEV 0025
----	HED 220	Health, Nutrition and Safety	HDEV 0007

Bachelor of Arts in English with Inspired Teaching and Learning Preliminary Single Subject Credential (California)

D	LIT 100	Introduction to Literature	ENGL 0001B*
<i>Also listed under COLS</i>			

Bachelor of Arts in Interdisciplinary Studies with an Inspired Teaching and Learning Preliminary Multiple Subject Teaching Credential (California)

D	LIT 100	Introduction to Literature	ENGL 0001B*
B	MTH 209A	Fundamentals of Mathematics I	MATH 0019
<i>Also listed under COLS</i>			

SCHOOL OF ENGINEERING AND COMPUTING

Bachelor of Science in Information Technology Management			
<i>*Prior Learning Credit Eligible Course</i>			
----	ITM 200*	Computer Hardware & Software	NONE
----	ITM 205*	Office Productivity Software	CIS 0050
----	ITM 230*	Computer Network Overview	CIS 0065

Bachelor of Science in Computer Science (BSCS)			
B	MTH 215	College Algebra & Trigonometry	MATH 0029
----	CSC 208	Calculus for Computer Science I	MATH 0030
----	CSC 209	Calculus for Computer Science II	NONE
----	CSC 220	Applied Probability & Stats	NONE
D	CSC 242	Intro to Programming Concepts	CSCI 0066
D	CSC 252	Programming in C++	NONE
D	CSC 262	Programming in Java	NONE

Bachelor of Science in Electrical and Computer Engineering (BSECE)			
B	MTH 215	College Algebra & Trigonometry	MATH 0029
F	PHS 104	Introductory Physics	PHYS 0010
-----	PHS 130A	Physics Lab for Engineering <i>(1.50 quarter units)</i>	NONE
B	CSC 208	Calculus for Comp. Science I	MATH 0030
-----	CSC 209	Calculus for Comp. Science II	NONE
-----	CSC 220	Applied Probability & Stats.	NONE
D	CSC 242	Intro to Programming Concepts	CSCI 0066
D	CSC 252	Programming in C++	NONE
Requirements for Major:			
-----	PHS 231	Calculus-based Physics 1	PHYS 0205
-----	PHS 232	Calculus-based Physics 2	PHYS 0210 and PHYS 0215

Bachelor of Science in Cybersecurity (BSCYB)			
	CYB 200	Introduction to Cybersecurity	CIS 0147
	CYB 211	Operating System Fundamentals	CIS 0141 and CSCI 0050/CIS142
	CYB 212	Introduction to Networking	CIS 0065
	CYB 213	Data Fundamentals for Cybersecurity	NONE
	CYB 214	Quant Tools for Cybersecurity Pro	NONE
	MTH 210 Probability & Statistics equivalent may be used if no equivalent to CYB 214 is available		MATH 0013
	CYB 215	Fund of Virt and Cloud Comp	CIS 0151
	CYB 216	Programming for Cybersecurity	CSCI 0012

Bachelor of Science in Construction Engineering Technology (BSCET)			
<i>^ For online students only</i>			
B	MTH 215	College Algebra & Trigonometry	MATH 0029
F	PHS 104	Introductory Physics	PHYS 0010
F	PHS 104A	Introductory Physics Lab (1.50 quarter units)	PHYS 0010L
<i>or</i>	<i>or</i>	<i>or</i>	<i>or</i>
-----	PHS 130A^	Physics Lab for Engineering (1.50 qrtr units)	NONE
F	CHE 101	Introductory Chemistry	CHEM 0002A
F	CHE 101A	Introductory Chemistry Lab (1.50 quarter units)	(Lab Included)
<i>or</i>	<i>or</i>	<i>or</i>	<i>or</i>
-----	CHE 120A^	Intro to Chemistry Lab for Eng (1.50 qrtr units)	NONE
B	CSC 208	Calculus for Comp. Science I	MATH 30
-----	CSC 220	Applied Probability & Stats.	NONE
-----	EGR 219	Intro to Graphics and Auto CAD	NONE
-----	EGR 220	Engineering Mathematics	NONE
-----	EGR 225	Statics & Strength of Material	ENGR 0022A

Bachelor of Science in Manufacturing Design Engineering (BSMDE)

^ For online students only

B	MTH 215	College Algebra & Trigonometry	MATH 0029
F	PHS 104	Introductory Physics	PHYS 0010
F	PHS 104A	Introductory Physics Lab (1.50 quarter units)	PHYS 0010L
<i>or</i>	<i>or</i>	<i>or</i>	<i>or</i>
-----	PHS 130A^	Physics Lab for Engineering (1.50 qrtr units)	NONE
F	CHE 101	Introductory Chemistry	CHEM 0002A
F	CHE 101A	Introductory Chemistry Lab (1.50 quarter units)	(Lab Included)
<i>or</i>	<i>or</i>	<i>or</i>	<i>or</i>
-----	CHE 120A^	Intro to Chemistry Lab for Eng (1.50 qrtr units)	NONE
B	CSC 208	Calculus for Comp. Science I	MATH 0030
-----	CSC 220	Applied Probability & Stats.	NONE
-----	EGR 219	Intro to Graphics and Auto CAD	ENGR 0022A
-----	EGR 220	Engineering Mathematics	NONE
-----	EGR 225	Statics & Strength of Material	NONE
-----	EGR 230	Electrical Circuits & Systems	ENGR 0017

Bachelor of Science in Information Systems (BSIS)

No Transferable Courses-see Cat 82 for major requirements

SCHOOL OF HEALTH AND HUMAN SERVICES (SHHS)

Bachelor of Science in Healthcare Administration			
This major has specific general education (GE) requirements. Students should complete the GE requirements listed for this major in the NU catalog instead of the university GE pattern. Some, but not all, of these GE requirements can be completed at San Diego City College prior to transfer; courses fulfilling those requirements are listed below.			
G	COH 100	Personal Health	HED 0002
----	COH 150	Healthcare Terminology	HSCI 0003
----	ACC 201	Financial Accounting Funds.	BUS 0001 and BUS 0002
----	ACC 202	Managerial Accounting Funds.	BUS 0003
E	PSY 100 <i>or</i> SOC 100	Introduction to Psychology <i>or</i> Principles of Sociology [+]	PSYC 0100 <i>or</i> SOC 0001
E	ECO 203	Principles of Microeconomics	ECON 0001B
E	ECO 204	Principles of Macroeconomics	ECON 0001A

Bachelor of Science in Public Health			
The Public Health major has specific general education (GE) requirements. Students should complete the GE requirements listed in the Public Health major section of the NU catalog instead of the university CSUGE or IGETC pattern.			
E	PSY 100	Introduction to Psychology	PSYC 0100
E	SOC 100	Principles of Sociology	SOC 0001
F	BIO 201	Human Anatomy & Physiol I	BIOL 0005
F	BIO 201A	Human Anatomy & Physiol Lab I <i>(1.5 quarter units)</i>	
F	BIO 202	Human Anatomy & Physiol II	<i>and</i>
F	BIO 202A	Human Anatomy & Physiol Lab II <i>(1.5 quarter units)</i>	<i>and</i>
F	BIO 203	Introductory Microbiology	BIOL 0006
F	BIO 203A	Introductory Microbiology Lab <i>(1.5 quarter units)</i>	
F	BIO 203A	Introductory Microbiology Lab <i>(1.5 quarter units)</i>	BIOL 0004 (Lab Included)
F	BIO 203A	Introductory Microbiology Lab <i>(1.5 quarter units)</i>	BIOL 0008A and BIOL 0008B (Lab Included)
G	COH 100	Personal Health	HED 0002

Bachelor of Science in Allied Health	
No Transferable Courses –see Cat 82 for major requirements	

SCHOOL OF PROFESSIONAL STUDIES (SOPS)

Bachelor of Arts in Digital Media Design			
A1	ENG 100 + ENG 101	Effective College English I and II	ENGL 0001A
E	COM 220	Media Literacy	COMM 0012 or AAD 0012

Bachelor of Arts in Digital Journalism			
A1	ENG 100 + ENG 101	Effective College English I and II	ENGL 0001A
E	COM 100	Introduction to Mass Communication	COMM 0070
D	JRN 200	History of Journalism	NONE

Bachelor of Arts in Pre-Law Studies			
A1	ENG 100 + ENG 101	Effective College English I and II	ENGL 0001A
E	PSY 100 <i>or</i> SOC 100	Introduction to Psychology <i>or</i> Principles of Sociology [+]	PSYC 0100 <i>or</i> SOC 0001
E	POL 201	American Politics	POLS 0001
D	<i>or</i> PHL 100	<i>or</i> Introduction to Philosophy	<i>or</i> PHIL 0006
----	LAW 200	Introduction to Law and Legal Writing	NONE

Bachelor of Science in Paralegal Studies			
	PLA 200	Legal Theory & Ethics	NONE
	PLX 2100X	Torts	NONE
	PLA 201	English for Professionals	NONE
	PLX 2101X	Leg Res Wrtg-Briefing /Analysis	NONE
	PLX 2102X	Contracts	NONE
	PLX 2103X	Leg Res Wrtg-Legal Memo	NONE
	PLA 202	Property	NONE
	PLA 203	Leg Res Wrtg-Persuasive Wrtg	NONE
	PLX 2105X	Computers & the Law	NONE

Bachelor of Public Administration (BPA)

*MNS 205 must be taken if student does not have transfer credits for MNS 205 or MTH 210 or MTH 215 or MTH 220.

B	MNS 205*	Intro to Quantitative Methods for Business	MATH 0042
E	ECO 203	Principles of Accounting Fundamentals	ECON 0001B
---	ACC 201	Financial Accounting Fundamentals	BUS 0001 and BUS 0002

Bachelor of Science in Criminal Justice Administration

---	CJA 229	Introduction to Policing	ADMJ 0050
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Bachelor of Science in Homeland Security and Emergency Management

No Transferable Courses-see Cat 82 for major requirements