SAMPLE PRE-MED FOUR-YEAR PLAN

Freshman Year

Course #	Course Name	Cr
BIOE 120	Biology for Engineers (120+121 fulfills BSCI105)	3
BIOE 121	Biology for Engineers Lab	1
ENES 100	Introduction to Engineering Design	3
ENES 102	Mechanics I	3
MATH 140	Calculus I	4
MATH 141	Calculus II	4
CHEM 135	General Chemistry I	3
CHEM 136	General Chemistry Lab	1
PHYS 161	General Physics	3
ENGL 101	Introduction to Writing	3
PSYC recommended	GenEd 1	3
SOCY recommended	GenEd 2	3
	Year 1 Total:	**34**

Sophomore Year

Course #	Course Name	Cr
BIOE221	Introduction to the Bioengineering Major	1
PHYS 260/261	General Physics/Lab	4
BIOE 232	Thermodynamics	3
BIOE 241	Biocomputational Methods	3
MATH 241	Calculus III	4
MATH 246	Differential Equations	3
BIOE 371	Linear Algebra & ODSs for Bioengineering	3
CHEM 231/232	Organic Chemistry I/Lab	4
CHEM 241/242	Organic Chemistry II/Lab (Breadth Elective)	4
BSCI222	Genetics (Bio Sci Elective 1)	4
	Year 2 Total:	**33**

Junior Year

Course #	Course Name	Cr
BIOE 331	Biofluids	3
BIOE372	Biostatistics for Exp. Design & Data Analysis	3
	BIOE Selective	3
	BIOE Selective	3
	BIOE Elective	3
BSCI 330	Cell Biology & Physiology	4
BIOE 340	Modeling Physiol Sys & Lab (fulfills BSCI440/441)	4
CHEM 271/272	Chemistry II/Lab (additional course)	4
BCHM 461 or 463*	Biochemistry (Bio Sci Elective 2)	3
PHYS271	Physics Lab (additional course)	1
	Year 3 Total:	**31**

Senior Year

Course #	Course Name	Cr
BIOE 457	Biomedical Electronics & Instrumentation	4
BIOE 485	Capstone I (Fall)	3
BIOE 486	Capstone II (Spring)	3
ENGL 393	Technical Writing	3
	BIOE Elective	3
	BIOE Elective	3
	BIOE Elective	3
	GenEd 3	3
	GenEd 4	3
	GenEd 5	3
	GenEd 6	3
	Year 4 Total:	**34**

pre-med courses fulfilled by BIOE curriculum	
pre-med courses not covered by BIOE curriculum	

TOTAL CREDITS: **132**

*Students taking BCHM461 or 463 must first complete the rest of the chemistry sequence up to and including CHEM271/272

Pre-health students should consult the Pre-Health Office's website at http://www.prehealth.umd.edu/ for futher advising and information on pre-requisites .