## Alabama State University <u>Degree Plan for Bachelor of Science in Biomedical Engineering (BME)</u>

## Freshman Year

Fall			Spring		
CHE 141	General College Chemistry I	4	ENG 132	English Composition II	3
ORI 100	Freshman Orientation	1	CHE 142	General College Chemistry II	4
BIO 127	General Biology I	4	MAT 265	Calculus & Analytical Geo I	4
ENG 131	English Composition I	3	BME 110	Intro to Biomed Engr.	3
HUM XXX	Humanities & Fine Arts Elective	3	BIO 128	General Biology II	4
Total		15	Total		18

**Sophomore Year** 

Fall			Spring		
Hist., & Soc.	History, Social and	3	Hist., & Soc.	History, Social and Behavioral	3
Sci. XXX	Behavioral Science Elective		Sci. XXX	& Science Elective	
BME 210	Introduction to Computer for Engineers	3	BME 200	Statics	3
MAT 266	Calculus & Analytical Geo II	4	MAT 350	Mathematical Tools For Eng. Prob. Solving	3
PHY 210	General Physics I	4	HUM XXX	Humanities & Fine Arts Elective	3
BME 290	Introduction to Materials	3	PHY 211	General Physics II	4
			BME 250	Thermodynamics for Engineers	2
Total		17	Total		18

Junior Year

Fall			Spring		
BME 322	Dev. Systems Biology	3	BME 325	Biological Transport Phenomena	3
BME 323	Dev. Systems Biology Lab	1	Hist., & Soc. Sci. XXX	History, Social and Behavioral & Science Elective	3
HUM 209	Humanities & Fine Arts Elective	3	BME XXX	BME Track Elective	3
Hist., & Soc. Sci. XXX	History, Social and Behavioral & Science Elective	3	CHE 211	Organic Chemistry I & Lab	5
BME 220	Introduction to Biomechanics	3	BME 370	Biomedical Devices & Systems	3
BME 221	Introduction to Biomechanics Lab	1	BME 371	Biomedical Devices & Systems Lab	1
BME 410	Biomaterials	3			
Total		17		Total	18

**Senior Year** 

Fall			Spring		
BME 490	Senior Design I Lecture/Projects	3	BME 491	Senior Design II Lecture/Projects	3
BME 440	Anatomy and Physiology for Engineers	3	BME 400	Undergraduate Research/Internship	1
BME 441	Anatomy and Physiology for Engineers Lab	1	BME 450	BioImaging	3
BME XXX	BME Track Elective	3	HUM XXX	Humanities & Fine Arts Elective	3
BME 412	Tissue Engineering	3	MAT 472	Probability and Statistics I	3
Total		13	Total		13
				Degree Requirement Total	129

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