

Articulation Verification: Course to Course Alignment

WESTCHESTER COMMUNITY COLLEGE					SUNY Polytechnic Institute				
Degree:		A.S.			Degree:		Bachelor of Science		
Program of Study:		Engineering Science			Program of Study:		Civil Engineering		
Course Prefix	Course Number	Title	Cr.	√	Course Prefix	Course Number	Title	Cr.	CR. APPLY TO 4 YR. DEGREE
CORE REQUIREMENTS									
ENG	101	Writing and Research	3		ENG	101	Composition	3	Yes
ENG	102	Writing and Literature	3		HUM	1	Humanities Gen Ed	3	Yes
MATH	181	Calculus 1	4		MAT	151	Calculus I	4	Yes
MATH	191	Calculus 2	4		MAT	152	Calculus II	4	Yes
MATH	230	Calculus 3	4		MAT	253	Calculus III	4	Yes
MATH	240	Differential Equations	4		MAT	260	Differential Equations	4	Yes
CHEM	107	Inorganic Chemistry 1 (and Lab)	5		CHE	130	Introductory Chemistry I	4	Yes
PHYS	121	Engineering Physics 1 (and Lab)	5		PHY	201	Physics I	4	Yes
PHYS	122	Engineering Physics 2 (and Lab)	5		PHY	202	Physics II	4	Yes
		Social Sciences, see SUNY Gen. Ed. Courses	3		SOS	1	Social Sciences elective	3	Yes
		American History, The Arts, Foreign Language, Other World Civilizations, Western Civilization- see SUNY Gen. Ed. courses (Select ONE course)	3			43	American History, The Arts, Foreign Language, Other World Civilizations, Western Civilization- see SUNY Gen. Ed. courses (Select ONE course)	3	Yes
DEGREE REQUIREMENTS									
COMSC	101	Computer Programming 1	4				Open ASCI Elective	4	
MECH	109	Intro to Engineering	3		ESC	110	Intro to Engineering	3	Yes
MECH	126	Statics	3		ESC	210	Engineering Mechanics: Statics	3	Yes
		Select ONE of the following FOUR paths to complete the remaining degree requirements:							
		Engineering Science (No Concentration)		12		12	#VALUE!		
CIVIL	214	Surveying 1							
CIVIL	221	Strength of Materials							
COMSC	110	Computer Programming 2							
COMSC	201	Data Structures							
ELEC	128	Electrical Circuits							
ELEC	129	Digital Logic							
ELEC	223	Digital Logic and Switching Circuits							
ELEC	227	Electrical System Analysis							
ELEC	255	Circuits for Engineers							
MECH	127	Introduction to Thermodynamics							
MECH	227	Dynamics							
		Civil Engineering Concentration		9					
CIVIL	214	Surveying 1			CE	210	Elementary Surveying	3	Yes
CIVIL	221	Strength of Materials			ESC	230	Mechanics of Materials	3	Yes
MECH	227	Dynamics			ESC	240	Engineering Mechanics- Dynamics	3	Yes
		and select ONE of the following courses:		4		13	#VALUE!	Students can select from the two options below:	

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BIOL	101	Principles of Biological Science (and Lab)		BIO	101	Biology I	4
CHEM	111	Inorganic Chemistry 2 (and Lab) (5 credits)		CHE	131	Introductory Chemistry II	4
PHYS	143	Earth Science (and Lab)					
		Electrical Engineering Concentration	14		14	#VALUE!	
ELEC	223	Digital Logic and Switching Circuits					
ELEC	227	Electrical System Analysis					
ELEC	255	Circuits for Engineers					
MATH	215	Linear Algebra					
		Mechanical Engineering Concentration	12		12	#VALUE!	
CIVIL	221	Strength of Materials					
ELEC	255	Circuits for Engineers					
MECH	127	Introduction to Thermodynamics					
MECH	227	Dynamics					
TOTAL							67

NOTES:

WCC general education "gen. ed." course options are located at www.sunywcc.edu/gened

Minimum Total Credits = 65

					Year 3		
					ESC 120	Design Tools and Processes	3
						General Ed.	4
						General Ed.	4
					CE 230	Civil Engineering Materials	3
					CE 220	Professionalism	2
					CE 330	Fluid Mechanics	3
					CE 301	Structural Engineering	4
					CE 302	Transportation Engineering	3
					CE 303	Environmental Engineering	4
					CE 304	Geotechnical Engineering	3
					Year 4		
					ECE 260 or ME	Pick One	3
						CE Emphasis 1	3
					CE335	Water Resource Engineering	3
					CE 480	Capstone Design 1	3
						CE Emphasis 2	3
					CE 481	Capstone Design 2	3
						CE Upper Elective	3
						Open Elective	3
						Open Elective	3
					COM 306	Upper division writing	4
						Total	64
						Need 1 more course to make up 128	