

## Pre-Engineering Adviser's Data Sheet

Name of Student \_\_\_\_\_ High School \_\_\_\_\_  
 Home Address \_\_\_\_\_ ACT (Composite Score) \_\_\_\_\_  
 \_\_\_\_\_ Engineering field \_\_\_\_\_

### Pre-Engineering Curriculum for all fields except Chemical

#### Option 1: Beginning with Calculus I

MAT 2170	4	Students entering with mathematical deficiencies may need to enroll in MAT 1330 (Trigonometry) and/or MAT 1400 (Pre-calculus). MAT 2550 (Linear Algebra) is strongly recommended.	PHY1000	0	All pre-engineering students are required to enroll in PHY 1000 every semester. PHY 2390 and 2400 are not required in Chemical, Electrical and Computer Engineering; however, PHY 2390 and 2400 are strongly recommended for Electrical and Computer Engineering.
MAT 2550	3		PHY1351G	3	
MAT 1441G	5		PHY1352G	1	
MAT 2442	5		PHY1361	3	
MAT 2443	4		PHY1362	1	
MAT 3501	3		PHY1371	3	
		PHY1372	1		
		PHY2390	3		
		PHY2400	3		
		PHY3270	4		
CHM 1310G	3	At UIUC, CHM 1410 & 1415 is not required for ECE, CS, GE & Nuc.E, but will count as a technical elective.	ENG 1001G	3	
CHM 1315G	1		ENG 1002G	3	
CHM 1410	3				
CHM 1415	1				
INT 2043	3	Not required in Electrical, Computer, or Chemical Engineering.			

\*A total of 18 hours of humanities, social sciences, and fine arts is required and may be taken at either institution. Courses should be selected in consultation with an advisor.

\*\* All transfer students to UIUC must have completed the equivalent of the intermediate level (or 3 high school years) of a single foreign language with a grade of C or better.

#### Option 1: Most intense, but quickest

FRESHMAN YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
ENG 1001G, Composition	3	ENG 1002G, Literature	3
MAT 1441G, Calculus 1	5	MAT 2442, Calculus 2	5
PHY 1351G, Mechanics	3	PHY 1361, Thermo/Electricity/Magnetism	3
PHY 1352G, Lab I	1	PHY1362, Lab II	1
CHM 1310G, Chemistry 1	3	CHM 1410, Chemistry 2	3
CHM1315G, Chemistry 1 Lab	1	CHM 1415, Chemistry 2 Lab	1
	16		16
SOPHOMORE YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
MAT 2443, Calculus 3	4	MAT 3501, Differential Equations	3
PHY 1371, Waves/Sound/Optics/Modern	3	PHY 2400, Dynamics	3
PHY 1372, Lab III	1	PHY 3270, Circuit Analysis	4
PHY 2390, Statics	3	INT 2043, Engineering Graphics	3
MAT 2170, Java	4	Social Science, Humanities, or Fine Arts (G)	3
Social Science, Humanities, or Fine Arts (G)	3		
	18		16

## Pre-Engineering Adviser's Data Sheet

Name of Student \_\_\_\_\_ High School \_\_\_\_\_  
 Home Address \_\_\_\_\_ ACT (Composite Score) \_\_\_\_\_  
 \_\_\_\_\_ Engineering field \_\_\_\_\_

### Option 2: Pre-Engineering Curriculum with math review For all fields except Chemical

MAT 2170	4	Students entering with mathematical deficiencies may need to enroll in MAT 1330 (Trigonometry) and/or MAT 1400 (Precalculus). MAT 2550 (Linear Algebra) is strongly recommended.	PHY1000	0	All pre-engineering students are required to enroll in PHY 1000 every semester. PHY 2390 and 2400 are not required in Chemical, Electrical and Computer Engineering; however, PHY 2390 and 2400 are strongly recommended for Electrical and Computer Engineering.
MAT 2550	3		PHY1351G	3	
MAT 1441G	5		PHY1352G	1	
MAT 2442	5		PHY1361	3	
MAT 2443	4		PHY1362	1	
MAT 3501	3		PHY1371	3	
			PHY1372	1	
			PHY2390	3	
			PHY2400	3	
			PHY3270	4	
CHM 1310G	3	At UIUC, CHM 1410 & 1415 is not required for ECE, CS, GE & Nuc.E, but will count as a technical elective.	ENG 1001G	3	
CHM 1315G	1		ENG 1002G	3	
CHM 1410	3				
CHM 1415	1				
INT 2043	3	Not required in Electrical, Computer, or Chemical Engineering.			

\*A total of 18 hours of humanities, social sciences, and fine arts is required and may be taken at either institution. Courses should be selected in consultation with an advisor.  
 \*\* All transfer students to UIUC must have completed the equivalent of the intermediate level (or 3 high school years) of a single foreign language with a grade of C or better.

### Option 2: With Math Review

FRESHMAN YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
ENG 1001G, Composition	3	ENG 1002, Literature	3
MAT 1400, Precalculus	3	MAT 1441G, Calculus I	5
MAT 1330, Trigonometry	2	PHY 1351G, Mechanics	3
CHM 1310G, Chemistry 1	3	PHY1352G, Lab I	1
CHM1315G, Chemistry 1 Lab	1	CHM 1410, Chemistry 2	3
Social and Behavioral (G)	3	CHM 1415, Chemistry 2 Lab	1
	15		16
SOPHOMORE YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
MAT 2442, Calculus 2	5	MAT 2443, Calculus 3	3
PHY 1361, Thermo/Electricity/Magnetism	3	PHY 1371, Waves/Sound/Optics/Modern	3
PHY 1362, Lab II	1	PHY 1372, Lab III	1
MAT 2170, Java	4	INT 2043, Engineering Graphics	3
Social and Behavioral (G)	3	Social and Behavioral (G)	3
	16	Fine Arts (G)	3
			16
JUNIOR YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
PHY 2390, Statics	3	PHY 2400, Dynamics	3
MAT 3501, Differential Equations	3	PHY 3270, Circuit Analysis	4
MAT 2550, Linear Algebra	3	Humanities or Fine Arts (G)	3
Humanities (G)	3		3
	12		13

## PRE-CHEMICAL ENGINEERING CURRICULUM (2-2)

FRESHMAN YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
ENG 1001G, Composition	3	ENG 1002G, Literature	3
MAT 1441G, Calculus 1	5	MAT 2442, Calculus 2	5
PHY 1351G, Mechanics	3	PHY 1361, Thermo/Electricity/Magnetism	3
PHY 1352G, Lab I	1	PHY 1362, Lab II	1
CHM 1310G, Chemistry 1	3	CHM 1410, Chemistry 2	3
CHM1315G, Chemistry 1 Lab	1	CHM 1415, Chemistry 2 Lab	1
	16		16
SOPHOMORE YEAR			
Fall Semester		Spring Semester	
PHY 1000, Engineering Seminar	0	PHY 1000, Engineering Seminar	0
MAT 2443, Calculus 3	4	MAT 3501, Differential Equations	3
CHM 2440, Organic Chemistry 1	4	**CHM 2310, Inorganic Chemistry 1	3
CHM 2445, Organic Lab	1	CHM 2840, Organic Chemistry 2	3
PHY 1371, Waves/Sound/Optics/Modern	3	CHM 2845, Organic Chemistry 2 Laboratory	1
PHY 1372, Lab III	1	MAT 2170, Java	4
Social Science, Humanities, or Fine Arts (G)	3	Social Science, Humanities, or Fine Arts (G)	3
	16		17

\*\*CHM 2730 (Quantitative Analysis) may be substituted for CHM 2310. A total of 18 hours of approved social sciences and humanities electives is required. Courses should be selected in consultation with an advisor.