THOMAS JEFFERSON UNIVERSITY
BACHELOR of SCIENCE in ENGINEERING: ENGINEERING   2023-2024

Name _____   ID# _____

LEVEL I (FIRST YEAR) – 35-36 credits

		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.

Hallmark Courses – 23-24 credits

Code	Course	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
FYS-100	Pathways Seminar		1 ☐			
	(Not required for transfer students)					
WRIT-101/G/S	Writing Seminar I: Written Communication		3-4 ☐			
	(WRIT-100 may only be used to satisfy free elective credits)					
AVIS-101	American Visions		3 ☐			
CHEM-103/103L	Chemistry I w/ Lab (Fall)		4 ☐			
PHYC-201/201L	Physics I w/ Lab (Spring)	*(pre-or co-requisite MATH-112)*	4 ☐			
MATH-111	Calculus I (Fall) *(MATH-110: Pre-Calc for Sci & Engr may be required prior to taking MATH-111)*		4 ☐			
MATH-112	Calculus II (Spring)	*(MATH-111)*	4 ☐			

DEC Core - 3 credits

Code	Course		Cr	Sem.	Grade	TR Equiv.
DECF-102	Finding and Shaping Opportunity		3 ☐			

Engineering Courses – 9 credits

Code	Course	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ENGR-101	Introduction to Engineering (Fall)		3 ☐			
ENGR-104	Introduction to Computing		3 ☐			
ENGR-102	Engineering Drawing	*co-requisite MATH-102, MATH-110 or MATH-111)*	3 ☐			

LEVEL II (SECOND YEAR) – 32 credits

		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.

Hallmark Courses – 6 credits

Code	Course	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ADIV-2( )	American Diversity	*(WRIT-101, AVIS-101)*	3 ☐			
WRIT-201	Writing Seminar II: Multi-media Communi	*(WRIT-101)*	3 ☐			

DEC Core - 3 credits

Code	Course		Cr	Sem.	Grade	TR Equiv.
DECS-2( )	Science: *(Select one DECS)*		3 ☐			

Engineering, Science & Math Courses – 23 credits

Code	Course	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
PHYC-203/203L	Physics II w/ Lab (Fall)	*(PHYC-201/201L)*	4 ☐			
MATH-213	Calculus III (Fall)	*(MATH-112)*	4 ☐			
ENGR-215	Engineering Statics (Fall)	*(PHYC-201/201L; MATH 111)*	3 ☐			
ENGR 305	Engineering Statistics (Fall)	*(MATH 112)*	3 ☐			
MATH-225	Differential Equations (Spring)	*(MATH-213)*	3 ☐			
ENGR-218	Engineering Dynamics (Spring)	*(ENGR-215; MATH-112, PHYC-201/201L)*	3 ☐			
ENGR-301	Mechanics of Materials (Spring)	*(MATH-112, PHYC-201/201L, ENGR-215)*	3 ☐			

LEVEL III (THIRD YEAR) - 30.5 credits

		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
GDIV/GCIT-2( )	Global Diversity or Global Citizenship *(Fall)*	*(WRIT-101, AVIS-101)*	3 ☐			
	(Includes World Language at any level)					

Engineering Courses ·

Code	Course	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ENGR-311	Fluid Mechanics (Fall)	*(ENGR-218)*	3 ☐			
ENGR-322	Fund. of Electrical Engineering I (Fall)	*(MATH 111, MATH 112, PHYC-203/203L)*	3 ☐			
ENGR-210	Introduction to Material Science (Fall)	*(CHEM-103/103L, MATH-110 or 111)*	3 ☐			
.....or.....ENGR-304	Operations Research I (Fall)	*(MATH-112, ENGR-305)*				
☞ ( )	Designated Technical Elective (Fall)	*(as appropriate)*	3 ☐			
ENGR-308	Integrated Engr Product Dev (Spring)	*(MATH-112, ENGR-104, ENGR-102)*	3 ☐			
ENGR-314	Numerical Methods for Engineers (Spring)	*(MATH-225, ENGR-104)*	3 ☐			
MENG-407	Thermodynamics (Spring)	*(PHYC-201/201L, MATH-112)*	3 ☐			
☞ ( )	Designated Technical Elective (Spring)	*(as appropriate)*	3 ☐			
ENGR-405	Engineering Simulations (Spring)	*(ENGR-301)*	3 ☐			
ENGR-399	E Design Seminar (Spring) *(pre/corequisite ENGR-311, ENGR-322, MENG-407, any 2 technical electives)*		0.5 ☐			

			(Prerequisite)	Cr	Sem.	Grade	TR Equiv.

Hallmark Course – 9 credits

			(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
ETHC-2( )	Ethics *(Fall)*		*(WRIT-101, AVIS-101)*	3 ☐			
CGIS-300	Contemporary Global Issues *(Fall)*		*(WRIT-201; GDIV-2XX or GCIT-2XX)*	3 ☐			
PHIL-499	Philosophies of the Good Life *(Spring)*			3 ☐			

(ETHC-2XX, ADIV-2XX, GCIT-2XX or GDIV-2XX, DECM-300, Sci Undstg, MATH-111)

DEC Core - 3 credits

			(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
DECM-300	Ethnographic Research Methods *(Fall)*		*(WRIT-201; GDIV-2XX or GCIT-2XX)*	3 ☐			

Engineering Courses – 18 credits

			(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
☞ ( )	Designated Technical Elective *(Fall)*		*(as appropriate)*	3 ☐			
** ENGR-498	Senior Design Project I *(Fall)*		*(MENG-399 or ENGR-399)*	3 ☐			
ENGR-303	Engineering Economics *(Spring)*		*(ENGR-305)*	3 ☐			
MENGR-405	Introduction to Mechatronics *(Spring)*		*(ENGR-322)*	3 ☐			
☞ ( )	Designated Technical Elective *(Spring)*		*(as appropriate)*	3 ☐			
** ENGR-4XX	Senior Design Project II *(Spring)*		*(ENGR-498)*	3 ☐			

TOTAL CREDITS: 127.5-128.5

** Satisfies DEC capstone requirement

☞ **Engineering Concentration** : Select one four-course option for *Designated Technical Electives*
Textile Engineering: TENG-306, TENG-308, TENG-310, TENG-320
Industrial & Systems Engineering: IENG-315, IENG-413, IENG-418, ENGR-307
Bioprocess Engineering: BP-402, BP-403, BP-404, BP-405

Custom: *Any four designated technical elective courses from the above and/or ENGR 371 course.*

Introductory and Fundamentals Courses: (MATH-099 does **not** count toward graduation requirements. However, WRIT-100 and ITXA-100 **can** be used toward graduation credits in the free elective category.)

			Cr	Sem.	Grade	TR Equiv.
MATH-099	Fundamentals of College Mathematics	*(must earn C or better)*	3 ☐			
MATH-110 or -102	Pre-calculus *(Does not count toward degree requirements)*		3 ☐			

Surplus credits not used toward degree requirements

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Please note Thomas Jefferson University residency requirement:
Thomas Jefferson 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 order to be eligible for a B.S. degree.

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

COURSE STATUS: ☑ = course to take next semester   ☒ = course currently being taken   ■ = course completed