



**Transfer Pathway: Houston Community
College AS Engineering Science, Electrical to
Lamar University BS Electrical Engineering**



First Year - Freshman							
Fall Semester				Spring Semester			
HCC	Lamar	Course Name	Hrs	HCC	Lamar	Course Name	Hrs
ENGR 1201*		Intro to ENGR	2	ENGR 2304		Programming for ENGR	3
ENGL 1301		English Comp I	3	ENGL 2311		Technical & Business Writing	3
HIST Core		History Core	3	MATH 2414		Calculus II	4
MATH 2413		Calculus I	4	PHYS 2325		Univ Physics I	3
CHEM 1311		General Chemistry I	3	PHYS 2125		Univ Physics I Lab	1
CHEM 1111		General Chemistry I Lab	1				
Total			16	Total			14
Summer Semester							
HCC	Lamar	Course Name	Hrs	HCC	Lamar	Course Name	Hrs
Total			0	Total			0
Second Year - Sophomore							
Fall Semester				Spring Semester			
HCC	Lamar	Course Name	Hrs	HCC	Lamar	Course Name	Hrs
GOVT 2305		Federal Govt	3	ENGR 2305		Circuits I	3
ECON 2301 or 2302		Micro or Macro Economics	3	ENGR 2105		Circuits I Lab	1
MATH 2415		Calculus III	4	MATH 2320		Diff. Equat.	3
PHYS 2326		University Physics II	3	Elective*		Elective	2
PHYS 2126		University Physics II Lab	1	ENGR 2306		Intro Digital Systems	3
				ENGR 2106		Intro Digital Systems Lab	1
				LPC Core		LPC Core	3
Total			14	Total			16
Summer Semester at Lamar University							
Lamar	Course Name	Hrs	Lamar	Course Name	Hrs		
ELEN 3101	Advanced EE Lab	1	MATH 2318	Linear Algebra	3		
ELEN 3381	Electrical Analysis	3					
Total		4	Total		3		
Third Year - Junior							
Fall Semester				Spring Semester			
Lamar	Course Name	Hrs	Lamar	Course Name	Hrs		
ELEN 3312	Circuits Analysis II	3	ELEN 3313	Signals, Systems, & Transforms	3		
ELEN 3371	Electromagnetics	3	ELEN 3322	Electronics II	3		
ELEN 3421	Electronics I	4	ELEN 3441	Fundamentals of Power Engineering	4		
ELEN 4486	Embedded Microprocessor Systems	4	ELEN 4387	Computer Organization & Architecture	3		
MATH 3370 or INEN 3320	Intro to Theory of Statistical Inference	3	GOVT Core	GOVT Core	3		
Total		17	Total		16		
Summer Semester							
Lamar	Course Name	Hrs	Lamar	Course Name	Hrs		
Total		0	Total		0		
Fourth Year - Senior							
Fall Semester				Spring Semester			
Lamar	Course Name	Hrs	Lamar	Course Name	Hrs		
ELEN 4306	Senior Project Design I	3	ELEN 4307	Senior Project Design II	3		
ELEN 4351	Control Engineering	3	HIST Core	History Core	3		
ELEN 4361	Communication Systems	3	ELEN Elective ^{EE}	ELEN Elective	3		
ELEN Elective ^{EE}	ELEN Elective	3	CA Core	Creative Arts Core	3		
ELEN Elective ^{EE}	ELEN Elective	3					
Total		15	Total		12		

Notes:
 *Unused HCC courses:
 LU will apply 1 credit hour of ENGR 1201 to LU EE degree.
 The 2-hour elective will not be used in LU degree.