

Suggested alignment between Curriculum and Program Requirements outlined by the UofL Med School and the JB Speed School of Engineering Bioengineering Curriculum

The table below compares the required pre-med courses to the current (2014) Bioengineering curriculum. NOTE *Italicized* text indicates the suggested replacement

Med School Requirements			BE Curriculum (BE Equivalent Class in Italics)		
Course Number(s)			Course Number(s)		
Biology					
Course Number	Course	Credits	Course Number	Course	Credits
240 or 242	Unity of Life or Diversity of Life	3 3	240	Unity of Life	3
244	Principles of Biology Lab	2	423	<i>BE Measurements</i>	2
329	Cell & Mol Biol	3	359	<i>Cell & Mol Biol</i>	3
Chemistry					
Course Number	Course	Credits	Course Number	Course	Credits
201	Gen Chem I	3	201	Gen Chem I	3
207	Intro. To Chem. Analysis I	1	207	Intro. To Chem. Analysis I	1
202	Gen Chem II	3	202	Gen Chem I	3
208	Intro. To Chem. Analysis II	1	208	Intro. To Chem. Analysis II	1
209	Intro to Chem Analysis III	1	209	Intro to Chem Analysis III	1
341	Org. Chem I	3	341	Org. Chem I	3
343	Org. Chem Lab I	2	343	Org. Chem Lab I	2
342	Org Chem II	3	342 (ADD)	<i>Org Chem II</i>	3
344	Org Chem Lab II	2	344 (ADD)	<i>Org Chem Lab II</i>	2
Physics					
Course Number	Course	Credits	Course Number	Course	Credits
221	Fund of Physics I	3	298	Physics I	4
223	Fund of Physics I Lab	1	295	Physics I Lab	1
222	Fund of Physics II	3	299	Physics II	4
224	Fund of Physics II Lab	1	Not req'd for BE		<i>Calculus-based Physics satisfies</i>
Math					
Course Number	Course	Credits	Course Number	Course	Credits
180	Elem of Calc	3	101	Engr Analysis I	4
OR			102	Engr Analysis II	4
205	Calculus I	4	BE also req. to take ↓	-	-
			201/205		
			330/360		

Med School Requirements			BE Curriculum (BE Equivalent Class in Italics)			
Course Number(s)			Course Number(s)			
English						
Course Number	Course	Credits	Course Number	Course	Credits	
101	Intro to Col Wri	3	101	Intro to Col Wri	3	
102	Intrmd Col Wri	3	102	Intrmd Col Wri	3	
			OR			
			201	Honors Eng I	3	
			202	Honors Eng II	3	
105	Honors Adv Comp		105	Hon Adv Comp		
Recommended upper level science courses						
Biology						
Course Number	Course	Credits	Offered*	Course Number	Course	Credits
330	Genetics	3	Fa/Sp	--	-	-
331	Genetics Lab	3	Fa/Sp	-	-	-
400	Histology	4	Fa	-	-	-
465	Prin. Physiology	3	Sp	354	<i>Anat & Phys (BE Required)</i>	3
540	Int. Metabolism	3	Fa/Sp	-	-	-
Chemistry						
Course Number	Course	Credits	Offered*	Course Number	Course	Credits
445 OR	Surv of Biochem	3	Sp	-	-	-
545	Biochemistry I	3	Fa	-	-	-

Additional notes:

With the exception of Organic Chemistry II (and associated lab, both of which must be taken), the BE curriculum satisfies all Pre-Med requirements.

The “Recommended upper-level science courses” listed on the UofL Medical School pre-requisite outline are suggested when choosing elective courses.

Further, taking Biochemistry, Histology, and/or Intermediary Metabolism **prior** to the MCAT is recommended.

* Searched Summer 2017, Fall 2017, and Spring 2018