

General Education

[General Education Program](#)

Program Goals

Consistent with E.O. 1033, Cal Poly's General Education Program is designed to assure graduates have made noteworthy progress toward becoming truly educated persons and to provide means whereby graduates have:

- The ability to think clearly and logically, to find information and examine it critically, to communicate orally and in writing, and to reason quantitatively;
- Appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share the world, and about the cultural endeavors and legacies of their civilizations;
- An understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries.

Foundational Courses

Students are expected to complete GE Area A classes during their freshman year. The three-course Communications sequence provides instruction and practice in the kinds of skills in writing, speaking, and critical thinking that students will need in their later courses. Completion of Area A is a prerequisite for many other GE classes. Students are also encouraged to complete their lower-division foundational GE classes in Areas B, C, and D (Science and Math, Arts and Humanities, and Society and the Individual) by the end of their sophomore year to give them the skills and knowledge to succeed in all their upper-division classes.

Technology Elective (Area F)

Most majors are required to take this upper-division elective which is integrative in nature, requiring the application and generalization of basic scientific and mathematical knowledge from foundation GE courses. Particular technologies are critically examined from multiple perspectives, which may include ethical, social, ecological, political, or economic viewpoints.

Advising

Some support courses fulfill both GE and major requirements and are listed on the program curriculum displays. Students should consult academic advisors during their freshman year for clarification on these GE/major support courses. GE course offerings are updated online each quarter in PASS.

Double-Counting

Courses from the student's Major department may not be used to fulfill GE Area C4 or D5.

GE Course Substitutions

Students are expected to complete the GE courses published for their degree program. Cal Poly GE courses must be selected from the approved GE list. Substitutions are not permitted except in extraordinary circumstances. Students requesting exceptions must follow petition procedures, outlined on the GE web site. This process may take several weeks.

GE Study Abroad

Students are strongly encouraged to submit a GE Study Abroad petition before going abroad in order to determine which study abroad courses will be granted GE credit.

Transfer Credit

Transfer credit for GE courses is accepted from California institutions, as approved by the CSU Chancellor's office. The GE Area letters and numbers at Cal Poly (e.g., GE A1, D4) may be different at other colleges. Some Cal Poly programs specify particular GE courses for major or support; these courses must be met with articulated equivalencies. Refer to www.assist.org for California Community College CSU GE lists and articulation agreements.

GE Requirements			
www.ge.calpoly.edu/			
<p>Most Majors=Colleges of Agriculture, Food & Environmental Sciences, Architecture & Environmental Design, Business, Science & Mathematics. CLA & LS=College of Liberal Arts and Liberal Studies major. ENGR=Engineering Programs.</p> <p>Some programs indicate specific GE courses to fulfill Major and Support course requirements. Courses from student's Major department may not be used to fulfill Areas C4 or D5. ✓ non-unit requirement All GE courses are 4 units unless otherwise indicated.</p>			
	Most Majors	CLA & LS	ENGR only
GE Units Taken in Residence	12	12	12
GE Upper Division Units Required	12	12	8
AREA A COMMUNICATION	12	12	12
A1 Expository Writing	4	4	4
A2 Oral Communication	4	4	4
A3 Reasoning, Argumentation, and Writing	4	4	4
AREA B SCIENCE & MATH	16	20	28
B1 Mathematics/Statistics	8	8	8
B2 Life Science	4	4	4
B3 Physical Science	4	4	4
B4 One lab taken with B2 or B3 course	✓	✓	✓
B5 elective (for CLA & LS students only) CLA & LS students may take B5, or any course from B1-B4		4	
B6 Upper-division (Engineering)			4
Engineering: Additional Area B			8
AREA C ARTS AND HUMANITIES	20	16	16
C1 Literature	4	4	4
C2 Philosophy	4	4	4
C3 Fine and Performing Arts	4	4	4
C4 Upper-division elective	4	4	4
Area C Elective (One from C1-C4)	4		
AREA D/E SOCIETY/INDIVIDUAL	20	20	16
D1 The American Experience (40404)	4	4	4
D2 Political Economy	4	4	4
D3 Comparative Social Institutions	4	4	4
D4 Self Development (CSU Area E)	4	4	4
D5 Upper-division elective	4	4	
AREA F TECHNOLOGY (upper-div)	4	4	
TOTAL GE UNITS	72	72	72

General Education Courses			
	Most Majors	CLA & LS	ENGR only
AREA A: COMMUNICATION	12	12	12
A1 Expository Writing	4	4	4
ENGL 133 Writing and Rhetoric for ESL Students ENGL 134 Writing and Rhetoric			
A2 Oral Communication	4	4	4
COMS 101 Public Speaking COMS 102 Principles of Oral Communication HNRS 101 Public Speaking			
A3 Reasoning, Argumentation, and Writing	4	4	4
COMS 126 Argument and Advocacy COMS 145 Reasoning, Argumentation and Writing ENGL 145 Reasoning, Argumentation, and Writing ENGL 148 Reasoning, Argumentation, and Professional Writing ENGL 149 Technical Writing for Engineers HNRS 145 Reasoning, Argumentation, and Writing HNRS 148 Reasoning, Argumentation, and Professional Writing HNRS 149 Technical Writing for Engineers PHIL 126 Logic and Argumentative Writing			
	Most Majors	CLA & LS	ENGR only
AREA B: SCIENCE & MATH	16	20	28
B1 Mathematics/Statistics	8	8	8
HNRS 141 Calculus I HNRS 142 Calculus II HNRS 143 Calculus III MATH 112 Nature of Modern Math MATH 117 Pre-Calculus Algebra II MATH 118 Pre-Calculus Algebra MATH 119 Pre-Calculus Trigonometry MATH 141 Calculus I MATH 142 Calculus II MATH 143 Calculus III MATH 161 Calculus for the Life Sciences I MATH 162 Calculus for the Life Sciences II MATH 182 Calculus for Architecture and Construction Mgmt MATH 221 Calculus for Business and Economics MATH 227 Mathematics for Elementary Teaching I STAT 130 Intro Statistical Reasoning STAT 217 Intro to Statistical Concepts and Methods STAT 218 Applied Statistics for the Life Sciences STAT 221 Intro Probability and Statistics STAT 251 Statistical Inference for Management I (5) STAT 252 Statistical Inference for Management II (5) STAT 313 Applied Experimental Design and Regression Models			
B2 Life Science (B2&4=lab course)	4	4	4
ANT 250 Biological Anthropology ASCI 112 Principles of Animal Science BIO 111 General Biology (B2&4) BIO 113 Animal Diversity and Ecology (B2&4) BIO 114 Plant Diversity and Ecology (B2&4) BIO 115 Animal/Human Structure and Function (B2&4) BIO 161 Introduction to Cell and Molecular Biology (B2&4)			

BIO 227 Wildlife Conservation Biology BOT 121 General Botany (B2&4) MCRO 221 Surv Microbiology (B2&4) MCRO 224 Gen Microbiology I (5) (B2&4) PPSC 110 Peoples, Pests and Plagues (B2&B4) <i>For Engineering students only; concurrent enrollment required:</i> BIO 213 Life Science for Engineers (2) and ENGR/BRAE 213 Bioengineering Fundamentals (2)			
B3 Physical Science (B3&4=lab course)	4	4	4
ASTR 101 Intro to the Solar System ASTR 102 Intro to Stars and Galaxies ASTR 112 Introduction to the Stars and Galaxies (B3&4) CHEM 110 World of Chemistry (B3&4) CHEM 111 Survey of Chemistry (5) (B3&4) CHEM 124 General Chemistry for Engineers I (B3&4) CHEM 125 General Chemistry for Engineers II (B3&4) CHEM 127 General Chemistry I (B3&4) GEOL 102 Introduction to Geology GEOL 205 Earthquakes HNRS 131 General Physics I (B3&4) HNRS 132 General Physics II (B3&4) HNRS 134 General Physics IA PHYS 104 Introductory Physics PHYS 107 Introduction to Meteorology PHYS 111 Contemporary Physics for Nonscientists PHYS 115 Physics of Sound and Music PHYS 121 College Physics I (B3&4) PHYS 122 College Physics II (B3&4) PHYS 131 General Physics I (B3&4) PHYS 132 General Physics II (B3&4) PHYS 133 General Physics III (B3&4) PHYS 141 General Physics IA PSC 101 Physical Environment: Matter and Energy (B3&4) PSC 103 Physical Environment: Earth and Universe			
B4 One lab taken with B2 or B3 course	✓	✓	✓
B5 elective (GE option for College of Liberal Arts & Liberal Studies students)	--	--	--
CLA & LS: (Select one from B1-B5)	0	4	0
BIO 112 Conservation Biology and Environmental Science BIO 302 Human Genetics BIO 305 Biology of Cancer BOT 311 Plants, People and Civilization FSN 210 Nutrition GEOL 203 Fossils and History of Life HNRS 319 Natural Resource Ecology, Theories and Applications MATH 326 Mathematics and Visual Art NR 319 Natural Resource Ecology, Theories and Applications PSC 201 Intro to Physical Oceanography PSY 340 Biopsychology SS 121 Intro to Soil Science			
B6 Upper-division Area B (ENGR only)	0	0	4
CHEM 305 Physical Chemistry for Engineers CSC 341 Numerical Engineering Analysis GEOL 305 Fundamentals Seismology MATH 304 Vector Analysis MATH 344 Linear Analysis II MATH 408 Complex Analysis I PHYS 412 & 452 Solid State Physics & Lab PHYS 417 Nonlinear Dynamical Systems STAT 312 Statistical Methods for Engineers STAT 321 Probability and Statistics for Engineers and Scientists STAT 350 Probability and Random Processes for Engineers			

Engineering: Additional Area B	0	0	8
	Most Majors	CLA & LS	ENGR only
AREA C: ARTS AND HUMANITIES	20	16	16
C1 Literature	4	4	4
ENGL 230 Masterworks British Literature through 18 th Century ENGL 231 Masterworks British Lit: Late 18 th Century – Present ENGL 240 American Tradition in Literature ENGL 251 Great Books I: Ancient and Classical World ENGL 252 Great Books II: Emergence of Europe ENGL 253 Great Books III: Age of Revolution FR 233 Critical Readings in French Literature GER 233 Critical Readings in German Literature HNRS 251 Great Books I: Ancient and Classical World SPAN 233 Introduction to Hispanic Readings			
C2 Philosophy	4	4	4
HNRS 230 Philosophical Classics: Metaphysics & Epistemology Knowledge and Reality (effective Spring 2010) HNRS 231 Philosophical Classics: Ethics and Political Philosophy PHIL 230 Philosophical Classics: Metaphysics & Epistemology Knowledge and Reality (effective Spring 2010) PHIL 231 Philosophical Classics: Ethics and Political Philosophy			
C3 Fine and Performing Arts	4	4	4
ARCH 217 History of Architecture ARCH 218 History of Architecture ARCH 219 History of Architecture ART 101 The Fundamentals of Drawing ART 111 Introduction to Art ART 112 Survey of Western Art ART 148 Sculpture COMS 208 Performance of Literature DANC 221 Dance Appreciation LA 211 History of Landscape Arch: Ancient Civs – Col America LA 212 History of Modern and Contemporary Landscape Arch MU 101 Introduction to Music Theory MU 120 Music Appreciation MU 221 Jazz Styles (USCP) MU 229 Music of the 60's: War and Peace (USCP) TH 210 Introduction to Theatre TH 227 Theatre History: Classical TH 228 Theatre History: 18 th Century to Contemporary			
C4 Upper-division elective	4	4	4
<i>Courses from student's Major Dept do not receive C4 credit</i> ARCH 320 Topics in Architectural History ARCH 326 Native American Architecture and Place (USCP) ART 311 Art History – Nineteenth Century Art ART 314 History of Photography ART 318 Asian Art: National, Religion and Intel Movements ART 370 Michelangelo ART 371 Topics in Renaissance Art COMS 308 Group Performance of Literature DANC 311 Dance in American Musical Theatre DANC 321 Cultural Influences on Dance in America (USCP) ENGL 330 Brit Lit: Age of Belief to1485 ENGL 331 Brit Lit: Age of Discovery, 1485-1600 ENGL 332 Brit Lit: Age of Enlightenment, 1660-1798 ENGL 333 Brit Lit: Age of Romanticism, 1798-1832 ENGL 334 Brit Lit: Age of Industrialism, 1832-1914 ENGL 335 Brit Lit: Age of Modernism: 1914-Present			

ENGL 338 Intro Shakespeare: London
 ENGL 339 Intro Shakespeare
 ENGL 340 Literary Sources American Character: 1600-1865
 ENGL 341 Literary Sources American Character: 1865-1914
 ENGL 342 Literary Sources American Character: 1914-1956
 ENGL 343 Multiple Voices Contemp Amer Lit: 1956 – Present
 ENGL 345 Women Writers of 20th Century (USCP)
 ENGL 346 Ethnic American Lit (USCP)
 ENGL 347 African American Literature (USCP)
 ENGL 349 Gender in 20th-Century Literature (USCP)
 ENGL 350 Modern Novel
 ENGL 351 Modern Poetry
 ENGL 352 Modern Drama
 ENGL 353 Drama in London
 ENGL 354 Bible as Literature and in Literature and the Arts
 ENGL 370 World Cinema
 ENGL 371 Film Styles and Genres
 ENGL 372 Film Directors
 ENGL 380 Literary Themes
 ENGL 381 Diversity in 20th-Century American Lit (USCP)
 ENGL 382 LGBT Literature and Media (USCP)
 ENGL 386 Creative Nonfiction
 ENGL 387 Fiction Writing
 ENGL 388 Poetry Writing
 ES 300 Chicano/a Non-Fiction Literature (USCP)
 ES 326 Native American Architecture and Place (USCP)
 ES 340 Cultural Production and Ethnicity
 ES 360 Ethnicity and the Land (USCP)
 FR 305 Significant Writers in French
 FR 350 French Literature in English Translation
 GER 305 Significant Writers in German
 GER 350 German Literature-English Translation
 HNRS 304 Values and Technology
 HNRS 320 Values, Media, Culture
 HNRS 380 Literary Themes
 HUM 303 Values and Technology
 HUM 310 World Cultures
 HUM 312 Chicano/a Culture (USCP)
 HUM 320 Values, Media, Culture
 HUM 361 Modernism
 MU 324 Music and Society
 MU 328 Women in Music
 NR 360 Ethnicity and the Land (USCP)
 PHIL 311 Greek Philosophy
 PHIL 312 Medieval Philosophy
 PHIL 313 Early Modern Rationalism
 PHIL 314 Early Modern Empiricism
 PHIL 315 Kant and 19th Century European Philosophy
 PHIL 316 20th Century European Philosophy
 PHIL 317 History of Analytic Philosophy
 PHIL 320 Asian Philosophy
 PHIL 321 Philosophy of Science
 PHIL 322 Philosophy of Technology
 PHIL 331 Ethics
 PHIL 332 History of Ethics
 PHIL 333 Political Philosophy
 PHIL 334 Philosophy of Law
 PHIL 335 Social Ethics (USCP)
 PHIL 336 Feminist Ethics, Gender and Society (USCP)

PHIL 337 Business Ethics			
PHIL 338 Ethics and Education			
PHIL 339 Biomedical Ethics			
PHIL 340 Environmental Ethics			
PHIL 341 Professional Ethics			
PHIL 342 Philosophy of Religion			
PHIL 350 Aesthetics			
RELS 301 Religions of Asia			
RELS 302 Monotheisms: Judaism, Christianity, and Islam			
RELS 304 Judaism			
RELS 306 Hinduism			
RELS 307 Buddhism			
RELS 310 Christianity			
RELS 311 Islam			
RELS 370 Religion, Gender and Society (USCP)			
RELS 372 Spiritual Extremism: Asceticism, Mysticism, Madness			
RELS 374 Religion and Violence			
RELS 378 Religion and Contemporary Values			
SPAN 305 Significant Writers in Spanish			
SPAN 340 Chicano/a Authors (USCP)			
SPAN 350 Hispanic Literature in English Translation			
SPAN 351 Latino/a Writers in U. S. (USCP)			
TH 310 Women's Theatre			
TH 320 Black Theatre (USCP)			
TH 360 Theatre in the United States			
TH 390 World Drama			
UNIV 361 Modernism			
WGS 370 Religion, Gender and Society (USCP)			
Area C Elective (one course from C1-C4)	4	0	0
	Most Majors	CLA & LS	ENGR only
AREA D/E: SOCIETY & INDIVIDUAL	20	20	16
D1 The American Experience (40404)	4	4	4
ES 112 Race, Culture, Politics in the U.S. (USCP) HIST 206 American Cultures (USCP) HIST 207 Freedom and Equality in American History (USCP) HNRS 112 Race, Culture, Politics in the U.S. (USCP) POLS 112 American and California Government			
D2 Political Economy	4	4	4
ECON 201 Survey of Economics ECON 222 Macroeconomics HIST 213 Modern Political Economy HIST 214 Political Economy of Latin America and Middle East HNRS 201 Survey of Economics SOC 218 International Political Economy			
D3 Comparative Social Institutions	4	4	4
ANT 201 Cultural Anthropology ANT 202 World Prehistory ES 212 Global Origins of U.S. Cultures (USCP) ES 241 Survey of Indigenous Studies (USCP) ES 242 Survey of Africana Studies (USCP) ES 243 Survey of Latino/a Studies (USCP) ES 244 Survey of Asian American Studies (USCP) GEOG 150 Intro to Cultural Geography HIST 210 World History I (5000 B.C.E. to 1789) HIST 216 Comparative Social Movements HIST 221 World History, Beginnings to 1000 HIST 222 World History, 1000-1800 HIST 223 World History, 1800 to Present HNRS 212 Global Origins of U.S. Cultures (USCP)			

HNRS 223 World History, 1800 to Present RELS 201 Religion, Dialogue and Society SOC 110 Comparative Societies			
D4 Self Development (CSU Area E)	4	4	4
FSN 250 Food and Nutrition: Customs and Culture (USCP) KINE 250 Healthy Living KINE 255 Personal Health: A Multicultural Approach (USCP) KINE 260 Women's Health Issues (USCP) PSY 201 General Psychology PSY 202 General Psychology			
D5 Upper-division elective	4	4	0
<i>Courses from student's Major Dept do not receive D5 credit</i>			
ANT 325 Precolumbian Mesoamerica ANT 330 Indigenous South Americans ANT 344 Sex, Death and Human Nature ANT 345 Human Behavioral Ecology ANT 360 Human Cultural Adaptations BUS 311 Managing Technology International Legal Environ CRP 334 Cities in a Global World ECON 303 Econ of Poverty Discrimination Immigration (USCP) ECON 304 Comparative Econ Systems ECON 322 Economic History of the Advanced World ES 308 Fire and Society ES 310 Hip-Hop, Poetics and Politics (USCP) ES 320 African American Cultural Images (USCP) ES 321 Native American Cultural Images (USCP) ES 322 Asian American Cultural Images (USCP) ES 323 Mexican American Cultural Images (USCP) ES 330 Chinese American Experience (USCP) ES 335 Filipina/o American Experience (USCP) ES 380 Critical Race Theory (USCP) ES 381 The Social Construction of Whiteness (USCP) GEOG 300 Geography of United States GEOG 301 Geography of Resource Utilization GEOG 308 Global Geography GEOG 370 Geography of Latin America HIST 306 The Witch-Hunt in Europe, 1400-1800 HIST 307 European Thought, 1800-2000 HIST 308 The Trans-Atlantic Slave Trade HIST 309 Cultures of West Africa and the African Diaspora HIST 310 East Asian Culture and Civilization HIST 316 Modern East Asia HIST 317 The Lure of the Sea HIST 318 The City in the Modern World HIST 319 Modern South and Southeast Asia HIST 320 Colonial and Revolutionary America HIST 321 Civil War America HIST 322 Modern America HIST 323 Versions of the Past: Novels, Comics and Movies HIST 324 The Historical Novel in the U.S., '60's to Present HIST 336 Britain at War: 1939-1945 HNRS 303 Econ of Poverty Discrimination Immigration (USCP) HNRS 324 The Historical Novel in the U.S., '60's to Present HNRS 391 Appropriate Tech/World's People: Development HUM 315 Critical Issues in Latin American Studies HUM 316 London: From Roman Colony to World Capitol KINE 323 Sport and Gender (USCP) KINE 324 Sport, Media and American Popular Culture (USCP) NR 308 Fire and Society NR 323 Human Dimensions Natural Resource Management POLS 325 Global Political Issues			

POLS 338 Critical Issues American Politics POLS 339 Comparative Political Regimes POLS 348 Early American Political Thought (<i>Spring 2010</i>) POLS 349 Contemporary American Political Thought (<i>Spg '10</i>) PSY 311 Environmental Psychology PSY 318 Psychology of Aging PSY 352 Conflict Resolution: Violent and Nonviolent RELS 344 Religious Studies: The Making of a Discipline SOC 315 Global Race and Ethnic Relations SOC 326 Sociology of the Life Cycle SOC 377 Sociology of Religion UNIV 391 Appropriate Tech/World's People: Development WGS 301 Introduction to Women's and Gender Studies (USCP) WGS 320 Women in Global Perspective WGS 340 Sexuality Studies			
	Most Majors	CLA & LS	ENGR only
AREA F: TECHNOLOGY ELECTIVE (upper division)	4	4	0
AERO 310 Air and Space AG 315 Organic Agriculture AG 330 Cal Poly Land: Nature, Technology and Society AG 350 The Global Environment AG 360 Holistic Management ASTR 324 Longitude, Navigation, and Timekeeping BIO 307 World Aquaculture: Applics, Methods and Trends BOT 329 Plants, Food, and Biotechnology BRAE 340 Irrigation Water Mgmt BRAE 348 Energy for a Sustainable Society BUS 350 The Global Environment CHEM 349 Chemical and Biological Warfare CRP 338 Digital Cities CSC 302 Computers and Society CSC 310 Computers for Poets EDES 350 The Global Environment ENGR 302 Transportation and Manufacturing in 21 st Century ENGR 350 The Global Environment ENVE 324 Introduction to Air Pollution ES 350 Gender, Race, Science and Technology (USCP) FSN 319 Food Technology/Customer GEOG 317 The World of Spatial Data/Geographic Info Tech GRC 377 Desktop Publishing for Print and World Wide Web HCS 329 Plants, Food, and Biotechnology HIST 354 History Network Technology HIST 358 Cloning HIST 359 Living in the Material World HNRS 310 Air and Space HNRS 311 Computers for Poets HNRS 392 Appropriate Tech for the World's People: Design HUM 302 Human Values in Agriculture HUM 330 Cal Poly Land: Nature, Technology and Society HUM 350 The Global Environment IME 320 Human Factors and Technology IT 330 Issues of Packaging IT 336 Textile Technology IT 341 Plastics Processes and Applications LA 317 The World of Spatial Data/Geographic Info Tech MATE 359 Living in the Material World ME 320 Consumer Energy Guide ME 321 Solar Energy NR 312 Technology of Wildland Fire Management			

NR 317 The World of Spatial Data/Geographic Info Tech			
NR 321 Water Systems Technology, Issues and Impacts			
POLS 333 World Food Systems			
PSC 307 Nuclear Weapons in Post 9/11 World			
PSC 320 Energy, Society and the Environment			
SCM 320 Technology in London			
SCM 325 Genetic Engineering Technology			
SCM 330 Ocean Discovery through Technology			
SCM 335 Nuclear Science and Society			
SCM 350 The Global Environment			
UNIV 330 Cal Poly Land: Nature, Technology and Society			
UNIV 333 World Food Systems			
UNIV 339 Disaster-Resistant Sustainable Communities			
UNIV 350 The Global Environment			
UNIV 392 Appropriate Tech/World's People: Design			
WGS 350 Gender, Race, Science and Technology (<i>USCP</i>)			
Total GE Units	72	72	72