



AS 4700 Mechanical Engineering Technology

Effective Fall 2019

62 Credits

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: * Zero level courses must be completed with a C grade or higher.									
<input type="checkbox"/>	ESL classes	<input type="checkbox"/>	Engl 050	<input type="checkbox"/>	Math 006	<input type="checkbox"/>	Math 033	<input type="checkbox"/>	FS 100/103
<input type="checkbox"/>	Engl 002	<input type="checkbox"/>	Engl 051	<input type="checkbox"/>	Math 090	<input type="checkbox"/>	Math 044		
<input type="checkbox"/>	Engl 003	<input type="checkbox"/>	Engl 057	<input type="checkbox"/>	Math 008	<input type="checkbox"/>	Math 045		
<input type="checkbox"/>	Engl 007			<input type="checkbox"/>	Math 022	<input type="checkbox"/>	Math 055		

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

General Education Courses (19 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 and Arts Elective	3 crs	
Social and Behavioral Sciences	3 crs	
Science Elective (w/ Lab)	3 crs	(Consider: PHYS 201 <u>or</u> CHEM 101 <u>or</u> BIOL 101 if transferring)
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 http://www.hacc.edu/NewStudents/PlacementTesting/index.cfm).

Required Program Courses (43 credits)			
CAD 154	3 crs	Computer-Aided Drafting & Design	
CAD 164	2 crs	Adv Computer-Aided Drafting & Design	Pre: CAD 154 with a grade of C or higher
CVTE 208	3 crs	Strength of Materials	Pre: GTEC 201 with a grade of C or higher
ELEC 100	1 cr	Fundamentals Electricity & Electronics	Pre: MATH 033 with C or higher; Co-req: MATH 044 <u>and</u> 055 (or MATH 051)
ENGR 102 (FYS)	2 crs	Engr. & Engineering-Tech Orientation	meets 1-cr FYS requirement
ENGR 208	3 crs	Microcontrollers and PLC's	Pre: ELEC 100 <u>or</u> ELOC 153 with a grade of C or higher
GTEC 104	3 crs	Engineering Materials & Processes	
GTEC 201	3 crs	Statics	Pre: MATH 103 <u>and</u> 104 with grades of C or higher
GTEC 202	3 crs	Statistical Quality Control	Pre: MATH 033, 044, & 055 (or MATH 051) with grades of C or higher
GTEC 208	1 cr	Strength of Materials Lab	Pre: GTEC 201 with a grade of C or higher
IA 205	3 crs	Computer Numerical Control	Pre: CAD 154 <u>and</u> MDES 207 with grades of C or higher
MATH 103	3 crs	College Algebra	Pre: Placement <u>or</u> MATH 033, 044, & 055 (or MATH 051) with C grades or higher
MATH 104	3 crs	Trigonometry	Pre: Placement <u>or</u> MATH 033, 044, & 055 (or MATH 051) with C grades or higher
MDES 201	3 crs	Dynamics	Pre: GTEC 201 <u>and</u> CAD 154 with grades of C or higher
MDES 204	3 crs	Product Design	Pre: CVTE 208; <u>or</u> Permission of the Discipline Lead
MDES 206	3 crs	Fluid Flow	Pre: GTEC 201 with a grade of C or higher
MDES 207	1 cr	Machine Shop Theory & Practice	

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		Summer I		Fall Semester II		Spring Semester II	
CAD 154	3	ENGL 104	3	COMM 101	3	CVTE 208	3	CAD 164	2
ENGL 101	3	ELEC 100	1	Social & Beh Sciences	3	GTEC 202	3	GTEC 208	1
ENGR 102 (FYS)	2	GTEC 104	3	Total credits	6	IA 205	3	IA 208	2
MATH 103	3	GTEC 201	3			MDES 201	3	MDES 204	3
MATH 104	3	Humanities & Arts	3			MDES 206	3	Science w/ Lab	3
Total credits	14	MDES 207	1			Total credits	15	ENGR 208	3
		Wellness	1					Total credits	14
		Total credits	15						

SUGGESTED ADDITIONAL SEQUENCE FOR STUDENTS TRANSFERRING TO A BSMET PROGRAM				
Fall Semester III		Spring Semester III		
CHEM 101 (Inorganic Chemistry)	4	Transfer Electives*	6	
Transfer Elective*	3	MATH 121 (Calculus I)	4	
MATH 119 (Pre-Calculus, 12-Wk Session)	4	PHYS 202 (General Physics II)	4	
PHYS 201 (General Physics I)	4	Wellness (PSU Only)	1	
Wellness (PSU Only)	1	Total Credits	15	
Total Credits	16			

* Students are to select courses that are suited for their intended transfer institution.

Counselor/Advisor Contact Information by Campus:				
<u>Gettysburg</u>	<u>Harrisburg</u>	<u>Lancaster</u>	<u>Lebanon</u>	<u>York</u>
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 (717-736-4223) or Kim Ketelsleger kaketels@hacc.edu (717-736-4224)				