

Civil Engineering, B.S. - General Civil Engineering Subplan/Option: 126 units
2020-2021 Academic Year

	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
Year 1	CE 1001 Civil Engineering [FSp]	Prereq: BSCE, BSCET, BSCEM or MSCE Major. Coreq: CE 1001L or CE 127L; and College Level Math.	1	CE 1011 Surveying Engineering [FSpSu]	Prereq: C- or better in CE 1001, CE 1101, CE 127, or ETC 130; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1011L, CE 134L, or ETC 131L; and MAT 114, MAT 1140, MAT 130, or MAT 1300.	3	[] = Term Typically Offered F = Fall Sp = Spring Su = Summer e = even years o = odd years
	CE 1001L Civil Engineering Laboratory [FSp]	Prereq: BSCE, BSCET, BSCEM or MSCE Major. Coreq: CE 1001 or CE 127; and College Level Math.	1	CE 1011L Surveying Engineering Laboratory [FSpSu]	Prereq: C- or better in CE 1001L, CE 1101L, CE 127L, or ETC 130L; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 1011, CE 134, or ETC 131; and MAT 114, MAT 1140, MAT 130, or MAT 1300.	1	
	GE Area E: Lifelong Learning and Self-Development [FSp]	Recommend EGR 1000/L	3	CHM 1210 General Chemistry I (B1) [FSpSu]	Prereq: SAT Math \geq 550; ACT Math \geq 23; C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250, STA 120, or STA 1200; or C- or better in CHM 121 and CHM 121L. Coreq: CHM 1210L.	3	
	GE Area A2: Written Communication [FSp] (Success Marker)		3	CHM 1210L General Chemistry Laboratory I (B3) [FSpSu]	Prereq: SAT Math \geq 550; ACT Math \geq 23; C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250.	1	
	MAT 1140 Calculus I (B4) [FSpSu] (Success Marker)	Prereq: C or better in MAT 1050 and MAT 1060, MAT 1070, or appropriate score on MDTP or ALEKS placement test.	4	MAT 1150 Calculus II (B4) [FSpSu] (Success Marker)	Prereq: MAT 1140, MAT 115B, MAT 1140C, AP Calc AB \geq 3, or AP Calc BC \geq 3.	4	
	GE Area A1: Oral Communication [FSP]		3	PHY 1510 Introduction to Newtonian Mechanics (B1) [FSp]	Prereq: C- or better in MAT 114, MAT 1140, MAT 1140C, MAT 115, MAT 116 or MAT 1150. Coreq: PHY 1510L.	3	
	GE Area B2: Life Sciences [FSp]		2	PHY 1510L Newtonian Mechanics Laboratory (B3) [FSp]	Coreq: PHY 1510.	1	
	Total Units		17	Total Units		16	

Year 2	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
	CE 2021 Infrastructure Economics and Public Policy [FSpSu]	Prereq: MAT 114 or MAT 1140; and BSCE, BSCET, BSCEM, or MSCE Major.	3	CE 2011 Technical Communications [FSpSu]	Prereq: GE Area A and BSCE, BSCET, BSCEM, or MSCE Major.	3	
CE 2041 Engineering Statics [FSpSu]	Prereq: C- or better in MAT 1150, MAT 115, or MAT 130; C or better in PHY 1510 or PHY 131; and C of better in PHY 1510L or PHY 131L.	3	CE 2051 Mechanics of Materials [FSpSu]	Prereq: C- or better in ME 214, ETT 210, CE 2041, ARO 2041, or ETM 2101.	3		
MAT 2140 Calculus III [FSpSu]	Prereq: MAT 116, MAT 214, MAT 1150, or MAT 1150C.	4	MAT 2240 Elementary Linear Algebra and Differential Equations [FSpSu]	Prereq: MAT 116, MAT 1150, or MAT 1150C.	3		
PHY 1520 Introduction to Electromagnetism and Circuits [FSp]	Prereq: C- or better in MAT 115 or MAT 1150; and C- or better in PHY 132, PHY 132B, PHY 1510B or PHY 1510. Coreq: PHY 1520L.	3	GSC 3210 Engineering Geology I (B5) [FSp]	Prereq: Upper Division standing; and Lower division GE requirements in Areas A and B. Coreq: GSC 3210L.	2		
PHY 1520L Introductory Laboratory on Electromagnetism and Circuits [FSp]	Coreq: PHY 1520.	1	GSC 3210L Engineering Geology I Laboratory (B5) [FSp]	Prereq: Upper Division standing; and Lower division GE requirements in Areas A and B. Coreq: GSC 3210.	1		
GE Area C1: Visual and Performing Arts [FSp]		3	GE Area D1: U.S. History American Ideals [FSp]		3		
Semester Total Units		17	Semester Total Units		15		

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Year 3	CE 2030 Civil Engineering Materials [FSpSu]	Prereq: C- or better in ME 218, ETT 220, or CE 2051; CHM 121 or CHM 1210; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 221L or CE 2030L.	2	CE 3401 Geotechnical Engineering [FSpSu]	Prereq: MAT 115, MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 2061, ME311, or ETT 310; and CE 3401L or CE 327L.	3	<i>Graduation Writing Test must be taken before completion of 75 units.</i>
	CE 2030L Civil Engineering Materials Laboratory [FSpSu]	Prereq: C- or better in ME 218, ETT 220, or CE 2051; CHM 121L or CHM 1210L Coreq: CE 221 or CE 2030.	1	CE 3401L Geotechnical Engineering Laboratory [FSpSu]	Prereq: MAT 115, MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: ETT 310, ME 311, or CE 2061; and CE 3401 or CE 326.	1	
	CE 2061 Fluid Mechanics [FSpSu]	Prereq: C- or better in ME 214, ETT 210, CE 2041, ARO 2041, or ETM 2101.	3	CE 3510 Structural Analysis II [FSpSu]	Prereq: C- or better in CE 304 or CE 3501; and BSCE, BSCET, BSCEM, or MSCE Major.	3	
	CE 2070 Computer Programming and Numerical Methods [FSpSu]	Prereq: C- or better in MAT 224, MAT 2240, or MAT 216.	3	CE 3501L Structural Design Laboratory [FSpSu]	Prereq: C- or better in ME 218, ETT 220, ETM 2201, or CE 2051; C- or better in MAT 115, MAT 1140, MAT 1140C, MAT 216, MAT 224, MAT 2240, MAT 131, or MAT 1310; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 304 or CE 3501.	1	
	IME 3011 App. of Stats in Engineering [FSp]	Prereq: MAT 115, MAT 116, MAT 214, MAT 215, MAT 216, MAT 224, or MAT 1150.	2	CE 3601 Transportation Engineering [FSp]	Prereq: CE 134 or CE 1011; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 3601L.	3	
	GE Area C2: Literature, Modern Languages, Philosophy and Civilization [FSp]		3	CE 3601L Transportation Engineering Laboratory [FSp]	Prereq: CE 134 or CE 1011; and BSCE, BSCET, BSCEM, or MSCE Major. Coreq: CE 3601.	1	
	GE Area C1 or GE Area C2 [FSp]	Select either C1: Visual and Performing Arts or C2: Literature, Modern Languages, Philosophy and Civilization course	3	GE Area D2: U.S. Constitution and California Government [FSp]		3	
	<i>Take the Graduation Writing Test</i>						
Semester Total Units			17	Semester Total Units		15	

	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
Year 4	EGR 4810 Project Design Principles and Applications (B5) [FSp]	Prereq: Lower division GE requirements in Areas A and B.	1	EGR 4820 Project Design Principles and Applications (B5) [SpSu]	Prereq: Lower division GE requirements in Areas A and B.	1	
	Option Electives [FSp]	Select from Curriculum Sheet	3	EGR 4830 Project Design Principles and Applications (B5) [SpSu]	Prereq: Lower division GE requirements in Areas A and B.	1	
	Option Electives [FSp]	Select from Curriculum Sheet	3	Option Elective	Select from Curriculum Sheet	3	
	Option Electives [FSp]	Select from Curriculum Sheet	3	Option Elective	Select from Curriculum Sheet	3	
	GE Area D3: Social Sciences: Principles, Methodologies, Value Systems, and Ethics [FSp]		3	IME 4020 Ethical Concepts in Technology and Applied Science (B5, C3) [FSpSu]		3	
	Option Electives [FSp]	Select from Curriculum Sheet	2	EGR 4050 Role of Design Professionals In Society (D4) [FSpSu]	Completion of all GE Area A, D1, D2, and D3 requirements.	3	
	<i>File an application to graduate</i>						
Semester Total Units			15	Semester Total Units		14	
						Total Units	126