

Course Number and Name	hrs.	Semester	Grade	Course Number and Name	hrs.	Semester	Grade
BIOM 1710 Intro Biomed Engr <sup>1</sup>	3			BIOM 2710	4		
CHEM 1110 Chemistry I	3			BIOL 3730 Vertebrate Physiology	4		
CHEM 1111 Chemistry Lab	1			Engr Elect (Including MECH 2332 or Biology)	3		
ENGL 1010 English Composition <sup>2</sup>	3			Tech Elec: CHEM 3311 & 3301-Foundations/Organic Chemistry & Lab <sup>6</sup>	4		
MATH 1910 Calculus I	4			Add BIOL course See recommended course from list <sup>10</sup>	3		
<b>First Semester Total Hours</b>	<b>14</b>			<b>Fifth Semester Total Hours</b>	<b>18</b>		
CHEM 1120 Chemistry II	3			MECH 3320 Engineering Materials	3		
CHEM 1121 Chemistry II Lab	1			BIOM 3710 Physiological System/Modeling	3		
BIOM 1720 Intro Biomed Engr Tools	3			Engr Elec <sup>6</sup>	3		
ENGL 1020 English Composition & Analysis <sup>2</sup>	3			Tech Elec: CHEM 3511&3501-Foundations/Bioorganic & lab <sup>7</sup>	4		
MATH 1920 Calculus II	4			ENGL 3603 Engineering Communication	3		
PHYS 2111 Physics I Lab	1			<b>Sixth Semester Total Hours</b>	<b>16</b>		
PHYS 2110 Physics for Science & Engineering I	3			BIOM 4760 Biomed Engr Design Principles	3		
<b>Second Semester Total Hours</b>	<b>18</b>			BIOM Elec	3		
BIOL 1110 Biology I	3			Engr Elec <sup>7</sup>	3		
BIOL 1111 Biology I Lab	1			Human 1 <sup>3</sup> : THEA 1030/COMM 1851/ART 1030/MUS1030 rec	3		
BIOM 2720 Experimental Design Analysis	3			Engr Elec <sup>6</sup>	3		
MATH 2110 Calculus III	4			ECON 2110 Macroeconomics <sup>5</sup>	3		
PHYS 2121 Physics II Lab	1			<b>Seventh Semester Total Hours</b>	<b>18</b>		
PHYS 2120 Physics for Science & Engineering II	3			Human 2 <sup>3</sup> : THEA 1030/COMM 1851/ART 1030/MUS1030 rec	3		
<b>Third Semester Total Hours</b>	<b>15</b>			BIOM 4780 Senior Project	3		
BIOL 1120 Biology II	3			Engr Elec <sup>6</sup>	3		
BIOL 2011 or 2021	1			BIOM Elec	4		
BIOM 2810	4			Soc Sci 1 <sup>4</sup>	3		
EECE 2201/2283	3			<b>Eighth Semester Total Hours</b>	<b>16</b>		
EECE 2203/2281	1			<b>Grand Total Hours</b>	<b>132</b>		
MATH 3120 Differential Equations	3			**4 extra hours in curriculum to meet Pre-Med requirements** See reverse side (pg 2) for notes.			
ENGL 2201/2202 Literary Heritage/African-American <sup>2</sup>	3						
<b>Fourth Semester Total Hours</b>	<b>18</b>						

Total Hours = 132

Total of 128 hours required for degree

**Graduation & General Education Requirements**

1. "C-" or better in all engineering, math, physics, chemistry, and biology courses used towards graduation. **Students must complete each highlighted course with a "C" or better before being admitted to the Biomedical Engineering major.**
2. 9 hours of English with a "C" or better in ENGL 1010 and ENGL 1020
3. 6 hours of Humanities *from approved list* [http://www.memphis.edu/bme/docs/advising\\_guide.pdf](http://www.memphis.edu/bme/docs/advising_guide.pdf)
4. 3 hours of Social Science *from approved list* [http://www.memphis.edu/bme/docs/advising\\_guide.pdf](http://www.memphis.edu/bme/docs/advising_guide.pdf)
5. Satisfies 3 hours of Social Science *requirement*
6. Must be an upper division (3XXX/4XXX) Engineering course
7. May be any upper division (3XXX/4XXX) Engineering, Science, or Math course
8. American History waived with High School American History
9. The *Catalog* is valid for seven (7) years
10. Suggested additional biological/chemical sciences courses: BIOL 3072 Genetics (3 Hrs); BIOL 3073 Gen Lab (1 Hr); BIOL 3610 Gen Embryol (4 Hrs); BIOL 3620 Comp Anat (5 Hrs); BIOL 3130 Cell Biol (3 Hrs); BIOL 4380 Histol (4 Hrs); BIOL 3500/3600 Microbiology (5 Hrs); BIOL 4445 Immunology (3 Hrs); CHEM 4511 Biochem I (3 Hrs); CHEM 4512 Biochem II (3 Hrs)

Note: Additional requirements as specified in the *Catalog*