University of San Diego SHILEY-MARCOS SCHOOL OF ENGINEERING

University of San Diego Shiley-Marcos School of Engineering

Int Engr - Embedded Software Conc. Degree Plan(2022/23 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/L: Chem +lab or ENGR 121: Engr Prog.	**4**
Core Curriculum	**3**		Core Curriculum	**3**
Total Hours	**16.5**		**Total Hours**	**18**
Second Year				
Fall			**Spring**	
ENGR 103: User-Centered Design	**3**		GENG 250: Integrated Approach to Energy	**3**
MATH 310: Applied Math for Engineering	**3**		COMP 120: Programming Abstractions	**3.5**
PHYS 271/L: Intro to Electricity & Magnet. +lab	**4**		Core Curriculum	**3**
Core Curriculum	**3**		GENG 288: Integrated Approach to EE	**4**
Core Curriculum	**3**		MATH 262: Discrete Math	**3**
Total Hours	**16**		**Total Hours**	**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**		COMP 310: Operating Systems	**3.5**
COMP 280: Intro to Computer Systems	**3.5**		GEMG 421 - Embedded Systems Performance	**3**
Core Curriculum	**3**		Core Curriculum	**3**
Total Hours	**15.5**		**Total Hours**	**15.5**
Fourth Year				
Fall			**Spring**	
COMP 300: Principles of Digital Hardware	**3.5**		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**
Core Curriculum	**3**		Engineering Elective (Upper Division)	**3**
GENG 350: Engineering and Social Justice	**3**		Core Curriculum	**3**
Total Hours	**16.5**		**Total Hours**	**15.5**
Final Semester				
Fall				
Engineering Electie (lower or upper division)	**3**		**Total GENG Degree Hours**	**147**
Core Curriculum	**3**			
Math/Sci elective	**3**			
Free Elective	**3-9**			