BACHELOR OF SCIENCE–Physics Major Track D (B.S. Physics and B.S.E.E. in Electrical Engineering)
2012-2013 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 150 credit hour graduation minimum. **(AS=Associate degree)**

LOWER DIVISION GENERAL EDUCATION REQUIREMENTS

	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, 115, or 131
Oral Communication–3 hours	3	CST 100, 105, 110, 111,
COMM 101R, 103R, 112R		112, or 126
Mathematics-3 hours		satisfied in the major
Language and Culture –0-6 hours		AS/HS/TOEFL
Information Literacy–3 hours		satisfied in ECE major
Human Creativity--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--3 hours		
HIST 100H, 101H, 102H, 103H, 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, 114L, FLET 100L	3	AS/ENG 112, 235, 237, 241, 242, 246, 267, or 268
Philosophy and Ethics–3 hours		
ENMA 480	3	
Natural Science and Technology–8 hours		satisfied 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 ____ satisfied in the major

Additional Graduation Requirements:
Passage of Exit Writing Exam _____
Application for Graduation _____
Passage of Physics Exit Exam _____
Senior Assessment _____

150 HOURS AND A 2.0 GRADE POINT AVERAGE IN PHYSICS, E.E. AND OVERALL ARE NEEDED TO GRADUATE.

Upper Division Gen Ed: Satisfied by E.E. Second Degree

Common Course Requirements	grade/credit	Transfer/subs
Approved Physics Seminar		ENGN 110
CHEM 121N/122N Chemistry I**	4	CHM 111 or 113
CHEM 123N/124N Chemistry II**	4	CHM 112 or 114
MATH 211Calculus I	4	
MATH 212 Calculus II	4	
MATH 312 Calculus III	4	MATH 285
MATH 307 Differential Equations	3	MATH 280
CS 150 Intro to Programming	4	
PHYS 231N University Physics I*	4	
PHYS 232N University Physics II*	4	

Physics Course Requirements	grade/credit	Transfer
MATH 316 or 401 or 421 or 422	3	
PHYS 323 Modern Physics	3	
PHYS 319 Analytical Mechanics	3	
PHYS 425 Electromagnetism I	3	
PHYS 452 Intro. Quantum Mechanics	3	
PHYS 303 Laboratory		ECE 287
PHYS 413 Methods of Exp. Physics	3	
PHYS 454 Thermal Physics	3	
PHYS 420 Computational Physics	3	
PHYS 453 Electromagnetism II	3	or ECE 323
PHYS 456 Inter. Quantum Mech.	3	
PHYS 499W or 489W/490W Thesis	3	
One from: PHYS 411, 415, 416, 417	3	

Engineering Course Requirements	grade/credit	Transfer
ENGN 110 Engin. & Tech. I	2	
ECE 111 Info Literacy for ECE	2	
ECE 200 Engin. Analysis Tools*	3	
ECE 201 Circuit Analysis*	3	
ECE 202 Circuits, Sig. & Lin. Sys.*	3	
ECE 287 Circuit Analysis*	2	
ECE 241 Fund. Comp. Engn.*	4	
ECE 303 Intro. To Electrical Power	3	
ECE 313 Electronics Circuits	4	
ECE 332 Microelectr. Mat. & Proc.	3	
ECE 304 Prob. Stat. & Reliab.	3	
ECE 381 Intro to Disc-time Sig. Proc.	3	
ECE 387 Microelectronics Lab	3	
ECE 485W EE Design I	3	
ECE 486 Prep: ECE Design II	1	
ECE 487 ECE Design II	2	
ENGN 401 FE Exam Review	1	
ECE Tech Elective I, II, III	3 each	

***A minimum grade of "C" is required in PHYS 231 and PHYS 232 and all ECE 2xx courses.**

****(CHEM 137N/138N) or (CHEM 121N/122N/123N/124N)**
edited: May 15, 2012