ARIZONA STATE UNIVERSITY

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

Name _____ Major: Bioengineering Degree BSE

ASU ID _____

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	Hrs Cr 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 and Design (6 hrs min)(HU)				
Social/Behavioral Sciences (6 hrs min)(SB)				
Awareness Areas:				
Cultural				
Global				
Historical				

B. Literacy/Critical Inquiry *(6 hrs)*	
+#L: BME 413 Bio Instrumentation [1] and *+#L:* BME 423 Bio Inst Lab [1]	***Satisfied by Courses in Major***
+#L: BME 417 Biomed Eng Cap Design I	

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 Prin of Prog C++	***Satisfied by Courses in Major***
MA: MAT 275 Mod Diff. Equ.	

Sub Total (II) _____

III. Required Lower Division Courses (53 hrs)

A. Natural Sciences/Basic Sciences *(20 hrs)*					
+BME 111 Engr Persp on Bio Sys (3) and +BME 112 Engr Persp Lab (1) ***OR*** BIO 188 General Biology II *(SQ)*(4)	4				
CHM 114 or 116 Gen Chem *(SQ)* [2]	4				
CHM 231/233 Elem/Gen Organ Chem	3				
CHM 235/237 Elem/Gen Organ Chem Lab	1				
PHY 121 Physics I *(SQ)* [3]	3				
PHY 122 Physics Lab I *(SQ)* [3]	1				
PHY 131 Physics II *(SQ)* [3]	3				
PHY 132 Physics Lab II *(SQ)* [3]	1				

B. Mathematical Studies *(12 hrs)*	Hrs Cr ASU	Hrs Cr Tr	Trans From	Gr
MAT 265 Calc for Engrs I	3			
MAT 266 Calc for Engrs II	3			
MAT 267 Calc for Engrs III	3			
MAT 275 Mod Diff Eq *(MA)*	3			
C. Lower Division Engrg *(21 hrs)*				
+BME 100 Intro to Bioengineering *(CS)*	3			
+BME 200 Conserv Princip in Bio	3			
+BME 235 Physiology for Engineers	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 (46 hrs)				
+BME 300 Bioengineering Prod Design	3			
+BME 318 Biomaterials	4			
+BME 331 BME Transport Phenom	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 *(L)*	4			
+BME 423 Bio Instrumen 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	3			
MAT 343 Applied Linear Algebra	3			
+Technical Electives *(6 hrs)*				
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] CHM 113 is prerequisite and does not apply toward degree credit

[3] 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			