INSTITUT SUPERIEUR DES SCIENCES DE L'INGENIEUR, DES INDUSTRIES ET DE L'INNOVATION
THE HIGHER INSTITUTE OF ENGINEERING SCIENCES, INDUSTRIES AND INNOVATION

BACHELOR'S IN BIOMEDICAL ENGINEERING

CODES	COURSE NAMES	CREDIT
	YEAR ONE	
BME1110	Introduction to research science	4
BME1111	Communication skills	3
BME1112	Engineering mathematics	3
BME1113	Physics (theories and lab)	3
BME1114	Microbiology	3
BME1115	General Chemistry	3
BME1116	Biology and Biochemistry	3
BME1117	Functional exploration equipment	3
BME1118	Surgical equipment	3
BME1119	Ethics and professional engineering	3
BME1120	Anatomy and human physiology	3
BME1121	Computer application	3
BME1122	Anatomy and Physiology	3
BME1123	Field work	3
BME1124	Digital Systems	3
BME1125	Random Signals	3
BME1126	Biostatistics I and II	3
BME1127	Databases	3
BME1128	BME electronics lab	3
		60
	YEAR TWO	
BME2110	Anatomy and Physiology	3
BME2111	Digital Electronics	3
BME2112	Histophysiology	3
BME2112	Signals and Systems	3
BME2113	Circuit Theory	3

BME2114	Biochemistry and Molecular Biology	3
BME2115	Database	3
BME2116	Electromagnetism and Optics	3
BME2117	Dynamical Systems in Biomedical Engineering	3
BME2118	Numerical Methods in Biomedical Engineering	3
BME2119	Circuit Analysis	3
BME2120	Bioengineering Thermodynamics	3
BME2121	Design and Graphics	3
BME2122	Differential Equation	3
BME2123	Quantitative Physiology	3
BME2124	Foundation of cellular and systems Biology	3
BME2125	Engineering electromagnetics Principles	3
BME2126	Engineering Statistics and Analysis	3
BME2127	Anatomy and Physiology	3
BME2128	Digital Electronics	3
		60
	YEAR THREE	
BME3110		3
BME3211	Histophysiology	3
BME3213	Signals and Systems	3
BME3112	Circuit Theory	3
BME3212	Biochemistry and Molecular Biology	3
BME3113	Database	3
BME3114	Electromagnetism and Optics	3
BME3115	Dynamical Systems in Biomedical Engineering	3
BME3116	Numerical Methods in Biomedical Engineering	3
BME3117	Circuit Analysis	3
BME3118	Bioengineering Thermodynamics	3
BME3119	Design and Graphics	3
BME3120	Differential Equation	3
BME3121	Quantitative Physiology	3
BME3122	Foundation of cellular and systems Biology	3
BME3123	Engineering electromagnetics Principles	3
BME3124	Engineering Statistics and Analysis	3
BME3125	Engineering Practice and Professional Values	3
BME3126	Biomedical Engineering design	3
BME3110	Nano medicine Engineering	3
		60
	YEAR FOUR	
BME4114	Regulatory, design and quality Requirements	3
BME4115	Biomechanics	3
BME4116	Biotransport Phenomena	3
BME4117	Research methods	3
BME4118	Biomedical Engineering Capstone Design I & II	3
BME4119	Motion biomechanics	3
BME4120	Advanced design	3

BME3121	Orthopedic and injury biomechanics	3
BME4122	Biomaterials	3
BME4123	Tissue Engineering	3
BME4125	Internship	10
BME4126	Dissertation	20
		60