

# Engineering

*Associate in Science in Engineering*

to

**Bachelor of Science in Chemical Engineering**

<i>Delaware County Community College</i>			<i>Widener University</i>		
<b>First Semester</b>			<b>First Semester</b>		
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
CS 101	Introduction to Computer Science	3	CSCI 131 or 151	Introduction to Programming or Introduction to Computer Science	3-4
		15			
<b>Second Semester</b>			<b>Second Semester</b>		
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
<b>Third Semester</b>			<b>Third Semester</b>		
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 <sup>1</sup>		3-5			
	Any transferable Diversity & Social Justice designated Social Science course	3	SSCI	Social Science elective	3
	Any transferable Global Understanding designated Social Science course	3	SSCI	Social Science elective	3
		17-19			
<b>Fourth Semester</b>			<b>Fourth Semester</b>		
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 <sup>2</sup>	Engineering Curriculum Electives	6-9			6
	Humanities Elective	3	HUM	Humanities elective	3
		15-18			15
	<b>Total Credits:</b>	<b>62-67</b>		<b>Total Credits:</b>	
<b>Notes:</b>					
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