LEAP Program Plan   Materials Science & Engineering

Student:_____   **BU-ID#** _____

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	#	Title
Core Courses				
	Taken	Needs	#	Title
1			ENG EK 125	Introduction to Programming for Engineers
2			CAS MA 124	Calculus II (MA 123)
3			CAS MA 225	Multivariate Calculus (MA124)
4			CAS MA 226	Differential Equations (MA225)
5			CAS PY 211	Physics I (co-req. MA124)
6			CAS PY 212	Physics II (PY 211)
7			CAS PY 313	Elementary Modern Physics (MA 124 and PY212)
8			ENG EK 301	Engineering Mechanics I (PY 211 and EK 127; co-req. MA 225)
9			ENG ME 304	Energy and Thermodynamics (PY 211, co-req. MA 225)
10			ENG ME 306	Introduction to Materials Science (PY 212; PY 313 recommended)
11-12	**Track Courses** - choose one track (a) through (d):			
a	**Biomaterials – choose one sequence (either CH101 and 102 or CH171 and172)**			
			CAS CH 101	General Chemistry I **and**
			CAS CH 102	General Chemistry II
			CAS CH 171	Principles of General Chemistry **and**
			CAS CH 172	Principles of Organic Chemistry (CH171)
b	**Materials for Energy and Environment**			
			CAS CH 131	General Chemistry for the Engineering Sciences
			ENG EK 335 (S)	Introduction to Environmental Engineering
			Or ENG EK 408 (F)	Introduction to Clean Energy and Storage Technologies (PY 211, PY212, CH131, MA123)
c	**Electronic/Photonic Materials**			
			CAS CH 131	General Chemistry for the Engineering Sciences
			ENG EK 307	Electric Circuit Theory (co-reqs. MA 226 and PY212)
d	**Nanomaterials**			
			CAS CH 131	General Chemistry for the Engineering Sciences
			ENG EC 481	Fundamentals of Nanomaterials and Nanotechnology (PY 313)

Minimum # of courses needed for LEAP foundation: _____
Comments:

Advisor Initials:_____ Date: _____

LEAP Program Plan   Materials Science & Engineering

Student:_____   BU-ID# _____

Foundation Planning Sheet
Enter the course numbers for each LEAP foundation Semester/Year.

Semester Year	Semester Year	Semester Year
Semester Year	Semester Year	Semester Year