



CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Lower Division General Education Requirements (32 units)

Lower Division General Education Requirements (21 units)

ENGL 101	Composition I: Reflective and Expository Writing	4 →	Composition I: Reflective and Expository Writing	3	
COMM 150	Oral Communication	4 →	Oral Communication	3	
HIST 202A or 202B	United States Civilization	4 →	United States History	3	
POLS 150	Government and American Society	4 →	United States Constitution and State/Local Government	3	
BLOCK C - Humanities	3 courses from 3 areas	12 →	BLOCK C - Humanities	1 course	3
	1 course	4 →	BLOCK D – Social Sciences	1 course	3
BLOCK E – Lifelong Understanding and Self-Development					
ENGR 150	Introduction to Engineering	1 →	ENGR 1500 Introduction to Higher Education for Engineers	3	
University Requirement (4 units)			University Requirement		
ENGL 102	Composition II: Analytical and Persuasive Writing	4 →	ENGL 2030	Moved to Lower Division Required	
WPE	(prior to completing 90 semester units)	NC/CR →	WPE	(prior to completing 90 semester units) NC/CR	

General Education Upper Division Theme (12 units)

Upper Division GE Theme (12 units)

Upper Division General Education Requirements (6 units)

All three courses must come from the same upper division theme.	12 →	Arts & Humanities	3
The department recommends :		Social Science	3

- Gender in the diversity of Human Experience
- Human Maturity and Aging Process and Problems

The “Natural Sciences and Mathematics” course must have a biology designation (BIOL)

Lower Division Major Requirements (69 units)

Lower Division Major Requirements (47 units)

CHEM 101	General Chemistry I	5 →	CHEM 1040	General Chemistry I	4
ENGL 102	Moved from University Requirements	→	ENGL 2030	Introduction to Technical Writing	3
MATH 206	Calculus I: Differentiation	4 →	MATH 2110	Calculus I: Differentiation	4
MATH 207	Calculus II: Integration	4 →	MATH 2120	Calculus II: Integration	4

MATH 208	Calculus III: Sequences, Series, and Coordinate Systems	4 →	MATH 2130	Calculus III: Sequences, Series, and Coordinate Systems	3
MATH 209	Calculus IV: Several Variables	4 →			
MATH 215	Differential Equations	4 →	MATH 2150	Differential Equations	3
PHYS 211	Mechanics	5 →	PHYS 2100	General Physics	5
PHYS 212	Wave, Optics and Thermodynamics	5 →	PHYS 2200	General Physics II	5
PHYS 213	Electricity and Magnetism	5 →			
CE 190	Introduction to CAD	1 →	No longer in the program		
CE 195	Civil Engineering Design I	4 →	CE 1950	Civil Engineering Design I	2
CE/ME 201	Statics (4)	4 →	CE/ME 2010	Statics	3
CE 202	Plane Surveying	4 →	CE 2020	Plane Surveying	3
CE/ME 205	Strength of Materials I	4 →	CE/ME 2050	Strength of Materials I	3
CE/ME 210	Matrix Algebra for Engineers	2 →	CE/ME 2120	Matrix Algebra and Statistics and Probability for Engineers	3
CE/ME 211	Statistics and Probability for Engineers	2 →		(need both CE 210 + 211 to satisfy)	
CE 280	Numerical Methods for Engineers I	2 →	CE 2800	Numerical Methods for Engineers I	1
CE 284	Environmental Engineering I	1 →	CE 2840	Environmental Engineering	1

Natural Science Special Requirement for Civil Engineering (3 units)

One Course (3 units) from the Following List

	BIOL 1010	General Biology	3
	MICR 1010	Introduction to Microbiology	3
	GEOL 1500	Earth Revealed	3
	GEOL 1550	Oceanography	3
	GEOL 1580	Natural Disasters	3

Upper Division Major Requirements (58 Units)

Upper Division Major Requirements (38units)

ENGR 300	Economics for engineers	4 →	CE/EE/ME 3000	Engineering Economics	3
ENGR 301	Ethics & Professionalism	1 →	CE 3010	Ethics & Professionalism	3
CE/ME 303	Fluid Mechanics I	4 →	CE 3030	Fluid Mechanics I	3
CE 306	Communication for Civil Engineers	3 →	CE 3060	Communication for Civil Engineers	2
CE/ME 312	Strength of Materials lab I	1 →	CE/ME 3120	Strength of Materials lab I	1
CE/ME 313	Fluid Mechanics Lab I	1 →	CE/ME 3140	Hydraulics Laboratory I	1
CE/ME 320	Dynamics	4 →	CE 3200	Dynamics for Civil Engineers	2
CE 360	Structural Mechanics I	4 →	CE 3600	Structural Mechanics I	3
CE 361	Introduction to Structural Design	4 →	CE 3610	Introduction to Structural Design	3

CE 364	Concrete Laboratory	1 →	CE 3640	Civil Engineering Materials Laboratory	1
CE 365	Specifications and Cost Estimating	4 →	Moved to Electives		
CE 366	Soil Mechanics I	4 →	CE 3660	Geotechnical Engineering	3
CE 368	Soil Mechanics Laboratory	1 →	CE 3680	Geotechnical Engineering Laboratory	1
CE 370	Transportation Engineering	4 →	CE 3700	Transportation Engineering	3
ENGR 207	Materials Science and Engineering	4 →	CE 3760	Properties of Civil Engineering Materials	2
CE 380	Numerical Methods for Engineers II	2 →	CE 3800	Numerical Methods for Engineers II	2
CE 384	Environmental Engineering II	3 →	CE 3840	Environmental Engineering II	2
CE 386	Design of Water Resources Systems	4 →	CE 3860	Design of Water Resources Systems	3
CE 387	Hydraulics	4 →	Moved to Electives		

*Students must select either ME 321 or ME 421 as a required course.

The other may be used as an upper division technical elective.

Senior Design Requirements (5 units)

The Senior Design requirement is a 2 course series that must be completed sequentially

Senior Design Requirements (4 units)

The Senior Design requirement is a 2 course series that must be completed sequentially

CE 496A	Civil Engineering Design Project I	3 →	CE 4960	Civil Engineering Design Project I	2
CE 496B	Civil Engineering Design Project II	2 →	CE 4970	Civil Engineering Design Project II	2

Upper Division Technical Electives (17 units)

Select 6 lecture courses and 1 laboratory courses from the following.

Lecture Electives (16 units):

CE 365	Moved from Upper Division Major Requirements	4 →	CE 3650	Specifications, Cost Estimating and Construction Management	3
CE 387	Moved from Upper Division Major Requirements	4 →	CE 3870	Hydraulics I	3
CE 461	Design of Steel Structures	4 →	CE 4610	Design of Steel Structures	3
CE 462	Reinforced Concrete Design I	4 →	CE 4620	Reinforced Concrete Design I	3
CE 463	Timber and Masonry Design	4 →	CE 4630	Timber and Masonry Design	3
CE 465	Seismic Design	4 →	CE 4650	Seismic Design	3
CE 467	Foundations I	4 →	CE 4670	Geotechnical Engineering Design I	3
CE 471	Highway Engineering	4 →	CE 4710	Highway Engineering	3
CE 472	Highway and Airport Pavement	4 →	CE 4720	Highway and Airport Pavement	3

Upper Division Technical Electives (10 units)

Select 3 lecture courses and 1 laboratory courses from the following.

Lecture Electives (9 units):

CE 484	Environmental Engineering Design	4 →	CE 4840	Environmental Engineering Design	3
CE 402	Strength of Materials II	4 →	CE 4020	Strength of Materials II	3
CE 460	Structural Mechanics II	4 →	CE 4600	Structural Mechanics II	3
CE 474	Traffic Engineering	4 →	CE 4740	Traffic Engineering	3
CE 475	Advanced Geomatics	4 →	CE 4750	Advanced Geomatics	3
CE 483	Hydrology I	4 →	CE 4830	Hydrology I	3
CE 485	Water Supply	4 →	CE 4850	Water Supply	3
CE 479	Groundwater Contamination and Remediation	4 →	CE 4790	Groundwater Contamination and Remediation	3
CE 480	Environmental Modeling	4 →	CE 4800	Environmental Modeling	3

Laboratory Electives (1 unit):

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CE 372	Asphaltic Materials Laboratory	1 →	CE 3720	Asphaltic Materials Laboratory	1
CE 381	Computer Aided Design Laboratory	1 →	CE 3810	Computer Aided Design Laboratory	1
CE 382	Computer Aided Structural Analysis, Design and Experimentation Lab	1 →	CE 3820	Computer Aided Structural Analysis, Design and Experimentation Lab	1
ME 412	Strength of Materials Laboratory II	1 →	No longer in the program		1
CE/ME 413	Fluid Mechanics Laboratory II	1 →	CE 4130	Hydraulics Laboratory II	1
CE 473	Pavement Design Laboratory	1 →	CE 4730	Pavement Design Laboratory	1
CE 499	Undergraduate Directed Study	1 →	CE 4990	Undergraduate Directed Study	4

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