Shiley-Marcos SCHOOL OF ENGINEERING
University of San Diego

Int Engr - Biomedical Engineering Degree Plan (2024/25 catalog)

First Year

Fall		Spring	
ENGR 101: Introduction to Engineering	3	ENGR 102 or ENGR 103	3
MATH 150: Calculus I	4	PHYS 270/270L: Mechanics & Lab	4
COMP 110: Computational Problem Solving	3.5	MATH 151: Calculus II	4
Core Curriculum	3	CHEM 151/151L: General Chemistry & Lab	4
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**16.5**	**Total Semester Units**	**18**

Second Year

Fall		Spring	
ENGR 102 or ENGR 103	3	GENG 250: Integrated Approach to Energy	3
MATH 310: Applied Math for Engineering	3	GENG 288: Integrated Approach to EE	4
PHYS 271/271L: Intro to Elec. and Magnet. & Lab	4	MENG 210: Statics	3
Core Curriculum	3	Core Curriculum	3
Core Curriculum	3	MATH 250: Calculus III or MATH 262: Discrete Math	3 - 4
Total Semester Units	**16**	**Total Semester Units**	**16-17**

Third Year

Fall		Spring	
GENG 311: Engineering Materials Science	3	GENG 360: Experimental Engineering	4
GENG 331: Physiology for Biomedical Engineers	3	GENG 380: Sustainability and Engineering	3
ISYE 330: Engineering Probability and Statistics	3	GENG 330: Biomaterials Design	3
Engineering Elective (lower or upper division)	3	Concentration Elective I	3
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**15**	**Total Semester Units**	**16**

Fourth Year

Fall		Spring	
GENG 491: Engineering Senior Design I	4	GENG 492: Engineering Senior Design II	3
GENG 350: Engineering and Social Justice	3	GENG 432: Medical Devices	3
GENG 430: Bioinformatics	3	Concentration Elective (upper division) II	3
GENG 431: Biomechanics	3	Engineering Elective (upper division)	3
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**16**	**Total Semester Units**	**15**

Final Semester

Fall	
Concentration Elective III	3
Math/Science Elective	3
Core Curriculum	3
Free Elective	9
Total Semester Units	**18**

Total GENG Degree Units	**147**