ASU ARIZONA STATE UNIVERSITY

2007-08 Curriculum Check Sheets — *Fulton School of Engineering*

Name _____ Major: Engineering Special Programs Degree BSE

ASU ID _____ Concentration: Premedical Engineering

Anticipated Grad. Date _____ *AGEC-A, AGEC-B, AGEC-S;* *Completed:* □ *Yes* □ *No*

ASU Requirement for all incoming Freshmen				
ASU 101 The ASU Experience	1 credit			

I. English Proficiency (6 hrs) *(University requirement – "C" min required)*	Hrs Cr ASU	Tr	Trans From	Gr
+ENG 101 / 107 First-Year Comp (3) and				
+ENG 102 / 108 First-Year Comp (3)				
Or, if eligible (see Catalog for eligibility)				
+ENG 105 Adv First-Year Comp (3) and				
An Applicable Elective (3) – see Department				
Sub Total (I) _____				

II. General Requirements (15 hrs) *(See Catalog for approved courses)*

A. Humanities & Social Sciences *(15 hrs min)*

(Required: 1 course upper division; plus a minimum of two courses that satisfy three awareness areas: cultural (C), global (G), and historical (H). Double counting is permissible between HU or SB and the awareness areas and also within the awareness areas.)

Humanities/Fine Arts (6 hrs min)(HU)				
Social/Behavioral Sciences (6 hrs min)(SB)				
Awareness Areas:				
Cultural				
Global				
Historical				

B. Literacy/Critical Inquiry *(6 hrs)*

L: BME 235 Physiology for Bio	***Satisfied by Courses in Major***
L: BME 413 Bio Instrumentation [1]	
L: BME 423 Bio Instrumentation Lab [1]	

C. Natural Sciences *(8 hrs)*

SQ: PHY 121/122 Physics I + Lab I	***Satisfied by Courses in Major***
SQ: PHY 131/132 Physics II + Lab II	

D. Mathematical Studies *(6 hrs)*

CS: CSE 100 Principles of Prog C++	***Satisfied by Courses in Major***
MA: MAT 275 Modern Diff. Eqs	

Sub Total (II) _____

III. Required Lower Division Courses (58 hrs)

A. Natural Sciences/Basic Sciences *(28 hrs)*

BIO 188 General Biology II *(SQ)*	4				
CHM 113 General Chemistry I *(SQ)*	4				
CHM 116 General Chemistry II *(SQ)*	4				
CHM 233 Gen Organic Chem I	3				
CHM 237 Gen Organic Chem Lab I	1				
CHM 234 Gen Organic Chem II	3				
CHM 238 Gen Organic Chem Lab II	1				
PHY 121 Physics I *(SQ)* [2]	3				
PHY 122 Physics Lab I *(SQ)* [2]	1				
PHY 131 Physics II *(SQ)* [2]	3				
PHY 132 Physics Lab II *(SQ)* [2]	1				

B. Mathematical Studies *(9 hrs)*	Hrs Cr ASU	Tr	Trans From	Gr
MAT 265 Calc for Engrs I	3			
MAT 266 Calc for Engr. II	3			
MAT 275 Mod Diff Eq *(MA)*	3			
C. Lower Division Engrg *(21 hrs)*				
+BME 100 Intro to Bioengr *(CS)*	3			
+BME 200 Conserv Princip in Bio	3			
+BME 235 Physiology for Engineers *(L)*	4			
CSE 100 Principles of Prog C++ *(CS)*	3			
EEE 202 Circuits I	4			
MAE 212 Engineering Mechanics	4			
Sub Total (III) _____				

# IV. Required Upper Division Courses (41 hrs)				
+BME 300 Bioengr Product Design	3			
+BME 318 Biomaterials	4			
+BME 331 Bioengineering Transport I	3			
+BME 350 Signals & Sys for Bio	3			
+BME 370 Microcomputer Apps in Bio	3			
+BME 413 Bio Instrumentation *(L)* [1]	3			
+BME 417 Biomed Eng Cap Design I	4			
+BME 423 Bio Instrumentation Lab *(L)* [1]	1			
+BME 434 Applications in Bio ***OR*** +BME 416 Biomechanics ***OR*** +BME 419 Biocontrol Systems	3			
+BME 490 Biomed Eng Cap Design II	4			
CHM 341 El Physical Chemistry	3			
IEE 380 Prob and Stats for Eng *(CS)*	3			
MAT 343 Applied Linear Algebra	3			
+Technical Electives (1 hr)				
Sub Total (IV) _____				

Total Upper Division _____ (minimum 45 required)

+ A minimum grade of "C" (2.0) required

 # Designates upper division course in the Major: A minimum cumulative GPA of 2.00 required

Designates a skill-set course

[1] Must complete both BME 413 & 423 to receive L credit

[2] Must complete lecture and lab to receive SQ credit

Graduation Requirements

Regular Curriculum – 120 Hours

Semester Hour Summary	*Hrs/ASU*	*Tr Hrs*	*Total*
I. English Proficiency			
II. General Requirements			
III. Required Lower Division			
IV. Required Upper Division			
Total Program Hours			

5/17/07