

BACHELOR OF SCIENCE–Physics Major Track E (BS Physics and MBA)

2015-2016 Old Dominion University Catalog

NAME: _____

UIN: _____

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: _____**LOWER DIVISION GENERAL EDUCATION REQUIREMENTS****A. Skills** grade/credit VCCS transfer equivalentWritten Communication–6 hours

ENGL 110C English Composition I _____ 3 AS/ENG 111
 ENGL 211C, 231C _____ 3 AS/ENG 112, 210, or 115, 131

Oral Communication–3 hours

COMM 101R, 103R, 112R _____ 3 CST 100, 105, 110, 111, 112, or 126

Mathematics–3 hours

MATH 162M _____ ✓ satisfied in the major

Language and Culture –0-6 hours

_____ AS/HS/TOEFL

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

Consult transfer guide for all equivalencies.

Information Literacy–3 hours

CS 120G, CS 121G, LIBS 120G _____ 3 AS/ITE 119
 or ECE 111 + CS 122

B. Ways of KnowingHuman Creativity--3 hours

ARTH 121A, ARTS122A, _____ 3 AS/ART 100–106, 111–114,— ;
 DANC 185A, MUSC 264A, _____ MUS 121, 122, 125;
 THEA 241A, COMM/THEA _____ CST 130, 141, 142, 151, 152, 231, 232, 250;

History--3 hours

HIST 100H, 101H, 102H, 103H, _____ 3 HIS 101, 102, 111, 121, 122, 203, 204, 231, 232, 253, 254
 104H, 105H

Literature--3 hours

ENGL 112L, 114L, FLET 100L _____ 3 AS/ENG 125, 236, 237, 241–246, 251–256, 267, or 268

Philosophy and Ethics--3 hours

PHIL 110P, 120P, 140P, 230E, _____ 3 AS/PHI 100, 101, 102, 250E, 303E, 344E, 345E, 441E, 442E, or other ‘E’ or ‘P’ course
REL 230, 231, or 232

Natural Science and Technology–8 hours Met in the major

Human Behavior–3 hours _____ 3 AS

ANTR 110S, CRJS 215S, ECON 200S, ECON 201S, ECON 202S, GEOG 100S, GEOG 101S, POLS 100S, POLS 101S, POLS 102S, PSYC 201S, PSYC 203S, SOC 201S, COMM 200S, WMST 201S, FIN 210S

The Impact of Technology--3 hours _____ 3 AS

CS300T, DNTH 440T, ENGL307T, GEOG 306T, HIST 300T, HIST 304T, HIST 389T, HIST 386T/SCI 302T, IT 360T, MUSC 335T, POLS 350T, STEM 110T, STEM 370T, WMST 390T, COMM 372T, PHIL 383T, or other ‘T’ course

Entrance Math Placement Test: _____**Physics Course Requirements** grade/credit Transfer

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 121N/122N Chemistry I**	_____ 4	<u>CHM 111 or 113</u>
CHEM 123N/124N 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 303 Laboratory	_____ 3	_____
PHYS 323 Modern Physics	_____ 3	_____
PHYS 355 Math Methods	_____ 3	_____
PHYS 319 Analytical Mechanics	_____ 3	_____
PHYS 413 Methods of Exp. Physics	_____ 3	_____
PHYS 425 Electricity & Magnetism	_____ 3	_____
PHYS 452 Intro. Quantum Mechanics	_____ 3	_____
PHYS 454 Thermal Physics	_____ 3	_____
One course from:		
PHYS 420, 453 or 456	_____ 3	_____
PHYS 499W or 489W/490W Thesis	_____ 3	_____
Approved Physics Seminar	_____ 1	_____
One course from:		
PHYS 311, 313, 332, 350, 411, 415, 416, 417.	_____ 3	_____

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

**** (CHEM 137N/138N) or (CHEM 121N/122N/123N/124N)**

UPPER DIVISION GENERAL EDUCATION

Satisfied by MBA CORE Curriculum, taken Senior Year – each course grade must be B or better for admittance to MBA program:

ACCT 601 Accounting for Managers	_____ 3	_____
BNAL 600 Foundations of Statistics	_____ 3	_____
ECON 604 Mgmt. Econ & Trade	_____ 3	_____
FIN 605 Financial Management	_____ 3	_____
MGMT 602 Organizational Mgmt.	_____ 3	_____
MKTG 603 Market Management	_____ 3	_____

For Physics degree only: 120 HOURS AND A 2.0 GRADE POINT AVERAGE IN THE MAJOR, MINOR, AND OVERALL ARE NEEDED TO GRADUATE.

Additional B.S. Graduation Requirements:

Application for Graduation _____
 Passage of Physics Exit Exam _____
 Senior Assessment _____

For MBA: Additional 30 credits hours in MBA program. For detailed information on MBA courses and concentrations, please refer to the MBA information in the Old Dominion University Graduate Catalog: <http://catalog.odu.edu/>

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