

*California State Polytechnic College*

Archives

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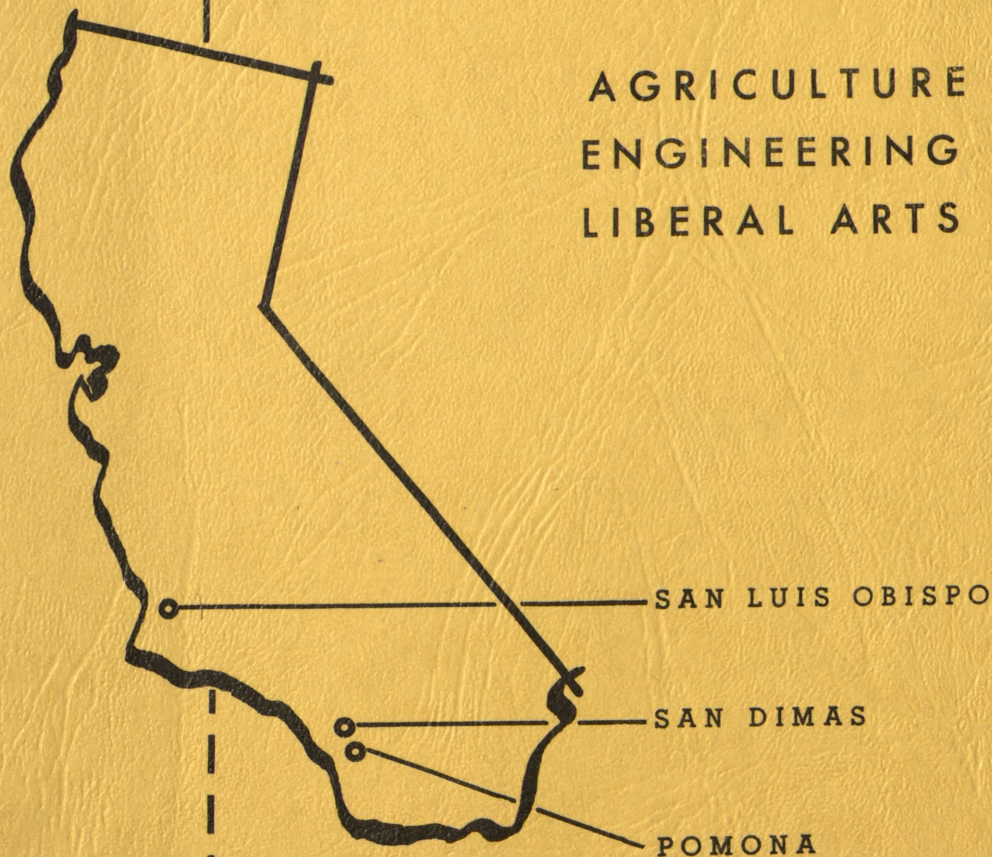
*Annual Report - Calif. State Poly College SLO 1956-57*

**(1956-57 ANNUAL REPORT)**

# CALIFORNIA STATE POLYTECHNIC COLLEGE

One of California's Ten State Colleges,  
Administered by the Board of Education  
And the State Department of Education

AGRICULTURE  
ENGINEERING  
LIBERAL ARTS



CALIFORNIA STATE POLYTECHNIC COLLEGE

ANNUAL REPORT

1956-57

to the

CALIFORNIA

STATE BOARD OF EDUCATION

AND THE

STATE DEPARTMENT OF EDUCATION

San Luis Obispo, California

May, 1957

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FACULTY

## FOREWORD

The Annual Report of California State Polytechnic College for 1956-57 herewith submitted is a record of a year of accomplishments which could not have been realized without the cooperation and support of the State Board of Education, the State Director of Education, the State Department of Education, members of the Legislature and other State officials to whom we now express our appreciation and thanks.

Although this report deals primarily with the past, it serves also to chart, in part, the course which the College must seek to follow in years immediately ahead. Many of the facts it records serve to indicate major problems which await solution.

The report of enrollment and that of the Foundation make clear the urgency of the College housing situation. The number of our married students has increased until it now exceeds one-third of the total enrollment. The large number of married students was considered to be a temporary postwar development brought about by the many veterans attending college. It is evident by this time, however, that the enrollment of married students is a continuing trend, for more than 31 per cent of the married students at San Luis Obispo are non-veterans. The Foundation's report in the following pages makes it clear, however, by its description of the number and condition of on-campus housing units for married students that the problem of providing for such students is becoming more serious each year. The problem is one of many for which the College must find solutions.

The Foundation report shows also that on-campus housing was available at San Luis Obispo this year to serve less than half of the single students living away from home, even though dormitories were filled to more than normal capacity. This fact provides a measure of Cal Poly's interest in the State College dormitory construction program. More dormitory space is essential to Cal Poly's traditional role of serving the youth of all California instead of merely those of its nearby region. This year 88 per cent of its students came from homes outside San Luis Obispo County, and at the southern campus 54.2 per cent came from homes outside Los Angeles County.

The report of the Engineering Division makes reference to the difficulty of recruiting additional faculty members. Although this difficulty is especially great in engineering because there the college comes into competition with the much higher salaries paid by industry, it is a problem which affects all divisions. Recruiting of a large faculty is a particularly serious problem in a college such as this which specializes in practical occupationally centered education. For the teaching of skills and techniques, a relatively low ratio of students to faculty members must be maintained. The Engineering Division report records strong evidence of this need: 40 per cent of the instruction is in laboratory work and there were 3,064 enrollments in first year skills courses in this division alone.

Seeking solutions to this faculty recruitment problem, I spent two weeks this year interviewing applicants in the Middle West and East, and also joined other State College presidents and the California State Employees Association in urging the Legislature to provide a 15 per cent increase in faculty salaries as a means of reducing the unfavorable differential between State College and industrial salaries.

## FOREWORD (continued)

Recruitment of an adequate faculty to keep pace with the College's rapidly growing enrollment must have a high priority on our list of problems for future action.

The section of this report devoted to the Kellogg-Voorhis campus at Pomona states that an institution to accommodate an eventual 12,000 students is being planned. This is in accord with the projection of student enrollment made by the State Finance Department and the State Department of Education. The report also indicates the expansion of curricula and the necessary building of physical plant to house them which is now in progress there.

Planning for the expansion of a small all-male unit of some 500 students to a coeducational college for 12,000 obviously presents a succession of major problems. The planning and construction of physical plant alone, although it is well begun, is a tremendous task. Perhaps of even greater magnitude are the problems of developing curricula in much wider areas and the recruitment of an outstanding faculty for so large an enterprise.

The College's experience in its first year of enrolling coeds again also is reported here. It has been a happy experience. The some 200 women enrolled have fitted into the campus life without confusion or the creation of serious problems. They have entered into a wide range of student activity where they have made a wholesome contribution.

As the number of these women students increases, however, their needs will shape the course of College planning. Enough dormitory space has been converted to house 164 women. No other space is available for conversion to this use, so additional on-campus housing can be obtained only by the construction of dormitories. Facilities and faculty must be expanded also in those fields which are proving of particular interest to women students.

The number of women attracted by the major in elementary education which was offered this year for the first time is gratifying. Even in its first year, elementary education has become the second largest major in the Arts and Sciences Division. Its first year record gives indication that through it the College will soon be making another major contribution to providing an adequate supply of teachers for California's youth.

*Julian A. McPhee*  
Julian A. McPhee  
President

ENROLLMENT -- FALL QUARTER, 1956

A total of 3767 full-time students registered at the San Luis Obispo campus of the College for the fall quarter, 1956, while a total of 506 registered at the Kellogg-Voorhis campus during the same period -- a total for both campuses of 4273. Of those at San Luis Obispo, 1152 were in agriculture, 2119 in engineering, and 444 in arts and sciences. Graduate students numbered 52. Included in the fall quarter enrollment at the San Luis Obispo campus were 197 women students.

An additional enrollment of limited students (6 units or less) during the fall quarter totalled 108 at the San Luis Obispo campus (3 men, 77 women).

The locations of the homes from which the students come indicate clearly the more-than-regional character of Cal Poly's service area. Of the students on the San Luis Obispo campus, 88 per cent come from 56 California counties, 6.2 per cent from 41 other states, and 5.8 per cent from 48 territories and foreign countries. At the Kellogg-Voorhis unit, 91.5 per cent of the students come from 20 California counties, 4 per cent from other states and 4.5 per cent from U. S. territories and foreign countries.

The current enrollment of 3767 individual regular students on the San Luis Obispo campus is expected to increase to 4120 by the fall of 1957. At the Kellogg-Voorhis unit enrollment is expected to increase to 745 individual regular students as a result of the addition of new majors.

# SAN LUIS OBISPO CAMPUS ENROLLMENT

## By Division

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Engineering Division	2114	5	2119
Agricultural Division	1134	18	1152
Arts & Sciences Division	281	163	444
Graduates	41	11	52
	<u>3570</u>	<u>197</u>	<u>3767</u>

## By Year

	<u>Men</u>	<u>Women</u>	<u>Total</u>
First Year	1100	90	1190
Second Year	930	46	976
Third Year	795	43	838
Fourth Year	704	7	711
Graduates	41	11	52
	<u>3570</u>	<u>197</u>	<u>3767</u>

## ENROLLMENT BY DEPARTMENTS

### Agricultural

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Engineering	144	0	144
Mechanized Agriculture	134	0	138
Animal Husbandry	398	12	410
Farm Management	37	1	38
Field Crops Production	82	1	83
Truck Crops Production	19	0	19
Dairy Husbandry	71	0	71
Dairy Manufacturing	37	0	37
Fruit Production	16	0	16
Ornamental Horticulture	52	2	54
Poultry Husbandry	56	1	57
Soil Science	88	1	89
	<u>1134</u>	<u>18</u>	<u>1152</u>

### Engineering

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Aeronautical	277	0	277
Architectural	266	4	270
Air Conditioning & Refrigeration	121	0	121
Electrical	157	0	157
Electronic	628	0	628
Industrial	69	0	69
Mechanical	484	1	485
Printing	112	0	112
	<u>2114</u>	<u>5</u>	<u>2119</u>

### Arts and Sciences

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Chemistry	5	2	7
Biological Sciences	50	8	58
Elementary Education	6	71	77
English & Speech	2	5	7
Home Economics	0	36	36
Mathematics	48	5	53
Physical Education	59	13	72
Physical Sciences	16	2	18
Social Sciences	67	12	79
Agricultural Journalism	28	9	37
	<u>281</u>	<u>163</u>	<u>444</u>

### Graduate

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Education	22	0	22
Education	19	11	30
	<u>41</u>	<u>11</u>	<u>52</u>

	<u>Men</u>	<u>Women</u>	<u>Total</u>
TOTAL	3570	197	3767

Agriculture  
total is  
incorrect.  
Should be  
1156 not 1152.

## PLACE OF LEGAL RESIDENCE (SAN LUIS OBISPO)

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COUNTY	Nov. 10 1950	OCT. 30 1951	Nov. 18 1952	Nov. 16 1953	Nov. 23 1954	OCT. 29 1955	Nov. 2 1956
ALAMEDA	106	93	87	82	113	139	144
ALPINE	0	0	0	0	0	0	0
AMADOR	0	0	1	1	2	4	4
BUTTE	10	8	7	14	14	17	19
CALAVERAS	1	2	5	2	2	4	1
COLUSA	12	4	5	4	3	5	6
CONTRA COSTA	45	36	36	31	38	52	82
DEL NORTE	1	0	0	0	0	2	1
EL DORADO	12	5	2	3	8	7	7
FRESNO	50	43	35	40	39	51	58
GLENN	14	14	10	16	15	14	16
HUMBOLDT	8	11	12	12	17	19	27
IMPERIAL	17	26	40	22	20	27	27
INYO	7	7	4	1	3	2	6
KERN	51	47	67	73	77	92	113
KINGS	17	13	15	20	20	27	32
LAKE	5	2	4	1	3	5	5
LASSEN	6	4	3	5	4	4	3
LOS ANGELES	596	481	454	429	531	668	772
MADERA	4	5	4	11	7	9	13
MARIN	14	12	15	10	14	23	19
MARIPOSA	1	2	0	3	3	5	4
MENDOCINO	6	8	17	10	17	20	16
MERCED	31	25	15	12	14	18	30
MODOC	5	3	1	1	2	3	4
MONO	0	0	0	0	0	0	1
MONTREY	57	38	37	42	60	57	67
NAPA	5	2	9	8	15	23	32
NEVADA	5	2	3	5	4	4	4
ORANGE	84	51	50	67	77	76	116
PLACER	5	6	5	7	12	10	13
PLUMAS	0	0	0	0	1	3	3
RIVERSIDE	68	56	49	49	65	71	84
SACRAMENTO	46	47	54	54	66	87	111
SAN BENITO	7	3	4	7	6	14	13
SAN BERNARDINO	64	51	46	45	65	66	87
SANTA CLARA	79	55	55	58	64	79	80
SAN DIEGO	95	89	80	93	105	98	105
SAN FRANCISCO	68	57	48	45	43	45	72
SAN JOAQUIN	39	26	27	18	33	43	55
SAN LUIS OBISPO	199	186	185	202	264	367	465*
SAN MATEO	43	38	53	48	62	66	77
SANTA BARBARA	120	91	116	104	120	125	117
SANTA CRUZ	34	34	25	24	27	39	39
SHASTA	5	8	8	6	7	9	8
SIERRA	1	2	0	0	0	0	0
SISKIYOU	6	3	8	7	8	9	8
SOLANO	12	7	11	12	16	29	39
STANISLAUS	46	32	36	27	35	47	62
SONOMA	31	26	31	30	34	36	42
SUTTER	9	6	7	6	4	5	8
TEHAMA	9	3	5	3	4	4	4
TRINITY	2	1	1	2	2	0	1
TUOLUMNE	3	4	3	3	5	5	8
TULARE	67	53	42	55	61	63	56
VENTURA	47	36	38	41	44	63	71
YOLO	4	4	2	7	7	5	6
YUBA	6	3	2	5	5	9	11
OTHER STATES	307	219	206	197	228	169	234
FOREIGN COUNTRIES	48	60	123	133	172	158	169
U. S. TERRITORIES	76	52	49	46	58	62	86
	2715	2199	2259	2259	2745	3163	3767

NOT ALL STUDENTS REGISTERED AT THE SAN LUIS OBISPO CAMPUS WERE INCLUDED IN THIS SURVEY AS SOME CARDS WERE NOT AVAILABLE AT THE TIME THE STUDY WAS MADE. ACTUAL ENROLLMENT IN 1950 WAS 2767, IN 1951 IT WAS 2213, IN 1952 IT WAS 2259. HAD THE BALANCE BEEN INCLUDED IN THIS STUDY, SOME ADDITIONAL COUNTIES WOULD BE REPRESENTED.

\* THIS FIGURE INCLUDES MANY MARRIED STUDENTS WHO CAME ORIGINALLY FROM OUTSIDE SAN LUIS OBISPO COUNTY BUT HAVE NOW ESTABLISHED LEGAL RESIDENCE THERE.

# SUMMARY OF ENROLLMENT DISTRIBUTION WITHIN THE STATE

Following the trend which began in 1903 and has continued ever since, Cal Poly's enrollment is widespread throughout the state--in contrast to that of the regional state colleges. At the San Luis Obispo campus 56 of the 58 counties in the state were represented in the fall of 1956. At the Kellogg-Voorhis campus fall quarter, 1956, enrollment distribution shows students from 20 of California's counties.

## Enrollment of Regular Students by Classes and Curriculum Level (San Luis Obispo Campus Only)

	<u>Technical</u>			<u>Degree</u>		
	<u>Men</u>	<u>Women</u>	<u>Total</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
<u>Agricultural</u>						
Freshmen	119	3	122	227	10	237
Sophomores	77	0	77	176	4	180
Juniors	0	0	0	272	1	273
Seniors	0	0	0	263	0	263
	<u>196</u>	<u>3</u>	<u>199</u>	<u>938</u>	<u>15</u>	<u>953</u>
Total Agriculture						1152
<u>Engineering</u>						
Freshmen				697	4	701
Sophomores				623	0	623
Juniors				476	1	477
Seniors				<u>348</u>	<u>0</u>	<u>348</u>
				<u>2144</u>	<u>5</u>	<u>2149</u>
Total Engineering						2119
<u>Arts and Sciences</u>						
Freshmen				57	73	130
Sophomores				54	42	96
Juniors				77	41	118
Seniors				<u>93</u>	<u>7</u>	<u>100</u>
				<u>281</u>	<u>163</u>	<u>444</u>
Total Arts and Sciences						444
<u>Graduates</u>						
	<u>Men</u>	<u>Women</u>	<u>Total</u>			
Agricultural Education	22	0	22			
Education	<u>19</u>	<u>11</u>	<u>30</u>			
	41	11	52			
ALL TOTAL				<u>Men</u>	<u>Women</u>	<u>Total</u>
				3750	197	3767

# ENROLLMENT OF VETERAN AND NON-VETERAN STUDENTS

7

	<u>Veterans</u>	<u>Non-Veterans</u>	<u>Total</u>
Freshmen	333	857	1190
Sophomores	417	559	976
Juniors	370	468	838
Seniors	316	395	711
Graduates	<u>21</u>	<u>31</u>	<u>52</u>
	1457	2310	3767

## ENROLLMENT OF MARRIED STUDENTS

	<u>Men</u>	<u>Women</u>	<u>Total</u>	
Public Law 346	3	0	3	
Public Law 16 and 894	12	0	12	
Public Law 550	810	3	813	
State Veterans	<u>47</u>	<u>2</u>	<u>49</u>	
Married Veterans	872	5	877	Approximately 60.1% of veterans enrollment.
Married Non-Veterans	<u>343</u>	<u>56</u>	<u>399</u>	
Total Married Students	1215	61	1276	Approximately 33.9% of total enrollment

## COMPARATIVE ENROLLMENTS BY YEARS (San Luis Obispo)

<u>5-yr. Intervals</u>	<u>1-yr. Intervals</u>	<u>1-yr. Intervals</u>
1903-04----- 20	1938-39-----651	1946-47----1571
1908-09----- 151	1939-40 --- 780	1947-48 -- 2229
1913-14 --- 194	1940-41 --- 739	1948-49 -- 2575
1918-19 --- 110	1941-42 --- 711	1949-50 --- 2909
1923-24 --- 114	1942-43 --- 570	1950-51 --- 2767
1928-29 --- 399	1943-44 --- 80	1951-52 --- 2213
1933-34 --- 239	1944-45 --- 128	1952-53 --- 2259
1938-39 --- 651	1945-46 --- 819	1953-54 --- 2259
		1954-55 --- 2745
		1955-56 --- 3163
		1956-57 --- 3767

## COMPARATIVE ENROLLMENTS BY YEARS (Kellogg-Voorhis Campus)

<u>5-yr. Intervals</u>	<u>1-yr. Intervals</u>	<u>1-yr. Intervals</u>
1938-39 --- 113	1938-39 --- 113	1946-47 --- 280
1943-44 --- Closed W. War II	1939-40 --- 137	1947-48 --- 393
1948-49 --- 411	1940-41 --- 136	1948-49 --- 411
1953-54 --- 423	1941-42 --- 117	1949-50 --- 438
	1942-43 --- 69	1950-51 --- 405
	1943-44 --- Closed W. War II	1951-52 --- 331
	1944-45 --- Closed W. War II	1952-53 --- 413
	1945-46 --- Closed W. War II	1953-54 --- 423
		1954-55 --- 384
		1955-56 --- 385
		1956-57 --- 506

KELLOGG-VOORHIS CAMPUS ENROLLMENT

Fall Quarter, 1954

Enrollment by Departments

Agricultural Management and Sales	28
Animal Husbandry	113
General Crops Production	98
Fruit Production	37
Ornamental Horticulture	120
Horticultural Services & Inspection	67
Soil Science	<u>43</u>
TOTAL	506

Enrollment by Classes and Curriculum Level

<u>Agricultural</u>	<u>Degree</u>
Freshmen	143
Sophomores	181
Juniors	90
Seniors	<u>92</u>
Total Agriculture	506

Enrollment of Veteran and Non-Veteran Students

	<u>Veteran</u>	<u>Non-Veteran</u>	<u>Total</u>
Freshmen	39	104	143
Sophomores	30	151	181
Juniors	63	27	90
Seniors	<u>44</u>	<u>48</u>	<u>92</u>
	176	330	506

Enrollment of Married Students

Public Law 346	0
Public Law 16 and 894	4
Public Law 550	89
State Veterans	<u>6</u>

Married Veterans 99      Approximately 56% of veterans enrollment

Married Non-Veterans 48

Total Married Students 147      Approximately 29% of total enrollment

## PLACE OF LEGAL RESIDENCE (Kellogg-Voorhis)

<u>County</u>	<u>Nov. 10</u> <u>1950</u>	<u>Oct. 30</u> <u>1951</u>	<u>Nov. 18</u> <u>1952</u>	<u>Nov. 9</u> <u>1953</u>	<u>Nov. 23</u> <u>1954</u>	<u>Oct. 29</u> <u>1955</u>	<u>Nov. 2</u> <u>1956</u>
Alameda	1	0	5	2	2	0	0
Contra Costa	1	0	1	0	1	1	1
El Dorado	0	0	1	1	0	0	0
Fresno	2	2	0	2	1	1	2
Imperial	1	5	1	4	9	23	41
Inyo	0	0	0	0	2	1	1
Kern	3	2	2	2	5	1	0
Kings	-	-	-	-	-	-	1
Los Angeles	239	185	226	234	179	192	232
Madera	0	0	0	0	1	0	0
Marin	0	0	1	1	1	1	1
Mendocino	1	2	1	1	1	0	0
Merced	1	0	0	0	1	0	0
Modoc	0	1	0	0	0	0	0
Monterey	0	0	1	1	0	1	0
Napa	1	1	2	2	3	0	0
Orange	31	31	34	35	30	17	32
Placer	0	1	1	1	0	0	2
Riverside	11	15	35	29	25	32	36
Sacramento	0	0	0	0	2	2	3
San Bernardino	33	21	36	40	33	37	43
San Diego	13	9	16	19	23	27	37
San Francisco	0	4	1	1	3	0	1
San Joaquin	0	0	0	0	2	2	2
San Luis Obispo	1	0	0	0	0	0	0
San Mateo	1	0	1	1	3	2	0
Santa Barbara	9	8	9	8	5	1	4
Santa Clara	2	2	1	1	0	1	2
Santa Cruz	1	0	0	1	2	0	0
Solano	0	0	1	1	1	0	0
Sonoma	1	0	0	0	0	0	0
Stanislaus	0	0	0	1	1	2	2
Sutter	0	0	1	1	0	0	0
Tehama	1	0	0	0	0	0	0
Tulare	5	3	1	0	2	1	3
Ventura	21	14	6	5	13	13	17
Yolo	0	0	1	0	0	0	0
Yuba	0	0	0	0	2	0	0
Other States	16	13	10	12	15	9	20
U. S. Territories	2	1	6	6	6	6	9
Foreign Countries	3	9	8	11	10	12	14
TOTAL	401*	329*	409*	423	384	385	506

\* Not all students registered at the Voorhis campus were included in this survey as some cards were not available at the time the study was made. In 1951 the actual enrollment was 331, and in 1952 it was 413.

DEGREES AND CERTIFICATES  
Number of Degrees and Certificates Granted  
(June, 1956--Both Campuses)

<u>Division and Department</u>	<u>Bachelor of Science</u>	<u>Bachelor of Education</u>	<u>Technical</u>	<u>Master of Arts in Education</u>
<b>Agriculture</b>				
Agricultural Engineering	21	0	9	0
Agricultural Inspection	14	0	0	0
Animal Husbandry	66	0	14	0
Dairy Manufacturing	10	0	0	0
Dairy Husbandry	16	0	3	0
Ornamental Horticulture	18	0	1	0
Poultry Husbandry	10	0	0	0
Crop Production, General	14	0	0	0
Citrus Fruit Production	6	0	0	0
Deciduous Fruit Production	4	0	1	0
Soil Science	15	0	1	0
Truck Crops	7	0	1	0
Field Crops	13	0	2	0
<b>Engineering</b>				
Aeronautical Engineering	20	0	3	0
Air Condit. & Refrigeration	8	0	0	0
Mechanical Engineering	42	0	0	0
Electrical Engineering	15	0	0	0
Electronic Engineering	28	0	0	0
Printing	11	0	0	0
Architectural Engineering	19	0	0	0
<b>Arts and Sciences</b>				
Biological Sciences	6	0	0	0
Elementary Education	0	1	0	0
Health and Physical Educ.	10	0	0	0
Mathematics	13	0	0	1
Social Sciences	9	0	0	3
Physical Sciences	2	0	0	0
Education Agriculture	0	0	0	17
Agricultural Journalism	5	0	0	0
	<u>402</u>	<u>1</u>	<u>35</u>	<u>21</u>

Grand Total Graduates, June 1956 -- 459

FACULTY

Combined Campuses

294 persons are on the teaching staff at the San Luis Obispo and San Dimas (Kellogg-Voorhis) campuses. The following tables indicate the distribution of the teaching staff according to degrees, as of March 20, 1957.

	<u>San Luis Obispo</u>		<u>Kellogg-Voorhis</u>
Degrees:	Doctorates 56	Doctorates	9
	Masters 113	Masters	20
	Bachelors 77	Bachelors	11
	None 8	None	0
	<u>Total 254</u>		<u>40</u>

CONSTRUCTION PROGRAMS

THE FOUNDATION

SPECIAL SERVICES

## MAJOR CONSTRUCTION PROGRAM

### San Luis Obispo

Women students were admitted to the college in September 1956 after a twenty-five year absence. Admission was made possible by the partial rehabilitation of several existing structures to provide: residence hall space for 164 women students; three temporary Home Economics Laboratories; facilities in the Health Center and a rest room in the Administration building for women students.

The site clearance and relocation project necessitated by the beginning of construction on the first unit of a new Engineering building was completed in October 1956. The major facilities provided under this project were: an Aero-nautical Engines laboratory with separate test cell and fuel storage building; a remodeled and enlarged instructional welding shop; and the relocation of the fire truck garage, and other small frame or metal temporary buildings. The old aero and welding shops which were built in the early 1900's were demolished to complete the site clearance for the Engineering building on which construction was begun in May of 1956. The building is progressing rapidly toward completion with occupancy expected by the fall term, 1957.

The 1956-57 budget included provision for several small site development projects, two of which have been completed while the remaining projects are in the final working drawing stage. The completed items were a small temporary red-rock parking area; a drainage system and correction of paving deficiencies at the new Ornamental Horticulture Unit. Other projects to be completed are a permanent parking lot for 225 cars; two secondary connecting roads; extension of the street lighting system; and other miscellaneous utility corrections.

Master planning for a campus for 10,000 students was begun by direction of the Departments of Finance and Education.

### Kellogg-Voorhis

The beginning of the 1956-57 academic year witnessed the occupancy of the first major building on the Kellogg campus. The new Science building was partially completed by September; hence all regular classes, the administrative staff, etc., were moved from the Voorhis campus to the new building. In addition to providing for the immediate needs of the instructional program in Biological and Physical Sciences (the purpose for which the building was designed for a college student body of 4,000), temporary use of the building was made by the library, agriculture departments, and all other arts and science departments as well as the Administrative offices.

Construction began on the following major projects: a gymnasium and playing fields; a small cafeteria; crops and fruit unit; and the first half of an Ornamental Horticulture Unit. These buildings are scheduled to be completed during the summer and fall of 1957.

Funds for the construction of the following additional facilities were approved by the legislature in the 1956-57 budget:

Site Development project to provide a large parking lot, storm drainage system, and other utility needs; beef, sheep, swine and poultry production units for the college's agricultural instructional program; and an

Engineering Building to house the Electronic, Mechanical, Aeronautical, and Industrial Engineering departments. Bids will soon be accepted for the construction of these projects.

Current enrollment projections for the Kellogg-Voorhis Unit of the College have necessitated the initiation of Master Planning for 12,000 students by 1970. Hence, the major construction program must be accelerated to meet the demand for admission.

#### MINOR CONSTRUCTION PROGRAM

Included in Minor Construction are those projects for which a total expenditure of less than \$20,000 is required. These, almost without exception, are handled completely by the college using college-owned equipment and regular crews and student assistants. During 1956-57 the college will have completed approximately \$151,000 in this type of project plus \$20,000 in Major Construction money turned over to us by the Division of Architecture to build parking lots and do similar work which they felt we could do easier than they could.

Every effort is made to employ the maximum number of students in this work. For example, most of the electrical work is done by a team of electrical engineering students working under the direction of the college electrician and Chief Engineer. Architectural engineering students work as draftsmen; mechanical engineers make many mechanical installations; agricultural engineering students operate the tractors, earth-movers, power graders, tampers, etc.; ornamental horticulture majors plan and install sprinkler systems and do actual landscaping. A project such as the construction of a poultry laying house is turned over directly to farm carpentry classes as a laboratory project. They, as a class, plan the building, order the materials and build the structure. There will be as many as 300 different students, during the year, working on minor construction items, exclusive of those working in regular class laboratories. This latter group receives no pay as it is a classroom exercise.

#### THE FOUNDATION

The Foundation serves the college as an auxiliary organization created and managed to operate enterprises difficult to handle under normal State procedures. These functions include aid to the instructional divisions of the college, the operation and management of housing and cafeterias and the provision of special services.

#### Instruction

The student project program and the semi-commercial agricultural and engineering enterprises comprise the Foundation's aid to the instruction program. Since the 1930's, earned surplus from projects and the herds and flocks, has been used to increase the breeding herds and finance an ever-growing student project program. At present the Foundation maintains purebred registered herds and flocks of Hereford, Angus and Shorthorn beef cattle; Holstein, Jersey and Guernsey dairy cattle; Hampshire, Southdown, Corriedale, Suffolk and Rambouillet sheep; Berkshire, Poland China, Duroc and Minnesota swine; Thoroughbred and Quarterhorse horses; and Leghorn, Cornish and Rhode Island Red poultry. Several outstanding gifts of high

quality animals were made to the Foundation during the year. The breeding improvement program was advanced by purchases of boars, rams, dairy bulls and other stock by the Foundation. At the end of the fiscal year the livestock inventory totaled \$129,100.00 and feed on hand was valued at \$89,000.00.

The breeding animals and the several hundred feeder animals are cared for and managed by students of the Agricultural Division. A wide variety of breeds is kept in numbers sufficient to handle needed class work in skills, judging and management.

## Housing

### For Single Students

By using all possible housing facilities on the San Luis Obispo campus, it was possible to provide accommodations for 1193 single students. Of these, 737 were housed in permanent type dormitories. The five newest dormitories, built to house 2 students per room, were used to house 3 students in each room, while Deuel dormitory, built more than 50 years ago, housed 2 students per room, even though the rooms average only 94 square feet of floor space. 416 students were housed in temporary, sub-standard frame structures with wallboard partitions. 40 students were housed in cottage type dormitories located at various projects throughout the campus.

During the 1957-58 college year, Chase, Heron, and Jespersen dormitories will be used to house women students. The total capacity of the three dormitories is 164 women students.

### For Married Students

On the San Luis Obispo campus there are 187 trailers, plus 75 units with one or two bedrooms, for married students and their families.

The 187 trailers, installed in 1947, had considerable usage before they were acquired by the College. Students, many of whom have two or more children, manage to exist in these trailers even though the total floor space is 110 square feet.

Poly Ninos village, consisting of 37 one bedroom and 38 two bedroom plywood units, was obtained by the College in 1946 as surplus from a military installation. It is estimated these 12 to 15-year old units will be usable for only about four more years.

### Outlook for 1957-1958

Again during 1957-58 all available campus housing for single and married students will be used on an overloaded basis. A survey of 88 other colleges indicates that an absolute minimum of 60 square feet per student is needed for bare living. The mean average square footage per student for these same colleges was 104 square feet. Using a base of 120 square feet per room for two student occupancy the present dormitories at San Luis Obispo should house only 809 students. However, by putting two students in rooms ranging from 94 to 120 square feet in size, and by putting three students in rooms of 205 square feet, the college will be able to accommodate 1193 single students.

### Food Service

A room and board program is now established on the San Luis Obispo campus. This program has allowed the food service people a more firm budget within which to work. A dietician has been added to the staff and menus are reviewed by a student advisory committee regularly. During the past year both dining halls have been redecorated and completely new furniture was purchased for the south dining hall. Staff training programs have progressed and recipes have been tested and standardized.

Most popular was the change in menus allowing students all the milk they wish at each meal. Approximately 2700 meals are prepared and served daily.

### SPECIAL SERVICES

California State Polytechnic College again in 1956-57 has endeavored to meet the challenge of an ever-expanding field for special services to education and industry. The various programs established in previous years under this general heading have continued to function in cooperation with the related outside agencies.

In offering service to agriculture education through the training of persons for the Special Secondary Credential in Vocational Agriculture and the Limited Special Secondary in Agriculture, as part of the regular instructional program of the college, Cal Poly has prepared 20 men to receive the Special and 5 the Limited-Special Secondary Credential this year.

Because of the college's specific interest in the agriculture teachers of the state and its feeling of responsibility for continuing to aid them in the better performance of their job (nearly 50 per cent of the agriculture teachers in California having received their training at California Polytechnic), the college continues to support strongly the cooperative in-service programs with the Bureau of Agricultural Education, of the State Department of Education, and the California Agricultural Teachers' Association.

The program of visits by California Polytechnic Agriculture Subject-Matter Specialists to high school and junior college agriculture departments this year saw Specialists from the San Luis Obispo Campus visit 86 schools of California. Specialists in the field of ornamental horticulture from the Kellogg-Voorhis Campus will have visited approximately 50 schools in the area of that campus by the close of this school year.

In addition to these visits, 97 of the California agriculture teachers met on the San Luis Obispo campus again last summer for a one-week course of concentrated training information and skills.

This program was preceded by the one-week conference, jointly sponsored by the California Agricultural Teachers' Association and the Bureau of Agricultural Education in cooperation with the college, at which 323 agriculture teachers of the state were in attendance. Speakers, exhibits, and meeting places affording opportunities for sharing of ideas and techniques, were part of the offerings provided by the college.

The ornamental horticulture staff and facilities at the Kellogg-Voorhis Campuses were also used last August to provide a concentrated one-week course in the skills of nursery practices, particularly designed to assist the high school and junior college agriculture instructor. About 25 teachers were in attendance.

The Future Farmers of America were provided with facility-space and assistance in the conducting of their State Final Judging Contest held in conjunction with their Annual State Convention on the San Luis Obispo Campus. Actually participating in the Judging Contests were 671 F.F.A. boys; official delegates to the Convention numbered 359; but approximately another 300 F.F.A. members attended the various functions with the non-delegate classification for the experience such a program affords. Over one thousand Southern California high school members of the F.F.A. held their annual Field Day at the Kellogg-Voorhis Campus again April 6, 1957.

The Future Homemakers of America also chose California Polytechnic, San Luis Obispo Campus, as the site of their 1956-57 Annual Section Nine Meeting. Approximately 200 Future Homemakers and their group advisers participated in this activity.

Not only agricultural groups favored the college with an opportunity to serve. The California Association of Health, Physical Education, and Recreation, in cooperation with the State Department of Education and the college, again sponsored two summer workshops--one for men and the other for women--on the San Luis Obispo Campus. The three-week, overlapping program, was attended by 219 men and 155 women physical education teachers from every section of the state. Forty-two members of the staff of the Association also participated in the workshops.

Wherever and whenever possible, groups from industry and governmental agencies were given the services of the college or use of the facilities of one of the three campus sites--San Luis Obispo, San Dimas, and Pomona. In addition to those detailed above, the following conferences and short courses should also be listed: Western Fairs Judging Conference; California Aviation Education Association; Grange Youth Conference; California Sprinkler Irrigation Conference; Central Coast Chapter, Society of California Accountants; Western Fairs Association College of Fairs; California Elementary School Administrators' Association; California State Beekeepers' Association; Western States Soils Conservation Service Workshop; Pacific Coast Conference Football Officials' School; California Milk Producers' Federation; School Lunch Workshop; California Association of Nurserymen; Joint Meeting of all C.S.E.A. Chapters in the area; and various San Luis Obispo County and Central Coast teachers' groups' meetings.

STUDENT PERSONNEL

## STUDENT PERSONNEL

### Co-Curricular Activities

Leadership training developments highlighted the co-curriculum. In addition to the annual fall and spring leadership conferences, three consecutive one-unit courses in leadership sociology were offered for the first time. Although listed in the catalog as courses in sociology, they were sponsored by the student activities department of the student personnel division. Emphasis was given to three areas of group activities: (1) Leadership problems, (2) Leadership techniques, and (3) Leadership dynamics. These courses were limited to students with offices --responsibilities with campus organizations, since class instruction was supplemented by supervised experiences with their own groups.

The addition of women students made a number of changes in emphasis in the co-curriculum. Not only did they successfully penetrate the ranks of student government groups and campus clubs, but a Women's Glee Club and a Women's Service Organization were formed.

The annual music tour to Southern California reached 25,000 persons, and Poly Royal weekend openhouse attracted nearly 15,000. The Student Publication's Board produced an outstanding yearbook and El Mustang, student newspaper, became a semi-weekly for the first time in the history of the college when a shift was made from a weekly to a Tuesday and Friday publication. The change to the semi-weekly was made in an effort to provide a better communications medium to serve the increased student body of a rapidly growing Cal Poly.

### Coeducational Program

The admission of women students this year brought with it new responsibilities and a new staff position in the Student Personnel Division. An Associate Dean of Students (Women) was added to help integrate the women's program into that of the school as a whole.

Areas of planning which have required the most attention are off campus housing, dormitory regulations, and social standards. As all needs could not be anticipated in advance, continual revision of the original plans was necessary. With the help of a committee of women students, a final revision for next year is now in process.

### Counseling and Testing

A study of students seeking individual counseling appointments at the Counseling Center between September 25, 1956 and April 9, 1957 revealed a total of 1519 separate appointments. This figure is conservative to the extent that counselors attempt to see additional students seeking help when scheduled counseling appointments are completed early, and it does not include withdrawal from college interviews between students and counselors. It appears that at least half of the students enrolled each year will voluntarily visit the Counseling Center during any year.

A second implication concerning the number of students seeking counseling appointments tends to reveal the Counseling Center as not just a place for referring students who are "troubled" or in "trouble", but rather more as an educational center attempting to perform an educative function for the individual student which is basically in keeping with the total educational program of the college.

In keeping with this point of view, at the beginning of the spring quarter, 1957, all new students taking guidance tests were provided with a basic statement, "Introduction of Guidance Tests," which invited them to the Counseling Center to be informed about the various detailed results of their tests. The purpose of this statement is indicated on the form as follows:

"There are two main reasons for the guidance tests which you are to take:

- "1. To help you find out more about yourself and better understand yourself.
- "2. To help the college better understand you in terms of its goal of trying to assist you toward the fullest possible kind of personal development in terms of your various abilities, achievements, interests, and personal qualities."

A study of new students enrolling last fall found those majoring in the new elementary education program ranking fourth in academic aptitude, as measured by the American Council on Education Psychological Examination, behind those majoring in the departments of physical science, mathematics, and electronic engineering.

Data regarding Testing Center operations show not less than 10,000 separate guidance tests were administered last year to approximately 1,800 new students. In addition 2,241 other separate tests were administered to individual students as prescribed by college counselors, or by industry as pre-employment tests for graduating seniors.

Since the graphic item counter was added to the IBM Test Scoring Machine, a total of 3,250 individual test answer sheets have been item-analyzed for classroom instructors. In addition, between 25,000 and 30,000 test answer sheets are being scored for class and laboratory instructors on the IBM Test Scoring Machine annually.

### Health Center

A number of changes have taken place during the past year due to the admission of women students and an increased enrollment. It has been necessary to revise our temporary quarters and add a female night attendant to the staff. Ward beds and isolation rooms for women students are located in the main Health Center Building. Ward beds and isolation rooms for men students are provided in an adjoining dormitory. Beginning with the Winter Quarter the fourth full time physician was added to the staff.

Special clinics in dermatology, radiology, and orthopedics, directed by specialists from San Luis Obispo, are held on a weekly basis.

The Campus Environmental Sanitation Program with the cooperation of the Biological Science Department, with the aid of student assistants, continues to be a valuable service. A Salk Poliomyelitis Vaccine Program was started at the beginning of the school year and over 3,000 vaccinations were given on a voluntary basis. A charge was made to cover the cost of the vaccine.

### Placement

Following is a summary of the interviewing activities of employing organizations who visited the campus during the regular recruiting period October 4, 1956 to April 11, 1957, and for whom a formal interviewing program was arranged:

Scholarships

This past year ten new scholarship funds were added to those in existence at the California State Polytechnic College. Most notable is the Leopold Edward Wrasse Scholarships. For the first year, 25 scholarships of \$500 each will be awarded from the income of this fund. The number of scholarships is expected to increase soon to about 50 each year. Other new scholarships are: U. S. Motors Foundation, California State Grange (two awards), Triangle Fertilizer, Harry Huston, Harry E. Rosedale Memorial, Hewlett-Packard Company - Alumni, Solar Aircraft, Tractor Sales Company, Earth Equipment.

INSTRUCTION

## OBJECTIVES AND PHILOSOPHY

The Legislature of the State of California set forth the objectives of California State Polytechnic in the founding act (1901) which states in part:

".....The purpose of the college is to furnish to young people of both sexes mental and manual training in the arts and sciences including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the student for the non-professional walks of life. This article shall be liberally construed, to the end that the college may at all times contribute to the industrial and agricultural welfare of the state". (Education Code, Chapter 3, Section 2065)

Since its opening in 1903 as a state vocational high school, California Polytechnic has pioneered in establishing and developing the occupational type of education as provided for in the founding act. The importance of this type of education to the State of California was recognized in 1933 when the college was made a direct administrative branch of the State Department of Education and at the same time became a three-year technical college. Further recognition came in 1936 when other colleges began accepting Cal Poly degree transfer students, and in 1940, when the State Board of Education authorized the college to grant the Bachelor of Science degree.

In developing occupational education the college has been particularly successful in its "upside-down" educational plan and the "project" system.

The term "upside-down" reflects the fact that a student who completes a four-year curriculum will have covered substantially the same material as that covered in a similar major in a typical land grant agricultural and mechanics arts college--but in a somewhat inverted order. The following is a summary of the Cal Poly plan of Instruction. It illustrates the college philosophy and particularly its effect on curriculum.

The curricula are occupationally centered in that the jobs for which students are being prepared are clearly identified. Educational experiences offered are dictated by the requirements of the job rather than by the requirements of professional graduate schools. The curriculum is "upside-down" in that major work designed to prepare for jobs begins in the freshman year and continues throughout the four years. This provides the student with motivation as well as saleable skills even though he may drop out of school before completing a four-year program. Supporting courses are closely correlated with major instruction. Thus major courses are developed to actually use the prerequisite supporting material. General education courses are offered throughout the four years in order that concepts requiring greater maturity and experience can be understood by the student. Placement of graduates and periodical follow-up visitations are accepted college responsibilities. These provide close contact with employer and graduate which results in on the job assistance to the graduate, better understanding of changes in the occupations for which the college prepares its graduates, better balance between the "how" and "why" phases of instruction, and more effective public relations.

The project system embodies the "learn-by-doing" and "earn while learning" philosophy of the college. It consists of self-owned or managerial projects operated by students in such a way as to give knowledge and provide experiences in the commercial production and marketing of agricultural products or in the

construction, rebuilding, repair, or maintenance of industrial machinery or equipment. This enables the student to earn money while doing work directly related to his major academic interest and provides incentive for the more rapid acquisition of further skills and knowledge. This program has been progressively developed since 1924 when projects were organized on a small scale and financed by the Citizen's State Bank. This arrangement was backed by faculty members and parents for the protection of the bank. The California State Polytechnic College Foundation was organized in 1940 as a non-profit corporation. With faculty members as directors, the foundation has assumed the responsibility for financing and recording the project operations.

### NEW CURRICULA

In the Fall Quarter of the academic year 1956-57, two new curricula were offered by the Agricultural Division on the San Luis Obispo Campus: Farm Management, which places emphasis on the management phases of agriculture, and Mechanized Agriculture, which was added as a major paralleling the Agricultural Engineering major. In the Engineering Division, a new major in Industrial Engineering was added. In the Arts and Sciences Division four majors were added: Elementary Education, Agricultural Chemistry, Home Economics, and English. Elementary Education and Home Economics had enrollments of 71 and 36 co-eds, respectively.

On the Kellogg-Voorhis Campus, the new major in Farm Management and Sales, which is designed to prepare students for such positions as owner, manager, or supervisor of related agricultural business, agricultural sales-service, marketing specialist, real estate appraiser, and government program specialists, had an initial enrollment of 28 students. Fourth year work was added in Fruit Production, General Crops, Horticultural Services and Inspection, and Ornamental Horticulture. Formerly, students transferred to San Luis Obispo to complete their work.

In the Fall Quarter of 1957-58, additional new work will be added at the Kellogg-Voorhis Campus. The third and fourth years of major work will be offered in Animal Husbandry. This program places emphasis on the feeding, marketing, and processing aspects of the livestock industry. A major in Landscape Architecture is to be offered as an addition to the offerings of the Ornamental Horticulture Department. This major prepares men for all phases of the landscape industry including landscape architecture, landscape contracting, and related fields.

Four majors in Engineering are to be introduced. The major in Aeronautical Engineering provides training in the basic principles and skills required in the design, manufacture, maintenance, and testing of aircraft and their components. The Electronic Engineering curriculum prepares students for employment by manufacturing concerns, broadcast and television stations, oil companies, utilities, government laboratories and agencies, sales organizations, schools, and self-employment. The Industrial Engineering program prepares students for employment with manufacturing firms in work related to planning, production, sales and management. It is a combination of Mechanical engineering and general business administration. The major in Mechanical Engineering prepares students for work in plant engineering, tool, machine, and pipe design, engineering testing, sales engineering, construction supervision, and maintenance planning.

In the Arts and Sciences Division, the first two years of a four-year major leading to the Bachelor of Science degree in Biological Sciences is being

introduced in the coming academic year! It is planned to expand this program as staff and facilities become available. In the case of the new Physical Education major only the first two years will be introduced at this same time.

These curricula have been approved by the California State Board of Education.

### COEDUCATION

The San Luis Obispo Campus of the College became fully coeducational in the Fall Quarter of the academic year 1956-57. The total registration of co-eds consisted of 197 regular and 77 limited students.

As was expected, co-eds enrolled in all three divisions. Enrollment of girls for the Fall Quarter by division and department as regular students is as follows:

<u>Agriculture</u>		<u>Engineering</u>		<u>Arts and Sciences</u>	
Animal Husbandry	12	Architecture	4	Agricultural Chemistry	2
Crops	1	Mechanical		Agricultural Journalism	9
Farm Management	1	Engineering	1	Biological Sciences	8
Ornamental Horticulture	2			Education (Grad)	11
Poultry Husbandry	1			Elementary Education	71
Soil Science	1			English	5
				Home Economics	36
				Mathematics	5
				Physical Education	13
				Physical Sciences	2
				Social Sciences	12
Totals	18		5		174

While the 77 limited students took courses throughout the entire college, the majority of them were in the field of education.

### LIBRARY

The year covered by this report has seen a 10.9% increase in recorded circulation and very noticeable increase in uncounted library use. Reading room use has increased approximately 25%.

Owing to increased enrollments the readers' seating capacity of the library has dropped to less than 10% of enrollment. This points up the rapidly growing need for construction of an addition to the present library building. An additional very serious need is for increased space and better adapted space for the technical operations of the Order and Cataloging Departments. The added wing now being planned will correct this problem.

The book collection of the library has been increased to almost 60,000 volumes. Almost 700 periodicals are received either by gift or by purchase. Trade journals are of particular value to this type of college.

### AUDIO-VISUAL DEPARTMENT

During the past year the Audio Visual Department has continued to improve its service to instruction through better maintenance and wider circulation of audio-visual materials and equipment. Operational efficiency has been gained through use of decentralized storage and circulation pick up points for equipment and materials. The provision of shop space for the technician has resulted in improved equipment maintenance.

For the production of audio-visual materials, a modified temporary structure was made available this year. Activity has concentrated on the development of the facility, equipment and operational production processes. The graphic and photographic materials produced during this developmental year have greatly increased the teaching effectiveness in courses according to reports by the instructors teaching with these materials.

Additional service in both AV Circulation and AV Production will come with added staff and improved facilities.

### AGRICULTURAL DIVISION

A broad training in fundamental practices of agricultural production is assured agricultural majors through related work offered by agricultural departments other than the major department. Both the how and the why are given students in the four-year degree curricula by providing a group of major courses; a block of closely related agricultural courses from other agricultural departments and a block of related courses in science and general education. In addition, all department majors have a liberal number of free electives, courses giving the student an opportunity to complete a well-rounded program.

#### Agricultural Engineering

The new buildings and facilities provided the Agricultural Engineering Department last year have contributed much to the effectiveness of the instruction in this department. During the Fall quarter, a total of 1214 students were enrolled in courses offered by the department, and during the Winter and Spring quarters 1081 and 975, respectively.

The new curriculum in Mechanized Agriculture and the revised curriculum in Agricultural Engineering were put into effect in September, 1956. The enrollment of 221 students now taking major work leading to a B.S. Degree in this department is divided about equally between the two curriculums. In addition, there are 57 students enrolled in the two-year Technical curriculum in Mechanized Agriculture or following a program of specially selected courses.

The departmental enrollment continues to make steady growth and the job opportunities outnumber by many times and number of graduates. With the critical need for more engineers trained in the field of water conservation and irrigation, an increasing number of undergraduates are interested in following the Soil and Water option provided in the new Agricultural Engineering curriculum, and an increasing number of our graduates are taking jobs with such agencies as the U. S. Soil Conservation Service, U. S. Bureau of Reclamation and the State Department of Water Resources.

While no project program as such is provided for students in the Agricultural Engineering department, an opportunity is provided for many students to do part-time work under supervision to supplement their formal training. Practically all the work of servicing and maintaining the fleet of tractors and machinery operated by the college in the instruction and farming program is done by students. Other jobs such as maintenance of the feed mill machinery; construction of small dams, reservoirs, and other conservation structures; and farm work with a wide variety of machinery and equipment gives students a chance to develop skill and confidence and put into practical application those things they learn in the classroom and laboratory.

The International Cooperation Administration and other agencies continue to schedule for training in this department many individuals and groups from foreign countries with agricultural mechanization as their training objectives. There are 21 currently enrolled. Reports received on the work being done by former trainees, who have completed the training program and returned to their home country, indicate that the results of this training program are highly successful.

### Animal Husbandry

Enrollment in the Animal Husbandry Department for the fall quarter of 1956-57 was 410. It is the objective of the department to maintain an enrollment of 425 students over the next few years, which can be adequately taken care of with our present teaching staff, livestock production facilities, and planned instruction facilities.

Student participation in livestock production projects continues to be a valuable teaching device and a popular activity for Animal Husbandry majors. Although no credit units are given for this activity and financial returns proved to be very small in 1956-57 projects 231 students carried on livestock projects. Eighty-four students fed out and marketed 470 head of cattle; 68 students fed out and marketed 593 head of hogs; 52 students fed out and marketed 417 head of sheep; and 27 students carried out a training program with 32 head of horses for which they paid the cost of carrying the horses throughout the training period of twelve weeks.

An improvement in livestock prices in relation to feed prices would add an incentive to more livestock project participation. An addition to our sheep feeding unit is planned to accommodate additional sheep feeding projects.

The rapidly expanding livestock and poultry feeding business in California is providing placement for a rather large number of Animal Husbandry graduates. A course in Feed Mill Operation has been added to meet the needs of students entering this field. The facilities available in our own milling plant and the large amount of feeds processed for the livestock, dairy and poultry production programs makes an ideal working program for training in this industry. Because of the need for abilities in horsemanship, in the beef cattle production, and feed lot industries, courses have been added in this field. The processing and merchandizing of meats is another field in need of trained personnel and added staff has been assigned to provide more training in this field.

Livestock ranching has continued to be the leading area for placement of graduates--largely students going back to their home ranches, although many are placed as managers, foremen or assistants on livestock farms. Agricultural

teaching, feed lot and feed mill operations, field work for feed companies, livestock and farm supply firms, livestock and farm loan agencies, meat packing firms, and graduate work at other agriculture colleges, have been sources of placement during the year.

Student activities sponsored by the Animal Husbandry Department included a livestock judging squad in which 15 students participated in intercollegiate judging contests at the Pacific International at Portland, Oregon, placing third; The Grand National Livestock Exposition, San Francisco, placing first; The Golden Spike Livestock Show at Ogden, Utah, placing first; The Chicago International Livestock Show at Chico, placing twenty-fourth; The National Western Livestock Show at Denver, placing seventh in Livestock, first in carload cattle judging, and fifth in wool judging; and The Southwest Livestock Exposition at Fort Worth, placing ninth.

The rodeo team from the department was the Pacific region intercollegiate champion team.

Students exhibited their project livestock or prepared Foundation livestock for sale at the California State Fair; the Los Angeles County Fair; the Cow Palace--Grand National Livestock Show; the Great Western Livestock Show; the California Ram Sale; the California Thoroughbred Selected Yearling sale at Del Mar; the California Thoroughbred Breeders sale at Pomona; the California Hereford Breeders sale at Madera; the California Shorthorn Breeders sale at Stockton; and the Tri-County Hereford Breeders sale at Paso Robles.

The department conducted the Western Fairs Annual Livestock Judging Conference, the State Final F.F.A. Livestock Judging contest. The Animal Husbandry Alumni Organization held their second annual conference on the campus.

The department is conducting a Hereford Bull Feeding Trial involving 54 head of bulls in cooperation with nine purebred Hereford breeders of the California Hereford Breeders Association. Their Annual Beef Cattle Conference is scheduled to be held at Cal Poly in October, 1957. The conference is to be centered around the results of the feeding trial.

### Crops Production

Further expansion of facilities and new equipment combined with the addition of two new staff members have made it possible to improve the over-all instructional program. The project program has been enlarged and all students are now participating in productive enterprises.

Visits with employers indicate a real need for young men who have completed a crops program. Many good jobs go unfilled each year. Employers and field men are most cooperative and assist with field trips and demonstrations.

Most students find part-time employment with the department. The orchards and vineyards are cared for completely by students in the department. This gives students financial assistance as well as a chance to gain productive experience.

Until the beginning of the 1956-57 school year, all senior students transferred to San Luis Obispo for their senior year. In a recap of figures provided by the recorder's office, we note a gradual increase in enrollment in the department as a whole if we discount the transfer students.

Service courses in three fields are given each quarter for non-majors for the first time this year. General classes in Field Crops, Truck Crops, and Fruit Crops have been very popular with other majors.

Due to the importance of certain new crops, emphasis is being placed on them. Our trial and demonstration plots are being extended and preliminary work is being done in the development of more desired corn varieties for campus plantings.

The shortage of water for orchards and fields is being remedied. A new well has been established in the deciduous orchard and concrete lines are to be installed. Additional water is being stored behind campus dams and released as needed.

Minor changes in instruction are being made to fit current conditions. We continue to emphasize production, but also include the new technological aspects of agriculture.

### Dairy Department

Student enrollment continued some decline although the department is still the largest in the western states. Unfavorable conditions in the dairy industry have doubtless had an effect.

There has been a continued expansion and improvement of the dairy project unit. Students now own and milk 90-100 cows of their own and they are obtaining splendid production and labor returns. A 500 gallon farm tank has recently been installed which permits bulk handling to reduce labor and milk losses.

Cal Poly dairy judging teams have again made a very creditable record. Both the dairy cattle and products team won first at the Pacific International contest. This was the third time in succession for the cattle and second for the products team to win this contest. The dairy products team competed for the first time in the National intercollegiate contest at Atlantic City and placed ninth among 33 colleges.

Outstanding herd sires have recently been purchased in Pennsylvania and New Jersey of the Guernsey and Jersey breeds in a continued program of keeping an outstanding bull stud at the college for the better breeding of the college Foundation and student-owned herds.

### Farm Management

This year marks the inauguration of the Farm Management Department at Cal Poly. The first departmental tabulation showed 35 students as majors or double majors. The number stood at 45 at the beginning of the spring quarter.

With the full teaching program, including senior year courses, under way at the beginning of the year 1957-58, the faculty will add more units to its teaching load within the department and will drop teaching in the Social Science Department.

The senior students will soon be helping the manager of the college farm in some of his work. They will also study prospective locations for a student farm. This will be done for the consideration of the Dean of Agriculture and the Foundation in appraising the future needs of the department.

## Ornamental Horticulture

The department had an enrollment of 54 students for the year. Five new courses were offered including: Flower Arrangement, Landscape Management, Aborigine, Cut Flower Production and Native Plants. To provide flowers for the flower arrangement work, a considerable expansion was made in the production of cut flowers. This included 400 stems of Column Stocks, 1200 stems of Chrysanthemums, 8000 Carnations and 200 spikes of Cymbidium Orchids. A commercial florist was employed on a part-time basis to teach floral design. Twenty-four students, including eight women, participated in this phase of instruction.

The Landscape Management class renovated several thousand square feet of lawn and planted 250 trees and shrubs as a part of the campus beautification program.

Students in the Ornamental Horticulture Club grew a crop of Giant Cockscomb flowers which were dried artificially and used on the prizewinning Rose Parade float. The Club members also sponsored the annual Poly Royal Flower Show which was the largest flower show in the county, attracting a crowd of over 8600 during the two-day period.

An average of 38 students per month were employed on a part-time basis in maintaining the campus landscaping.

Sixteen student projects involving 22 students were operated during the year. Crops produced included Poinsettias, Chrysanthemums, Easter Lilies, Tropical Foliage and Bedding Plants. A total of \$4,400 worth of floral products were marketed by the students through the Horticulture Department nursery. Most of the purchases were made by staff members and other students.

## Poultry Husbandry

Enrollment in the Poultry Department showed a decrease of one student in the fall of 1956 as compared to a year earlier. This follows national trend for the last five years which has resulted in decreased enrollment in Poultry Husbandry in most colleges.

Broad nationwide industry trends during recent years have undoubtedly not only affected enrollment but should indicate a constant watch on curricula evaluation. The trends in the industry is toward fewer producing units each of which is large, highly mechanized, well financed and often corporate in organization. During the past five years there has been a reduction of nearly twenty percent in numbers of farms raising poultry (excluding family flocks). On the other hand, total volume of birds raised increased 15 percent in 1956 over the previous year. Even with the national increase in volume of chicks hatched, there was a reduction of more than 20 percent in numbers of hatcheries operating during the past two years.

There seems to be an increasing trend toward integration of various phases of production, processing and merchandizing within the poultry industry and as a rule, these are built into large corporate units. The larger units embracing several affiliated highly specialized areas are naturally seeking well-trained and qualified personnel which offers opportunity for graduates.

The Poultry Department places considerable emphasis on the project program because it gives the student familiarity with most operating phases of the industry activities. It also adds new values and emphasis to other classes and course work.

### Soil Science

Enrollment in all classes continued at a high level during the year with over 900 agricultural and non-agricultural majors taking work in the department. With all except two courses involving laboratory work and the bulk of the work in 4-unit courses, all members of the staff carried a heavy load of instructional activities. An increase of about one-third in the number of students majoring in soil science the previous year is also adding materially to the faculty load of instructional and other activities.

While the number of majors in soil science reached an all-time peak the previous year and has continued at almost the same level this past year, the number of graduates has stood at about the same for the past four years. During the year sixteen students completed the four-year curriculum and secured employment or were inducted into the Armed Services. Distribution of the graduates shows: 4 in Soil Laboratories, 3 in Soil Conservation, 3 in Graduate Schools, 2 in Soil-Water Surveys, 2 in Agricultural Chemical Distribution, and 2 in the Armed Services. It is noted that during the past three years salary levels for Soil Science Graduates have increased steadily, from \$300 to around \$450 per month.

More and more attention is being given to the Senior Project program with emphasis on learn-by-doing types of projects. Each student in Soil Science is expected to conduct experiments and studies of particular interest and helpfulness in developing a Senior Project Report. This activity is developing into laboratory, field, and greenhouse work on methodology, plant culture, and farm planning. Soil monolith preparation, range fertilization plot studies, minor element nutrition of plants and soil fertility evaluation are some of the more popular Senior Project subjects.

Curriculum evaluation and improvements were continued with more attention directed toward minor changes indicated by comments and recommendations of graduates. Additional mathematics and English are recommended by a majority of graduates. Some increase in science, particularly physics and chemistry, is also suggested by a number of graduates. In every case of graduate opinion received to date, adequacy of the soils courses at Poly is mentioned.

Land Judging activities initiated by the soils staff and students in 1953 with high schools of San Luis Obispo and Santa Barbara counties is paying great dividends in terms of high school participation in such activities and in the training of Poly students. This activity has become state-wide with numerous local contests, some sectional contests and a final at San Luis Obispo in connection with other F.F.A. contests. Cal Poly's Student Chapter of the Soil Conservation Society of America assists in three local contests and in the state finals. It is expected that 30 teams will compete in this event.

High School visitation by soils staff members was another activity of significance. One such visitation allowed a staff member to meet with over 600 high school Vo-Ag students in land judging, pot culture studies and soil testing

techniques. Visual aids are used in teaching high school students where field trips and project visitation are not possible. Much interest in agricultural education seems to develop in high school Vo-Ag students with this method of presentation.

### Veterinary Science

The Veterinary Science Department acts as a service department in the agricultural division. The course of instruction ranges from fundamental biology to practical field programs in disease and parasite control. Livestock sanitation and prevention measures of disease control are stressed in class assignments. Both members of the Veterinary Science department devote considerable time to the maintenance of the health of the college herds and flocks. It is especially important that the college livestock be kept free of animal diseases transmissible to humans, which would prove a hazard to students working with them. The herds are kept free from tuberculosis, brucellosis, encephalomyelitis, and similar diseases which are dangerous to human health. Special programs are being followed for the control of mastitis, contagious ecthyma, swine cholera, and both internal and external parasites.

Supervisory inspection of the meats laboratory is maintained. The production laboratories are utilized to demonstrate the value of livestock disease control programs.

### ENGINEERING DIVISION

The operation of the Engineering Division can be expressed in the form of an equation which reads as follows:

Students + Staff + Instructional Program + Facilities = Manpower for Industry

During 1956-57, there were many interesting developments among the elements of the equation. The following brief statements and charts summarize the highlights of these developments.

#### The Engineering Students

The spectacular growth of the Cal Poly engineering program continued. The charts in Figure 1 show the changes which occurred in size, type, and source of students.

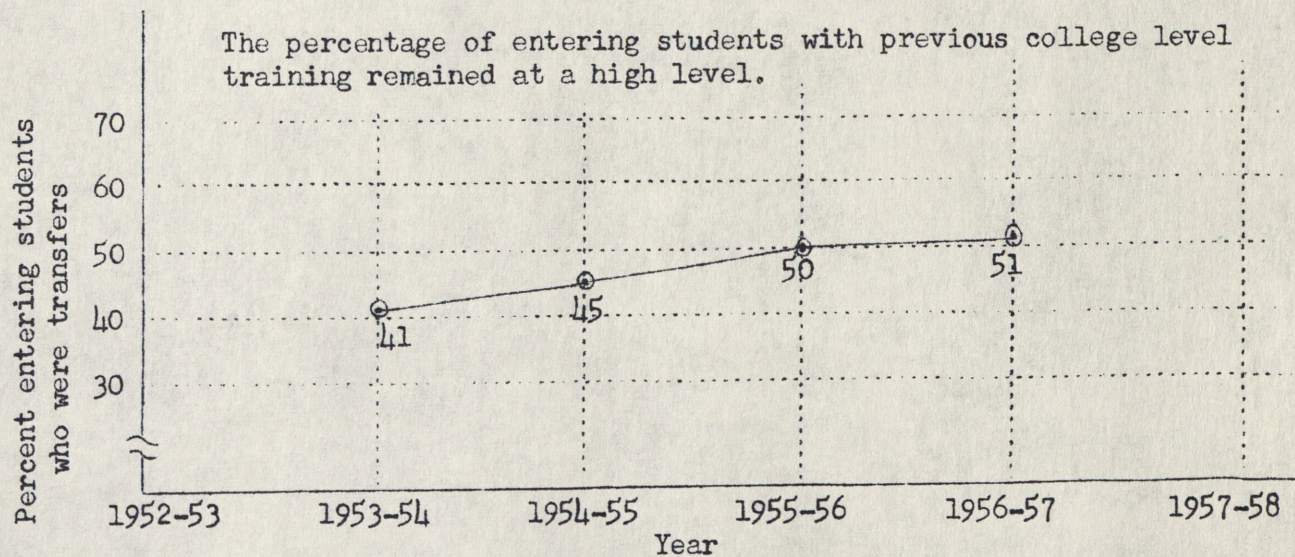
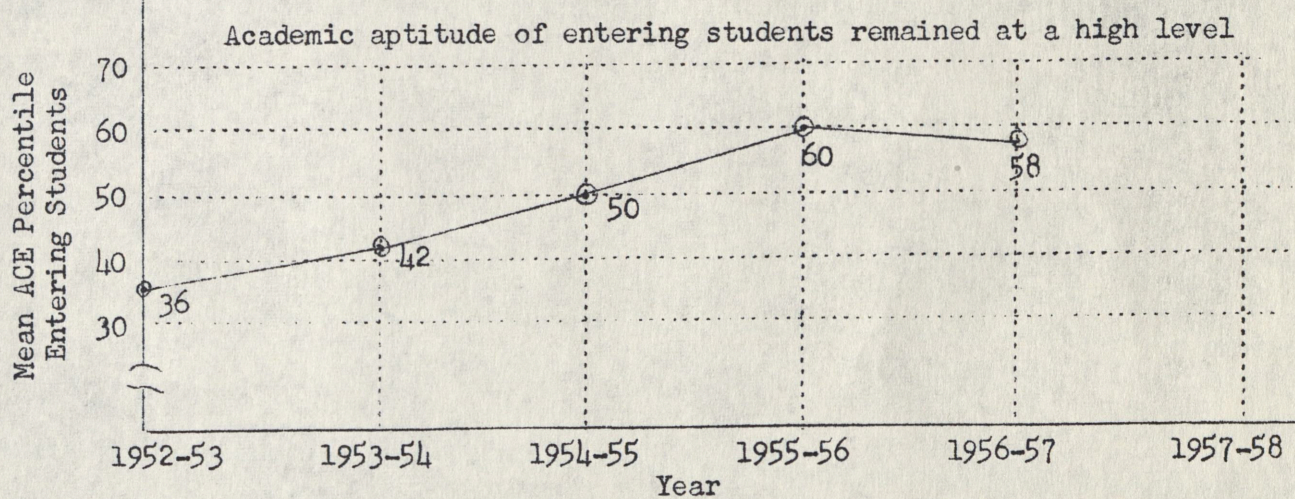
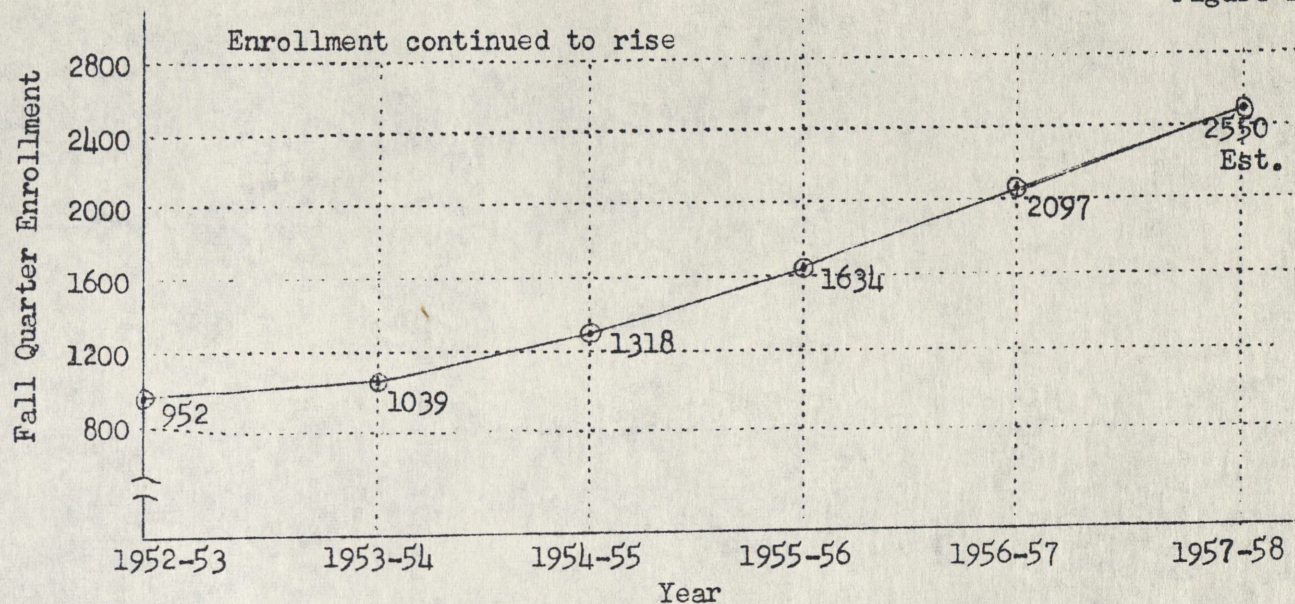
#### The Engineering Staff

Despite the extreme difficulty in staff recruitment, the College was fortunate to retain most of the previous staff members and to obtain a number of good new instructors.

A cross section of the engineering staff is shown below:

Average age	41.1
Average years at Cal Poly	4.4
Average years teaching experience	6.1
Average years industrial experience	8.7
Average years military service	1.8

Figure 1



Industry recognition of the staff continued and took many forms. Staff members now hold the following professional positions:

Chairman, Education Committee, Region VII, Institute of Radio Engineers  
 Chairman, Student Activities Committee, California Council of Architects  
 Chairman, Education Committee, National Assoc. of Practical Refrigerating Engr.  
 Member, Educational Activities Council, American Welding Society  
 Member, Young Engineering Teachers Committee, American Society for Engineering Education  
 Member, Student Affairs Committee, Los Angeles Section, American Institute of Electrical Engineers  
 Member, Education Committee, American Society of Refrigerating Engineers  
 Member, Student Affairs Committee, American Welding Society

### The Instructional Program

The Cal Poly instructional program prepared students for today's jobs and tomorrow's careers. It accomplishes this end in three ways:

1. Students learn how to do things, to do them well, and why they are done.
2. Students form good work habits and develop the personal characteristics so essential for success in industry.
3. Students participate in departmental club activities as affiliates of national professional engineering societies to form a pattern of professional growth for their future careers.

#### 1. Curriculum

The heart of the instructional program is the curriculum. The learn-by-doing emphasis is well illustrated in two ways:

- a. In the fall quarter, there were the following enrollments in first-year skills courses:

869	Welding
550	Machine Shop
256	Sheet Metal
135	Aeronautical skills
62	Air Conditioning skills
100	Architectural skills
180	Electronic skills
52	Electrical skills
219	Mechanical skills
37	Printing skills
604	Mechanical drafting

- b. There is a heavy emphasis on laboratory work as shown by the percentage of total student credits offered in laboratory work:

	% Lect.	% Lab.
Aeronautical courses	60	40
Air Conditioning & Refrigeration courses	71	29
Architectural courses	51	49
Electrical courses	80	20
Electronic courses	73	27
Industrial courses	73	27
Mechanical courses	65	35
Printing courses	45	55
Machine Shop courses	8	92
Welding courses	4	96
Over-all division	60%	40%

## 2. Student Personal Growth

The development of good work habits and ability to carry responsibility is well illustrated by several elements of the Cal Poly program.

- a. The Foundation project program provided the opportunity to earn while learning. The Electronic Engineering and Printing Departments carried on fairly extensive projects.
- b. Divisional repair and maintenance work was accomplished by student labor under faculty supervision.
- c. More than one hundred instructional student projects were completed, including the design and construction of:

- Flow meter for laminar flow of water
- New type of disc brake
- Heat transfer apparatus
- Test fixture for optical inspection of thread form
- Magnetic drum memory system
- Inductive, capacitive, and resonant windows for X-band microwave test set-up
- Universal laboratory chassis
- Shock tube for producing shock waves
- Dynamometer for aircraft starting motors
- Electric drive for crane in aircraft engine shop
- Motor tractor for hospital stretcher
- Water tank rheostat
- Pole-0 computing device
- Fan test system
- Absorption refrigerating system

## 3. Student Departmental Activities

Highlights of the year's activities were:

- a. Membership in student branches of professional engineering societies continued to increase:

Institute of Aeronautical Science	102
American Society of Refrigerating Engineers	50
American Institute of Architects	220
American Institute of Electrical Engineers	45
Institute of Radio Engineers	160
American Welding Society	18
American Society of Tool Engineers	60
Society of Automotive Engineers	200

b. Activities were plentiful and were highlighted by the following events:

Students in welding presented an exhibit at the Western Metals Congress.  
 Students in Architectural Engineering presented an exhibit at the State Convention of the California Council of Architects.  
 Mechanical Engineering students captured the top four prizes in the Northern California Collegiate Mobilgas Economy run.  
 Electronic Engineering students competed in a student paper contest sponsored by the Institute of Radio Engineers for colleges in the thirteen western states.  
 Aeronautical Engineering students competed in a student paper contest sponsored by the Institute of Aeronautical Science for colleges on the Pacific Coast.  
 An Electrical Engineering student won first prize in the Los Angeles regional student paper competition sponsored by the American Institute of Electrical Engineers.  
 Students in Air Conditioning and Refrigeration Engineering presented an exhibit at the Western Air Conditioning Show.

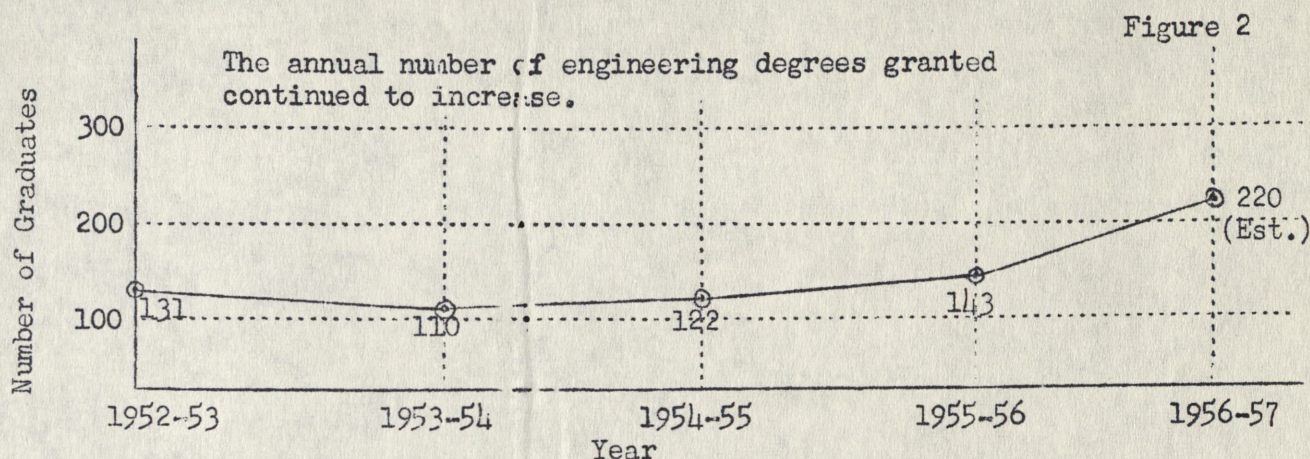
### The Facilities

The Engineering Division appreciates the splendid support it has received to date from the State Board of Education and other State agencies. It is extremely difficult to keep ahead of the combined forces of increasing enrollment and technological changes. However, partial solutions have been found by temporary maneuvers and long range building developments. Examples are:

The move to the replacement facility for the old Aero Engines shop is completed.  
 The special project room and display gallery (student enterprises) are nearing completion.  
 The East wing of the Engineering Building, which will house the Electrical and Electronic Engineering Departments will be ready for occupancy prior to the fall quarter.  
 Preliminary plans have been submitted to the State Department of Education for a Graphic Arts Building to house the Printing and Industrial Engineering Departments.  
 Two steps of a three step plan for the Machine Shop Department expansion have been completed.  
 Plans are completed for additional temporary facilities for the Industrial Engineering and Printing Departments.  
 Plans are now being formulated for the West wing of the Engineering Building to provide the balance of the division's facility needs.

## The Manpower for Industry

The chart below (Figure 2) shows the continued increase in the number of engineering graduates. It is interesting to note that the Cal Poly contribution to the annual national supply of engineering graduates is approaching one per cent.



More than 150 companies recruiting engineers conducted approximately 3300 student interviews.

Starting salaries for June graduates will average about \$470 per month. Many offers have exceeded \$500 per month.

### Gifts

In addition to the State-support provided the College, additional help in the form of gifts and scholarships was received from industry. These were:

- \$1000 scholarship in Air Conditioning and Refrigeration by the Hiatt Engineering Company
- \$500 scholarship in Mechanical Engineering by the Link-Belt Company
- \$600 in scholarships in Electronic Engineering by the West Coast Electronic Manufacturers' Association
- \$400 toward scholarship fund in Electronic Engineering by Hewlett-Packard Company
- Geiger counter from Radio Corporation of America, New Jersey
- Vapor Defrost Cooling Unit from Refrigeration Engineering, Inc.
- Industrial Counter Model and Slide Screw Tuner and Fuses from Hewlett-Packard Company
- Engineering Books from Mrs. M. G. Van Leevwen
- Airplane Engine from Rocky Mt. Steel Products
- Engraving machine from New Hermes Foundation
- Absorption refrigeration unit from Southern California Gas Company and Southern Counties Gas Company
- Pumping unit from Lufkin Foundry and Machine Company
- Magnetic drum and associated components from Rand Corporation
- Petroleum refinery model from The Fluor Corporation, Ltd.
- Welding equipment from Tweco Products, Inc.

## ARTS AND SCIENCES DIVISION

The 1956-57 academic year was noteworthy for the Arts and Sciences division because of the admission of women students. Most of the women who came to Cal Poly were enrolled in majors in this division, bringing a record Fall Quarter enrollment of 444 undergraduate majors. The comparable 1955-56 undergraduate enrollment was 261, the increase being 70 percent.

In curricula, the division also showed changes, mainly due to the advent of women. Elementary Education enrolled 77 majors to become, in its first quarter of operation one of the two Arts and Sciences majors with the largest enrollments. Another new major, Home Economics, enrolled 36 majors although only the first year of major courses was being offered. The third new major, Agricultural Chemistry, had 2 women students in the Fall Quarter and provided a new channel for occupational outlets for students with agricultural interests who wish to enter the chemical industry.

The accompanying table (see page 37) illustrates the growth of undergraduate major enrollment in the Arts and Sciences division since 1951-52. During that period the division has grown from 185 to 444 majors, an increase of 140 percent. The general trend has been a gradual increase each year, making possible an orderly development of curriculum and staff to meet major students' needs.

These data do not represent the entire instructional activity of the division, however. The responsibilities of the Arts and Sciences division also extend to the graduate program in education and the general education and service program for the entire college.

Most of the required work in general education and a large proportion of the work supporting all major curricula is offered by departments in this division. These include the major departments shown in the table on page 37 and in addition the departments of Music and Military Science and Tactics as well as offerings in psychology, art, and audio-visual methods. The scope of the instructional responsibilities of the Arts and Sciences division can best be shown by the fact that in the past five years it has handled between 53 percent and 55 percent of the total college instructional load.

The graduate program in education is handled mainly by the Arts and Sciences division. It should be noted, however, that approximately one-third of the graduate students are also candidates for the Special Secondary Credential in Vocational Agriculture, and they take a substantial part of their graduate work in the Agricultural Division. The total graduate enrollments since 1951-52 are as follows:

	<u>Men</u>	<u>Women</u>
1951-52	56	
1952-53	40	
1953-54	49	
1954-55	58	
1955-56	54	6
1956-57	41	11

It is interesting to note that these enrollments have remained quite stable. This is due to the fact that the education program has been limited to the

secondary field and only a few teaching majors. As work is offered in administration, in new majors such as Homemaking Education, and in the elementary field, the graduate enrollment will develop in keeping with breadth of offerings.

The highlight of the year was the addition of majors in Elementary Education and Home Economics, planned primarily for women students. They enrolled a total of 111 majors of whom 105 were women. The college was glad, however, to enroll six men in Elementary Education, an occupational area that offers great opportunities to men. These enrollments in the first year of these majors demonstrate a response to a need. Both fields are in great need of workers. Also, these enrollments reflect the effectiveness of the teacher recruitment program initiated by Dr. Roy E. Simpson and the State Board of Education in 1956. It is encouraging to teacher-educators to see the fruits of this effort in the form of actual enrollments in new teaching programs.

Fall Quarter Enrollments, 1951-57 (Regular Undergraduate Students)

	<u>REGULAR STUDENTS</u>									
	51-2	52-3	53-4	54-5	55-6			56-7		
					<u>Men</u>	<u>Women</u>	<u>Tot.</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Journalism	19	22	24	31	37		37	28	9	37
Biological Sciences	38	39	34	44	46		46	50	8	58
Education						1	1	6	71	77
English & Speech								2	5	7
Home Economics									36	36
Mathematics	8	7	14	27	34		34	48	5	53
Physical Education	81	70	63	51	65		65	59	13	72
Physical Sciences	8	9	7	5	7		7	16	2	18
Agricultural Chemistry								5	2	7
Social Science	31	37	35	50	71		71	67	12	79
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>—</u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
Arts & Sciences Division - Totals	185	184	177	208	260	1	261	281	163	444

KELLOGG-VOORHIS CAMPUS

## KELLOGG-VOORHIS CAMPUS

Notable for the moving of the administrative and most of the instructional activity to the Kellogg unit and for the completion of the Science building, the first major academic structure, 1956-57 has been the most important year in the history of the southern campus to date. It saw a larger enrollment than ever before recorded, the approval of majors outside the field of agriculture and the beginning of planning for a college with an eventual enrollment of 12,000 students.

### Agricultural Division

Planning for and the construction of new production facilities have constituted an important part of the year's activity. About completed are new facilities for fruit and vegetable crop packing operations and ornamental horticulture facilities. Early in the year, a Harvestore silo was installed as part of the new animal husbandry facility. Planned for 1957 spring and summer construction are production units for beef, swine, sheep and poultry.

Instructional programs have been strengthened considerably with the addition of the fourth year in four majors: Fruit Production - Ornamental Horticulture - Horticultural Services and Inspection - General Crops Production. The new program in Agricultural Management and Sales had an excellent beginning and is serving a real need. During the year a new four-year program in Landscape Architecture has been developed and approved by the State Board of Education. This program is to be initiated in the fall of 1957, and at the same time the second and third years of Agricultural Management and Sales will be added, together with the third and fourth years of the Animal Husbandry program.

### Arts and Sciences Division

The Arts and Sciences Division operates as a service division to major departments and is organized into seven instructional departments - Biological Sciences, English and Speech (including Journalism), Mathematics, Music, Physical Education, Physical Sciences, and Social Sciences (including Education and Psychology). At its March meeting, the State Board of Education approved applications for the introduction of major programs in Biological Sciences and Physical Education, beginning in September, 1957.

Several new courses were introduced this year to broaden the range of electives available to students and to provide required supporting courses for the major in Agricultural Management and Sales and the additional fourth year work in other majors.

Ground was broken for the erection of physical education facilities. Funds were obtained for the equipping of laboratories and other necessary facilities in the Science Building for the teaching of Physics courses, to be initiated in the 1957-58 academic year. A request was submitted for funds to equip additional biological sciences laboratories in the Science Building for the teaching of anatomy, physiology, and related courses.

### Engineering Division

The State Board of Education has authorized the introduction in September, 1957, of an engineering program at the Kellogg-Voorhis campus to include the

following four majors: Aeronautical Engineering, Electronic Engineering, Industrial Engineering, and Mechanical Engineering. Selected courses from the freshman and sophomore years will be offered beginning with the Fall quarter 1957-58. Beginning with the Fall quarter 1958-59 instruction will begin in the freshman, sophomore and junior years of each of the four majors. A full four year program will be in operation in September 1959. This program should help to alleviate the serious shortage of engineering and technical personnel in the Southland. During this past year real progress has been made in planning for the instructional program and physical facilities required for this new engineering division.

During the academic year 1957-58 the engineering division will use the facilities now available in the recently completed science and classroom building. Instruction in welding will be performed in facilities which will be shared with the Agricultural Engineering Department. The building plans for the new engineering center were transmitted to Sacramento by the Los Angeles office of State Division of Architecture on March 28, 1957. The target occupancy date for the new buildings has been set for September, 1958.

The total floor area enclosed by the four buildings comprising the center is approximately 87,400 square feet.

### Library

The Library was moved from the Voorhis Campus to the Science Building on the Kellogg Campus during September, 1956. The new and larger quarters and new equipment provided an opportunity to make materials more easily available to students and to make numerous improvements in services for students and college staff. The Voorhis Library was open four nights a week to provide reserve books and study facilities for students living on the Voorhis Campus.

The book collection total reached 10,440 volumes by the addition of 2,040 books and microfilm reels during the year. A total of 367 periodical titles were received. An active campaign to eliminate obsolete materials in all parts of the collection was carried out in cooperation with the faculty. The average number of loans per student was 13.5.

Two major services to students were carried to completion: (1) the division of the card catalog into author-title and subject sections, and (2) the cataloging of California Agricultural Experiment and Extension Service publications to make them as easily available as books. Other services, in part, include weekly displays, library instruction to classes and special groups, and a survey of library facilities in the Pomona - Riverside area including subject specialties and hours open.

### Student Personnel

A very active school relations program was undertaken during this year. Meetings were held with counselors, instructors, and students in more than 80 high schools and junior colleges in Southern California. The primary purpose of the meetings this year was to present information concerning the expansion of the curricular offerings in agriculture and the beginning of the new curriculum in engineering and arts and sciences.

A new program of counseling and testing was initiated this year. An associate dean of counseling and testing was added to the staff, as well as a counselor. The Counseling Center conducted the student orientation program. Every student entering the college completes a counseling folder which contains valuable information for use by the Counseling Center and the staff.

With about half the students living on the campus, co-curricular activities are an important part of the over-all program. Organized campus outings, dances, assemblies, games and tournaments have provided worthwhile experiences in citizenship training. Leadership training programs for student body officers and parliamentary procedure courses were inaugurated this year.

Poly Vue and the Educational Field Day were combined this year into one two-day activity, which was held April 5 and 6th. The college glee club and orchestra toured high schools in San Bernardino, Riverside, and Orange County.

A residence on the Kellogg Campus was remodeled into a compact facility to house the Health Service. A college nurse is on duty full time. A contractual arrangement has been made with a clinic in the nearby community of Covina. This arrangement does not meet the real health service needs of the students on the campus and it is expected that a full-time resident doctor will be secured shortly.

Approximately 50 percent of the students live in the Voorhis Campus housing facilities. There are 231 single men living in the residence halls and 39 married students living in the Vet Hill housing unit and the trailer park on the Voorhis campus. Many students found private living accommodations in the nearby community of Pomona.

Since in the past there have been no graduating classes from this campus, the placement activities have been limited to part-time on-campus and off-campus placement. One staff member has been assigned three-tenths time to coordinate the part-time and permanent placement program. With the first graduating class this June the Placement Office is in a position to provide placement service for graduating seniors.

Five scholarships totaling \$1000 were granted to incoming students, and nine scholarships totaling \$950 were granted to advanced students during this year. During the year 479 short-term loans were made to students to meet their emergency situations. Three long-term loans were granted. Four new scholarships and three new loan funds were established this year by friends of the college.