

Baccalaureate Degree Plan

NCCCS Associate in Arts *or* Associate in Science transfer to

East Carolina University, **BS SCIENCE EDUCATION**

The Science Education, BS prepares and develops professionals in science education by offering classroom instruction and research opportunities in programs for students whose career goals are teaching science in the elementary, middle, and secondary schools, and in higher education. Undergraduate areas of preparation include the methods and processes of teaching the biological, physical, and earth sciences.

A minimum GPA of 2.7 is required for admission into Upper Division of the degree.

For information about NC teacher licensure requirements see Licensure.

As a transfer student, it is important to contact an ECU Academic Advisor, coeadvising@ecu.edu, as soon as possible.

An example of how to plan your first 2 years of the traditional 4 years of study is included at the end of this document.

Optional/Recommended courses to take at a North Carolina Community College Complete for all Concentrations: PHY 151 **PSY 150 BIO 111** ENG 111 MAT 171 PHY 152 ENG 112 **BIO 112** MAT 263* SOC 225 **GEL 111** CHM 151 (Take MAT 271* instead of 263 if CHM 152 choosing Physics as HEA 110 concentration.) By Area Concentration: Chemistry Earth Science Biology Physics **BIO 145** CHM 251 **GEL 113 MAT 271 BIO 250** CHM 252 GEL 220 or **MAT 272 GEL 230** PHY 251 PHY 252

Due to the amount of Natural Science courses with labs required/recommended for this degree, it is unlikely students will finish all recommended/optional courses before transferring. *That is okay!*

To meet ECU degree requirements, a globally diverse general education course should ideally be taken while completing your AA/AS. Please choose one course from the following: ANT 210, ANT 220, ANT 240/240A; ART 111; DRA 111; ENG 261; GEO 111, GEO 113; HIS 111, HIS 112; MUS 110; POL 210; REL 110, REL 211, REL 212. These courses would apply to different areas of an AA or AS. Consult with your advisor if you have questions.

- Students do not have to complete all recommended courses at a NCCCS institution. Other courses to complete an AA or AS are student's choice; no other current department recommendations.
- Completion of an AA or AS, including HEA 110, qualify for a General Education waiver as long as all other General Education Program requirements have been met. For more information about General Education Core Requirements at ECU, and a list of specific course options, click here.

Degree Requirements

General Education Core Requirements
40 semester hours credit required; Completion of an approved NCCCS AA/AS waives the GE requirement.

Competency	Semester Hour Credits Required	Notes
Written Communication	6	ENG 111 and ENG 112 should be taken at the community college to satisfy this competency.
Humanities & Fine Arts	9	At least one class should be labeled as Humanities (HU) and one should be labeled as Fine Arts (FA).
Social Sciences	9	NCCCS HIS courses are not considered a social science at ECU.
Natural Sciences	7	One course must include a lab.
Mathematics	3	Choose MAT 171.
Health Promotion and Health- Related Physical Activity	3	HEA 110 should be taken at the community college to satisfy this competency.

Specific General Education	As part of completing the 40 required hours, please include:	NCCCS Equivalents
Requirements	BIOL 1100 - Principles of Biology I CHEM 1150 - General Chemistry I GEOL 1500 - Dynamic Earth GEOL 1501 - Dynamic Earth Laboratory	BIO 111 CHM 151 GEL 111
	MATH 1065 - College Algebra PSYC 1000 - Introductory Psychology	MAT 171 PSY 150
	Choose a Council on Educator Preparation approved general education diversity course: PSYC 2777 - Ethnocultural Psychology or SOCI 1010 - Race, Gender, Class	SOC 225
	Note: BIOL 1100; GEOL 1500, GEOL 1501 count toward the 7 s.h. general education natural sciences requirement. CHEM 1150 counts toward the 3 s.h. general education elective requirement.	
Core	Complete 49-53 hours by choosing one area concentration.	NCCCS Equivalents
Biology	Complete 52-53 hours.	
	BIOL 1101 - Principles of Biology Laboratory I BIOL 1200 - Principles of Biology II BIOL 1201 - Principles of Biology Laboratory II	BIO 111 BIO 112
	BIOL 2110 - Fundamentals of Microbiology BIOL 2111 - Fundamentals of Microbiology Laboratory	BIO 175
	BIOL 2250 - Ecology BIOL 2251 - Ecology Laboratory	BIO 145
	BIOL 2300 - Principles of Genetics BIOL 3030 - Principles of Physiology	BIO 250
	BIOL 3260 - Cell and Developmental Biology or	
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	BIOL 3310 - Cellular Physiology	
	BIOL 3311 - Cellular Physiology Discussion BIOL 3620 - Biological Evolution CHEM 1151 - General Chemistry Laboratory I	CHM 151
	CHEM 1160 - General Chemistry II CHEM 1161 - General Chemistry Laboratory II MATH 2121 - Calculus for the Life Sciences I	CHM 152 MAT 263
	MATH 2122 - Calculus for the Life Sciences II PHYS 1250 - General Physics I PHYS 1251 - General Physics Laboratory I	PHY 151
	PHYS 1260 - General Physics II SCIE 3602 - Investigations in Physical Science SCIE 3604 - Investigations in Life and Environmental Science	PHY 152
Chemistry	SCIE 3606 - Investigations in Earth and Space Science Complete 49 hours.	NCCCS Equivalents
	BIOL 1101 - Principles of Biology Laboratory I BIOL 1200 - Principles of Biology II BIOL 1201 - Principles of Biology Laboratory II CHEM 1151 - General Chemistry Laboratory I	BIO 111 BIO 112 CHM 151
	CHEM 1160 - General Chemistry II CHEM 1161 - General Chemistry Laboratory II CHEM 3250 - Quantitative and Instrumental Analysis CHEM 3251 - Quantitative and Instrumental Analysis Laboratory	CHM 152
	CHEM 2750 - Organic Chemistry I CHEM 2753 - Organic Chemistry Laboratory I	CHM 251
	CHEM 2760 - Organic Chemistry II CHEM 2763 - Organic Chemistry Laboratory II CHEM 3770 - Biological Chemistry	CHM 252
	MATH 2121 - Calculus for the Life Sciences I MATH 2122 - Calculus for the Life Sciences II	MAT 263
	PHYS 1250 - General Physics I PHYS 1251 - General Physics Laboratory I	PHY 151
	PHYS 1260 - General Physics II PHYS 1261 - General Physics Laboratory II	PHY 152
	SCIE 3602 - Investigations in Physical Science SCIE 3604 - Investigations in Life and Environmental Science SCIE 3606 - Investigations in Earth and Space Science	
Earth Science	Complete 51 hours.	
	BIOL 1101 - Principles of Biology Laboratory I BIOL 1200 - Principles of Biology II BIOL 1201 - Principles of Biology Laboratory II	BIO 111 BIO 112
	CHEM 1151 - General Chemistry Laboratory I CHEM 1160 - General Chemistry II CHEM 1161 - General Chemistry Laboratory II	CHM 151 CHM 152
	GEOL 1550 - Oceanography or GEOL 1700 - Environmental Geology	GEL 220 GEL 230
	GEOL 1600 - Earth and Life Through Time GEOL 3070 - Earth Materials and Resources GEOL 3071 - Earth Materials and Resources Laboratory GEOL 3200 - Introduction to Field Methods	GEL 113

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Physics	GEOL 3250 - Introduction to Geomorphology GEOL 3251 - Introduction to Geomorphology Laboratory GEOL elective over 3000 (3 s.h.) MATH 2121 - Calculus for the Life Sciences I MATH 2122 - Calculus for the Life Sciences II PHYS 1250 - General Physics I PHYS 1251 - General Physics Laboratory I PHYS 1261 - General Physics Laboratory II SCIE 3602 - Investigations in Physical Science SCIE 3604 - Investigations in Life and Environmental Science SCIE 3606 - Investigations in Earth and Space Science Complete 52 hours. BIOL 1101 - Principles of Biology Laboratory I BIOL 1200 - Principles of Biology Laboratory II CHEM 1151 - General Chemistry Laboratory I CHEM 1160 - General Chemistry Laboratory I CHEM 1161 - General Chemistry Laboratory II CHEM 1161 - General Chemistry Laboratory II MATH 2171 - Calculus I	MAT 263 PHY 151 PHY 152 NCCCS Equivalents BIO 111 BIO 112 CHM 151 CHM 152 MAT 271
	MATH 2172 - Calculus II PHYS 1251 - General Physics Laboratory I PHYS 1261 - General Physics Laboratory II PHYS 2350 - University Physics I PHYS 2360 - University Physics II PHYS 3416 - Modern Physics I PHYS 3417 - Modern Physics II PHYS 4700 - Advanced Laboratory PHYS 4701 - Advanced Laboratory SCIE 3602 - Investigations in Physical Science SCIE 3606 - Investigations in Earth and Space Science	MAT 272 PHY 151 PHY 152 PHY 251 PHY 252
	Choose two of the following: PHYS 4080 - Astronomy and PHYS 4081 - Astronomy Laboratory or PHYS 4120 - Thermodynamics or PHYS 4310 - Modern Optics	
Specialty Area	Complete 6 hours. SCIE 3323 - Introduction to Teaching in the High School Science Classroom SCIE 4323 - The Teaching of Science in High School	To be completed at ECU.
Professional Courses	Complete 22-23 hours. EDUC 4400 - Foundations of School Learning, Motivation, and Assessment or PSYC 4305 - Educational Psychology READ 3990 - Teaching Reading in the Content Areas in the Secondary School or	To be completed at ECU.

	READ 5317 - Adolescent Literacy in the Content Areas	
	SCIE 2123 - Early Experiences for the Prospective Teacher SCIE 4030 - Technology in Science Teaching SCIE 4324 - Internship in Science Education SCIE 4325 - Internship Seminar: Issues in Science Education SPED 4010 - Effective Instruction in Inclusive Classrooms	
General Electives	Complete general electives needed for graduation requirements.	

Potential 2 Year Map for BS Science Education

An example of courses to take at your community college.

First Semester at NCCCS Institution

NCCCS Course	ECU Transfer Equivalent
ENG 111	ENGL 1100
BIO 111	BIOL 1100, 1101
MAT 171	MATH 1065
HEA 110	HLTH 1000/KINE 1000
ACA 122	COAD 1XXX (elective credit)

Second Semester at NCCCS Institution

NCCCS Course	ECU Transfer Equivalent
ENG 112	ENGL 2201
CHM 151	CHEM 1150, 1151
Humanities/Fine Arts course	
MAT 263 or MAT 172	MATH 2121 or 1083
PSY 150	PSYC 1000

Third Semester at a NCCCS Institution

NCCCS Course	ECU Transfer Equivalent
Humanities/Fine Arts course or PHY 151	PHYS 1250, 1251
CHM 152	CHEM 1160, 1161
BIO 112	BIOL 1200, 1201
SOC 225	SOCI 1010
Social Behavioral Science course	

Fourth Semester at a NCCCS Institution

NCCCS Course	ECU Transfer Equivalent
Humanities/Fine Arts course	
Social Behavioral Science course or Elective course	
PHY 152 or GEL 111	PHYS 1260, 1261 or GEOL 1500, 1501
Elective course	

- Schedule at ECU will depend on courses completed at the community college and semester of entry (fall or spring).
- You should email coeadvising@ecu.edu as soon as possible for more specialized advising.
- This schedule is dependent on taking full-time course loads; however, it may not be realistic to take a full-time course load if you are working full-time or part-time, are a caregiver, or have other obligations. Ask your advisor how you can be most successful.