General requirements for bachelor's degrees are outlined in General Requirements - Bachelor's Degree (http://catalog.calpoly.edu/generalrequirementsbachelorsdegree/) and for master's degrees in Graduate Education (http://catalog.calpoly.edu/graduateeducation/). The specific requirements for a particular major degree program are listed under the academic department or program that offers the major.

The curriculum display for each bachelor's degree program shows courses arranged by Major, Support, General Education and Electives. These curriculum displays are useful guides, but students should consult with their academic advisors.

Information regarding academic advising is available on the Academic Advising (http://catalog.calpoly.edu/academicsupportandcampuslife/academicservicesandprograms/academicadvising/) page.

### Courses

Descriptions of Cal Poly courses are located in Courses A-Z (http://catalog.calpoly.edu/coursesaz/), arranged alphabetically by subject area with its corresponding course prefix (an abbreviation that represents the subject or offering department). The courses in a bachelor's degree curriculum are identified as Major Courses, Support Courses, General Education, and Electives.

**Major Courses** are designed to provide competence in the professional field in which a degree is earned. They are usually offered by the academic department in which the degree program is offered, but they may include courses from other departments.

**Approved Electives** are courses that students can choose from within the parameters set by their departments.

**Support Courses** provide background needed for major courses and are offered by departments other than the department in which the major is offered. For example, most majors in engineering and in the sciences require support courses in mathematics. Some degree programs do not include support courses.

**General Education (GE)** courses provide a common foundation of knowledge for all undergraduate programs. GE requirements are described in detail on the General Education (http://catalog.calpoly.edu/generalrequirementsbachelorsdegree/) page.

**Free Electives** are courses that students can choose simply to pursue their own interests.

**Prerequisites** are one or more courses that must be completed, or other knowledge, skills, or standards that must be demonstrated, before a student is permitted to take certain courses. Prerequisites (if any) for a course are listed in the course’s description in the catalog.

Some prerequisites have their own prerequisites, forming a string of courses that must all be taken. The catalog course description shows the last course in the prerequisite string of courses. For example, ME 212 Engineering Dynamics has prerequisites of MATH 241; and ME 211 or ARCE 211. MATH 241 Calculus IV requires MATH 143, which requires MATH 142, which requires MATH 141. ME 211 Engineering Statics requires MATH 241; and PHYS 141. To enroll in ME 212 Engineering Dynamics, students must have successfully completed MATH 241, MATH 143, MATH 142, MATH 141 and ME 211 or ARCE 211 and PHYS 141.

Statements in the catalog course descriptions may also contain the words "concurrent" which means that two or more courses must be taken in the same term or "corequisite" which means that the course or courses
may be taken prior to the course being described (prerequisite) or in the same term (concurrent).

If a student does not meet a requisite as outlined in a course's description, but can demonstrate to an instructor that they have the necessary knowledge or skills through alternative means, then the instructor may grant the student permission to enroll in the course.

**Crosslisted courses** are shared by two or more academic units and have identical titles, descriptions, units, modes of instruction and prerequisites. They are interchangeable for degree requirements. They cannot be repeated for degree credit under separate prefixes. Example: HNRS 141 / MATH 141 Calculus I.

**Selected Advanced Topics (470s)** are generic courses that offer special topics on an "as needed basis." The specific topic appears in the Schedule of Classes and on the students' transcripts.

**Topic courses** are shown in the catalog with generic titles and are repeatable with different topics. Specific topic titles appear in the Schedule of Classes and on students' transcripts. Example: ENGL 439 Topics in British Literature, repeatable to 12 units with different topics (e.g., Jane Austen, Victorian Poets, Hardy).

Other statements in the course descriptions include, “**major credit limit**” (total number of units allowed toward the major) and “**total credit limit**” (total number of units students can take for course credit).

### Course Numbering System

Courses are generally numbered according to the plan shown below.

- 010–099 Pre-baccalaureate courses that are not for degree credit.
- 100–299 Courses primarily for freshman and sophomore students.
- 300–399 Courses primarily for advanced undergraduate students with prerequisite coursework.
- 400–499 Courses for advanced undergraduates. Certain 400-level courses can be used in graduate programs. See General Policies (http://catalog.calpoly.edu/graduateeducation/#generalpolicies) for Graduate Education.
- 500–599 Graduate courses.

### Credit Hour

As of July 1, 2011 federal law (Title 34, Code of Federal Regulations, sections 600.2 and 600.4) requires all accredited institutions to comply with the federal definition of the credit hour. For all CSU degree programs and courses bearing academic credit, the "credit hour" is defined as "the amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practice, studio work, and other academic work leading to the award of credit hours."

A credit hour is assumed to be a 50-minute period. In courses in which "seat time" does not apply, a credit hour may be measured by an equivalent amount of work, as demonstrated by student achievement.

### Modes of Instruction

The mode of instruction is included in each course description; for supervision/independent study courses, no mode is indicated. Some courses have more than one mode of instruction.

#### Mode and number of hours classes meet each week

- **Activity:** 2 hours per unit of credit.
- **Laboratory:** 3 hours per unit of credit.
- **Lecture:** 1 hour per unit of credit.
- **Seminar:** 1 hour per unit of credit.
- **Supervision/Independent Study:** Courses involve independent work done by students under the guidance of the faculty and do not meet regularly in a classroom. 3 hours of independent study per week per unit of credit.

### Concentrations

A **concentration** is a group of courses designed to provide specialized knowledge within a bachelor's degree program. Completion of a concentration is noted on the student's transcript, but not shown on the diploma.

### Specializations

A **specialization** is a similarly specialized group of courses in a master's degree program. Completion of a specialization is noted on the student's transcript and shown on the diploma.

### Minors

A **minor** is an integrated, coherent group of courses designed to give a student knowledge in an academic area outside of the major field of study. The minor is completed along with the requirements for the bachelor’s degree. For more information and a list including available minors at Cal Poly, see Programs A-Z (http://catalog.calpoly.edu/programsaz/). Completion of a minor is noted on the student's transcript, but not shown on the diploma.

### Graduate Certificates

A **graduate certificate** is designed to provide a specialized area of study that meets the requirements for professional competence and to expand access to specialized knowledge. The subject matter is advanced and narrow in focus.

The programs are typically designed for working professionals who are seeking to advance their career opportunities by obtaining specialized knowledge in their field or in a new field. Completion of the graduate certificate program will be commemorated by a document bearing the University seal and signed by the program's college dean(s) and is noted on the student's transcript.

### Quarters and Quarter Units

Cal Poly's academic calendar consists of four quarters − Fall, Winter, Spring and Summer (see Academic Calendar (http://catalog.calpoly.edu/academiccalendar/)).

Cal Poly's **academic year** consists of Fall, Winter and Spring quarters.
The university year includes, and begins with, Summer quarter.

Each course offered by the University carries a value in quarter units, often referred to simply as units or credits.

To convert semester units to quarter units, multiply by 1.5. For example, 6 semester units X 1.5 = 9 quarter units.

Changes of Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University, by the chancellor or designee of the California State University, or by the president or designee of the campus. It is not possible in a publication of this size to include all of the rules, policies and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

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