

		T	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL		3	Choose 1	Communication (Core)	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Option: ENGL 1301	
			4	MATH 2413	Calculus I (Core)	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	See General Education Core for more details.	
			2	ENGT 1201	Foundations of Engineering Technology					
			3	ENGT 1310	Design Graphics I					
			3	CHEM 1311	General Chemistry I			MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, or MATH 2413 with a grade of "C" or higher."	or CHEM 1309	
			1	CHEM 1111	General Chemistry I Lab (Core)			090	Credit/Registration in CHEM 1311	or CHEM 1109
					UNIV	1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design				As required, based on credit hours earned, TSI status, High School rank, major declaration.
		<b>16 Semester Total Hours</b>								
FIRST YEAR	SPRING		3	ENGT 1320	Design Graphics II			ENGT 1310		
			4	MATH 2414	Calculus II	C		MATH 2413 with a grade of 'C' or better.		
			4	PHYS 1401	General Physics I/Lab I			030	MATH 1414, MATH 1314, MATH 2412, or MATH 2413.	1 hour of lab to count for 090 Core; Or may select PHYS 2425. Prerequisite: MATH 2413 and concurrent enrollment in MATH 2414.
			3	ENGT 2307	Engineering Materials				CHEM 1311 or CHEM 1309	
		<b>14 Semester Total Hours</b>								
		T	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
SECOND YEAR	FALL		1	ENGT 1105	Machine Shop Lab			ENGT 1310		
			3	MANE 3332	Engineering Statistics			MATH 2413 and credit for or enrollment in MATH 2414.		
			4	PHYS 1402	General Physics II/Lab II			030	PHYS 1401.	1 hour of lab to count for 090 Core; Or may select PHYS 2426. Prerequisite: PHYS 2425
			3	ENGT 2310	Manufacturing Processes				ENGT 2307.	
			3	CSCI 1380	Introduction to Programming in Python			090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	Choose a section using Python
				<b>14 Semester Total Hours</b>						
SECOND YEAR	SPRING		3	Choose 1	Communication (Core)			010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1302 or ENGL 1305
			3	ENGT 2321	Industrial Electronics				PHYS 1402 or 2426 and MATH 2413	
			3	Choose 1	Social and Behavioral Sciences (Core)			080		See General Education Core for course options.
			3	ENGT 3310	Fundamentals of Product Design				2310	
			3	ENGT 3313	Intro to Systems Engineering				CSCI 1380	
		<b>15 Semester Total Hours</b>								

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	3		ENGT 3318	Instruments and Transducers			ENGT 2321	
		3		ENGT 3301	Computer Numerical Control			ENGT 1105, ENGT 1320, and ENGT 2307	
		3		ENGT 3315	Fluid Power Systems			ENGT 1310, ENGT 2321, and PHYS 1402 or 2426	
		3		Choose 1	American History ( Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327.
		3		MANE 3337	Engineering Economics			Credit/registration in MANE 3332	
		3		ENGT 3303	Prog. Logic Controllers			ENGT 2321	
		<b>18</b>		<b>Semester Total Hours</b>					
THIRD YEAR	SPRING	3		ENGT 4315	Robotics			ENGT 3303	
		3		ENGT 3324	Metrology			ENGT 1320, MANE 3332, ENGT 3301	
		3		Choose 1	American History ( Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328.
		3		Choose 1	Advanced Engineering Technology Elective				ENGT 3300, ENGT 3321, ENGT 4311, ENGT 4312, ENGT 3320
		2		ENGT 4201	Technical Project I			ENGT 2310, ENGT 3303, credit for/enrollment in ENGT 3318	
		<b>14</b>		<b>Semester Total Hours</b>					
		T	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3		ENGT 4310	System Simulation and Optimization			ENGT 3313	
		3		Choose 1	ENGT Practicum				ENGT 3305 or three instances of ENGT 3105. Full time one semester internship or three semesters of
		3		ENGT 4322	Mechatronic Systems Design			ENGT 3310	
		3		ENGT 4335	Project Management			MANE 3337, ENGT 3324.	
		3		POLS 2305	U.S. Federal Govt & Politics		070		
				<b>15</b>		<b>Semester Total Hours</b>			
FOURTH YEAR	SPRING	3		PHIL 2326	Ethics, Technology and Society ( Core)		040		
		2		ENGT 4202	Technical Project II			ENGT 4201	
		3		ENGT 4326	Quality Control & Lean Six Sigma			MANE 3332	Co-requisite: ENGT 4126
		3		POLS 2306	Texas Government & Politics		070		
		3		Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
		<b>14</b>		<b>Semester Total Hours</b>					

**CORE: The 2023-2024 list of core courses can be found in the 2023-2024 Undergraduate Catalog: [www.utrgv.edu/catalog](http://www.utrgv.edu/catalog) > See 'Core Curriculum'**

Symbols Key	
<p><b>Critical (!):</b> sequence sensitive course.  <b>Minimum Grade:</b> A - Excellent; B - Good; C - Satisfactory; D - Below Average;  CR - Credit; P - Passing; S - Satisfactory.</p>	<p><b>General Education Core (GEC) Sections:</b> 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy &amp; Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary ; 090 - Technologies; 090 - Language Diversity &amp; Writing.</p>

**120 TOTAL HOURS (42 advanced minimum credit hours)**

Approved: Friday, March 12, 2021

Revised: Wednesday, November 15, 2023