BACHELOR OF SCIENCE–Physics Major Track E (BS Physics and MBA) NAME: _____
2012-2013 Old Dominion University Catalog

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 equivalent***
Written 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	3	CST 100, 105, 110, 111, 112, or 126
COMM 101R, 103R, 112R		
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 or CS 121G	3	AS/ITE 119

B. ***Ways of Knowing***		
Human Creativity--3 hours		
ARTH 121A, ARTS122A, DANC 185A, MUSC 264A, THEA 241A, COMM/THEA	3	AS/ART 100–106, 111–114,— ; MUS 121, 122, 125; CST 130, 141, 142, 151, 152, 231, 232, 250;
History--3 hours		
HIST 100H, 101H, 102H, 103H, 104H, 105H	3	HIS 101, 102, 111, 121, 122, 203, 204, 231, 232, 253, 254
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, 250E, 303E, 344E, 345E, 441E, 442E	3	AS/PHI 100, 101, 102 111, 112, 115, 220, 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		

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	MATH 285
MATH 307 Differential Equations	3	MATH 280
MATH 316 or 401 or 421 or 422	3	
CHEM 121N/122N Chemistry I**	4	CHM 111 or 113
CHEM 123N/124N Chemistry II**	4	CHM 112 or 114
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:
MBA CORE courses taken Senior Year – all 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 Graduation Requirements:
Application for Graduation _____
Passage of Physics Exit Exam _____
Senior Assessment _____

edited: July 19, 2012