

Longwood University/Old Dominion University

ARTICULATION AGREEMENT 2011-2012

Bachelor of Science in Physics to a Bachelor of Science in Civil Engineering

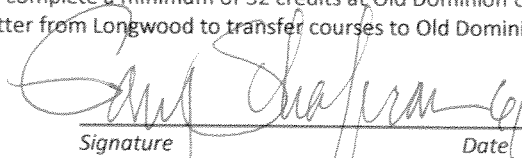
Longwood University B.S. degree in Physics				Old Dominion University B.S. degree program in Civil Engineering			
Major-*** require C- or better for transfer				Major			
CHEM	111	***Fundamental Chemistry I	4	CHEM	121/ 122N	Foundations of Chemistry	4
CHEM	112	***Fundamental Chemistry II	4	CHEM	123/ 124N	Foundations of Chemistry	4
PHYS	201	***University Physics I	4	PHYS	231N	University Physics	4
PHYS	202	***University Physics II	4	PHYS	232N	University Physics	4
MATH	261	***Calculus I	4	MATH	211	Calculus I	4
MATH	262	***Calculus II	4	MATH	212	Calculus II	4
MATH	361	***Calculus III	4	MATH	312	Calculus III	4
MATH	362	***Differential Equations	3	MATH	307	Ordinary Differential Equations	3
CMSC	204	***Intro Programming	3	CS	150	Problem Solving and Programming	3
PHYS	260	Introduction to Experimental Design	2	PHYS	2ELE	Elective	2
PHYS	321	Modern Physics I	3	PHYS	323	Modern Physics I	3
PHYS	324	Thermodynamics	3	PHYS	454	Thermal and Statistical Physics	3
PHYS	352	Mechanics	3	PHYS	319	Analytical Mechanics (substitute MAE 205)	3
PHYS	332	Electricity and Magnetism	3	PHYS	320	Intro to Electromagnetic Theory	3
PHYS	331	AC/DC Circuits	4	EET	350	Combination of PHYS 341+ 331= EET 350 (substitute for ENGN 110)	4
PHYS	341	Electronics	4	EET	350	Combination of PHYS 341+ 331= EET 350 (substitute for ENGN 111)	4
PHYS	395	**Statics	3	CEE	204	Statics	3
PHYS	ELE	Elective (Please see Longwood catalog for list of applicable courses)	3	PHYS	ELE	Elective	3
Total in Major			62	Total in Major			62
General Education				General Education			
*ENGL	150	Writing and Research	3	ENGL	110C	English Composition	3
ART Achievement	REQ	One from ART 125, 160, or THEA 101	3	FPAP	1REQ	Human Creativity Way of Knowing	3
ENGL	REQ	Choose one literature course from ENGL 202, 201, or 203	3	LIT	1REQ	Literature Way of Knowing	3
HIST	100 or 110	Western Civilization	3	HISP	1REQ	Interpreting the Past Way of Knowing	3
Social Science	REQ	Select one from courses listed in Longwood catalog	3	SSCP	1REQ	Human Behavior Way of Knowing	3
FORGN LANG	REQ	FREN 101, SPAN 201 OR GERM 201	3	FLP	1REQ	Foreign Language	3
PHED or RECR	101	Health / Physical Education	2	PE	1ELE	Elective	2
LSEM	100	Longwood Seminar	1	UNIV	100	University Orientation	1
DIVERSITY	REQ	Select one from courses listed in Longwood catalog	3	ELE pr REQ		Elective or General Education Requirement	3
CMSC/ MATH	350	Ethics in Math or Computer Science	3	GNRL	3ELE	Upper Division Elective (substitute for ENMA 480)	3
ENGL	400	Adv Writing Seminar	3	ENGL	327W	Advance Composition (substitute for ENGL 231C)	3
Total Additional General Education			30	Total Additional General Education			30

Additional Requirements - ODU			
SCI	ELEC	Choose either a lab science outside of PHYS/CHEM	
			4
MAE	220	Engineering Mechanics II—Solid Mechanics & Lab	3
CET	319	Surveying for Engineers	1
CEE	320	CE Materials	3
CEE	305	C&E Engineering Computations	3
CEE	330	Hydromechanics	3
CEE	350	Environ Pollution & Control	3
CEE	304	Probability, Statistics and Risk in CE	3
CEE	310	Structures I	3
CEE	323	Soil Mechanics	3
CEE	340	Hydraulics & Water Resources	3
CEE	335	CE Soils & Hydraulics Lab	1
CEE	240	GEO Information Sys in C&E Engr	3
CEE	470	Transportation Engineering	3
CEE	410	Concrete Design I	3
CEE	430	Foundation Engineering	3
CEE	402	Professional Practice of Engineering	1
CEE	403W	Civil Engineering Design Project	3
CEE	4XX	Transportation or Environ Engr Elective	3
CEE	4XXX	Civil Engr Elective	3
ENGN	401	FE Review	1
Total Credits to be Taken at ODU			56
Total Transfer Credits in Major			62
Total Credits in General Education			30
Total Credits Earned for Dual B.S. Degree			148

** PHYS 395-Statics may not be offered at Longwood University. If not offered, students will have to complete this course at ODU or through the Virginia Community College System, prior to enrolling at ODU.** Students are required to complete a minimum of 32 credits at Old Dominion University to earn the baccalaureate degree. Student must earn a grade of C- or better from Longwood to transfer courses to Old Dominion University.


 Signature Date 8/15/11

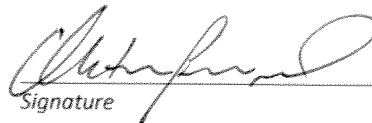
Dr. Melissa Rhoten
 Chair, Department of Chemistry & Physics
 Longwood University


 Signature Date 6/21/11

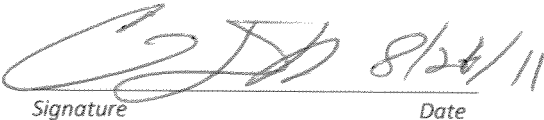
Dr. Gary Schafran
 Chair, Batten College of Engineering and
 Technology (Civil Engineering)
 Old Dominion University


 Signature Date 8/15/11


Dr. Michelle Parry
 Director, Dual Degree and Physics Program
 Longwood University


 Signature Date 6/21/2011

Dr. Oktay Baysal
 Dean, Batten College of Engineering and
 Technology
 Old Dominion University


 Signature Date 8/24/11

Dr. Charles Ross
 Dean, Cook-Cole College of Physics
 Longwood University


 Signature Date 7/6/11

Dr. Carol Simpson
 Provost and Vice-President, Academic Affairs
 Old Dominion University


 Signature Date 8/19/2011

Dr. Ken Perkins
 Interim Vice President, Academic Affairs
 Longwood University