



TWO-TRACK GENERAL EDUCATION PROGRAM TRACK A		TWO-TRACK GENERAL EDUCATION PROGRAM TRACK B	
AREA	UNIT TOTAL (72 units)	AREA	UNIT TOTAL (72 units)
<p><b>1. Communication &amp; Critical Thinking</b> 3 courses: Methods of Inquiry; Written Communication; Oral Communication Methods of Inquiry and Written Communication are pre-requisites for Areas 3,4,5. Oral Communication is recommended to be taken in the student's first year. 12 units.</p>	12	<p><b>1. Communication in the English Language</b> Patterns 1 &amp; 2 3 courses, 12 units</p>	12
<p><b>2. Science &amp; Mathematics</b> (Must include one lab) Options: (1) Same as Track B (2) ISGE or similar, as approved 4 courses, 16 units; 1 course each from Subareas A, B, C, D; Subarea D course must be upper division</p>	16	<p><b>2. Science &amp; Mathematics</b> 4 courses: 1 each from Subareas A, B, C, D; D must be upper division. 4 courses, 16 units</p>	16
<p><b>3. Humanities &amp; Social Sciences</b> World Cultures: Literary, Historical and Philosophical Perspectives--3 courses, nonsequential. 12 units; (1) The Human Conscience &amp; Spirit; (2) Political Authority &amp; Change; (3) Creativity, Technology, &amp; Society; (4) Fine and Performing Arts--Intention, Process, and Product. Individual &amp; Society--3 courses: 12 units, to include: 28 Lower or Upper Division: Consumers, Producers &amp; Economic Institutions Upper Division: Readings in Human Behavior &amp; Human Nature The Individual in a Diverse Society Recommend coordination of World Cultures and Fine and Performing Arts units; Individual in a Diverse Society must follow World Cultures 1,2,3</p>	28	<p><b>3. Humanities &amp; Social Sciences</b> Arts, Literature, Philosophy &amp; Foreign Languages 3 courses--1 per area, 12 units Social, Political &amp; Economic Institutions and Their Historical Background 3 courses--1 per area, 12 units. Integrated Being 1 course, 4 units</p>	28
<p><b>4. U.S. History, Constitution &amp; Ideals</b> 2 courses, 8 units:</p>	8	<p><b>4. U.S. History, Constitution &amp; Ideals</b> 2 courses, 8 units.</p>	8
<p><b>5. Breadth</b> (Upper Division) Options (1) G.E. Seminars XXX 491,492 2-course sequence in a college World Cultures and Readings in Human Behavior and Nature. (2) Foreign Language (upper or lower division); not open to foreign language majors. (3) International Experience.</p>	8	<p><b>5. Breadth</b> 2 upper division courses, both elected outside student's major 2 courses, 8 units</p> <p>*Provisions for IGE remain; IGE students will complete in Track B.</p>	8

## GENERAL EDUCATION

### General Education—Unit Distribution

The General Education Program at California State Polytechnic University, Pomona shall be organized into the following distribution areas:

1. Communication in the English Language. Three (3) courses, 12 units (one course in Area A, B, and C)
2. Science and Mathematics. Four (4) courses, one (1) each from subareas A, B, C, D; D must be upper-division. Sixteen (16) units.
3. Humanities & Social Sciences:
  - A. Arts, Literature, Philosophy & Foreign Languages, three (3) courses, one (1) per subarea.
  - B. Social, Political & Economic Institutions and their Historical Background, three (3) courses, one (1) per subarea. Twelve (12) units
  - C. Integrated Being. One (1) course, four (4) units.
4. U.S. History, Constitution & Ideals. Two (2) courses, eight (8) units.
5. Breadth. Two (2) upper-division courses, both elected outside student's Eight (8) units.

### General Education—Approved Coursework

Courses are approved by the Campus Academic Senate by area to meet the university general education program requirements. Coursework in general education should not be taken without a specific curricular goal. Students should consult with their departmental degree advisors or with the staff of the University Advising Centers. Many degree programs specify which university approved courses meet their more specific degree requirements. Such departments will list approved courses in their degree curriculum layouts and in their catalog section.

Courses listed as a sequence should be taken in order. For example, in the sequence MAT 114-115, MAT 114 should be completed before taking MAT 115. Each course in the sequence counts as one course toward meeting general education requirements.

### Interdisciplinary General Education (IGE)

The Interdisciplinary General Education Program addresses the need for an integrated approach to curriculum, teaching, and scholarship and the creation of an extended learning community. As of July, 1994, the IGE Program is a part of the new School of Education and Integrative Studies, which shares these goals.

Students should also consult the coursework list for the INTERDISCIPLINARY GENERAL EDUCATION PROGRAM (IGE). This program is open to any department wishing to adopt it as an option, and provides an integrative-thematic approach to the Humanities and Social Sciences components of General Education (areas 1, 3, and 4) for a total 32 units of the 48 lower-division units required. This program is designed as a two and one-half year program in which the participant studies both major coursework as well as courses designed to partially meet the University General Education requirement. Applicants for this program must take the EPT (score of 147 or better) or have this test waived because of other test scores (e.g., SAT, ACT, etc).

This is the preferred pattern for students in engineering and architecture. Also recommended to all other students in the Colleges of Agriculture, Business Administration, Environmental Design, and Science. See departmental advisors or Program Director.

### Transfer and Change of Major Students and General Education Certification

Community college transfer students and Cal Poly Pomona change of major students are advised that, while they may be certified by their community colleges as having met all (or most) CSU lower division general education requirements, or have met G.E. requirements prior to change of major, many courses on the Cal Poly General Education list are also major department entrance or prerequisite requirements and will still have to be taken to meet degree requirements. For example, students may have met the quantitative

reasoning requirement by taking an algebra course at the community college, or at Cal Poly, and be so certified. This will not meet the calculus requirement for engineering, which also meets the Cal Poly Pomona G.E. quantitative reasoning requirement. Calculus will still have to be taken. Such "excess" coursework will be given as "elective credit." Some transfer students may be certified by their community colleges as having met the CSU General Education quantitative reasoning requirement with coursework which does not meet the Cal Poly Pomona Mathematics proficiency requirement. Such students will also have to take coursework to meet this graduation requirement.

### General Education—Course Lists

Note: Certain professional programs include G.E. course patterns not listed here. Students should consult the curriculum of the specific major to identify the exact G.E. requirement for the major. The Symbol (+) indicates that a course may be taken on a credit/no credit basis. Please refer to corresponding major section in this catalog for prerequisites and detailed description of general education courses listed below.

#### Track A

##### AREA 1—Communication and Critical Thinking

(Refer to University Programs section in this catalog for Track A course descriptions)

Communication and Critical Thinking I . . . . .	.GEN	101	(4)
Communication and Critical Thinking II . . . . .	.GEN	102	(4)
Communication and Critical Thinking III . . . . .	.GEN	103	(4)

##### AREA 2—Science and Mathematics

Same as Track B

##### AREA 3—Humanities and Social Sciences

The Human Conscience and Spirit . . . . .	.GEN	104	(4)
Political Authority and Change . . . . .	.GEN	105	(4)
Creativity, Technology and Society . . . . .	.GEN	106	(4)
Fine and Performing Arts – Intention, Process and Product . . . . .	.GEN	107	(4)
Consumers, Producers and Economic Institutions . . . . .	.GEN	108	(4)
Readings in Human Behavior and Nature . . . . .	.GEN	109	(4)
The Individual in a Diverse Society . . . . .	.GEN	110	(4)

##### AREA 4—U.S. History, Constitution and Ideals

Introduction to American Government . . . . .	.PLS	201	(4)
U.S. History . . . . .	.HST	202	(4)

##### AREA 5—Breadth (Choose one of the following)

Option I – Upper Division Seminars . . . . .	.GEN	401	(8)
Option II – Foreign Language . . . . .	.GEN	402	(8)
Option III – International Experience . . . . .	.GEN	403	(8)

#### Track B

##### AREA 1—Communication in the English Language (12 units)

Take one course in Area A, B, and C.

A. Written Communication			
Freshman English I . . . . .	.ENG	104	(4)
(All speakers of English as a second language who have not achieved the minimum EPT score for ENG 104 must take ENG 102 and ENG 103 in place of ENG 104.)			
B. Oral Communication			
Public Speaking . . . . .	.COM	100	(4)
Advocacy and Argument . . . . .	.COM	204	(4)
C. Critical Thinking			
Freshman English II . . . . .	.ENG	105	(4)
Critical Thinking . . . . .	.PHL	202	(4)

##### AREA 2—Science and Mathematics (16 units)

Students are required to take at least one lower division (100 or 200-level) course from Sections A, B, and C. Students must take an upper division course in math or science to fulfill Section D. At least one laboratory course from Sections B or C is also required. Laboratory classes are marked with an

"L" following the course number. Students must meet both ELM and MDT course prerequisites before enrolling in any mathematics or statistics course.

**A. Mathematics**

Students must meet both ELM and MDT course prerequisites before enrolling in any mathematics or statistics course.

MAT 105	College Algebra	(4)
MAT 106	Trigonometry	(4)
MAT 114	Analytic Geometry and Calculus I	(4)
MAT 115	Analytic Geometry and Calculus II	(4)
MAT 116	Analytic Geometry and Calculus II	(4)
MAT 125	Introductory Calculus for Business	(4)
MAT 130	Technical Calculus	(4)
MAT 135	Contemporary Mathematics	(4)
MAT 137	Survey of Geometry	(4)
MAT 191	Survey of Mathematics	(4)
STA 120	Statistics with Applications	(4)

**B. The Physical Sciences**

CHM 101/101A	Consumer Chemistry	(4)
CHM 103/103A	Fundamentals of Chemistry	(4)
CHM 104	College Chemistry	(3)
CHM 111	General Chemistry	(3)
CHM 141L	College Chemistry Laboratory	(1)
CHM 151L	General Chemistry Laboratory	(1)
GEO 101	Physical Geography	(4)
†GSC 101	Fundamentals of Earth Science	(4)
†GSC 111	Principles of Geology	(3)
†GSC 112	Historical Geology	(3)
†GSC 115	Astronomy of the Solar System	(3)
†GSC 116	Astronomy of the Universe	(4)
†GSC 117L	Astronomy Laboratory	(1)
†GSC 120	Introduction to Oceanography	(4)
†GSC 141L	Principles of Geology Laboratory	(1)
†GSC 142L	Principles of Geology Field Trip	(1)
Note: GSC 142L (Does not meet lab science requirement.)		
†GSC 151L	Historical Geology Laboratory	(1)
†PHY 102	Fundamentals of Physics	(4)
PHY 105/105L	Physics of Musical Sound	(4)
PHY 121	College Physics	(3)
PHY 131	General Physics	(3)
PHY 141L	College Physics Laboratory	(1)
PHY 151L	General Physics Laboratory	(1)

**C. The Life Sciences**

BIO 110	Life Science	(3)
BIO 111L	Life Science Laboratory	(1)
BIO 115/115L	Basic Biology	(5)

**D. Science, Technology and Civilization**

Students must take an upper division course from the following list to fulfill Section D.

AGB 300	Insects and Civilization	(4)
AGR 311	Plants and Civilization	(4)
ANT 350	Environment, Technology, and Culture	(4)
AVS 300	Animal Issues in Science and Society	(4)
CS 475	Computers and Society	(4)
EC 435	Seminar in Environmental Economics	(4)
EC 439	Seminar in Water Resource Economics	(4)
FN 305	Nutrition, Science, and Health	(4)
GSC 350/350A	Geologic Catastrophes	(4)
FN 325	Current Issues in the Food Chain	(4)
IA/FN 445	Nutrition/International Development	(4)
KIN 301	Foundations of Sports Medicine	(4)
PHL 483	Philosophy of Science	(4)

PHY 301	Energy and Society	(4)
PHY 302	Physics of Everyday Experience	(4)
RS 301	Life Support Processes	(4)

For Liberal Studies Major Pre-Credential Options only: Required for students who plan to meet state requirements for elementary school teachers and for precredential option in Liberal Studies. The following courses are to be taken in sequence. Students must take all courses listed in order to meet General Education requirements. See departmental advisor for more information.

MAT 191	Survey of Mathematics	(4)
SCI 211/211L	Chemical Sciences	(4)
BIO 110	Life Science	(4)
SCI 212/212L	Geological Sciences	(4)
SCI 210/210L	Physics Concepts and Activities	(4)

**AREA 3—Humanities and Social Sciences (28 units)**

Arts, Literature, Philosophy, and Foreign Languages (12 units)

Students are required to take at least one course from each section. A minimum of 12 units must be completed. See also the Interdisciplinary General Education Program (IGE) Section, which is the pattern recommended for students in Engineering and Architecture.

**A. Fine and Performing Arts**

ART 110	The Visual Arts	(4)
ART 212	History of Western Art (Part I)	(4)
ART 213	History of Western Art (Part II)	(4)
ART 214	History of Western Art (Part III)	(4)
DAN 202	Introduction to Dance	(4)
TH 203	Introduction to the Theater	(4)
TH 210	Introduction to the American Theater	(4)
ENV 112	Design and the Built Environment	(4)
ENV 115/115A	History of Art and Design	(4)
MU 100	Introduction to Music	(4)
MU 101	Music Appreciation	(4)
MU 103	World of Music	(4)
HOR 214	History of Garden Art	(4)
TH 125/125A	Introduction to Acting	(4)
TH 204	Live Theater Appreciation	(4)

**B. Philosophy and History**

HST 101	History of World Civilization: The Ancient Period	(4)
HST 102	History of World Civilization: The Middle Period	(4)
HUM 201	Introduction to the Humanities	(4)
HUM 202	Humanism & the Humanities	(4)
PHL 201	Introduction to Philosophy	(4)
PHL 203	Introduction to the History of Philosophy	(4)
PHL 204	Ethical Problems of Contemporary Life	(4)
PHL 205	Business and Professional Ethics	(4)
PHL 220	Religions of the World	(4)
PHL 221	Introduction to Religious Studies	(4)
REC 124	Philosophy of Leisure and the Work Ethic	(4)

**C. Literature and Foreign Languages**

ENG 201	Introduction to Modern Fiction	(4)
ENG 202	Introduction to Poetry or Modern Drama	(4)
ENG 203	Introduction to Shakespeare	(4)
ENG 204	Modern Fiction for Speakers of English as a Second Language	(4)
ENG 205	Black Literature in America	(4)
ENG 206	Introduction to Contemporary Literature	(4)
ENG 207	Survey of British Literature I	(4)
ENG 208	Survey of British Literature II	(4)
ENG 211	Survey of American Literature I	(4)
ENG 212	Survey of American Literature II	(4)
ENG 213	Ethnic Literatures of the U.S.	(4)
ENG 215	Latino Literature in America	(4)
ENG 216	The Bible as Literature	(4)

ENG 217	World Literature I	(4)	SOC 206	Family Relations	(4)
ENG 218	World Literature II	(4)	SSC 101	Introduction to Social Sciences	(4)
ENG 222	The Literature of Science Fiction	(4)	SW 201	Introduction to Social Welfare	(4)
ENG 231	Introduction to Folklore	(4)	PLS/SOC 290	Political Sociology (4) (Engineering students only)	
ENG 240	Women Writers	(4)	<b>F. Political and Historical Institutions</b>		
FL 101	Elementary French I	(4)	AG 101	Agriculture and the Modern World	(4)
FL 102	Elementary French II	(4)	HST 103	History of Civilization: The Modern World	(4)
FL 103	Elementary French III	(4)	HST 201	United States History	(4)
FL 111	Elementary German I	(4)	PLS 202	Comparative Political Systems	(4)
FL 112	Elementary German II	(4)	PLS 203	Introduction to International Relations	(4)
FL 113	Elementary German III	(4)	PLS/SOC 290	Political Sociology (4) (Engineering students only)	
FL 114	Conversational German for Beginners	(4)	<b>G. The Integrated Being (4 units)</b>		
FL 121	Elementary Ancient Greek I	(4)	ANT 201	Human Nature/Human Affairs: A Biocultural View	(4)
FL 122	Elementary Ancient Greek II	(4)	BIO 205	Biological Perspectives on Contemporary Life	(4)
FL 123	Elementary Ancient Greek III	(4)	HRT 255	The Healthy American Gastronomer	(4)
FL 131	Elementary Latin I	(4)	KIN/FN 203	Health, Nutrition and the Integrated Being	(4)
FL 132	Elementary Latin II	(4)	KIN 207	Personal Health	(4)
FL 133	Elementary Latin III	(4)	PSY 201	General Psychology	(4)
FL 141	Elementary Russian I	(4)	PSY 210	Mind, Brain & Behavior: An Integrated View	(4)
FL 142	Elementary Russian II	(4)	<b>AREA 4—U.S. History, Constitution, and American Ideals (8 units)</b>		
FL 143	Elementary Russian III	(4)	Students take two courses in this area. See also the Interdisciplinary General Education Program (IGE) section, which is the recommended pattern for most students in engineering and architecture.		
FL 151	Elementary Spanish I	(4)	PLS 201	Introduction to American Government	(4)
FL 152	Elementary Spanish II	(4)	HST 202	United States History	(4)
FL 153	Elementary Spanish III	(4)	<b>AREA 5—Upper Division General Education (8 units)</b>		
FL 161	Elementary Japanese I	(4)	Students must select two courses outside their major.		
FL 162	Elementary Japanese II	(4)	ABM 313	Food and Agricultural Policy	(4)
FL 163	Elementary Japanese III	(4)	ABM 324	Management Accounting I	(4)
FL 201	Intermediate French	(4)	ABM 328	Agricultural Enterprise Management	(4)
FL 202	Intermediate French Reading	(4)	ABM 402	Personnel Management	(4)
FL 203	Intermediate French Composition and Conversation	(4)	ABM 406	Land Appraisal	(4)
FL 211	Intermediate German	(4)	ABM/IA 450	Agricultural Water Resource Management	(4)
FL 212	Intermediate German Reading	(4)	AMS 450	American Dreams, Myths, and Realities	(4)
FL 213	Intermediate German Composition and Conversation	(4)	ANT 320	Indians of California	(4)
FL 251	Intermediate Spanish	(4)	ANT 321	Indians of North America	(4)
FL 252	Intermediate Spanish Reading	(4)	ANT 333	Varieties of American Culture	(4)
FL 253	Intermediate Spanish Conversation	(4)	ANT 355	Psychological Anthropology	(4)
FL 254	Intermediate Spanish Composition	(4)	ANT 358	Social Anthropology	(4)
FL 261	Intermediate Japanese	(4)	ANT 399	Cultural Areas of the World: Africa	(4)
FL 262	Intermediate Japanese Reading	(4)	ANT 399	Cultural Areas of the World: Mesoamerica	(4)
FL 263	Intermediate Japanese Conversation	(4)	ANT 399	Cultural Areas of the World: The Middle East	(4)
Social, Political, and Economic Institutions and Their Historical Background			ANT 405	Women: An Anthropological View	(4)
<b>D. Economic Institutions</b>			ARC 451	Theory of Architecture and Urbanism	(4)
EC 201	Principles of Economics	(4)	ARO 311	Gas Dynamics	(3)
EC 202	Principles of Economics	(4)	ART 312	Foundations of Modern Art	(4)
IA 101	Global Resources for Food	(4)	BHS 328	Women and Men: Changing Sex Roles	
HE 245	Consumerism: The Movement, Its Impact and Issues	(4)	BHS 426	BHS Applied Social Psychology/Sociology	(4)
MKT 201	The Consumer, Marketing and Society	(4)	BIO 301	Human Sexuality	(4)
OM 103	Business and Its Environment	(4)	BIO 302	Biology of Cancer	(4)
<b>E. Social Institutions</b>			BIO 303	Genetics	(4)
ANT 102	Introduction to Cultural Anthropology	(4)	BIO 310	Cell, Molecular, and Developmental Biology	(4)
EWS 140	Introduction to Ethnic Studies	(4)	BIO 325	Principles of Ecology	(4)
EWS 145	Introduction to the Study of Women and Men in Society	(4)	BIO 410	Biophysics	(4)
EWS 201	African American Experience	(4)	BIO 420	Water Pollution Biology	(3)
EWS 202	Chicano/Hispanic Experience	(4)	BIO 431/431L	Radiation Biology	(4)
EWS 203	Native American Experience	(4)	BIO 435/435L	Cellular Physiology	(4)
EWS 204	Asian American Experience	(4)	BIO 436	History and Philosophy of Biology	(4)
FN 228	Food and Culture	(4)	BIO 450	Concepts of Molecular Biology	(4)
GEO 102	Cultural Geography	(4)	BOT 316	Plant Environments	(4)
AMM 108	Culture, People and Dress	(4)	BUS/SA 362	China as a Cultural Entity	(4)
KIN 449	Play, Games, and Sport	(4)	BUS/SA 432	The Use and Role of Technology in China	(4)
REC 125	Leisure in Society	(4)			
SOC 201	Principles of Sociology	(4)			

BUS/SA 452	Political Economy and Business Practice in China . . . . .	(4)	GEO 353	Russia: Environment and People . . . . .	(4)
BUS/SA 482	China and the U.S. Cross-Cultural Analysis . . . . .	(4)	GEO 357	Geography of Asia . . . . .	(4)
CE 301	Technological Economics . . . . .	(4)	GEO 358	Geography of Africa . . . . .	(4)
CHE 304	Kinetics and Reactor Design . . . . .	(4)	GEO 410	Photographic Remote Sensing . . . . .	(4)
CHE 428	Machine and Process Controls . . . . .	(4)	GEO 420	Digital Image Processing . . . . .	(4)
CHM 306	History and Philosophy of Chemistry . . . . .	(4)	GSC 304	Meteorology . . . . .	(4)
CHM 311	Physical Chemistry . . . . .	(3)	GSC 321	Geotechnology . . . . .	(4)
CHM 312	Physical Chemistry . . . . .	(3)	GSC 335	Descriptive Physical Oceanography . . . . .	(4)
CHM 313	Physical Chemistry . . . . .	(3)	GSC 360	Groundwater Geology . . . . .	(4)
CHM 327/327L	Biochemistry . . . . .	(4)	GSC 370	Planetary Geology . . . . .	(4)
CHM 328/328L	Biochemistry . . . . .	(4)	HE 342	Family Resource Management . . . . .	(4)
COM 314	Organizational Communication Theory . . . . .	(4)	HE 422	Family Housing and Environment . . . . .	(4)
COM 321	Communications Problem Analysis . . . . .	(4)	HE 440	Family Financial Behavior . . . . .	(4)
COM 327	Intercultural Communication . . . . .	(4)	HST 305	Ancient and Medieval India . . . . .	(4)
COM 337	Group Discussion . . . . .	(4)	HST 306	Modern India . . . . .	(4)
COM 413	Public Opinion, Propaganda and the Mass Media . . . . .	(4)	HST 307	South Asia . . . . .	(4)
CPU 301	Life Support Processes . . . . .	(4)	HST 309	Modern Southeast Asia . . . . .	(4)
CPU 302	Global Regenerative Systems . . . . .	(4)	HST 313	Middle East: The Rise of Islam . . . . .	(4)
CPU 303	Shaping a Sustainable Future . . . . .	(4)	HST 315	Middle East: Problems of the 20th Century . . . . .	(4)
CPU 401	Ethics and Engineering Decision-making . . . . .	(4)	HST 323	Enlightenment, Absolutism, and Constitutionalism 1648-1789 . . . . .	(4)
EC 411	Economic Development . . . . .	(4)	HST 324	Revolution and Reaction 1789-1850 . . . . .	(4)
EC 419	Land Economics . . . . .	(4)	HST 325	Nationalism, Imperialism, and Industrialization 1850-1914 . . . . .	(4)
EC 429	Seminar in Natural Resource Economics . . . . .	(4)	HST 326	Europe 1900-1945: World Wars and the Crisis of Liberalism . . . . .	(4)
EC 431	Regional Economic Analysis . . . . .	(4)	HST 327	Europe Since 1945: Cold War, Revival and New Era . . . . .	(4)
EC 432	Seminar in Urban Economics . . . . .	(4)	HST 331	Pre-Colonial Africa . . . . .	(4)
EC 433	Economics of Transportation . . . . .	(4)	HST 333	African Nationalism and Decolonization . . . . .	(4)
EC 434	Economics of Public Utilities . . . . .	(4)	HST 335	Latin America: The Colonial Period . . . . .	(4)
EC 435	Seminar in Environmental Economics . . . . .	(4)	HST 336	Latin America: The Era of Nation Building . . . . .	(4)
EC 436	Seminar in Air Resources Economics . . . . .	(4)	HST 337	Latin America: Problems of the 20th Century . . . . .	(4)
EC 437	Seminar in the Economics of Poverty and Discrimination . . . . .	(4)	HST 351	England to 1689 . . . . .	(4)
EC 438	Seminar in Waste Management Economics . . . . .	(4)	HST 356	The Soviet Union . . . . .	(4)
EC 439	Seminar in Water Resource Economics . . . . .	(4)	HST 370	History of California . . . . .	(4)
EC 440	Industrial Organization . . . . .	(4)	HST 403	History of the Native American . . . . .	(4)
EC 441	American Industry . . . . .	(4)	HST 406	Women in the United States . . . . .	(4)
ECE 333	Electronic Instrumentation and Control . . . . .	(4)	HST 411	Rise of the City in American Life . . . . .	(4)
EGR 403	Capital Allocation Theory . . . . .	(4)	HST 421	The Scientific Revolution . . . . .	(4)
ENG 401	Chaucer . . . . .	(4)	HST 425	Great Britain in Industrial Revolution . . . . .	(4)
ENG 402	Milton and His Contemporaries . . . . .	(4)	HST 441	Women in Asia . . . . .	(4)
ENG 403	Shakespeare . . . . .	(4)	IA 362	Agricultural Policy in Developing Nations . . . . .	(4)
ENG 450	Twentieth-Century British Literature . . . . .	(4)	IE 401	Engineering Economic Decision Analysis . . . . .	(4)
ENG 456	Twentieth-Century American Literature . . . . .	(4)	KIN 363	Psychological Aspects of Physical Activity and Sport . . . . .	(4)
ENG 459	Literatures of the "Third World" . . . . .	(4)	KIN 370	Stress Management for Healthy Living . . . . .	(4)
ENV 489	Community Design and Social Change . . . . .	(4)	KIN 450	Role of Sport in Contemporary Society . . . . .	(4)
EWS 301	Ethnic Identity . . . . .	(4)	KIN 469	History of Women in Sport . . . . .	(4)
EWS 304	Asian American Communities: Comparative Analysis . . . . .	(4)	MAT 306	History of Mathematics . . . . .	(4)
EWS 345	Gender, Ethnicity, and Employment . . . . .	(4)	MAT 317	Laplace Transforms and Fourier Series . . . . .	(3)
EWS 380	U.S. Women in Contemporary Global Context . . . . .	(4)	MAT 318	Mathematical Analysis of Engineering Problems . . . . .	(3)
EWS 390	The Ethnic Woman . . . . .	(4)	ME 301	Thermodynamics . . . . .	(4)
EWS 401	African American Contemporary Issues . . . . .	(4)	ME 435	Advanced Engineering Measurements . . . . .	(4)
EWS 402	Chicano/Hispanic Contemporary Issues . . . . .	(4)	MHR 301	Principles of Management . . . . .	(4)
EWS 403	Native American Contemporary Issues . . . . .	(4)	MHR 318	Multicultural Organizational Behavior . . . . .	(4)
EWS 404	Asian American Contemporary Issues . . . . .	(4)	MHR 324	Communication for Management . . . . .	(4)
EWS 407	Sexual Orientation and Diversity . . . . .	(4)	MHR 406	Strategies for Men and Women in Management . . . . .	(4)
EWS 420	Gender, Ethnicity, and Class . . . . .	(4)	MHR 438	Advanced Organizational Behavior . . . . .	(4)
EWS 430	Ethnic Thought and Values . . . . .	(4)	MHR 452	Emerging Issues in Management . . . . .	(4)
EWS 440	Female and Ethnic Development . . . . .	(4)	MIC 320/320L	Food Microbiology . . . . .	(4)
FN 317	Food Science and Technology . . . . .	(4)	MIC 330	General Epidemiology . . . . .	(4)
FN 420	Food Chemistry and Toxicology . . . . .	(4)	MKT 301	Principles of Marketing Management . . . . .	(4)
FN 433	Advanced Nutrition . . . . .	(4)	MU 315	Music of Asia . . . . .	(4)
FN 434	Advanced Nutrition . . . . .	(4)	PHL 307	American Indian Thought and Religion . . . . .	(4)
FN 435	Nutritional Assessment - Laboratory Methods . . . . . (To be taken as lab 2 with FN 433)	(2)	PHL 330	Ethics, Environment, and Society . . . . .	(4)
GEO 303	Climatology . . . . .	(4)	PHL 401	Philosophy and Religion of Japan . . . . .	(4)
GEO 312	Economic Geography . . . . .	(4)	PHL 402	Philosophy and Religion of China . . . . .	(4)
GEO 315	Urban Geography . . . . .	(4)	PHL 405	Philosophy and Religion of Islam . . . . .	(4)
GEO 351	Geography of California . . . . .	(4)			

PHL 406	Religions of the Mediterranean and the West	(4)
PHL 420	Philosophical Issues in the Law	(4)
PHL 459	Epistemology	(4)
PHL 465	Philosophy of Love and Sex	(4)
PHL 483	Philosophy of Science	(4)
PHY 306	History of Physics	(4)
PHY 333	Thermal Physics	(4)
PHY 340	Energy and the Environment	(4)
PHY 344	Applied Optics	(4)
PHY 346	Solid State Physics for Engineers	(4)
PLS 315	Politics of Public Policy	(4)
PLS 318	Business and Public Policy	(4)
PLS 328	American State and Local Politics	(4)
PLS 330	Ethics, Environment, and Society	(4)
PLS 323	American Ethnic Politics	(4)
PLS 342	Politics of Developing Areas	(4)
PLS 431	Ancient and Medieval Political Thought	(4)
PLS 432	Modern Political Thought	(4)
PLS 436	Twentieth-Century Political Thought	(4)
PLS 441	Comparative European Governments and Politics	
PLS 442	Comparative Sub-Saharan African Governments and Politics	(4)
PLS 444	Comparative Latin American Governments and Politics	(4)
PLS 446	Comparative Middle Eastern Governments and Politics	(4)
PLS 447	Government and Politics of the Russian Republic	(4)
PLS 448	Comparative East Asian Governments and Politics	(4)
PLS 449	Comparative Southeast Asia Governments and Politics	(4)
PLS 451	International Conflict, War and Peace	
PSY 310	Child Psychology: Early Childhood	(4)
PSY 311	Child Psychology: The Middle Years	(4)
PSY 312	Adolescent Psychology	(4)
PSY 332	Industrial and Personnel Psychology	(4)
PSY 334	Cognitive Processes	(4)
PSY 340	Educational Psychology	(4)
PSY 415	Abnormal Psychology	(4)
PSY 420	Environmental Psychology	(4)
PSY 430	Psychobiology of Mental Disorders	(4)
PSY 455	Human Sexual Behavior: Relationships	(4)
RS 301	Life Support Processes	(4)
RS 302/302L	Global Regenerative Systems	(3/1)
RS 303/303L	Shaping a Sustainable Future	(2/2)
SCI 450	Philosophic Implications of Science	(4)
SOC 301	Contemporary Social Problems	(4)
SOC 302	Criminology	(4)
SOC 321	Family as a Social Institution	(4)
SOC 330	Population and Society	(4)
SOC 350	Collective Behavior and Social Movements	(4)
SOC 360	Juvenile Delinquency	(4)
SOC 401	Urban Sociology	(4)
SOC 430	Sociology of Mental Disorders	(4)
SOC 433	Survey Research	(4)
SS 334	Soil and Water Conservation	(4)
STA 330	Applied Probability Theory	(4)
STA 331	Applied Statistics	(4)
SW 312	The Developmentally Disabled Population	(4)
SW 314	The Socially and Culturally Different Child	(4)
SW/REC 324	Disabled Populations	(4)
TH 301	Through the Artist's Eyes: Visions of World Artists	(4)
TH 410	20th Century American Theater	(4)
TH 481	History of Costume	(4)
URP 301	Principles of Urban Planning	(4)
ZOO 414/414L	Embryology	(5)
ZOO 422/422L	Histology	(5)
ZOO 424/424L	Comparative Animal Physiology	(5)
ZOO 435/435L	Public Health Entomology	(4)

**THE FOLLOWING MINOR PROGRAMS WILL SATISFY GENERAL EDUCATION UPPER DIVISION REQUIREMENT**

Artificial Intelligence  
 Computer Systems Organization  
 Regenerative Studies  
 Scientific Computer Programming

1996-97 General Education Requirements in the College of Engineering

	Area 1	Area 2	Area 3	Area 4	Area 5		
<b>ARO</b>	ENG 104 (4) COM 204 (4) ENG 105 (4)	2a. <u>MAT 114 (4)</u> 2b. <u>PHY 131/151L (4)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>MAT 317, 318 (3,3)</u>	3a. Elective* (4) 3b. <u>PHL 201 (4)</u> 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EC 202 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. <u>PSY 201 (4)</u>	PLS 201 (4) HST 202 (4)	<u>ECE 353/355L (3/1)</u> <u>ECE 354/356L (3/1)</u>
<b>CME</b>	Pattern 1 (12) or Pattern 2 (12)	2a. <u>MAT 114 (4)</u> 2b. <u>PHY 131/151L (4)</u> <u>CHM 151L, CHM 152L (1,1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>CHM 316 (3)</u>	3a. Elective* (4) 3b. Elective* (4) 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EGR 403* (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. Elective* (4)	PLS 201 (4) HST 202 (4)	<u>CHM 311, 312 (3,3)</u> <u>MTE 4xx (4)</u>
<b>CE</b>	ENG 104 (4) COM 204 (4) <u>CE 361 (4)</u>	2a. <u>MAT 114 (4)</u> 2b. <u>PHY 131/151L (4)</u> <u>PHY 152L, 153L (1,1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>IME 301 (3)</u> or <u>STA 309 (3)</u>	3a. Elective (4) 3b. Elective (4) 3c. <u>UD or LD Elective (4)</u>	3d. <u>CE 301 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. <u>PSY 201 (4)†</u>	PLS 201 (4) HST 202 (4)	<u>GSC 321 (4)</u> <u>MHR 318* (4)</u>
<b>ECE</b>	ENG 104 (4) COM 204 (4) <u>ECE 311 (4)</u>	2a. <u>MAT 114 (4)</u> 2b. <u>PHY 131/151L (4)</u> <u>PHY 152L (1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>ECE 302 (4)</u>	3a. Elective* (4) 3b. Elective* (4) 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EC 201 or EC 202 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. Elective* (4)	PLS 201 (4) HST 202 (4)	<u>EGR 402 (4)</u> <u>EGR 403 (4)</u>
<b>ET</b>	ENG 104 (4) COM 204 (4) COM 216 (4)	2a. <u>MAT 130 (4)</u> 2b. <u>PHY 121/141L (4)</u> <u>PHY 142L, 143L (1,1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>STA 309 (3)</u>	3a. Elective* (4) 3b. Elective* (4) 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EC 201 or EC 202 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. <u>PSY 201 (4)†</u>	PLS 201 (4) HST 202 (4)	<u>ETT 305 or ETC 301 (4)</u> <u>EGR 402 or MHR 318* (4)</u>
<b>IE and MFE</b>	ENG 104 (4) COM 204 (4) COM 216 (4)	2a. <u>MAT 114 (4)</u> 2b. <u>PHY 131/151L (4)</u> <u>PHY 152L, 153L (1,1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>IME 301 (3)</u> or <u>STA 309 (3)</u>	3a. Elective* (4) 3b. Elective* (4) 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EC 201 or EC 202 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. Elective* (4)	PLS 201 (4) HST 202 (4)	<u>EGR 402 (4)</u> <u>EGR 403 (4)</u>
<b>IME</b>	ENG 104 (4) COM 204 (4) <u>ME 231 (4)</u>	2a. <u>MAT 114 (4)</u> 2b. <u>CHM 111/151L (3/1)</u> <u>CHM 152L (1)</u> 2c. <u>BIO 110 (3)</u> 2d. <u>ME 330 (4)</u>	3a. Elective* (4) 3b. Elective* (4) 3c. <u>UD or LD Elective* (4)</u>	3d. <u>EC 201 or EC 202 (4)</u> 3e. & 3f. <u>SOC/PLS 390 (4)</u>	3g. Elective* (4)	PLS 201 (4) HST 202 (4)	<u>EGR 403 (4)</u> <u>ECE 333/383L (4)</u>

• All programs in the College of Engineering are nationally accredited by the Accreditation Board for Engineering and Technology (ABET) and engineering curricula are required to satisfy both ABET national requirements and, concurrently, CSU general education requirements. In order to achieve this, underlined courses double-count in satisfying both major and general education requirements. All course-work can be satisfied through course substitution via a General Academic Petition, or via articulation as appropriate. All non-underlined coursework can, in addition, be satisfied via GE certification from a community college.

• Because of ABET requirements in the life sciences, degree credit for any course other than BIO 110 (Area 2c) requires a General Academic Petition.

• (\*) denotes a course that could be used to satisfy the Cal Poly Pomona requirement in American Cultural Perspectives.

• † indicates that PSY 201 is a prerequisite for MHR 318 in Area 5.



**TOTAL 32 QUARTER UNIT INTERDISCIPLINARY GENERAL EDUCATION PROGRAM****INTERDISCIPLINARY GENERAL EDUCATION PROGRAM (IGE)**

The Interdisciplinary General Education Program addressed the need for an integrated approach to curriculum, teaching, and scholarship and the creation of an extended learning community. As of July, 1994, the IGE Program is a part of the new School of Education and Integrative Studies, which shares these goals.

The IGE program is open to any department wishing to adopt it as an option and is the preferred pattern for students in engineering and architecture. It is recommended to all other students in the Colleges of Agriculture, Business Administration, Environmental Design, and Science. It is also available to Humanities majors in the English and Foreign AREA Languages Department, to Liberal Studies students in the Liberal Studies Option and to philosophy majors, College of Arts. See departmental advisors or the Program Director.

The eight course sequence has the following common goals:

**Learning Outcomes**

1. Communication skills and critical thinking.
2. Development of historical social consciousness.
3. Multicultural understanding.
4. Understanding and appreciation of aesthetic experiences.
5. Understanding and articulation of values.
6. Independent integration of knowledge and experience through active student learning.

Please refer to University Programs section in this catalog for IGE course descriptions.

**FIRST YEAR**

IGE 120	Consciousness and Community: Origins and Development of Human Societies . . . . .	(4)
IGE 121	Rationalism and Revelation: The Ancient World . . . . .	(4)
IGE 122	Authority and Faith: Feudalism and the Renaissance . . . . .	(4)

**SECOND YEAR**

IGE 220	Culture and Contact: The Expansion of the West . . . . .	(4)
IGE 221	Reform and Revolution: The Age of Enlightenment . . . . .	(4)
IGE 222	Individualism and Collectivism, Competing Ideologies: The Industrial Age . . . . .	(4)

**THIRD YEAR**

IGE 223	Promise and Crisis: The Modern World . . . . .	(4)
IGE 224	Connections Seminar: Exploration and Personal Expression . . . . .	(4)

**HOW INTERDISCIPLINARY G.E. PROGRAM MEETS UNIVERSITY REQUIREMENTS**

This 32 unit program meets the following portion of the University General Education requirements under Track B. (Engineering students see adviser for specific additional coursework required by major.)

**AREA 1 COMMUNICATION IN THE ENGLISH LANGUAGE**

ENG 104 ("a") satisfied at the end of the first year (after taking IGE 120, IGE 121, IGE 122); "b" and "c" not satisfied. Select from regular GE list.

**AREA 2 SCIENCE AND MATHEMATICS**

Not satisfied. Select courses from regular G.E. list as specified by major.

**AREA 3 ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGES**

Any two courses (8 units) from "a" or "b" or "c" satisfied at the end of the first year with the completion of IGE 120, IGE 121, and IGE 122. Take the remaining 4 unit-course from the regular list. (Example: If "b" and "c" are replaced by IGE courses, then take "a" from the regular list, and so on.) The student may choose which two courses to replace by IGE courses.

"e" and "f" are satisfied (8 units) at the end of the second year with the completion of IGE 220, IGE 221, and IGE 222. Choose "d" from the regular GE list. "g" is satisfied (4 units) at the end of the IGE sequence (IGE 224).

**AREA 4 U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS**

Satisfied (8 units) at the end of the IGE sequence (IGE 224)

**AREA 5 UPPER DIVISION GENERAL EDUCATION**

Not included in IGE. Choose from regular upper division course list.

**AMERICAN CULTURAL PERSPECTIVES REQUIREMENT**

The American Cultural Perspectives Requirement is a graduation requirement. Courses satisfying this requirement may be part of either a student's General Education program, major, or minor. These courses may also be taken as electives. This requirement will not constitute an additional unit load on the degree requirements of students in any program. This requirement shall be implemented fall quarter, 1995.

To satisfy this requirement a student must take at least one four-unit course. Courses that meet the American Cultural Perspectives Requirement should satisfy all of the following criteria:

Introduce theoretical perspectives and nonwestern/nontraditional approaches for studying gender, ethnicity, and class.

Include the study of at least one other marker of social difference, such as sexual orientation, religious affiliation, national origin, etc.

Include substantive materials (books/films/lectures/articles/etc.) by and/or about members of at least two of the following socio-cultural groups: African Americans, Native Americans, Chicano/Latino Americans, Asian Americans, Pacific Islands Americans, Middle Eastern Americans, and European/white ethnic Americans.

Address intra-cultural differences as well as inter-cultural commonalities between groups that collectively represent the American population. The commonalities and differences may be examined by focussing on diverse cultural practices, environmental ethics, political histories, religious beliefs, or means of artistic expression.

The following courses have been approved to satisfy this requirement:

ANT 102	Introduction to Cultural Anthropology . . . . .	4
ANT 333	Varieties of American Culture . . . . .	4
ENG 212	Survey of American Literature II . . . . .	4
ENG 213	Ethnic Literatures of the U.S. . . . .	4
ENG 459	Literatures of the Third World . . . . .	4
EWS 140	Introduction to Ethnic Studies . . . . .	4
EWS 145	Introduction to the Study of Women and Men in Society . . . . .	4
EWS 390	The Ethnic Woman . . . . .	4
EWS 420	Gender, Ethnicity, and Class . . . . .	4
EWS 430	Ethnic Thought and Values . . . . .	4
FN 228	Food and Culture . . . . .	4
HST 202	United States History . . . . .	4
HST 345	America Comes of Age, 1890-1945 . . . . .	4
HST 347	The U. S. Since 1945 . . . . .	4
MHR 318	Organizational Behavior in a Multicultural Environment . . . . .	4
KIN 450	Role of Sport in Contemporary Society . . . . .	4
KIN 469	History of Women in Sport . . . . .	4
PHL 307	American Indian Thought and Religion . . . . .	4
PLS 323	American Ethnic Politics . . . . .	4
SOC 323	Sociology of Minority Communities . . . . .	4

Students should consult with their departments or academic advisors for any other courses that might be approved during the 1996-97 academic year to satisfy this requirement