Engineering

Associate in Science in Engineering

to

Bachelor of Science in Robotics Engineering

Delaware County Community College			***Widener University***		
First Semester			***First Semester***		
ENG 100	**English Composition I**	**3**	ENGL 101	Reading, Thinking, & Writing	**3**
MAT 160	**Calculus I**	**4**	MATH 141	Calculus I	**4**
CHE 110	**General Chemistry I**	**4**	CHEM 145/147	General Chemistry I & General Chem	**4**
EGR 150	**Engineering Topics**	**1**	ENGR 111	Engineering Techniques	**2**
DPR 101	**Intro to Computer Science**	**3**	CSCI 131 or 151	Introduction to Programming or Introduction to Computer Science	**3-4**
		15			
Second Semester			***Second Semester***		
ENG 112	**English Comp II: Writing About Literature**	**3**	ENGL 102	Literature & Critical Writing	**3**
MAT 161	**Calculus II**	**4**	MATH 142	Calculus II	**4**
CHE 111	**General Chemistry II**	**4**	CHEM 146/148	General Chemistry II & General Chemistry Lab II	**4**
PHY 131	**University Physics I**	**4**	PHYS 161/163	Physics I & Physics I Lab	**4**
		15			**15**
Third Semester			***Third Semester***		
MAT 260	**Calculus III**	**4**	MATH 241	Multivariable Calculus	**4**
PHY 132	**University Physics II**	**4**	PHYS 162/164	Physics II & Physics II Lab	**4**
EGR Elective[1]		**3-5**			
	Any transferable Diversity & Social Justice designated Social Science course	**3**	SSCI	Social Science elective	**3**
	Any transferable Global Understading designated Social Science course	**3**	SSCI	Social Science elective	**3**
		17-19			
Fourth Semester			***Fourth Semester***		
MAT 261	**Differential Equations**	**3**	MATH 242	Elementary Differential Equations	**3**
COMM 100 or COMM 111	**Interpersonal Communication or Public Speaking**	**3**	COMS 290 or COMS 180	Social Science elective or Social Science elective	**3**
EGR Elective[2]	**Engineering Curriclum Electives**	**6-9**			**6**
	Humanities Elective	**3**	HUM	Humanities elective	**3**
		15-18			**15**
	Total Credits:	**62-67**		**Total Credits:**	

Notes:

1	Students must take a minimum of one of the following engineering courses as part of the Engineering Curriculum Electives: EGR200, 201, 210, or 220.				
EGR 200	Engineering Statics	3	ENGR 213	Statics	3
EGR 201	Engineering Dynamics	3	ENGR 214	Dynamics	3
EGR 210	Engineering Circuits	4			
EGR 220	Engineering Thermodynamics	3	ENGR 325	Thermodynamics	3
2	Students must select 2 additional Engineering Curriculum Electives. Suggested electives by transfer discipline are listed below:				
	For Biomedical Engineering: EGR 200, 201, 210 or 220.				
	For Chemical Engineering: CHE 200, 201, EGR 200, 201, 210 or 220.				
	For Civil Engineering: EGR 100, 200				
	For Electrical/Computer Engineering: EGR 200, 201, 210, 220, CS 110, 210, or MAT 200.				
	For Mechanical Engineering: EGR 100, 200, 201, 210, 220, or MAT 200.				
	For Robotics Engineering:EGR 100, 200, 201, 210, DPR 110, 210				
EGR 100	Engineering Graphics	3	ENGR 113	Computer Aided Engineering Design	2