## **BS CIVIL ENGINEERING**

NAME

STUDENT ID	
MINOR	

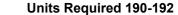
Cal Poly, Higher Ed, and Major GPA at least 2.00	[ ] YES [ ] NO
US Cultural Pluralism Met	[ ] YES [ ] NO
60 Units Upper Division Met Taken/Remaining	[]YES []NO
GWR Met	[ ] YES [ ] NO
Upper Div GE Met Taken/Remaining	[ ] YES [ ] NO
Free Electives Met	[ ] YES [ ] NO
C- or higher in A1, A2, A3, and B4	[ ] YES [ ] NO
Residency Requirements Met	[ ] YES [ ] NO
Note: No major or support courses may be selected as	credit/no credit.

Note: No major or support courses may be selected as	creatt/no c	realt.	-
MAJOR COURSES (72)	Units	Grade	Grd Pts
CE 111 Intro to Civil Engr	1		
CE 112 Design Principles in Civil Engr	2		
CE 113 Computer Aided Drafting	2		
CE 204 Mech of Mater 1 (3) and	3 and		
CE 207 Mech of Mater II (2) or	2 <i>or</i>		
CE 208 Mech of Mater $(5)^1$	5		
CE 222 Intro. Experiments in Transport Engr	1		
CE 251 Programming App in Engr	2		
CE 259 Civil Engineering Materials	2		
CE 321 Fund Trans Engr	3		
CE 322 Fund Trans Engr Lab	1		
CE 336 Water Resources Engineering	4		
CE 337 Hydraulics Laboratory	1		
CE 352 Structural Engineering	4		
CE 355 Reinforced Concrete Design	4		
CE/CM 371 Constr Mgmt & Proj. Plan	4		
CE 381 Geotech Engineering	4		
CE 382 Geotech Engineering Lab	1		
CE 465 Civil Engr Prof Practice	1		
CE 466 & 467 or	6		
CE 468 & 469			
Technical Electives <sup>2</sup>	24		
(In consultation with faculty advisor. See list and			
guidelines on reverse.)			
		<u> </u>	
		I	1

## **SUPPORT COURSES (78-80)**

BIO 213 Life Science for Engineeers $(B2)^3$ 2BMED/BRAE 213 Bioengineering Fundamentals $(B2)^3$ 2BRAE 239 Engineering Surveying4CHEM 124 Gen Chem for Engr I $(B1/B3)^3$ 4CHEM 125 Gen Chem for Engr II4ENGL 149 Technical Writing for Engineers $(A3)^3$ 4ENVE 331 Fundamentals of Environmental Engineering4GEOL 201 Physical Geology3MATE 210 Materials Engineering3MATE 215 Materials Laboratory I1MATH 141 Calculus I $(B4)^3$ 4MATH 142 Calculus II $(Ad'1 Area B)^3$ 4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 132 General Physics III4PHYS 133 General Physics III4		
BRAE 239 Engineering Surveying4CHEM 124 Gen Chem for Engr I (B1/B3) <sup>3</sup> 4CHEM 125 Gen Chem for Engr II4ENGL 149 Technical Writing for Engineers $(A3)^3$ 4ENVE 331 Fundamentals of Environmental Engineering4GEOL 201 Physical Geology3MATE 210 Materials Engineering3MATE 215 Materials Laboratory I1MATH 141 Calculus I (B4) <sup>3</sup> 4MATH 142 Calculus II (B4) <sup>3</sup> 4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4	BIO 213 Life Science for Engineeers (B2) <sup>3</sup>	2
CHEM 124Gen Chem for Engr I (B1/B3) <sup>3</sup> 4CHEM 125Gen Chem for Engr II4ENGL 149Technical Writing for Engineers $(A3)^3$ 4ENVE 331Fundamentals of Environmental Engineering4GEOL 201Physical Geology3MATE 210Materials Engineering3MATE 215Materials Laboratory I1MATH 141Calculus I (B4) <sup>3</sup> 4MATH 142Calculus II (B4) <sup>3</sup> 4MATH 241Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 244Linear Analysis I4ME 211Engineering Dynamics3ME 341Fluid Mechanics I3PHYS 141General Physics IA (Add'1 Area B) <sup>3</sup> 4	BMED/BRAE 213 Bioengineering Fundamentals (B2) <sup>3</sup>	2
CHEM 125Gen Chem for Engr II4ENGL 149Technical Writing for Engineers $(A3)^3$ 4ENVE 331Fundamentals of Environmental Engineering4GEOL 201Physical Geology3MATE 210Materials Engineering3MATE 215Materials Laboratory I1MATH 141Calculus I (B4) <sup>3</sup> 4MATH 142Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 241Calculus IV4MATH 241Calculus IV4MATH 244Linear Analysis I4ME 211Engineering Dynamics3ME 341Fluid Mechanics I3PHYS 141General Physics IA (Add'1 Area B) <sup>3</sup> 4	BRAE 239 Engineering Surveying	4
ENGL 149Technical Writing for Engineers (A3) <sup>3</sup> 4ENVE 331Fundamentals of Environmental Engineering4GEOL 201Physical Geology3MATE 210Materials Engineering3MATE 215Materials Laboratory I1MATH 141Calculus I (B4) <sup>3</sup> 4MATH 142Calculus II (B4) <sup>3</sup> 4MATH 143Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 241Calculus IV4MATH 244Linear Analysis I4ME 211Engineering Dynamics3ME 341Fluid Mechanics I3PHYS 141General Physics IA (Add'1 Area B) <sup>3</sup> 4	CHEM 124 Gen Chem for Engr I (B1/B3) <sup>3</sup>	4
ENVE 331 Fundamentals of Environmental Engineering4GEOL 201 Physical Geology3MATE 210 Materials Engineering3MATE 215 Materials Laboratory I1MATH 141 Calculus I (B4) <sup>3</sup> 4MATH 142 Calculus II (B4) <sup>3</sup> 4MATH 143 Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4	CHEM 125 Gen Chem for Engr II	4
GEOL 201 Physical Geology3MATE 210 Materials Engineering3MATE 215 Materials Laboratory I1MATH 141 Calculus I (B4) <sup>3</sup> 4MATH 142 Calculus II (B4) <sup>3</sup> 4MATH 143 Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4		4
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MATE 215 Materials Laboratory I1MATH 141 Calculus I (B4) <sup>3</sup> 4MATH 142 Calculus II (B4) <sup>3</sup> 4MATH 143 Calculus III (Add'1 Area B) <sup>3</sup> 4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 241 Calculus IV4MATH 241 Calculus IV3ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4	GEOL 201 Physical Geology	3
MATH 141 Calculus I (B4) <sup>3</sup> 4MATH 142 Calculus II (B4) <sup>3</sup> 4MATH 143 Calculus III (Add'I Area B) <sup>3</sup> 4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'I Area B) <sup>3</sup> 4PHYS 132 General Physics II4	MATE 210 Materials Engineering	3
MATH 142 Calculus II (B4)³4MATH 143 Calculus III (Add'1 Area B)³4MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B)³4PHYS 132 General Physics II4	MATE 215 Materials Laboratory I	1
MATH 143 Calculus III (Add'1 Area B)34MATH 241 Calculus IV4MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B)34PHYS 132 General Physics II4	MATH 141 Calculus I (B4) <sup>3</sup>	4
MATH 145 Calculus IN (ride 17 field D)       4         MATH 241 Calculus IV       4         MATH 244 Linear Analysis I       4         ME 211 Engineering Statics       3         ME 212 Engineering Dynamics       3         ME 341 Fluid Mechanics I       3         PHYS 141 General Physics IA (Add'l Area B) <sup>3</sup> 4         PHYS 132 General Physics II       4	MATH 142 Calculus II (B4) <sup>3</sup>	4
MATH 244 Linear Analysis I4ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'l Area B) <sup>3</sup> 4PHYS 132 General Physics II4	MATH 143 Calculus III (Add'1 Area B) <sup>3</sup>	4
ME 211 Engineering Statics3ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4	MATH 241 Calculus IV	4
ME 212 Engineering Dynamics3ME 341 Fluid Mechanics I3PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4PHYS 132 General Physics II4	MATH 244 Linear Analysis I	4
ME 341 Fluid Mechanics I       3         PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4         PHYS 132 General Physics II       4	ME 211 Engineering Statics	3
PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup> 4         PHYS 132 General Physics II       4	ME 212 Engineering Dynamics	3
PHYS 132 General Physics II 4	ME 341 Fluid Mechanics I	3
PHYS 132 General Physics II 4	PHYS 141 General Physics IA (Add'1 Area B) <sup>3</sup>	4
PHYS 133 General Physics III 4		4
	PHYS 133 General Physics III	4







updated

1.17.20

**NOTE**: This is a snapshot of the curriculum as originally published in the catalog. The Degree Progress Report (DPR) reflects updates to the published catalog. The DPR will be used to award your degree and calculate your EAP.

STAT 312 Statistical Methods for Engineers (UD-B) <sup>3</sup> 4         Approved Engineering Science Elective <sup>2, 4</sup> 2.         Select 2-4 units from: CM 280; CSC 231, 234; EE 201;       2.         ME 302; IME 314; MATH 304, 344       44         GENERAL EDUCATION (GE)         72 units required, 32 of which are specified in Major/Support	-4
Approved Engineering Science Elective <sup>2, 4</sup> Select 2-4 units from: CM 280; CSC 231, 234; EE 201; ME 302; IME 314; MATH 304, 344 GENERAL EDUCATION (GE)	
ME 302; IME 314; MATH 304, 344 GENERAL EDUCATION (GE)	
GENERAL EDUCATION (GE)	
72 units required, 32 of which are specified in Major/Support	40
Refer to <u>current schedule</u> or <u>http://www.ge.calpoly.edu</u> to choose GE courses. You will <u>not</u> receive credit for courses not on the approved lists.	
**	
Minimum of 8 units required at the 300 level.	8
Area A English Language Comm & Critical Thinking	8
A1 Oral Communication	
A2 Written Communication	
A3 Critical Thinking $(4 \text{ units in Support})^3$	
Area B Scientific Inquiry & Quantitative Reasoning	
28 units are listed in Support <sup>3</sup>	10
Area C Arts and Humanities	16
Lower- division courses in Area C must come from three different subject prefixe	
Lower- division courses in Area C must come from three different subject prefixe C1 Arts <sup>5</sup>	
Lower- division courses in Area C must come from three different subject prefixe C1 Arts <sup>5</sup>	- •
Lower- division courses in Area C must come from three different subject prefixed         C1       Arts <sup>5</sup>	
Lower- division courses in Area C must come from three different subject prefixe C1 Arts <sup>5</sup>	25
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Lower- division courses in Area C must come from three different subject prefixe         C1       Arts <sup>5</sup>	25
Lower- division courses in Area C must come from three different subject prefixe         C1       Arts <sup>5</sup>	12

## FREE ELECTIVES ......0

<sup>1</sup> Transfer students take CE 208 in Fall Quarter.

<sup>2</sup> Consultation with advisor is recommended prior to selecting technical electives or approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

<sup>3</sup> Required in Support; also satisfies GE

<sup>4</sup> The courses selected to satisfy this requirement may not be used to satisfy other major or support requirements (no double counting of coursework).

<sup>5</sup> C1, C2, and C elective must come from three different subject prefixes.

## **TECHNICAL ELECTIVES<sup>1,2</sup>**

In consultation with faculty advisor, select from CE 356, ENVE 325, any 400-500 level CE and ENVE courses not required in the major (maximum of 4 units from the following list):

ARCE 305, 372, 403; BIO/NR/SS 421; BMED/CE/ME 404; BRAE 345, 447, 532; CHEM 341; CM 334; CRP 420, 435; CRP/NR 404, 408; ERSC 442; ERSC/GEOL 401, 402; GEOL 415; IME 314; MATE 425, 450; MATH 344; SS 423

<sup>1</sup> Consultation with advisor is recommended prior to selecting technical electives or approved electives; bear in mind your selections may impact pursuit of postbaccalaureate studies and/or goals.

<sup>2</sup> Additional guidelines for technical electives:

a) More than 4 units of coursework outside CE/ENVE is only permitted in special/unusual cases and requires written justification by the student, and approval by the Department Chair.

b) No more than 4 combined units of CE 400, CE 500, ENVE 400 and ENVE 500 can count towards the degree.

c) No more than 8 combined units of CE 470 / ENVE 470, CE 471 / ENVE 471, CE 570 / ENVE 570, CE 571 / ENVE 571 can be credited.

d) Co-op, graduate seminar, senior project/design, and thesis courses are not permitted.

e) Only one course can be credited for CE 458 / CE 558; CE 459 / CE 556.f) The courses selected to satisfy this requirement may not be used to satisfy other major or support requirements (no double counting of coursework).