

Students earning the AS, AA, or AA&S (or university parallel) degree from a Virginia Community College automatically satisfy the lower division general education requirements. **Courses marked with \* require a grade of C or better to transfer, even with the AS degree. The remaining lower division courses are automatically satisfied by the AS (including foreign language), regardless of the grade earned.** Additionally, courses in which a grade of "C-" or below were earned will not transfer. Therefore Community College degree holders may require additional credits to meet the 120 credit hour graduation minimum. **(AS=Associate degree)**

**Entrance Writing Sample Placement Test:** \_\_\_\_\_

**Entrance Math Placement Test:** \_\_\_\_\_

**LOWER DIVISION GENERAL EDUCATION REQUIREMENTS**

**A. Skills** grade/credit VCCS transfer equivalent

Composition–6 hours

ENGL 110C English Composition I \_\_\_\_\_ 3 AS/ENG 111  
ENGL 111C, 131C \_\_\_\_\_ 3 AS/ENG 210, 115, or 131

Oral Communication–3 hours \_\_\_\_\_ satisfied in the major by  
COMM 101R, 103R, 112R \_\_\_\_\_ Phys 499W

Mathematics–3 hours

MATH 162M \_\_\_\_\_ satisfied in the major

Foreign Language Skills–0-6 hours \_\_\_\_\_ AS/HS/TOEFL

BS students' competence must be at the 102 or 111 level.

Consult transfer guide for all equivalencies.

Computer Skills–3 hours

CS 149D or higher \_\_\_\_\_ satisfied in the major by  
\_\_\_\_\_ CS 150 or 155

**B. Perspectives**

Fine and Performing Arts--3 hours

ARTH 121A, ARTS122A, \_\_\_\_\_ 3 AS/ART 101, 102, 111  
DANC 185A, MUSC 264A, \_\_\_\_\_ 112, 113, 114, 115;  
THEA 241A, COMM/THEA 270A \_\_\_\_\_ MUS 121, 122; SPD130,  
\_\_\_\_\_ 141, or 142

History--6 hours (Choose any 2)

HIST 101H, 102H, 103H, \_\_\_\_\_ 3 AS/Choose two from  
104H, 105H \_\_\_\_\_ 3 HIS 101, 102, 111, 112,  
121, 122, 201, 202, 203,  
204, 231, 232, 251, 252,  
253, or 254

Literature--3 hours

ENGL 112L, 144L, FLET 100L \_\_\_\_\_ 3 AS/ENG 112, 235, 237,  
241, 242, 246, 267, or  
268

Philosophy--3 hours

PHIL 110P, 120P, 150P \_\_\_\_\_ 3 AS/PHI 100, 101, 102,  
211, 212, 220, REL 230,  
231, or 232

Natural Science and Technology--11 to 12 hours Met in the major

Social Science--6 hours

I. Social Science I \_\_\_\_\_ 3 AS  
Social Science II \_\_\_\_\_ 3 AS

Choose 2: (Must be two separate disciplines):

ANTR 110S, CRJS 215S, ECON 200S, ECON 201S, ECON 202S,  
GEOG 100S, GEOG 101S, POLS 100S, POLS 101S, PSYC 201S,  
PSYC 203S, SOC 201S, COMM 200S, WMST 201S

<u>Physics Course Requirements</u>	<u>grade/credit</u>	<u>Transfer</u>
MATH 211 Calculus I	_____ 4	_____
MATH 212 Calculus II	_____ 4	_____
MATH 312 Calculus III	_____ 4	<u>MATH 285</u>
MATH 307 Differential Equations	_____ 3	<u>MATH 280</u>
MATH 316 or 401 or 421 or 422	_____ 3	_____
CHEM 115N College Chemistry I**	_____ 4	<u>CHM 111 or 113</u>
CHEM 116N College Chemistry II **	_____ 4	<u>CHM 112 or 114</u>
CS 150 Intro to Programming	_____ 4	_____
PHYS 231N University Physics I*	_____ 4	_____
PHYS 232N University Physics II*	_____ 4	_____
PHYS 323 Modern Physics	_____ 3	_____
PHYS 319 Analytical Mechanics	_____ 3	_____
PHYS 320 Electricity & Magnetism	_____ 3	_____
PHYS 352 Intro. Quantum Mechanics	_____ 3	_____
PHYS 303 Laboratory	_____ 3	_____
PHYS 413 Methods of Exp. Physics	_____ 3	_____
PHYS 420 Computational	_____ 3	_____
PHYS 453 Radiation & Optics	_____ 3	_____
PHYS 454 Thermal Physics	_____ 3	_____
PHYS 456 Inter. Quantum Mech.	_____ 3	_____
PHYS 499W Senior Thesis	_____ 3	_____
Approved Physics Seminar	_____ 1	_____
Two courses from:		
PHYS 313, 350, 411, 415, 416, 417	_____ 3	_____
with at least three credits 4xx	_____ 3	_____

**\*Physics majors must earn a grade of "C" or better in PHYS 231 and PHYS 232.**

**\*\* (CHEM 135) or (CHEM 115 and CHEM 116)**

**UPPER DIVISION GENERAL EDUCATION**

Satisfied by any University approved 2<sup>nd</sup> major, minor, cluster, or two upper-division courses (6 credits) outside of and not required by the major.

**120 HOURS AND A 2.0 GRADE POINT AVERAGE IN THE MAJOR, MINOR, AND OVERALL ARE NEEDED TO GRADUATE.**

**Additional Graduation Requirements:**

Passage of Exit Writing Exam \_\_\_\_\_  
Application for Graduation \_\_\_\_\_  
Passage of Physics Exit Exam \_\_\_\_\_  
Senior Assessment \_\_\_\_\_

**PHYSICS MINOR: (12 credits at 300-400 level)**

PHYS 319	_____ 3	_____
PHYS 320	_____ 3	_____
6 additional credits at 300-400 level	_____ 3	_____
	_____ 3	_____