*California State Polytechnic College*

# *Annual Report*
# 1963-64

# Annual Report 1963-64
# California State Polytechnic College

Contents

# Board of Trustees of the California State Colleges

Edmund G. Brown ---------- *Sacramento*
*Governor of California and President of the Trustees*
Glenn M. Anderson ---------- *Sacramento*
*Lieutenant Governor of California*
Jesse M. Unruh, *Speaker of the Assembly* ---------- *Sacramento*
Max Rafferty ---------- *Sacramento*
*State Superintendent of Public Instruction*
Charles Luckman, *Chairman* ---------- *Los Angeles*
Albert J. Ruffo, *Vice Chairman* ---------- *San Jose*
Gregson E. Bautzer ---------- *Beverly Hills*
John E. Carr ---------- *Newport Beach*
Mrs. Philip Conley ---------- *Fresno*
Donald M. Hart ---------- *Bakersfield*
George D. Hart ---------- *San Francisco*
Louis H. Heilbron ---------- *San Francisco*
Theodore Meriam ---------- *Chico*
Victor H. Palmieri ---------- *Malibu*
Thomas L. Pitts ---------- *San Francisco*
Simon Ramo ---------- *Canoga Park*
Daniel H. Ridder ---------- *Long Beach*
Paul Spencer ---------- *San Dimas*
James F. Thacher ---------- *San Francisco*
E. Guy Warren ---------- *Hayward*

Glenn S. Dumke ---------- *Inglewood*
*Chancellor, California State Colleges*

# Administration --- California State Polytechnic College

Julian A. McPhee ---------- *President*
Leona M. Boerman ---------- *Secretary to the President*
Robert E. Kennedy ---------- *Vice President*
Harold O. Wilson ---------- *Executive Dean, Operations Analysis*
Hugh La Bounty ---------- *ExecutiveDean, Planning and Development*
Eugene E. Brendlin ---------- *Foundation Manager*
Kenneth Kitch ---------- *Assistant to the President and Director Voorhis Educational Center*
Douglass W. Miller ---------- *Publications Manager*

## SAN LUIS OBISPO CAMPUS

Dale W. Andrews ---------- *Dean of the College*
Everett M. Chandler ---------- *Dean of Students*
Carl C. Cummins ---------- *Dean, Applied Arts Division*
Clyde P. Fisher ---------- *Dean, Applied Sciences Division*
Harold P. Hayes ---------- *Dean, Engineering Division*
Jerald F. Holley ---------- *Registrar*
John D. Lawson ---------- *Associate Dean (Activities)*
Billy W. Mounts ---------- *College Physician*
Donald S. Nelson ---------- *Business Manager*
Eugene Rittenhouse ---------- *Placement Officer*
Warren T. Smith ---------- *Dean, Agriculture Division*
Joics B. Stone ---------- *Associate Dean (Counseling and Testing)*
Lorraine Howard ---------- *Associate Dean (Women)*
Howard West ---------- *Assistant to the President*
C. Paul Winner ---------- *Associate Dean (Admissions and Records)*

## KELLOGG CAMPUS

C. O. McCorkle ---------- *Dean of the College*
Albert J. Aschenbrenner ---------- *Dean, Arts and Sciences Division*
Carl R. Englund ---------- *Dean, Agriculture Division*
Lauren J. Henderson ---------- *College Physician*
Henry House ---------- *Associate Dean (Activities)*
Cecil W. Jones ---------- *Business Manager*
Thomas H. McGrath ---------- *Dean of Students*
Mary Etta Murray ---------- *Associate Dean (Women)*
Harold P. Skamser ---------- *Dean, Engineering Division*
Milton R. White ---------- *Placement Officer*
Robert J. Winterbourne ---------- *Associate Dean (Admissions and Records)*
Richard G. York ---------- *Registrar*

# Foreword

"We cannot engage in every project nor climb every mountain without losing something of the power that comes from well-defined objectives. We need to maintain a focus in our efforts and to keep before us the elements of a plan and a philosophy."

—President J. A. Stratton,
*Massachusetts Institute of Technology*

This annual report records the development of the College during the 1963-64 year. In presenting it I wish to supply as background (which should make the report more meaningful) a summary of the objectives of the College and the basic concepts used in implementing them.

The College has four objectives. The first is to train for good citizenship. The second is to maintain a polytechnic program of instruction which will be the best in the United States in the areas it has selected for emphasis. A third objective is to contribute to the welfare of the state and nation by a continuous program of educational service to agriculture, industry, education and business. Fourth, Cal Poly seeks to encourage other educational institutions to adopt objectives and methods similar to its own.

In seeking to attain its objectives the College has developed and employs basic concepts it has found to be effective. Cal Poly's three campuses are administered as one college. Undergraduate education and specific occupationally oriented programs are emphasized.

Faculty members are required not only to be well qualified in their fields but to be outstanding teachers as well. Academic training is not overlooked in examining the qualifications of prospective faculty members, but successful experience in the occupational areas in which they will teach is stressed.

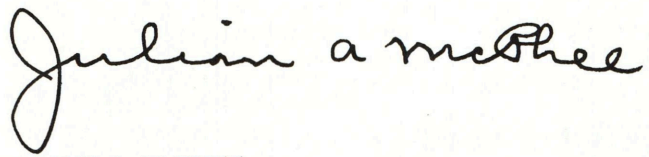
Cal Poly seeks to provide a strong motivation for its students. That is why the student is started in his major when he first enters college, enabling him to get right at the primary thing for which he came. Immediate introduction of instruction in the major field also makes possible the spreading of general education courses throughout the four college years. Thus, students take the more advanced general courses when they are better prepared to appreciate them.

Student motivation also enters into Cal Poly's learn-by-doing methods of instruction, into the earn-while-learning processes of its enterprise system and into its requirement that each senior must complete a project with a minimum of supervision.

Finally, the College seeks to maintain a co-curricular program that will add to rather than detract from its curricular program. The co-curricular program is planned to provide emotional outlet for students who have been busy with academic work all day and to teach students the meaning and importance of good citizenship.

The foregoing background should enable you to see the Cal Poly focus and the plan and the philosophy out of which the developments recorded in this report have taken shape.

To the Trustees and Chancellor of the California State Colleges for whom this annual report is specifically prepared, I offer my most sincere appreciation. Their sympathetic understanding of Cal Poly's role as the only polytechnic college among the California State Colleges has been most helpful. For that understanding, the Cal Poly faculty and staff and myself are grateful.



JULIAN A. McPHEE
*President*

# Era of Expanding Responsibilities

Increasing evidence that this is an era of expanding responsibilities for higher education was provided by 1963-64. Not only are there the responsibilities which come with greater size but also those which are brought by our advancing technology and which come with ventures in new geographic and subject matter areas.

Responsibilities created by growth of enrollment become greater in 1963-64. Total enrollment was 10,719 students, 6,310 at the San Luis Obispo Campus and 3,869 at the Kellogg Campus as shown in the accompanying chart and Tables I-A, B. While the rate of increase was not so large as in the preceding year which created an all-time record, it reached a substantial 10.4 per cent.

Los Angeles County had more students at the San Luis Obispo Campus (17.7 per cent) than did any other county (Table V-A). San Luis Obispo County supplied 13.4 per cent and Santa Barbara County 6.9 per cent but all counties except Alpine and Trinity were represented. Foreign students made up 6.5 per cent of the students at San Luis Obispo and those from other states 5.5 per cent.

Although the students at the Kellogg Campus came from 37 California counties, Los Angeles County furnished 61.3 per cent of the enrollment and San Bernardino County 13.6 per cent (Table V-B). Foreign countries sent 4.5 per cent and other states 1.8 per cent.

To teach this greater number of students the faculty was enlarged to a total of 630 of whom 391 were at San Luis Obispo and 239 at the Kellogg Campus. A faculty-student ratio of 1:16 was maintained at both campuses.

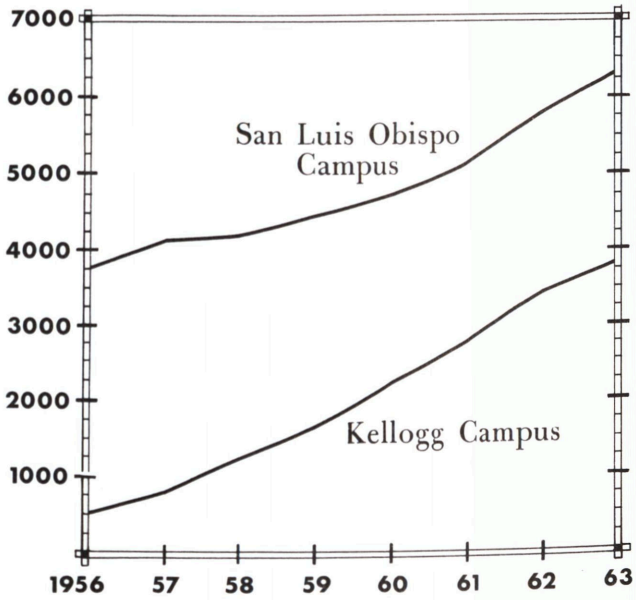
To maintain operation with these increases in the number of students and faculty State budgeted expenses for the College as a whole increased to $10,568,248 of which $6,494,411 was for the San Luis Obispo Campus and $4,073,837 for the Kellogg Campus.

## A POLYTECHNIC COLLEGE

The College continued during 1963-64 its emphasis of the applied fields of agriculture, engineering, business and home economics and their closely related supporting fields of physical sciences, natural sciences and mathematics which has given the college its unique place as the only polytechnic institution within the state college system.

Cal Poly continued to be the largest agricultural college in the United States in undergraduate degree objective enrollment and

GROWTH OF ENROLLMENT 1956-63




to have the largest undergraduate enrollment in engineering among colleges in the West.

The College's emphasis on areas of instruction outlined in its Enabling Act and their supporting fields is indicated in the accompanying table showing the number of majors and the full-time equivalent students taught in each field. The per cent of the campus totals which falls in the emphasis fields is virtually the same as in recent years at both campuses.

In a period of rapidly increasing general enrollment there has been a correspondingly rapid growth in the number of student majors and the number of student full-time equivalents taught in the emphasis fields. Comparison of the figures in the table with

those for 1960-61 discloses that the number of majors and of full-time equivalent students taught was larger in 1963-64 for every subject matter field in the emphasis areas. The emphasis areas as a whole showed a 35 per cent increase in majors and a 45 per cent increase in full-time equivalent students taught over the four-year period.

**FTE MAJORS AND FTE TAUGHT IN ENABLING ACT AND CLOSELY RELATED SUPPORTING FIELDS 1963-64**

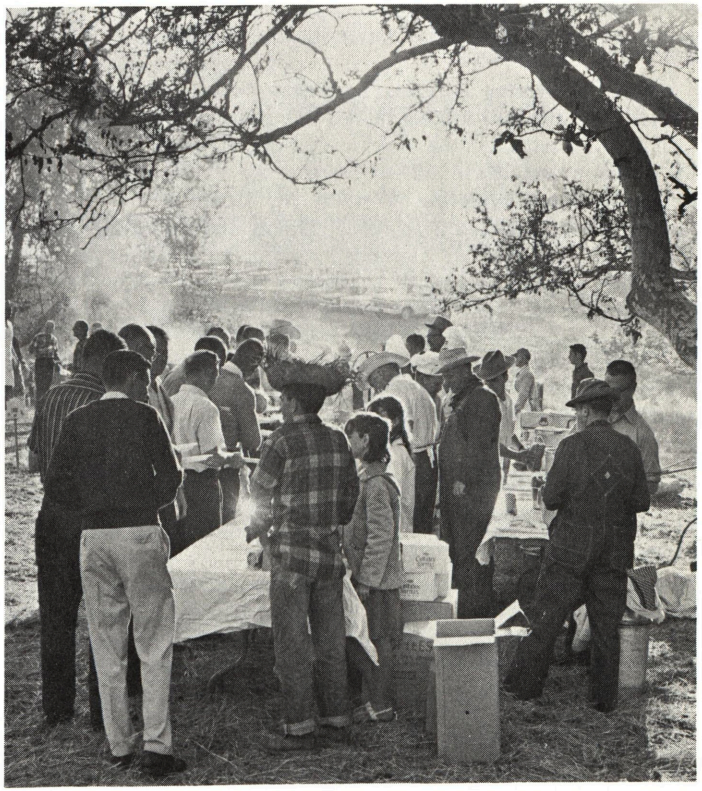
| Subject Fields | San Luis Obispo Campus | | Kellogg Campus | |
|---|---|---|---|---|
| | FTE Majors | FTE Taught | FTE Majors | FTE Taught |
| Agriculture | 1463 | 862 | 632 | 345 |
| Engineering | 2068 | 1080 | 1202 | 594 |
| Business | 310 | 285 | 538 | 370 |
| Biological Sci. | 219 | 336 | 184 | 190 |
| Physical Sci. | 76 | 560 | 64 | 340 |
| Mathematics | 196 | 785 | 130 | 393 |
| Home Economics | 313 | 93 | — | — |
| Emphasis Field Totals | 4645 | 4001 | 2750 | 2232 |
| All Other Fields | 1289 | 1924 | 752 | 1273 |
| Campus Totals | 5934 | 5925 | 3502 | 3505 |
| Percent Emphasis Fields of Campus Totals | 78.3 | 67.5 | 78.5 | 63.7 |

A factor in maintaining Cal Poly's prestige in applied fields has been the continuance and development of contacts with leaders in the fields in which the college offers instruction. These contacts are achieved through attendance of its faculty members at industrial, engineering and agricultural conferences, through summer employment of faculty members by industry and through the sponsorship of on-campus meetings of various groups by the College's divisions and departments.

In the latter activity, the College has had a growing program. For example, twenty-one meetings of off-campus agricultural groups were sponsored at the San Luis Obispo and Kellogg Campuses this year. Largest of these was the anual convention and state final judging contest of the California Association of Future Farmers of America at San Luis Obispo attended by 900 high school students. The California Farm Bureau Federation Conference was attended by 700 at the San Luis Obispo Campus and the California Hay, Grain and Feed Dealers Workshop by 400.

Among other groups hosted at San Luis Obispo by the Agriculture Division were the California Agricultural Teachers Association Summer Conference, the Cotton Ginners Association, farm brokers and the International Shade Tree Conference. At the Kellogg Campus the annual agricultural education Field Day drew a record attendance of 1,400 high school students. Other agricultural groups hosted at the Kellogg Campus included the California Cutting Horse Association and the Sunkist Managers.

***Ranch Breakfast at California Agricultural Teachers Association's Summer Conference at San Luis Obispo Campus.***



Ties with industry and engineering were strengthened through 16 meetings which off-campus groups held on the San Luis Obispo and Kellogg Campuses. At San Luis Obispo 500 gathered for the workshop of the California Refrigeration Service Engineers Society sponsored by the Air Conditioning and Refrigeration Engineering Department and 160 attended the conference of the Regional Association of Planning Directors sponsored by the Architecture and Architectural Engineering Department.

The Engineering Division at the Kellogg Campus hosted among other off-campus groups, the annual Spring Lecture Series of the Institute of Electronic and Electrical Engineers which attracted 750 persons and the American Society of Quality Control Conference with an attendance of 500.

### *Relations with Schools*

The Engineering Divisions have engaged also in relations-with-schools activities which have helped to build student interest in the College's offerings. At the San Luis Obispo Campus the Engineering Division hosted the annual Engineering Preview sponsored by a $2,000 grant from the Western Air Conditioning Industries Association for selected high school juniors and seniors throughout California. The Kellogg Campus Engineering Division sponsored both the annual leadership conference and the national project exposition of the Junior Engineering Technical Society.

The College's polytechnic emphasis was made known to high school and Junior College students through other activities of its relations-with-schools program which has as its purposes: (1) assisting students to find out whether Cal Poly is for them, (2) making possible a smooth transition from high school or junior college to Cal Poly, (3) assisting counselors, high schools and junior colleges to have the up-to-date factual information which will be of most assistance to their students.

Relations with the junior colleges long have been stressed at Cal Poly. Particular attention has been given to the maintenance of articulation agreements with the individual junior colleges so that students can plan their courses of study to avoid loss of time when transferring to Cal Poly.

Cal Poly has articulation agreements in effect with 71 of the 73 junior colleges now operating in California. The two junior colleges started this year have not yet completed such agreements. Agreements were made with three colleges during the year and 11 other agreements were revised. These agreements are quite current, none of them being more than two and a half years old.

Cal Poly enrollment in 1963-64 included transfers from 68 California junior colleges. The Kellogg Campus enrolled 1,222 such students and the San Luis Obispo Campus 1,460.

Visits to the Cal Poly campuses by junior college counselors are encouraged. Counselors from seven junior colleges visited the Kellogg Campus and counselors from six visited the San Luis Obispo Campus.

The Kellogg Campus held an Engineering Counselor Day which was attended by 35 high school staff members. The annual Campus Day at the Kellogg Campus drew an attendance of some 600 counselors and prospective students. Campus Day at the San Luis Obispo Campus was attended by 117 students, parents and school officials representing 20 high schools.

Representatives of the Kellogg Campus made visits to nine junior colleges during which they contacted 21 staff members. San Luis Obispo Campus representatives visited six junior colleges.

# San Luis Obispo Campus

## INSTRUCTION

Developments in instruction at the San Luis Obispo Campus were highlighted during the year by introduction of three new major curricula, reactivation of another such curriculum, and an intense evaluation of the instructional programs in agriculture in terms of meeting the needs of a changing agriculture.

### *Agriculture Division*

As a result of the evaluation, the Agriculture Division revised many of its curricula to bring into sharper focus management, business and economic aspects of agriculture.

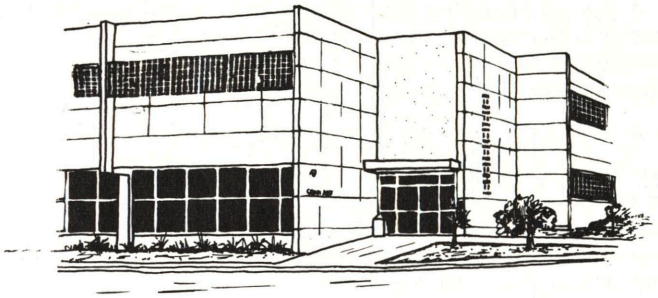
Student enterprise activities in agriculture maintained by the California State Polytechnic College Foundation as a supplement to the instructional program were carried on by 746 students. Active projects numbered 380 in which student earnings were $38,629.25. The projects were in dairy, beef, swine, sheep, horses, poultry, crops, ornamental horticulture, and food processing and integrated programs. The largest student earnings were for the 38 projects in dairy from which students received $21,716.56.

### *Engineering Division*

The Engineering Division added a major in architecture and changed the name of the Architectural Engineering Department to Architecture and Architectural Engineering Department. Graduates in the new major will receive the degree of Bachelor of Architecture.

Industry support in funds and equipment totaled $74,550 during the year. The major gift, made to the Electrical Engineering Department, was a Burroughs 205 computer from the General Electric Company and accessory equipment from the Burroughs Corporation valued at $50,000.

Other industry gifts were: cooling tower, Baltimore Air Coil Company $750; Arkla gas absorption air conditioning unit, Natural Gas Bureau $6,000; supplies for architecture projects from several donors $2,000; variable air flo meters, Fischer and Porter Company $700; target drone vehicle, Lockheed Missile and Space Company $500; Ford 352 test engine, Ford Motor Company $350; Cummins



Diesel engine, Cummins Service and Sales $900, equipment and supplies, General Fireproofing Company $900, Linda Plasmarc welding surfacer, Stoody Company $9,000, Continental Can Company $500, metal sculpture mural depicting the history of the air conditioning industry $750.

Much effort was expended by the Engineering Division during the year to increase its contributions to meeting student needs. A "Workship" program which corresponds to a fellowship arrangement at the undergraduate level was successfully implemented. The work of the student advisory system was emphasized and referral of complex problems to the Counseling Center was increased. Problems of junior college transfers were under intensive study and efforts made to optimize transfer credits for students. Vigorous attention was given to placement problems to offset cutbacks in defense spending—result: an excellent placement record in a problem period.

### *Applied Arts Division*

The year saw the reactivation of the major in English at San Luis Obispo and the development of a new curriculum in that department.

As a result of the changes in the law governing credentials, the Education Department during the year completely reorganized its offerings and the coordination of the professional instruction with the majors and minors of other departments of the College. A new credential program was developed for both elementary and secondary credentials and the Education Department has been operating on the basis of this plan pending final approval from the Chancellor's Office and the State Board of Education.

A year of curriculum development has resulted in revision of old courses to meet the new credential requirements. The year has been the first of two required to phase out the old program. Some education courses have been dropped.

The Applied Arts Division sponsored meetings of nine off-campus groups, the Education Department being the leader in this activity. The Education Department was host to the California Elementary School Administrators Workshop, a meeting of the Elementary School Sciences Association from Northern California which attracted 500 participants, and a State Department of Education two-day meeting on School Component System Development. The Physical Education Department had its annual two-week workshops for men and women. Other off-campus groups included a Real Estate Teachers Workshop, a Conference of Homemaking Teachers in the Central Coast Region and a high school Yearbook Conference attended by 125 yearbook staff members and advisors.

### *Applied Sciences Division*

The Physical Sciences Department has been authorized to establish separate Bachelor of Science degrees with majors in physics and chemistry. In previous years chemistry and physics have been offered as options rather than curricula. The former agricultural chemistry curriculum in the department has been redesignated as biochemistry.

The Applied Sciences Division sponsored meetings of off-campus groups in the fields of arithmetic and physics. A two-week arithmetic workshop was sponsored by the Mathematics Department. A meeting of the American Association of Physics Teachers attended by 100 persons was sponsored by the Physical Sciences Department.

### *Library*

The Library's collection at the San Luis Obispo Campus was increased by 13,982 volumes making the total approximately 146,000 volumes. Significant improvement in the number and variety of periodicals received was achieved during the year. Addition of 190 periodical subscriptions made a total of 1,550 such subscriptions.

### *Instructional Materials Program*

Slidefilms, manuals and other teaching aids completed in 1963-64 brought to 50 the total of marketable teaching aids produced by the Instructional Materials Program at the San Luis Obispo Campus since it was put on an organized basis in 1957. The program evolved from Cal Poly's devotion to excellence in instruction and recognition of the need for materials which contribute to improved classroom teaching.

Cal Poly has tried especially to provide materials for more specialized areas of instruction, such as agriculture. The need in such areas is great because the commercial producers of instructional materials pass them by in favor of the greater volume markets available in other fields.

Through efforts of staff members the Instructional Materials Program has produced materials which are in use throughout California and the nation as well as on campus. Departments of vocational agriculture in secondary schools and junior colleges as well as other organizations have purchased many of these materials for use in their instructional programs. The high educational value of these materials plus the minimal costs of finished products have promoted wide distribution.

The program is operated on a non-profit basis with initial costs of producing materials used for Cal Poly instruction being paid from the State support budget. Costs of duplicating materials are charged to the Foundation IMP budget. As of February 29, 1964, a statement of operations shows that all materials produced have a market value of $29,599.50.

The 19 textbook depositories in the State and the State Curriculum Laboratory have a full set of all these instructional materials available to educators for review. Additionally, each supervisor of agricultural education has a set on file.

The Instructional Materials Program has expanded each year of its seven-year existence, with a high percentage of productions devoted to agriculture. However, plans have been made to move into areas of guidance and counseling, industrial education, business, and home economics to further emphasize vocational education. Interdisciplinary approaches to crops and biology are also

resulting in plans for new materials in agriculture with emphasis on science.

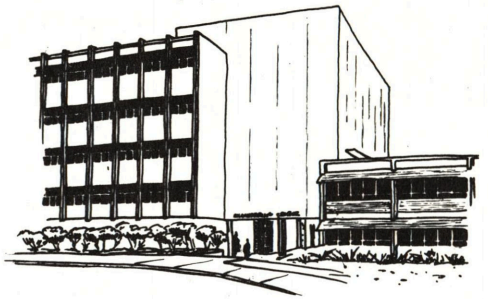
### *Computer Center*

To enable instruction to keep pace with the tremendous growth of commercial and industrial use of computers a computer center was organized formally during 1963-64. Administration of the center is the responsibility of a coordinator who reports directly to the Dean of the College.

The Center now contains a Bendix G-15 digital computer in addition to an IBM 1620. The College is anticipating the addition of a large Burroughs B-205 computer as soon as it is returned to operating condition by the students and staff of the Electrical Engineering Department. The main components of the B-205 were a gift to the College by the General Electric Company. Three additional pieces of auxiliary equipment were given to the College by the Burroughs Corporation which will make it possible for the B-205 to be added to the Center as a fully operating computer. It is anticipated that this third computer will be fully operational by the end of the 1964-65 academic year.

The primary purpose of the Computer Center is to enhance the College's instructional programs in engineering, agriculture, business, and the sciences. The center will provide means for modern, up-to-date instruction in the important and rapidly expanding field of electronic data processing. The Computer Center is also expected to assist in increasing the efficiency of handling administrative data and in the preparation of administrative reports.

Several seminars and workshops have been held on computer programming and operation of the computer center machines to give in-service training to faculty members who will be teaching the additional computer courses being started next fall. Illustrative of the increasing demand for instruction on computer programming and operation, each of the major departments in the Engineering Division will begin next fall a special computer course. These courses will provide specialized instruction for each department's majors concentrating on application of electronic data processing techniques to their fields of emphasis.



The San Luis Obispo Campus is currently cooperating with the Chancellor's staff in planning a new facility to house the Computer Center. The new building is being planned as an engineering and mathematics building and would also provide space for the College's present electronic tabulating equipment.

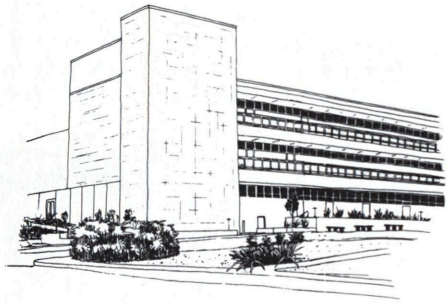
The tab equipment and computer will be closely related and administered to produce the maximum benefit to the total college program through joint administration and instructional use of both facilities. The new facility is being proposed for funding in the 1965-66 State budget for initial occupancy in 1968.

## PLACEMENT

Representatives of 258 employers recruited graduating seniors on campus making 3,884 student contacts. Had it not been for 158 interview schedules which were cancelled due to lack of student interest, more than 2,000 additional interviews could have been had by students.

Placement of graduates was essentially 100 per cent by graduation time and the year saw a sharp increase in teacher placement activity. By the end of the 1963-64 year 82 employers had reserved 163 interview dates for the 1964-65 recruitment year, an increase of 14 per cent over reservation requests at the corresponding date in the preceding year.

Although a full report of the starting salaries received by the June, 1964, graduates is not yet available, partial data on the engineering salaries indicates that they were higher than those received the preceding year. Average monthly salaries received by



1964 Cal Poly graduates in the various kinds of engineering were as follows:

Aeronautical engineering $628, air conditioning and refrigeration engineering $601, electrical engineering $639, electronic engineering $639, industrial engineering $623, mechanical engineering $629, metallurgical engineering $634.

The highest monthly salary offer reported this year was $745 in electronic engineering. For graduates of each of the other engineering departments the highest offers were at or near the $700 level.

## COUNSELING AND TESTING

Counseling and testing activities showed a great increase compared to those of the preceding year. A total of 1,419 students received individual counseling and an additional 1,250 had group counseling. A total of 13,114 tests was administered to 3,842 students. As in the case of counseling, this record almost doubled that of the preceding year.

## HEALTH CENTER

At the Health Center 17,190 students were seen by physicians. X-ray examinations numbered 3,288 and immunizations alone totalled 11,362. The infirmary at the Health Center admitted 531 and had 2,571 patient bed days during the year.

Following intensive inspection, the Health Center was accredited for three years by the Joint Commission of Hospital Accreditation representing the American Medical Association, American Hospital Association, American College of Surgeons, and the American College of Physicians. Such accreditation is available only to institutions with sufficient interest in quality patient care to devote the effort demanded by the Joint Commission specifications.

## FINANCIAL AID FOR STUDENTS

Scholarships at the San Luis Obispo Campus had a total value of $62,809 and were given to 173 students (Table IV). Loans arranged through the Dean of Students Office were made to 1,353 students for a total amount of $209,340. Of this, $134,837 was in 225 National Defense Education Act loans. The San Luis Obispo Business Office is now receiving approximately $1,000 per month in pay-backs on NDEA loans.

United Student Aid Fund loans, which are carried through banks, counted for $24,903 of the loan total. Long-term loans totaled 75 and were issued for a total of $14,600. Some 1,000 short-term emergency loans were made, the average loan being $35.

The San Luis Obispo Campus gave part-time on-campus employment to 2,116 students to whom it paid $790,053. This was an increase of more than $130,000 over the amount the College paid for student part-time labor the previous year. The Placement Office handled more than 1,000 requests for students to do part-time work, a 25 per cent increase over the number of the preceding year.

## INTERNATIONAL COMMITMENTS

The international commitments of the College, the result of its policy of cooperation at the San Luis Obispo Campus with the Agency for International Development of the United States Department of State, are on the increase.

In on-campus activity, 1963-64 was one of the busiest years the College has had in its 13 years of cooperation with A.I.D. and its predecessor agencies. Students from 21 countries were assigned to the San Luis Obispo Campus for at least one quarter of training. The number of individual students totaled 94. A.I.D. programs are fully subsidized by the federal government by contract with the State.

The A.I.D. students followed the trend of the last several years in that many were assigned to the College not only for specific

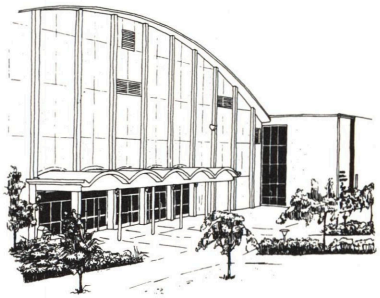
technical training objectives but also for a Bachelor of Science degree objective. A.I.D. students pursuing a B.S. degree major were distributed as follows by departments: agricultural business management 1, agricultural engineering 4, animal husbandry 8, agricultural journalism 1, crops 8, electrical engineering 2, mechanized agriculture 7, soils science 7.

Four A.I.D. students were studying to meet the Master of Arts degree requirements in agricultural education. In addition to technical training objectives, 10 students were authorized to take the two-year technical course in crops, animal husbandry, or mechanized agriculture.

In addition to the work with students enrolled with regular curricula, individual class and special training activities were scheduled for approximately 50 other students during the year. Field visitation tours were conducted to meet the needs of groups having basic common interests and training objectives.

As a result of the President's suggestion, a program of home and farm visitation was initiated. During December, 24 A.I.D. students lived with farm families in Kern County for eight days. Two groups of 20 each spent a long weekend in the Arvin area with individual families.

***Night View of College of Further Education at Lusaka, Northern Rhodesia.***



Real progress was made in establishing contacts for good home hospitality to be extended to A.I.D. students throughout the Central California Coast area. A climate is being developed in which the A.I.D. participant can meet and establish relationships with Americans. A.I.D. has urged that its students see and meet more Americans in the interest of good present and future international relations for the United States.

Two one-week seminars in communications were offered with the basic objective of preparing participants who will soon return to their homelands to communicate more effectively in their roles as teachers, extension supervisors, etc.

The major special training program begun during the year was the animal health and sanitation instruction program for the Congo-Niger-Burundi group. This program, which was begun in March, 1964, will be conducted until December.

### *Northern Rhodesia Project*

The first year of the project begun in Northern Rhodesia in April, 1963, under A.I.D. auspices has been a most successful one. Throughout the year the San Luis Obispo Campus has had a team of four instructors assisting in the educational program at the new College of Further Education in Lusaka.

From a small beginning, the College of Further Education has expanded its program in the areas of business, homemaking, physical education, and pre-engineering, for which Cal Poly is responsible in this project.

Generally felt to be the principal contribution made to date in the Northern Rhodesia program is the introduction of Cal Poly's educational philosophy into the work of the College of Further Education.

It is understood that the two-year contract under which this project was begun will be extended for an additional two years. The technical assistance areas to be involved have not been decided upon as yet, but probably will be similar to those in which the college is operating currently.

### *Argentina Project*

Under an agreement with A.I.D. a five-member team from San Luis Obispo completed a pre-contract survey of the agricultural program which is conducted under the jurisdiction of the Ministry of Agriculture in Argentina. The survey was made in the late summer of 1963. A final report, completed after the survey team had returned to the campus, was submitted to A.I.D. in Washington, and presently is under study. The report recommends a project for the improvement of agricultural education in Argentina, which it has been indicated may be implemented during the 1965 fiscal year.

## CAPITAL OUTLAY DEVELOPMENTS

The 1963-64 academic year was one of considerably less capital outlay activity than the several previous years. The capital outlay program for the San Luis Obispo Campus now appears to have settled to a uniform rate, at which projects totaling $2,000,000 a year can be expected.

The major accomplishment for this past year has been the start of construction for the new Administration Building. It is anticipated that this project, totaling $1,700,000 will be completed during the fall of 1964.

Several minor projects have also been completed during this past year, the most noticeable one being the extensive groundscape work around the new Engineering West Building. This development is significant in another way, since it is the implementation of the approved master plan tenet of a "walking campus." This design precept will eventually restrict the use of all roads within the outer perimeter road to pedestrian traffic only.

The first phase of our current parking program was completed in early spring. It provided for the rehabilitation of the temporary parking lot constructed with the original five Mountain Residence Halls. The rehabilitation of this lot now brings it up to standard with the other residence hall lots.

Two most significant among other minor projects are a domestic sewer line, connecting the campus to the city sewer system and installation of the second phase of the on-campus Whale Rock irrigation distribution system, which will permit the use of Whale Rock water for irrigation purposes.

# Kellogg Campus

## INSTRUCTION

The year's work in instruction was characterized by careful re-examination and refinement of curricula and courses with special attention to development of additional areas of specialization within the College's major curricula.

### *Agriculture*

Three interdisciplinary option programs, one of which may be elected with any agricultural major, have been made available for the next college year. They are offered in recognition of continuing technological advancement in all areas of employment in agriculture and will enable agriculture majors to add greater depth to their courses of study. The options included are 30-unit concentrations in agrophysics, biochemistry, and biometrics.

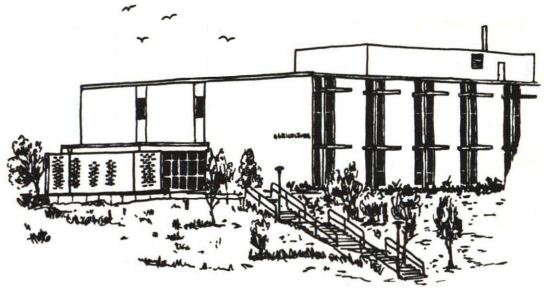
To strengthen the soil science aspects of the Agronomy Department, the soils and agronomy curricula have been combined into a single department. Options in both crops and soils are available to the students. The Ornamental Horticulture Department has prepared to offer a 30-unit option in park administration beginning in the fall of 1964.

The Landscape Architecture Department now has a concentration in urban planning and is applying for approval to offer a full curriculum. The department was officially accredited by the American Society of Landscape Architects in August, 1963.

A total of 240 Kellogg students participated in the enterprise system sponsored by the California State Polytechnic College Foundation as an adjunct of the College's "learn-by-doing" method of instruction. These students engaged in 99 projects in which their share of the profits was $4,165.90.

Swine projects with a total of 25 were the most numerous. Sheep projects were next in popularity with 24. Other types of projects and the number of each follow: beef 18, agronomy 11, ornamental horticulture 7, poultry 5, fruit 4, photography 2, printing 1, horse 1.

Projects in poultry although relatively few in number returned the largest share of profits to the students who received $2,061.88



from them. Next most profitable to their student operators were the agronomy projects which returned $1,162.55.

Under auspices of the Agriculture Division, 28 Sunday Arabian horse shows were offered which were attended by a total of 23,381 persons.

### *Engineering*

A work-study program was added during the year for industrial engineering students in the manufacturing areas of General Dynamics of Pomona. Approval for the offering of a major in chemical engineering beginning fall of 1965 was obtained. Substantial new scholarship aid for students was provided by the Western Electronic Educational Fund, the Foundry Educational Foundation and the Western Electric Company.

The Aerospace Engineering Department carried out the college philosophy in outstanding style in the competitive design and construction of two rocket sleds. Students supplied construction and design know-how to nozzles, electronic timing and automatic braking for the sleds.

The sophomore design class also competed in the design of two cargo planes. A complete preliminary design and proposals were presented to industry supervisors and leaders from Boeing, Douglas, Lockheed, and the Air Force.

### *Arts and Sciences Division*

To make possible more specific occupational preparation for students within already existing curricula the Arts and Sciences

Division planned during the year a number of options or sub-curricular patterns of not less than 30 quarter units. These will be available for the first time in the Fall of 1964. The Business Management curriculum will include four, the Biological Science curriculum four, the Physical Sciences curriculum three, the Social Science curriculum three.

### *Computer Center*

A Computer Center was established as a campus-wide facility for use by students and faculty from all departments. A computer committee, on which all divisions of the College are represented, supervises the operation of the Computer Center through its chairman.

To make maximum use of the computer as quickly as possible, a training and service program was instigated for both the students and staff members. The Mathematics Department offered six sections of a one-unit course, Math 221, where the basic ideas of programming were taught using the Fortran technique. This course was also offered during the Winter and Spring Quarters with four sections given each quarter. Throughout the year 370 students took this course.

The Mechanical Engineering Department incorporated the basic instruction in programming using Fortran in its freshman course. Approximately 80 students learned to write programs for the computer by this means. The Mathematics Department offered one section of Math 304, where the machine language technique of programming was emphasized. In addition, students in business were taught how to program the computer in a data processing class. To encourage the use of the computer by staff members, two special inservice courses were taught.

The equipment consists of an IBM 1620 system with auxiliary punch card equipment. During the year, 5,014 programs were processed by the Computer Center for 17 departments of the College.

### *Library*

The Library at the Kellogg Campus added more than 10,000 books during the year bringing its total to 38,563 volumes. More than 2,100 bound volumes of periodicals also were added and 184 reels of microfilm. Its total of documents now stands at 16,872.

## PLACEMENT

On-campus interviews by employers reached a new high this year and, based on fragmentary returns, average salaries offered to 1964 graduates represented an increase over those of the preceding year.

To the Kellogg Campus, 135 companies sent recruiting representatives who had 240 interviewing schedules and met 83 per cent more seniors than were interviewed last year. By June, 1964, firms had confirmed 110 recruiting dates for the college year 1964-65. The space industries again led in seeking the engineering

***Students at Work in Computer Center, Kellogg Campus.***

graduates and the demand for graduates in the agriculture field is greater than the supply.

A partial report on salaries offered to June, 1964, graduates found the mean of salaries offered to civil engineering graduates to be the highest in any category. It was $770 monthly. Next highest mean was electronic engineering with $657. The highest salary offer also went to a civil engineer at $890 a month.

The means of monthly salaries offered in other occupations were: aero-space engineering $627, industrial engineering $625, mechanical engineering $613, agricultural business management $499, agronomy $475, animal husbandry $450, fruit industries $390, landscape architecture $510, biological sciences $548, mathematics $527, physical education $506, social sciences $547, accountancy $530, business administration $540, marketing $515.

## COUNSELING AND TESTING

Counseling cases increased during the year at a slightly greater rate than the increase in enrollment. The Counseling Center staff handled 3,052 such cases during the year. The total of tests given was 4,282 of which 3,171 were admissions tests given for aptitude and for placement in math, English and chemistry.

## HEALTH CENTER

The student Health Center received 11,648 visits from 3,810 students. In 8,941 of these cases the students were seen by physicians. X-ray examinations alone totaled 2,367.

## FINANCIAL AID FOR STUDENTS

Twenty-eight scholarships, of which 18 were in the Agriculture Division, were awarded by the College to students at the Kellogg Campus (Table IV-B). In addition, 11 students received California State Scholarships and another 85 students scholarships from off-campus agencies.

Loans were made to 1,200 students and involved $126,707 at the Kellogg Campus. Loans from college funds totaled more than $50,000 and the average loan was for $50. The National Defense Student Loan program provided $76,707 for 210 students. In the ten-year history of the student loan program at the Kellogg Campus, less than 1 per cent of the total amount borrowed is delinquent.

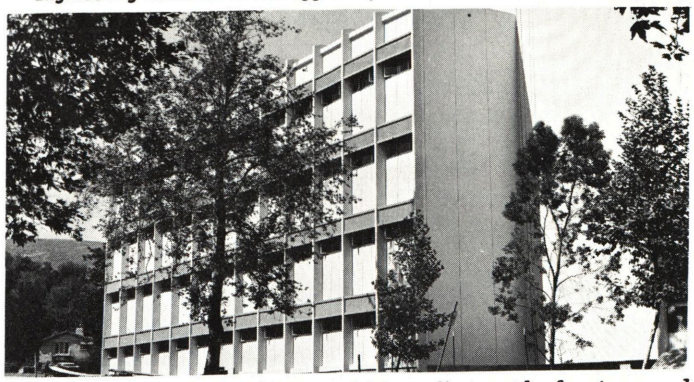
Some 250 students were paid $67,061.77 for part-time on-campus work by the College. The Placement Office handled 1,866 off-campus part-time job orders.

## CAPITAL OUTLAY DEVELOPMENTS

The 1963-64 academic year saw the completion of the 2.4 million dollar Music-Speech-Drama facility at the Kellogg Campus. This building was first put to use in March of 1964. Another project completed in the 1963-64 academic year is the swimming pool complex. These pools provide for basic swimming instruction, life saving, diving instruction and intercollegiate competition both in swimming and diving.

The working drawings for the Men's Gymnasium were completed during this academic year. The Gymnasium will have a 3,000 seat main basketball court and will also provide for instruction in volleyball, badminton, and tennis. Also as a part of the gymnasium project are rooms for wrestling, adaptive physical education, and elementary physical education.

***Engineering Addition at Kellogg Campus in Final Construction Stages.***



The Engineering Addition which will provide for increased enrollments in Aerospace Engineering, Civil Engineering, Electronic Engineering, Industrial Engineering, and Mechanical Engineering will be completed early in the Fall Quarter of the 1964-65 academic year. This four building complex, costing in the neighborhood of 5.5 million dollars for construction, will provide for advanced laboratory experiences for all the engineering students at the Kellogg Campus.

# Educational Center

While conferences, seminars, institutes, workshops and similar experiences are to be found at all of the College's campuses, this type of continuing education is particularly concentrated at the Educational Center, to which the Voorhis Campus, in Los Angeles County, is now largely devoted. Here, throughout the year, short-term programs involve groups from business, industry, government. education, community organizations, etc., and more than 90 per cent are in-resident.

During 1963-64, the total of these Center programs passed 165 and represented participation of more than 20,000 person-days.

Some 43 per cent of the conferences have comprised groups from business and industry; 13 per cent were from government at levels ranging from local through national; 19 per cent were from various educational areas; and 25 per cent came from community groups of volunteer and similar nature.

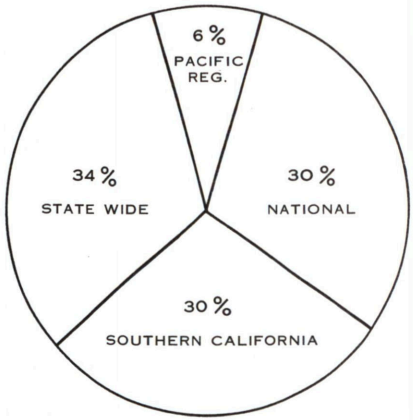
Reflecting a continuation of certain special programming interests, the Center this past year brought to the West Coast two more long-time significant conferences hitherto held only in the East or Mid-West. It also gave special assistance to four more conference groups engaging in their first in-residence conference experiences under educational auspices.

An interesting new development during 1963-64 was discovery of the Center's effectiveness as a neutral ground for the discussion of controversial issues by contending groups brought from local or regional scenes to an in-resident educational setting. Successes shaped by this type of program in the past year point to possibly more and more significant work to be done in this regard, not only by Cal Poly but by other educational centers.

Steps were also begun for the establishment under faculty auspices of a continuing inventory of faculty and staff backgrounds especially valuable to various phases of continuation education.

Conversion of two smaller conference rooms into one larger facility with a stage made it possible for the Center to accommodate for the first time two groups, each approximately 100 in size.

**GEOGRAPHIC AREAS OF ATTENDANCE AT EDUCATIONAL CENTER 1963-64**




Southern California's mounting population and the consequent socio-economic pressures continue to dramatize the key role of the 157-acre Educational Center in the future of the State. Within five miles of the geographic center between Santa Barbara and San Diego, and representing a parent college traditionally close to the practicing needs of its instructional fields, Cal Poly's Educational Center programming increased some 120 per cent more than in the preceding year, as an indication of needs to be met and filled.

## Table I-A. ENROLLMENT OF TOTAL STUDENTS BY MAJOR
### San Luis Obispo Campus, Fall 1956 — Fall 1963

| Major | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---|---|---|---|---|---|---|---|
| **Agriculture** | | | | | | | | |
| Ag. Bus. Mgmt. | — | — | — | 23 | 77 | 133 | 182 | 225 |
| Ag. Ed. | 21 | 13 | 17 | 19 | 23 | 22 | 22 | 17 |
| Ag. Engr. | 144 | 125 | 122 | 109 | 102 | 100 | 91 | 87 |
| Mech. Ag. | 134 | 120 | 132 | 116 | 113 | 95 | 102 | 107 |
| Animal Husb. | 410 | 340 | 300 | 357 | 364 | 410 | 437 | 446 |
| Crops | 102 | 99 | 96 | 95 | 110 | 100 | 109 | 130 |
| Fruit Prod. | 16 | 20 | 22 | 32 | 30 | 40 | 40 | 39 |
| Dairy Husb. | 71 | 61 | 58 | 65 | 64 | 60 | 63 | 67 |
| Dairy Mfg. | 37 | 25 | 26 | 32 | 32 | 37 | 37 | 28 |
| Farm Mgmt. | 38 | 61 | 100 | 118 | 126 | 114 | 133 | 135 |
| Food Proc. | — | — | — | 3 | 4 | 19 | 21 | 29 |
| Orn. Hort. | 54 | 55 | 43 | 46 | 66 | 71 | 81 | 98 |
| Poultry Ind. | 57 | 39 | 35 | 42 | 43 | 39 | 32 | 40 |
| Soil Science | 89 | 81 | 66 | 68 | 76 | 73 | 68 | 65 |
| TOTALS 1/ | 1173 | 1039 | 1017 | 1125 | 1230 | 1313 | 1418 | 1513 |
| **Engineering** | | | | | | | | |
| Aeronautical | 277 | 267 | 250 | 242 | 185 | 175 | 180 | 202 |
| Air Cond. & Ref. | 121 | 99 | 82 | 88 | 79 | 73 | 85 | 104 |
| Architectural | 270 | 285 | 307 | 315 | 356 | 356 | 461 | 554 |
| Electrical | 157 | 172 | 159 | 144 | 124 | 130 | 148 | 143 |
| Electronic | 628 | 705 | 573 | 550 | 503 | 491 | 496 | 516 |
| Industrial | 69 | 97 | 103 | 97 | 102 | 104 | 112 | 101 |
| Mechanical | 485 | 555 | 506 | 444 | 415 | 350 | 375 | 395 |
| Weld. & Met. | — | — | — | 16 | 29 | 40 | 41 | 45 |
| TOTALS | 2007 | 2180 | 1980 | 1896 | 1793 | 1719 | 1898 | 2060 |
| **Applied Arts** | | | | | | | | |
| Business | — | — | — | 55 | 167 | 204 | 293 | 331 |
| Educ., Elem. | 77 | 120 | 178 | 217 | 350 | 430 | 513 | 323 |
| Educ., Sec. | 31 | 27 | 98 | 64 | 47 | 98 | 154 | 252 |
| English | 7 | 17 | 31 | 37 | 20 | 4 | 1 | 76 |
| Home Ec. | 36 | 64 | 87 | 97 | 174 | 237 | 311 | 336 |
| Physical Ed. | 72 | 97 | 135 | 160 | 142 | 151 | 141 | 146 |
| Printing | 112 | 109 | 106 | 95 | 107 | 107 | 110 | 133 |
| Tech. Arts | — | — | 31 | 77 | 102 | 105 | 131 | 131 |
| Tech. Journ. | 37 | 48 | 52 | 33 | 55 | 73 | 69 | 72 |
| TOTALS | 372 | 482 | 718 | 835 | 1164 | 1409 | 1723 | 1800 |
| **Applied Sciences** | | | | | | | | |
| Biological Sci. | 58 | 72 | 85 | 93 | 143 | 165 | 201 | 242 |
| Mathematics | 53 | 89 | 131 | 140 | 152 | 175 | 181 | 200 |
| Physical Sci. | 18 | 29 | 47 | 53 | 57 | 56 | 71 | 62 |
| Ag. Chem. | 7 | 15 | 15 | 22 | 22 | 27 | 17 | 19 |
| Social Sci. | 79 | 102 | 105 | 131 | 138 | 230 | 259 | 393 |
| TOTALS | 215 | 307 | 383 | 439 | 512 | 653 | 729 | 916 |
| Unknown | 23 | 103 | 84 | 182 | 14 | 7 | 33 | 21 |
| **Campus Totals** | 3790 | 4111 | 4182 | 4477 | 4713 | 5101 | 5801 | 6310 |
| 1/Ag. Techs included | (192) | (197) | (173) | (256) | (214) | (252) | (285) | (380) |

## Table I-B. ENROLLMENT OF TOTAL STUDENTS BY MAJOR
### Kellogg Campus, Fall 1956 — Fall 1963

| Major | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---|---|---|---|---|---|---|---|
| **Agriculture** | | | | | | | | |
| Ag. Bus. Mgmt. | 28 | 87 | 87 | 86 | 107 | 97 | 102 | 117 |
| Agronomy | 98 | 73 | 75 | 60 | 61 | 60 | 55 | 51 |
| Animal Husb. | 111 | 95 | 127 | 104 | 128 | 133 | 130 | 160 |
| Fruit Ind. | 37 | 39 | 35 | 46 | 40 | 37 | 35 | 39 |
| Land. Arch. | — | 149 | 120 | 141 | 140 | 182 | 191 | 206 |
| Orn. Hort. | 120 | 42 | 56 | 64 | 63 | 71 | 76 | 78 |
| Service & Insp. | 67 | 48 | 36 | 32 | 38 | 39 | 42 | 42 |
| Soil Science 1/ | 43 | 10 | 13 | 8 | 9 | 5 | 5 | 8 |
| TOTALS | 504 | 543 | 549 | 541 | 586 | 624 | 636 | 701 |
| **Engineering** | | | | | | | | |
| Aerospace | — | 23 | 42 | 80 | 91 | 79 | 113 | 167 |
| Civil | — | — | — | — | — | 73 | 120 | 169 |
| Electronic | — | 115 | 133 | 374 | 525 | 498 | 576 | 623 |
| Industrial | — | 26 | 41 | 66 | 81 | 76 | 77 | 87 |
| Mechanical | — | 52 | 116 | 165 | 237 | 262 | 276 | 269 |
| TOTALS | — | 216 | 432 | 685 | 934 | 988 | 1162 | 1315 |
| **Arts & Sciences** | | | | | | | | |
| Accountancy | — | — | 12 | 32 | 57 | 95 | 133 | 159 |
| Bus. Adm. | — | — | 66 | 123 | 209 | 339 | 408 | 408 |
| Marketing | — | — | 4 | 19 | 29 | 28 | 28 | 36 |
| Biological Sci. | — | 20 | 25 | 55 | 71 | 118 | 177 | 196 |
| Educ., Elem. | — | — | — | — | — | — | 197 | 237 |
| Educ., Sec. | — | — | — | — | 5 | 20 | 22 | 21 |
| Language Arts | — | — | 10 | 11 | 11 | 4 | 47 | 94 |
| Mathematics | — | — | 19 | 50 | 74 | 99 | 121 | 142 |
| Physical Ed. | — | 19 | 57 | 80 | 102 | 125 | 153 | 168 |
| Physical Sci. | — | — | 14 | 31 | 44 | 46 | 57 | 73 |
| Social Sci. | — | — | 21 | 35 | 92 | 263 | 273 | 319 |
| TOTALS | — | 39 | 228 | 436 | 694 | 1137 | 1616 | 1853 |
| **Campus Totals** | 504 | 798 | 1209 | 1662 | 2214 | 2749 | 3414 | 3869 |

1/ Lower-division only.

## Table II-A. TRENDS IN ENROLLMENT BY CLASS LEVEL, BY ENROLLMENT STATUS, AND BY SEX
### San Luis Obispo Campus, Fall 1957 — Fall 1963

| Year (Fall) | Full-Time Students by Class Level: Fresh. | Soph. | Lower Division | Junior | Senior | Under-Grads. | Percent Full-Time Lower Div. | Grads. |
|---|---|---|---|---|---|---|---|---|
| 1957 | 1089 | 1008 | 2097 | 872 | 824 | 3793 | 55.3 | — |
| 1958 | 1426 | 1118 | 2544 | 763 | 432 | 3739 | 68.0 | — |
| 1959 | 1219 | 1310 | 2529 | 938 | 425 | 3892 | 65.0 | — |
| 1960 | 1376 | 1271 | 2647 | 946 | 590 | 4183 | 63.3 | 32 |
| 1961 | 1654 | 1285 | 2939 | 891 | 704 | 4534 | 64.8 | 39 |
| 1962 | 1769 | 1542 | 3311 | 948 | 769 | 5028 | 65.8 | 50 |
| 1963 | 1824 | 1655 | 3479 | 1146 | 842 | 5467 | 63.6 | 70 |

## Table II-A (1)

| Year (Fall) | Enrollment Status: Regular Students | Limited Students | Total Enroll | Percent Limited |
|---|---|---|---|---|
| 1957 | 3946 | 165 | 4111 | 4.0 |
| 1958 | 3938 | 244 | 4182 | 5.8 |
| 1959 | 4210 | 267 | 4477 | 6.0 |
| 1960 | 4497 | 216 | 4713 | 4.6 |
| 1961 | 4838 | 263 | 5101 | 5.2 |
| 1962 | 5462 | 339 | 5801 | 5.8 |
| 1963 | 5908 | 402 | 6310 | 6.4 |

## Table II-A (2)

| Year (Fall) | Enrollment by Sex: Men | Women | Total Enroll | Percent Women |
|---|---|---|---|---|
| 1957 | 3651 | 460 | 4111 | 11.2 |
| 1958 | 3684 | 498 | 4182 | 11.9 |
| 1959 | 3827 | 650 | 4477 | 14.5 |
| 1960 | 3886 | 827 | 4713 | 17.5 |
| 1961 | 3999 | 1102 | 5101 | 21.6 |
| 1962 | 4386 | 1415 | 5801 | 24.4 |
| 1963 | 4778 | 1532 | 6310 | 24.3 |

## Table II-B. TRENDS IN ENROLLMENT BY CLASS LEVEL, BY ENROLLMENT STATUS, AND BY SEX

### Kellogg Campus, Fall 1957 — Fall 1963

| Year (Fall) | Full-Time Students by Class Level: Fresh. | Soph. | Lower Division | Junior | Senior | Under-Grads. | Percent Lower Div. | Full-Time Grads. |
|---|---|---|---|---|---|---|---|---|
| 1957 | 301 | 166 | 467 | 146 | 114 | 727 | 64.2 | — |
| 1958 | 477 | 410 | 887 | 146 | 64 | 1097 | 80.8 | — |
| 1959 | 610 | 533 | 1143 | 262 | 82 | 1487 | 76.9 | — |
| 1960 | 637 | 625 | 1262 | 332 | 323 | 1917 | 65.8 | 4 |
| 1961 | 969 | 908 | 1877 | 447 | 74 | 2398 | 78.3 | 12 |
| 1962 | 1454 | 763 | 2217 | 588 | 148 | 2953 | 75.1 | 10 |
| 1963 | 1494 | 858 | 2352 | 654 | 302 | 3308 | 71.1 | 8 |

## Table II-B (1)

| Year (Fall) | Enrollment Status: Regular Students | Limited Students | Total Enroll | Percent Limited |
|---|---|---|---|---|
| 1957 | 754 | 44 | 798 | 5.5 |
| 1958 | 1185 | 24 | 1209 | 2.0 |
| 1959 | 1635 | 27 | 1662 | 1.6 |
| 1960 | 2153 | 61 | 2214 | 2.8 |
| 1961 | 2641 | 108 | 2749 | 3.9 |
| 1962 | 3285 | 129 | 3414 | 3.8 |
| 1963 | 3688 | 181 | 3869 | 4.7 |

## Table II-B (2)

| Year (Fall) | Enrollment by Sex: Men | Women | Total Enroll | Percent Women |
|---|---|---|---|---|
| 1957 | 798 | — | 798 | — |
| 1958 | 1209 | — | 1209 | — |
| 1959 | 1662 | — | 1662 | — |
| 1960 | 2214 | — | 2214 | — |
| 1961 | 2428 | 321 | 2749 | 11.7 |
| 1962 | 2804 | 610 | 3414 | 17.9 |
| 1963 | 3095 | 774 | 3869 | 20.0 |

## Table IV-B. SCHOLARSHIPS

### Kellogg Campus, 1963-64

**Awards administered by College**

| Amount | Number |
|---|---|
| $100 or less | 15 |
| 101 - 200 | 9 |
| 201 - 300 | 3 |
| 301 - and more | 1 |
| TOTAL | 28 |

**Awards partially administered by College**

| Amount | Number |
|---|---|
| $ 99 or less | 14 |
| 100 - 149 | 16 |
| 150 - 199 | 3 |
| 200 - 249 | 5 |
| 250 - 349 | 8 |
| 350 - 499 | 3 |
| 500 - or more | 6 |
| TOTAL | 55 |

## Table III. COMPONENTS OF FALL ENROLLMENT: FIRST-TIME FRESHMEN, TRANSFERS, RETURNING, & CONTINUING STUDENTS

### By Campus, Fall 1960 — Fall 1963

| Campus and Enrollment Components | Fall 1960 No. | % | Fall 1961 No. | % | Fall 1962 No. | % | Fall 1963 No. | % |
|---|---|---|---|---|---|---|---|---|
| **San Luis Obispo Campus** | | | | | | | | |
| First-Time Freshmen | 1004 | 21.3 | 1094 | 21.4 | 1297 | 22.4 | 1258 | 19.9-1/ |
| Transfers | 730 | 15.5 | 756 | 14.8 | 791 | 13.6 | 959 | 15.2 |
| Returning Students | 227 | 4.8 | 152 | 3.0 | 157 | 2.7 | 194 | 3.1 |
| Continuing Students | 2752 | 58.4 | 3099 | 60.8 | 3556 | 61.3 | 3899 | 61.8 |
| Total Enrollment | 4713 | 100.0 | 5101 | 100.0 | 5801 | 100.0 | 6310 | 100.0 |
| **Kellogg Campus** | | | | | | | | |
| First-Time Freshmen | 434 | 19.6 | 629 | 22.9 | 777 | 22.8 | 742 | 19.2-1/ |
| Transfers | 530 | 23.9 | 606 | 22.0 | 659 | 19.3 | 661 | 17.1 |
| Returning Students | 82 | 3.7 | 82 | 3.0 | 107 | 3.1 | 128 | 3.3 |
| Continuing Students | 1168 | 52.8 | 1432 | 52.1 | 1871 | 54.8 | 2338 | 60.4 |
| Total Enrollment | 2214 | 100.0 | 2749 | 100.0 | 3414 | 100.0 | 3869 | 100.0 |

1/ Change in freshman admission requirement to include 6 college prep recommending grades or the 30th percentile effective Fall 1963.

## Table IV-A. SCHOLARSHIPS

### San Luis Obispo, 1963-64

**Miscellaneous Awards (Not administered by College)**

| Amount | Number | Total |
|---|---|---|
| $ 25.00 | 1 | $ 25.00 |
| 50.00 | 9 | 450.00 |
| 75.00 | 1 | 75.00 |
| 100.00 | 28 | 2,800.00 |
| **Calif. State** | | |
| @ 111.00 | 33 | 3,663.00 |
| 150.00 | 5 | 750.00 |
| 200.00 | 14 | 2,800.00 |
| 250.00 | 14 | 3,500.00 |
| 300.00 | 11 | 3,300.00 |
| 350.00 | 3 | 1,050.00 |
| 400.00 | 9 | 3,600.00 |
| 500.00 | 14 | 7,000.00 |
| 600.00 | 3 | 1,800.00 |
| 750.00 | 2 | 1,500.00 |
| 1,000.00 | 3 | 3,000.00 |
| TOTAL | 122 | $35,313.00 |

**Awards administered by College**

| Amount | Number | Total |
|---|---|---|
| $ 50.00 | 2 | $ 100.00 |
| 100.00 | 11 | 1,100.00 |
| 150.00 | 8 | 1,200.00 |
| 200.00 | 3 | 600.00 |
| 250.00 | 13 | 3,250.00 |
| 270.00 | 32 | 8,640.00 |
| 300.00 | 17 | 5,100.00 |
| 350.00 | 2 | 700.00 |
| 400.00 | 5 | 2,000.00 |
| 500.00 | 79 | 39,500.00 |
| 600.00 | 1 | 600.00 |
| TOTAL | 173 | $62,790.00 |

**SCHOLARSHIP SUMMARY**

| | | |
|---|---|---|
| Cal Poly | 173 | $62,790.00 |
| Misc. | 122 | 35,313.00 |
| TOTAL | 295 | $98,103.00 |

## Table V-A. GEOGRAPHIC ORIGIN OF STUDENTS
### San Luis Obispo Campus, Fall 1963

| California Counties & Other Areas of Origin | 1963 No. | 1963 % | California Counties & Other Areas of Origin | 1963 No. | 1963 % |
|---|---|---|---|---|---|
| Alameda | 225 | 3.6 | Sacramento | 129 | 2.0 |
| Amador | 2 | — | San Benito | 14 | 0.2 |
| Butte | 20 | 0.3 | San Bernardino | 108 | 1.7 |
| Calaveras | 4 | 0.1 | San Diego | 116 | 1.8 |
| Colusa | 8 | 0.1 | San Francisco | 81 | 1.3 |
| Contra Costa | 204 | 3.2 | San Joaquin | 81 | 1.3 |
| Del Norte | 1 | — | San Luis Obispo | 849 | 13.4 |
| El Dorado | 7 | 0.1 | San Mateo | 192 | 3.0 |
| Fresno | 98 | 1.6 | Santa Barbara | 437 | 6.9 |
| Glenn | 10 | 0.2 | Santa Clara | 241 | 3.8 |
| Humboldt | 32 | 0.5 | Santa Cruz | 46 | 0.7 |
| Imperial | 25 | 0.4 | Shasta | 21 | 0.3 |
| Inyo | 207 | 3.3 | Sierra | 2 | — |
| Kern | 207 | 3.3 | Siskiyou | 16 | 0.2 |
| Kings | 47 | 0.7 | Solano | 64 | 1.0 |
| Lake | 4 | 0.1 | Sonoma | 42 | 0.7 |
| Lassen | 10 | 0.2 | Stanislaus | 83 | 1.3 |
| Los Angeles | 1117 | 17.7 | Sutter | 12 | 0.2 |
| Madera | 36 | 0.6 | Tehama | 3 | — |
| Marin | 74 | 1.2 | Trinity | 0 | — |
| Mariposa | 3 | — | Tulare | 93 | 1.5 |
| Mendocino | 27 | 0.4 | Tuolumne | 6 | 0.1 |
| Merced | 53 | 0.8 | Ventura | 135 | 2.1 |
| Modoc | 4 | 0.1 | Yolo | 27 | 0.4 |
| Mono | 3 | — | Yuba | 4 | 0.1 |
| Monterey | 171 | 2.7 | | | |
| Napa | 28 | 0.4 | Total California | 5543 | 87.8 |
| Nevada | 7 | 0.1 | | | |
| Orange | 179 | 2.8 | Other States | 350 | 5.5 |
| Placer | 22 | 0.3 | U. S. Territories | 4 | 0.1 |
| Plumas | 5 | 0.1 | Foreign Countries | 413 | 6.5 |
| Riverside | 86 | 1.4 | **Total Enrollment** | 6310 | 100.0 |

## Table V-B. GEOGRAPHIC ORIGIN OF STUDENTS
### Kellogg Campus, Fall 1963

| California Counties & Other Areas of Origin | 1963 No. | 1963 % | California Counties & Other Areas of Origin | 1963 No. | 1963 % |
|---|---|---|---|---|---|
| Alameda | 7 | 0.2 | San Mateo | 12 | 0.3 |
| Contra Costa | 8 | 0.2 | Santa Barbara | 13 | 0.3 |
| Fresno | 7 | 0.2 | Santa Clara | 5 | 0.1 |
| Imperial | 36 | 0.9 | Solano | 2 | — |
| Inyo | 1 | — | Sonoma | 3 | 0.1 |
| Kern | 8 | 0.2 | Stanislaus | 4 | 0.1 |
| Los Angeles | 2375 | 61.3 | Tulare | 9 | 0.2 |
| Monterey | 4 | 0.1 | Ventura | 25 | 0.6 |
| Napa | 1 | — | | | |
| Orange | 243 | 6.3 | All Other Counties | 15 | 0.4 |
| Riverside | 210 | 5.4 | | | |
| Sacramento | 9 | 0.2 | Total California | 3624 | 93.5 |
| San Bernardino | 529 | 13.6 | | | |
| San Diego | 76 | 2.0 | Other States | 71 | 1.8 |
| San Francisco | 6 | 0.2 | U. S. Territories | 1 | — |
| San Joaquin | 9 | 0.2 | Foreign Countries | 173 | 4.5 |
| San Luis Obispo | 7 | 0.2 | **Total Enrollment** | 3869 | 100.0 |

## Table VI-A. BACHELOR'S DEGREES BY MAJOR, AND TOTAL MASTER'S DEGREES
### San Luis Obispo Campus, 1956-57 to 1963-64

| Major | 56-57 | 57-58 | 58-59 | 59-60 | 60-61 | 61-62 | 62-63 | 63-64 |
|---|---|---|---|---|---|---|---|---|
| **Agriculture** | | | | | | | | |
| Ag. Bus. Mgmt. | — | — | — | — | — | 14 | 19 | 22 |
| Ag. Engr. | 22 | 17 | 24 | 10 | 16 | 20 | 17 | 11 |
| Mech. Ag. | 5 | 17 | 24 | 17 | 25 | 15 | 16 | 12 |
| Animal Husb. | 56 | 57 | 55 | 43 | 28 | 37 | 43 | 58 |
| Crops | 17 | 18 | 17 | 12 | 17 | 18 | 15 | 21 |
| Fruit Prod. | 3 | 2 | 1 | 7 | 6 | 1 | 5 | 10 |
| Dairy Husb. | 19 | 13 | 6 | 12 | 6 | 9 | 4 | 10 |
| Dairy Mfg. | 10 | 4 | 4 | 5 | 4 | 4 | 13 | 7 |
| Farm Mgmt. | — | 6 | 11 | 17 | 11 | 10 | 22 | 23 |
| Food Proc. | — | — | — | — | — | — | 3 | 5 |
| Orn. Hort. | 10 | 15 | 7 | 5 | 4 | 9 | 7 | 8 |
| Poultry Ind. | 10 | 7 | 8 | 7 | 8 | 7 | 3 | 6 |
| Soil Science | 12 | 26 | 17 | 19 | 12 | 19 | 12 | 13 |
| TOTALS 1/ | 164 | 182 | 174 | 154 | 137 | 163 | 179 | 206 |
| **Engineering** | | | | | | | | |
| Aeronautical | 46 | 34 | 53 | 53 | 38 | 40 | 25 | 31 |
| Air Cond. & Ref. | 22 | 28 | 26 | 18 | 18 | 14 | 17 | 12 |
| Architectural | 29 | 27 | 32 | 45 | 43 | 36 | 42 | 67 |
| Electrical | 27 | 29 | 29 | 30 | 25 | 17 | 26 | 21 |
| Electronic | 56 | 83 | 71 | 54 | 68 | 58 | 64 | 57 |
| Industrial | — | 14 | 21 | 15 | 16 | 23 | 13 | 26 |
| Mechanical | 63 | 111 | 140 | 111 | 112 | 77 | 68 | 73 |
| Weld. & Met. | — | — | — | — | — | 6 | 11 | 7 |
| TOTALS | 243 | 326 | 372 | 326 | 320 | 271 | 266 | 294 |
| **Applied Arts** | | | | | | | | |
| Business | — | — | — | — | 2 | 13 | 34 | 32 |
| Educ. Elem. | 10 | 31 | 41 | 29 | 39 | 61 | 63 | 72 |
| English | — | 1 | 4 | 9 | 15 | 1 | 1 | 0 |
| Home Ec. | — | — | 8 | 12 | 17 | 16 | 36 | 40 |
| Physical Ed. | 13 | 10 | 18 | 26 | 17 | 23 | 32 | 26 |
| Printing | 20 | 15 | 33 | 21 | 11 | 14 | 12 | 13 |
| Tech. Arts | — | — | — | 16 | 19 | 24 | 37 | 31 |
| Tech. Journ. | 3 | 9 | 11 | 1 | — | 6 | 10 | 10 |
| TOTALS | 46 | 66 | 115 | 114 | 120 | 158 | 225 | 224 |
| **Applied Sciences** | | | | | | | | |
| Biological Sci. | 16 | 9 | 14 | 14 | 12 | 15 | 19 | 26 |
| Mathematics | 23 | 44 | 61 | 70 | 49 | 48 | 53 | 61 |
| Physical Sci. | 2 | 4 | 20 | 8 | 14 | 14 | 12 | 10 |
| Ag. Chem. | — | 4 | 3 | 4 | 8 | 9 | 6 | 6 |
| Social Sci. | 8 | 20 | 16 | 16 | 17 | 12 | 16 | 29 |
| TOTALS | 49 | 81 | 114 | 112 | 100 | 98 | 106 | 132 |
| Totals (Bachelor's) | 502 | 655 | 775 | 706 | 677 | 690 | 776 | 856 |
| Master's (Sec. Ed.) | 31 | 40 | 41 | 51 | 65 | 53 | 66 | 70 |
| **Campus Totals** | 533 | 695 | 816 | 757 | 742 | 743 | 842 | 926 |
| 1/ Ag. Tech. Certificates not included above: | 23 | 20 | 25 | 30 | 21 | 14 | 35 | 47 |

## Table VI-B. BACHELOR'S DEGREES BY MAJOR

### Kellogg Campus, 1956-57 to 1963-64

| Major | 56-57 | 57-58 | 58-59 | 59-60 | 60-61 | 61-62 | 62-63 | 63-64 |
|---|---|---|---|---|---|---|---|---|
| **Agriculture** | | | | | | | | |
| Ag. Bus. Mgmt. | — | — | 11 | 16 | 21 | 10 | 11 | 18 |
| Agronomy | 12 | 11 | 25 | 11 | 8 | 14 | 5 | 9 |
| Animal Husb. | — | 9 | 16 | 12 | 12 | 16 | 13 | 21 |
| Fruit Ind. | 6 | 9 | 6 | 3 | 7 | 6 | 5 | 5 |
| Land. Arch. | — | 12 | 6 | 16 | 17 | 12 | 16 | 19 |
| Orn. Hort. | 20 | 9 | 15 | 13 | 13 | 8 | 10 | 15 |
| Service & Insp. | 16 | 18 | — | — | 5 | 7 | 9 | 5 |
| TOTALS | 54 | 68 | 79 | 71 | 83 | 73 | 69 | 92 |
| **Engineering** | | | | | | | | |
| Aerospace | — | — | — | — | 5 | 4 | 7 | 15 |
| Civil | — | — | — | — | — | — | — | 4 |
| Electronic | — | — | — | 4 | 30 | 39 | 69 | 69 |
| Industrial | — | — | — | 7 | 7 | 15 | 12 | 15 |
| Mechanical | — | — | — | 4 | 29 | 35 | 26 | 32 |
| TOTALS | — | — | — | 15 | 71 | 93 | 114 | 135 |
| **Arts and Sciences** | | | | | | | | |
| Accountancy | — | — | — | 4 | 8 | 9 | 22 | 31 |
| Bus. Adm. | — | — | — | 23 | 35 | 41 | 57 | 91 |
| Marketing | — | — | — | 1 | 4 | 9 | 7 | 11 |
| Biological Sci. | — | — | — | 9 | 7 | 12 | 16 | 24 |
| Educ., Elem. | — | — | — | — | — | — | — | 3 |
| Language Arts | — | — | — | — | 5 | 2 | 1 | 7 |
| Mathematics | — | — | — | 7 | 16 | 23 | 36 | 22 |
| Physical Ed. | — | — | — | 4 | 20 | 20 | 18 | 25 |
| Physical Sci. | — | — | — | 2 | 6 | 7 | 7 | 7 |
| Social Sci. | — | — | — | 7 | 9 | 15 | 20 | 25 |
| TOTALS | — | — | — | 57 | 110 | 138 | 184 | 246 |
| Totals (Bachelor's) | 54 | 68 | 79 | 143 | 264 | 304 | 367 | 473 |
| **Campus Totals** | 54 | 68 | 79 | 143 | 264 | 304 | 367 | 473 |

## Table VII. COMPARATIVE DISTRIBUTION OF UNDERGRADUATE MAJORS BY SUBJECT FIELD

### Cal Poly and all State Colleges, Fall 1962

| Subject Field | Kellogg Campus | | SLO Campus | | All State Colleges | |
|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % |
| Agriculture | 637 | 18.8 | 1,126 | 21.4 | 2,353 | 2.6 |
| Business | 569 | 16.8 | 293 | 5.6 | 11,914 | 13.0 |
| Creative Arts | — | — | — | — | 5,525 | 6.0 |
| Education | 84 | 2.5 | 466 | 8.9 | 15,204 | 16.6 |
| Engineering | 1,163 | 34.3 | 2,008 | 38.2 | 8,420 | 9.2 |
| Foreign Language | — | — | — | — | 1,169 | 1.3 |
| Health | — | — | — | — | 140 | 0.2 |
| Home Economics | — | — | 311 | 5.9 | 1,731 | 1.9 |
| Humanities | 58 | 1.7 | 70 | 1.3 | 5,098 | 5.6 |
| Industrial Arts | — | — | 131 | 2.5 | 1,870 | 2.0 |
| Library Science | — | — | — | — | 74 | 0.1 |
| Mathematics | 127 | 3.7 | 181 | 3.4 | 2,577 | 2.9 |
| Natural Resources | — | — | — | — | 486 | 0.5 |
| Nursing | — | — | — | — | 1,813 | 2.0 |
| Physical Education | 153 | 4.5 | 141 | 2.7 | 3,123 | 3.4 |
| Police Science | — | — | — | — | 746 | 0.8 |
| Psychology | — | — | — | — | 2,679 | 2.9 |
| Science | | | | | | |
| General | — | — | — | — | 57 | 0.1 |
| Life | 209 | 6.2 | 201 | 3.8 | 4,257 | 4.6 |
| Physical | 62 | 1.8 | 71 | 1.4 | 2,836 | 3.1 |
| Social Science | 330 | 9.7 | 259 | 4.9 | 11,206 | 12.2 |
| Undeclared | 1 | — | — | — | 8,196 | 9.0 |
| TOTALS | 3,393 | 100.0 | 5,258 | 100.0 | 91,474 | 100.0 |

Source: Table 17, Fall Three Weeks Statistical Report of the California State Colleges, 1962-63, Chancellor's Office, November 1963.

Note: The following proportions of total majors in all state colleges, in selected subject fields, were enrolled at Cal Poly (both campuses): Agriculture, 74.9%; Engineering, 37.7%; Home Economics, 18.0%; All Fields, 9.4%.

# California State Polytechnic College Annual Report 1963--1964