



# AS #4120 Engineering

60 Credits

Effective Fall 2019

*This is an overview of the program. Any suggested course sequencing is meant to serve as a guideline for your semester planning. Students are expected to see your assigned advisor to develop and review their individual educational plans. The scheduling of courses, program sequencing and curriculum are subject to change.*

Developmental Courses (as determined through College Placement Testing)* and Prerequisites:									
<i>* Zero level courses must be completed with a C grade or higher.</i>									
<input type="checkbox"/>	ESL classes	<input type="checkbox"/>	Engl 050	<input type="checkbox"/>	Math 006	<input type="checkbox"/>	Math 033	<input type="checkbox"/>	Math 103
<input type="checkbox"/>	Engl 002	<input type="checkbox"/>	Engl 051	<input type="checkbox"/>	Math 090	<input type="checkbox"/>	Math 044	<input type="checkbox"/>	Math 104
<input type="checkbox"/>	Engl 003	<input type="checkbox"/>	Engl 057	<input type="checkbox"/>	Math 008	<input type="checkbox"/>	Math 045	<input type="checkbox"/>	Math 119
<input type="checkbox"/>	Engl 007	<input type="checkbox"/>	FS 100/103	<input type="checkbox"/>	Math 022	<input type="checkbox"/>	Math 055	<input type="checkbox"/>	Chem 100 (if needed)

\*See counselor/advisor to discuss this course or options to self-remediate and successfully place into higher- or college-level course.

General Education Courses (16 credits)		
ENGL 101	3 crs	Pre-req: Placement thru testing, or ENGL 051 & ENGL 003 with grades of C or higher
ENGL 104	3 crs	Pre-req: ENGL 101 & ENGL 003 with grades of C or higher
COMM 101	3 crs	Pre-req: Placement thru testing, or ENGL 051 & ENGL 003 with grades of C or higher
Humanities & Arts Elective	3 crs	
Social & Behavioral Sciences Elect	3 crs	
Any Wellness Course	1 cr	See HACC catalog for a list of approved Wellness courses
First Year Seminar		ENGR 102 (meets 1-cr FYS) or see HACC Catalog for a list of approved courses (unless exempted by examination-see <a href="http://www.hacc.edu/NewStudents/PlacementTesting/index.cfm">http://www.hacc.edu/NewStudents/PlacementTesting/index.cfm</a> ).

Required Program Courses (44 credits)			
CAD 154	3 crs	Computer-Aided Drafting & Design	
CHEM 101	4 crs	General Inorganic Chemistry	Pre: MATH 103 with C or higher; eligibility for enrollment in ENGL 101; and CHEM 100 (or high school equivalent) with C or higher or Toledo Exam score of 26 or higher
ENGR 102	2 crs	Engr. & Engineering-Tech Orientation	Pre: Eligibility for enrolment into ENGL 101 (meets 1-cr FYS requirement)
ENGR 213	3 crs	Statics	Pre: MATH 121 with grade of C or higher
ENGR 214	3 crs	Dynamics	Pre: ENGR 213 with grade of C or higher
MATH 121	4 crs	Calculus I	Pre: MATH 119 with grade of C or higher
MATH 122	4 crs	Calculus II	Pre: MATH 121 with grade of C or higher
MATH 221 or MATH 222	4 crs	Calculus III or Differential Equations	Pre: MATH 122 with grade of C or higher
PHYS 211	4 crs	Physics for Engineers & Scientists I	Pre: MATH 121 with grade of C or higher
PHYS 212	4 crs	Physics for Engineers & Scientists II	Pre: MATH 122 & PHYS 211 with grades of C or higher
Transfer Electives	9 crs	Transfer Electives Students select their electives appropriate for their transfer institution. Note number of credits and prerequisites. Transfer electives vary with specialized fields and transfer institutions.	

Recommended Sequence For Full-Time Students (Part-time students can complete this program by taking one or more courses each semester.)							
Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
CAD 154	3	ENGL 104	3	ENGR 213	3	ENGR 214	3
CHEM 101	4	MATH 122	4	MATH 221 or 222	4	PHYS 212	4
ENGL 101	3	COMM 101	3	PHYS 211	4	Humanities & Arts Elective	3
ENGR 102 (FYS)	2	Social & Behavioral Science	3	Transfer Elective	3	Transfer Elective	3
MATH 121	4	Transfer Elective	3	Wellness	1		
	<b>16</b>		<b>16</b>		<b>15</b>		<b>13</b>

Counselor/Advisor Contact Information by Campus:				
Gettysburg	Harrisburg	Lancaster	Lebanon	York
Student Services	Counseling and Advising	Counseling and Advising	Receptionist Desk	Counseling and Advising
Lobby	Cooper 219	221 Main	Lobby	Leader Suite 104
717-337-3855	717-780-2498	(717) 358-2988	717-270-4222	717-801-3213

Program Faculty Coordinators:  
Forrest Lysinger [frlysing@hacc.edu](mailto:frlysing@hacc.edu) (717-736-4223) or Kim Ketelsleger [kaketels@hacc.edu](mailto:kaketels@hacc.edu) (717-736-4224)