

THOMAS JEFFERSON UNIVERSITY  
 BACHELOR of SCIENCE in ENGINEERING: MECHANICAL ENGINEERING

2023-2024

Name \_\_\_\_\_ Campus key \_\_\_\_\_  
 LEVEL I (FIRST YEAR) – 35-36 credits (Prerequisite) Cr Sem. Grade TR Equiv.

**Hallmark Courses – 23-24 credits**

FYS-100	Pathways Seminar <small>(Not required for transfer students)</small>	1	<input type="checkbox"/>		
WRIT-101/G/S	Writing Seminar I: Written Communication <small>(WRIT-100 may only be used to satisfy free elective credits)</small>	3-4	<input type="checkbox"/>		
AVIS-101	American Visions	3	<input type="checkbox"/>		
CHEM-103/103L	Chemistry I w/ Lab	4	<input type="checkbox"/>		
PHYS-201/201L	Physics I w/ Lab <small>(pre-or co-requisite MATH-112)</small>	4	<input type="checkbox"/>		
MATH-111	Calculus I (Fall) <small>(MATH-110 Pre-Calculus for Sci. &amp; Engr. may be required prior to taking MATH-111)</small>	4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring) <small>(MATH-111)</small>	4	<input type="checkbox"/>		

**DEC Core - 3 credits**

DECF-102	Finding and Shaping Opportunity	3	<input type="checkbox"/>		
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**Engineering Courses – 9 credits**

ENGR-101	Introduction to Engineering (Fall)	3	<input type="checkbox"/>		
ENGR-102	Engineering Drawing <small>(co-requisite MATH 102, MATH-110 or MATH-111)</small>	3	<input type="checkbox"/>		
ENGR-104	Introduction to Computing	3	<input type="checkbox"/>		

LEVEL II (SECOND YEAR) – 32 credits (Prerequisite) Cr Sem. Grade TR Equiv.

**Hallmark Courses – 6 credits**

ADIV-2( )	American Diversity <small>(WRIT-101, AVIS-101)</small>	3	<input type="checkbox"/>		
WRIT-201	Writing Seminar II: Multi-media Communi <small>(WRIT-101)</small>	3	<input type="checkbox"/>		

**DEC Core - 3 credits**

DECS-2( )	Science	3	<input type="checkbox"/>		
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**Engineering, Science & Math Courses – 23 credits**

PHYS-203/203L	Physics II w/ Lab (Fall) <small>(PHYS-201/201L)</small>	4	<input type="checkbox"/>		
MATH-213	Calculus III (Fall) <small>(MATH-112)</small>	4	<input type="checkbox"/>		
ENGR-215	Engineering Statics (Fall) <small>(MATH 112,PHYS 201-201L)</small>	3	<input type="checkbox"/>		
ENGR-305	Engineering Statistics (Fall)	3	<input type="checkbox"/>		
MATH-225	Differential Equations (Spring) <small>(MATH-213)</small>	3	<input type="checkbox"/>		
ENGR-218	Engineering Dynamics (Spring) <small>(ENGR-215; MATH 112, PHYS 201/201L)</small>	3	<input type="checkbox"/>		
ENGR-301	Mechanics of Materials (Spring) <small>(MATH 112,PHYS 201-201L, ENGR-215)</small>	3	<input type="checkbox"/>		

LEVEL III (THIRD YEAR) - 30.5 credits (Prerequisite) Cr Sem. Grade TR Equiv.

**Hallmark Courses – 3 credits**

GDIV/GCIT-2( )	Global Diversity or Global Citizenship <small>(Fall) (WRIT-101, AVIS-101)</small> <small>(Includes World Language at any level)</small>	3	<input type="checkbox"/>		
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**Engineering Courses – 27.5 credits**

ENGR-302	Design for Manufacturability (Fall) <small>(ENGR-102)</small>	3	<input type="checkbox"/>		
ENGR-311	Fluid Mechanics (Fall) <small>(ENGR-218)</small>	3	<input type="checkbox"/>		
ENGR-322	Fund. of Elec. Engg. I (Fall) <small>(MATH 111, MATH 112, PH)</small>	3	<input type="checkbox"/>		
ENGR 210	Intro to Materials Science (Fall) <small>(MATH-110 or 111, CHEM-103/103L)</small>	3	<input type="checkbox"/>		
ENGR-308	Integrated Engr Product Dev (Spring) <small>(MATH-112,ENGR-104,ENGR-102)</small>	3	<input type="checkbox"/>		
ENGR-314	Numerical Methods for Engineers(Spring) <small>(MATH-225, ENGR-104)</small>	3	<input type="checkbox"/>		
MENG 407	Thermodynamics (Spring) <small>(PHYS-201/201L, MATH-112)</small>	3	<input type="checkbox"/>		
ENGR 405	Engineering Simulations (Spring) <small>(ENGR 301)</small>	3	<input type="checkbox"/>		
MENG-301	Machine Design (Spring) <small>(ENGR-218, ENGR 301)</small>	3	<input type="checkbox"/>		
MENG-399	ME Design Seminar (Spring) <small>(pre/co-requisite ENGR311, MENG301, MENG407)</small>	0.5	<input type="checkbox"/>		

