

SUGGESTED PROGRAM FOR BIOMEDICAL ENGINEERING PROGRAM (134credits)

	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6	SEMESTER 7	SEMESTER 8
Subject		Constitutional Law and Democracy DERE1300 3	Uniandes' Basic Cycle (CBU) XXXX 2	Uniandes' Basic Cycle (CBU) XXXX 2	Uniandes' Basic Cycle (CBU) XXXX 2	Uniandes' Basic Cycle (CBU) XXXX 2	Uniandes' Basic Cycle (CBU) XXXX 2	Uniandes' Basic Cycle (CBU) XXXX 2
Code								
Credits								
Pre-requirements								
Co-requirements								
Writing I	ESCR1101 2	Writing II ESCR1102 2 <small>ESC.UNI.1</small>		Uniandes' Basic Cycle (CBU) XXXX 2		Free Elective Course (CLE) XXXX 3		Free Elective Course (CLE) XXXX 3
Differential Calculus +	MATE1203 3	Integral Calculus and Differential Equations MATE1214 3 <small>MATE1203</small>	Vector Calculus MATE1207 3 <small>MATE1214 MATE1105</small>	English Reading Requirement LENG2999 0	Biochemistry MBIO2100 3 <small>QUIM1301 MBIO2101</small>	Biomechanics ‡ IBIO3160 3 <small>LEVEL1 IBIO2102 IBIO2240 ESP. REQ. LENG 2999</small>	Engineering Elective XXXX 3	Second Language Requisite LENG3999 0
Linear Algebra I		MATE1105 3 <small>MATE1203</small>		Differential Equations MATE2303 3 <small>MATE1207 MATE2303C</small>	Biochemistry Lab MBIO2101 1 <small>QUIM1103 MBIO2100</small>	Biomedical Engineering Elective IBIOXXXX 3 <small>LEVEL1 LENG 2999 ESP. REQ.</small>	Biomedical Engineering Elective IBIOXXXX 3 <small>LEVEL1 LENG 2999 ESP. REQ.</small>	Biomedical Engineering Elective IBIOXXXX 3 <small>LEVEL1 LENG 2999 ESP. REQ.</small>
Physics I	FISI1018 3 <small>MATE1203</small>	Physics II FISI1028 3 <small>MATE1203 MATE1214 FISI1018 MATE1105</small>	Introduction to Programming † ISIS1221 3 <small>ISIS1204L</small>	Circuits and Instrumentation ‡ IELE1010 3 <small>MATE1214 IELE1010L MATE1105</small>	Probability and Statistics I IIND2106 3 <small>MATE1214 IIND2106C MATE1105</small>	Experimental Design and Biostatistics ‡ IBIO3270 3 <small>LEVEL1 IIND2106 IBIO2240 ESP. REQ. LENG 2999</small>	Biomedical Engineering Elective IBIOXXXX 3 <small>LEVEL1 LENG 2999 REQ. ESPA</small>	Biomedical Engineering Elective IBIOXXXX 3 <small>LEVEL1 LENG 2999 ESP. REQ.</small>
Experimental Physics I	FISI1019 1 <small>FISI1018</small>	Experimental Physics II FISI1029 1 <small>FISI1028</small>	Cell Biology ‡ MBIO1100 3 <small>MBIO1101</small>	Molecular Biology MBIO2102 3 <small>QUIM1103 MBIO2103</small>	Investment Decision Analysis IIND2401 3 <small>IBIO1010 IIND2401C MATE1105</small>	Signal Processing and Biomedical Instrumentation ‡ IBIO3560 3 <small>LEVEL1 MATE2303 IBIO2240 LENG 2999 ESP. REQ.</small>		
Chemistry ‡	QUIM1103 3 <small>QUIM1104 QUIM1103C</small>		Organic Chemistry QUIM1301 3 <small>QUIM1103 QUIM1302</small>	Molecular Biology Lab MBIO2103 1 <small>QUIM1103 MBIO2102</small>	Biomaterials ‡ IBIO2650 3 <small>IBIO2102 IBIO2651 QUIM1301 LENG 2999</small>	Medical Imaging Analysis IBIO3470 3 <small>LEVEL1 IBIO2240 ESP. REQ. LENG 2999</small>		
			Organic Chemistry Lab QUIM1302 1 <small>QUIM1301</small>		Biological Transport Phenomena ‡ IBIO2250 3 <small>IBIO2102 IBIO2251 IBIO2240 MATE2303 FISI1028 MBIO1100 LENG 2999</small>	Modeling and Simulation of Biomedical Systems ‡ IBIO3260 3 <small>LEVEL1 IBIO2102 IBIO2240 IBIO2250 ESP. REQ. LENG 2999</small>	Design Project I IBIO3680 3 <small>LEVEL1 IBIO2102 ESP. REQ. LENG 2999</small>	Design Project II IBIO3870 3 <small>LEVEL2 IBIO3680</small>
			Quant. Physiology ‡ for Biomedical Eng. II IBIO2102 3 <small>IBIO2099 IBIO2102L</small>	Scientific Programming ‡ IBIO2240 3 <small>ISIS1204 IBIO2241 MATE1214 MATE1105</small>				
			Quant. Physiology ‡ for Biomedical Eng. I IBIO2099 3 <small>IBIO2099L</small>					
			Introduction to ‡ Biomedical Engineering IBIO1010 3 <small>IBIO1010T IBIO1011</small>					

Subject (AREA)

Code Credits

Pre-requirements Co-requirements

- (A) GENERAL EDUCATION AND FREE CHOICE CREDITS
- (B) DESIGN PROJECT
- (D) BASIC SCIENCES
- (E) ENGINEERING FOUNDATION
- (F) BIOMEDICAL ENGINEERING FOUNDATION
- (G) IN-DEPTH STUDY OF BIOMEDICAL ENGINEERING

† Must approve classification exam

‡ These courses must be enrolled with their 0 credits laboratory

LEVEL 1: Following courses are level 1 (IBIO1010, MBIO1100, IELE1010, QUIM1301, MATE1207, FISI1028, FISI1029)

LEVEL 2: Following courses are level 2 (MBIO2102, MBIO2100, IBIO2102, IBIO 2240, LENG 2999, IIND 2106, IBIO 2650, IBIO 2250, MATE 2303)

‡ Required course in biomedical engineering option

‡ Elective course in biomedical engineering option