

Thomas Jefferson University  
B.S. in ENGINEERING: MECHANICAL ENGINEERING

2017-2018

Name West Chester 3+2

ID# \_\_\_\_\_

<b>Fall 1 - 17-18 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
FYS-100	Pathways Seminar (Not required for transfer students)		1		waived	
WRIT-101	Writing Seminar I: Written Communication		3	■	TR	WRIT120,220
MATH-111	Calculus I		4	■	TR	MAT161
CHEM-103/103L	Chemistry I w/ Lab		4	■	TR	CHE 103,CRL103
ENGR-101	Introduction to Engineering		3	■	TR	PHY 115
ENGR-104	Introduction to Computing		3	■	TR	CSC141

<b>Spring 1 - 17 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
<b>DBTU-114</b>	<b>Debating U.S. Issues</b>		3	■	TR	HIS100,150
MATH-112	Calculus II (MATH-111)		4	■	TR	MAT162
PHYS-201/201L	Physics I w/ Lab (pre- or co-requisite MATH-112)		4	■	TR	PHY 170
ENGR-102	Engineering Drawing (MATH-102 or MATH-111)		3	■	TR	PHY116
DECGEN200	Innovation Essentials		3	□	+	

<b>Fall 2 - 17 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ADIV-2( )	American Diversity (WRIT-101, DBTU-114)		3	■	TR	PSC100,PSC343
PHYS-203/203L	Physics II w/ Lab (PHYS-201/201L)		4	■	TR	PHY 180
MATH-213	Calculus III (MATH-112)		4	■	TR	MAT261
ENGR-215	Engineering Statics (PHYS-201/201L; pre- or co-requisite MATH-2-)		3	■	TR	PHY 260
Elective	(DECGEN200 agreement)		3	■	TR	3 cr "other"

<b>Spring 2 - 16 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
<b>WRIT-202</b>	<b>Writing Seminar II: Multi-media Communication</b> WRIT 202 is for transfer students (4 cr)	(WRIT-101)	4	□		
MATH-225	Differential Equations (MATH-213)		3	■	TR	MAT343
ENGR-218	Engineering Dynamics (ENGR-215; pre or co-requisite MATH-225)		3	■	TR	PHY300
ENGR 301	Mechanics of Materials (ENGR-215)		3	□		
DECSYS-20( )	Systems: (Select one DECSYS)		3	□	+	

<b>Fall 3 - 15 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
GDIV/GCIT-2( )	Global Diversity ....or.... Global Citizenship (Includes World Language at any level)	(WRIT-101, DBTU-11)	3	■	TR	FRE101,ECO111
ENGR-311	Fluid Mechanics (ENGR-218, PHYS203/203L)		3	□		
ENGR-305	Engineering Statistics I (MATH 112)		3	□		
ENGR-322	Fund. of Electrical Engineering I (PHYS-203/203L)		3	■	TR	PHY330
MENGR 407	Thermodynamics and Heat Transfer I (PHYS-201/201L, MATH-112)		3	■	TR	PHY350

<b>Spring 3 - 16 cr</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
<b>DBTG-300</b>	<b>Debating Global Issues</b> (WRIT-2XX; GDIV-2XX or GCIT-2XX)		3	■	TR	WRT200,204,206
ENGR-314	Numerical Methods for Engineers (MATH-225, ENGR-104)		3	□		
ENGR-308	Integrated Engr Product Dev (MATH-112, ENGR-104, ENGR-102)		3	□		
ENGR-210	Introduction to Materials Science (MATH-111, CHEM-103/103L)		3	□		
MENGR-301	Machine Design (ENGR-215)		3	□		
ENGR-399M	Junior MENGR Semr (pre/co-requisite ENGR311, MENGR301, MENGR407)		1	□		

Fall 4 - 15 cr		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ETHIC-2( )	Ethics	(WRIT-101, DBTU-114)	3	<input checked="" type="checkbox"/>	TR	PHI180
** ENGR-498	Senior Design Project I	(ENGR311, MENG301, MENG4(	3	<input type="checkbox"/>		
ENGR-302	Design for Manufacturability	(ENGR-102)	3	<input type="checkbox"/>		
MENGR-427	System Dynamics and Control	(ENGR-311, ENGR-218)	3	<input type="checkbox"/>		
DECMTHD-300	ISEM: Ethno Research Methods	(WRIT-2XX; GDM-2XX or GGT-2XX)	3	<input type="checkbox"/>	+	

Spring 4 - 15 cr		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
<b>HALLMK-499</b>	<b>Capstone Folio Workshop</b>		3	<input type="checkbox"/>		
<i>(ETHIC-2XX, ADN-2XX, GGT-2XX or GDM-2XX, DBTG-300, DECMTHD300, Sci Undstg, MATH111)</i>						
ENGR-303	Engineering Economics	(ENGR-305)	3	<input type="checkbox"/>	+	
MENGR-405	Introduction to Mechatronics	(ENGR-322)	3	<input type="checkbox"/>	+	
** ENGR-499	Senior Design Project II	(ENGR399M, ENGR 498)	3	<input type="checkbox"/>	+	
MENGR-428	Thermodynamics II	(MENGR-407)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 128 credits**

\*\* Satisfies DEC capstone requirement

+ Satisfies Hallmarks folio requirement

<b>Introductory and Fundamentals Courses:</b> (MATH-099 does <b>not</b> count toward graduation requirements. However, WRTG-100 and ITXA-100 can only be used in a free elective capacity.)						
MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
MATH-110 or -102	Pre-calculus	(Does not count toward degree requirements)	3	<input type="checkbox"/>		

Surplus credits not used toward degree requirements

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Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits - 12 credits must be within the major core; 9 credits must be in Hallmark courses in

This form should be used as a worksheet in conjunction with the catalog and the Hallmark "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

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