

Student: _____ BUID#: _____

Course pre-requisites are listed in parentheses. Other required courses may be designated as part of the advising process. All students must present evidence of previous equivalent coursework or complete the following:

Taken	Needs	Course Number	Title	Credits
		ENG EK 121	Introduction to Programming and Data Science with Python for Engineers	2
		ENG EK 122	MATLAB for Engineers (EK 121)	2
		CAS MA 124	Calculus II (MA 121 or MA 123)	4
		CAS MA 225	Multivariate Calculus (MA 124 or MA 129)	4
		CAS MA 226	Differential Equations (MA 225 or MA 230)	4
		CAS PY 211	General Physics I (MA 123; co-req. MA 124 or MA 127)	4
		CAS PY 212	General Physics II (PY 211 and MA 124)	4
		ENG EK 301	Engineering Mechanics I (PY 211; co-req. MA 225 and EK 121/122)	4
		ENG EK 307	Electric Circuits (co-req. PY 212)	4
		CAS CH 131	General Chemistry for the Engineering Sciences (co-req. MA 123)	4
		ENG EK 103	Computational Linear Algebra (EK 121/122)	3
		ENG EK 381	Probability, Statistics, and Data Science for Engineers (EK 103 and MA 225)	4
		ENG BE 209 (F,S)	Principles of Molecular Cell Biology and Biotechnology	4
		ENG BE 403 (F,S) OR ENG EC 401 (F,S)	Biomedical Signals and Controls (MA 226 and EK 307) Signals and Systems (MA 226 and EK 307)	4
		ENG BE 493 (F,S)	Biomedical Measurements Lab I (co-req. BE 403)	4
Choose one of the following				
		ENG BE 404 (S)	Control Systems in Biomedical Engineering (BE 403)	4
		ENG BE 420 (F,S)	Introduction to Solid Biomechanics (EK 103, MA 226 and EK 301)	4
		ENG BE 435 (F,S)	Transport Phenomena in Living Systems (PY 211 and MA 226)	4
		ENG BE 436 (S)	Fundamentals of Fluid Mechanics (MA 226 and EK 301)	4
		ENG EK 424 (F,S)	Thermodynamics and Statistical Mechanics (CH 102, PY 212, MA 226 and EK 381). Recommended for students intending to apply to the PhD program or take BE 605.	4

Minimum # of courses needed for LEAP foundation: _____

Comments:

Advisor Initials: _____ Date: _____

Student: _____ BUID#: _____

Enter the course numbers for each LEAP foundation semester and year:

Course	Semester	Year	Course	Semester	Year	Course	Semester	Year