Shiley-Marcos SCHOOL OF ENGINEERING
University of San Diego

Int Engr - Embedded Software Degree Plan (2025/26 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 I & 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	COMP 120: Programming Abstractions	3.5
PHYS 271/271L: Intro to Elec. and Magnet. & Lab	4	GENG 288: Integrated Approach to EE	4
Core Curriculum	3	MATH 262: Discrete Math	3
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**16**	**Total Semester Units**	**16.5**

Third Year

Fall		Spring	
GENG 311: Engineering Materials Science	3	GENG 360: Experimental Engineering	3
MENG 210: Statics	3	GENG 380: Sustainability and Engineering	3
ISYE 330: Engineering Probability and Statistics	3	GENG 421 - Embedded Systems Performance	3
COMP 280: Intro to Computer Systems	3.5	COMP 310: Operating Systems	3.5
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**15.5**	**Total Semester Units**	**15.5**

Fourth Year

Fall		Spring	
GENG 350: Engineering and Social Justice	3	COMP 375: Networking	3.5
GENG 422: Advanced Embedded Software Dev	3	COMP 365: Principles of Info. Security	3
GENG: 491 Engineering Senior Design I	4	GENG 492: Engineering Senior Design II	3
COMP 300: Principles of Digital Hardware	3.5	Engineering Elective (Upper Division)	3
Core Curriculum	3	Core Curriculum	3
Total Semester Units	**16.5**	**Total Semester Units**	**15.5**

Final Semester

Fall	
Engineering Elective (lower or upper division)	3
Math/Sci elective (based on concentration)	3
Core Curriculum	3
Free Elective	3-9
Total Semester Units	**12-18**

Total GENG Degree Units	**147**