



**Transfer Pathway: Houston Community College
AS Engineering Science, Mechanical to Lamar
University BS Industrial 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 1304		ENGR Graphics I	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 1412		General Chemistry w/lab II	4	PHYS 2125		Univ Physics I Lab	1
				ENGR 2304		Programming for ENGR	3
Total			16	Total			17
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
ENGR 2301		Statics	3	ENGR 2305		Circuits I	3
GOVT 2305		Federal Govt	3	ENGR 2105		Circuits I Lab	1
MATH 2415		Calculus III	4	MATH 2320		Differential Equations	3
PHYS 2326		Univ Physics II	3	ENGR 2302		Dynamics	3
PHYS 2126		Univ Physics II Lab	1	ECON 2301 or 2302		Micro or Macro Economics	3
Total			14	Total			13
Summer Semester at HCC or LU							
HCC	Lamar	Course Name	Hrs	HCC	Lamar	Course Name	Hrs
MATH 2318		Linear Algebra	3	LPC Core		LPC Core	3
ENGR 2308	INEN 2373	Engr Economics	3				
Total			6	Total			3
Third Year - Junior							
Fall Semester				Spring Semester			
Lamar	Course Name		Hrs	Lamar	Course Name		Hrs
INEN 3320	Probability & Statistics for Engineering		3	INEN 4320	Statistical Decision Making in Engineering		3
INEN 4315	Industrial Management		3	INEN 4345	Computer Integrated Manufacturing		3
INEN 4350	Production & Inventory Control		3	INEN 4370	Operations Research		3
INEN 3322	Engineering Materials & Manufacturing Processes		3	INEN 4300	Quality Improvement		3
				INEN 3380	Work Design		3
Total			12	Total			15
Summer Semester							
Lamar	Course Name		Hrs	Lamar	Course Name		Hrs
POLS 2301	Political Science I (GOVT 2306)		3	HIST 1302	US History II		3
Total			3	Total			3
Fourth Year - Senior							
Fall Semester				Spring Semester			
Lamar	Course Name		Hrs	Lamar	Course Name		Hrs
INEN 4323	IE Systems Design		3	INEN 4385	IE Design		3
INEN 4375	Simulation of Industrial Systems		3	Technical Elective	Technical Elective		3
INEN 4316	Industrial & Product Safety		3	Technical Elective	Technical Elective		3
INEN 4396	Automated System Engineering		3	CA Core	Creative Arts Core		3
Total			12	Total			12

Notes:

Engineering Economics can be used as both Pre-rec and social and behavioral science elective at LU.

4 hours saved by having CHEM II required (assume Chem 1 completed as pre-rec)

Dynamics and computer graphics transferred as INEN Elective

Total number of hours is 126

HCC hours not used:

ECON 2301 or 2302

One hour of circuits lab is not used

2 hour Intro to Engineering is used for 1 hour LU course