

### **Business Building**

The college's educational philosophy follows the Cal Poly tradition—that of enlisting maximum student involvement in the learning process through case analysis, special projects, internships, computer simulations, and other learn-by-doing exercises.

The college has state-of-the-art computer facilities that have been ranked as among the best for faculty and students, and is the largest student computer lab in the CSU system.

*Photo by Jeff Goldberg/Esto Photographics*

College of  
*Business*

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# College of *Business*

**William C. Boynton, Dean**  
**Walter E. Rice, Associate Dean**  
**Ray M. Haynes, Director of Advancement**  
**Business Bldg. (03), Room 455**  
**805 756-2704**

<b><u>Area/Contact</u></b>	<b><u>Bachelor of Science Degrees:</u></b>
	Business Administration, BS
	<i>Concentrations:</i>
Accounting .....	Accounting
Associate Dean .....	Independent Course of Study
Finance .....	Financial Management
Global Strategy.....	International Business Management
and Law	
Management.....	Human Resource Management
	Management
	Management Information Systems
Marketing .....	Marketing Management
Economics .....	Economics, BS
	<i>Concentrations:</i>
	Business and Industrial Economics
	Independent Course of Study
	International Trade and
	Development
	Quantitative Economics
Industrial .....	Industrial Technology, BS
Technology	

<b><u>Area/Contact</u></b>	<b><u>Minors:</u></b>
Advising .....	Business
Center	
Economics .....	Economics
Industrial .....	Integrative Technology
Technology	Packaging

<b><u>Area/Contact</u></b>	<b><u>Graduate Programs:</u></b>
Graduate .....	Business Administration, MBA
Management	General MBA
Programs	Agribusiness Specialization
	Architectural Management Track
	Bachelor of Architecture, MBA
	Engineering Management
	MBA & MS Engineering
Industrial .....	Industrial and Technical Studies, MA
Technology	

The mission of the College of Business at Cal Poly is to create a dynamic educational environment, which inspires students to think effectively, take responsible action, and make a positive impact on business and society. We strive for excellence in teaching and in the development, refinement, application, and dissemination of knowledge.

### **Guiding Principles**

- Above all else, we base our actions upon their positive impact on the human condition.
- We act with integrity.
- We aim to continuously improve our understanding of the learning process in order to consistently provide educational programs of the highest quality.
- We are committed to the highest quality undergraduate program, while continually offering high quality graduate and other professional programs.
- We endeavor to develop life long competencies rather than mastery of specific information.
- We subscribe to the philosophy of learning by doing. "One must learn by doing the thing; for though you think you know it you have no certainty, until you try." (Sophocles, 445 B.C.)
- As a college in a polytechnic university, we seek to develop and use our special competencies in current and emerging technologies.
- We enrich our programs by drawing from and contributing to the sciences and the humanities.
- We encourage interdisciplinary teamwork and promote interaction among academia, business, industry, government, and society.
- We value individual strengths, creativity, and inventiveness and believe that individuals will contribute to the realization of our mission in different ways.
- We value service to students, the university, the community, and to academic and professional associations.

The BS degree program in Business Administration and the Master of Business Administration are accredited by the AACSB—The International Association for Management Education. The BS degree program in

Industrial Technology is accredited by the National Association of Industrial Technology (NAIT). The objective of accreditation is to foster high quality in educational programs.

The college is organized into eight areas: Accounting, Economics, Finance, Global Strategy and Law, Industrial Technology, Marketing, Management and Graduate Management Programs. This organizational structure allows for programs of study that blend broad-based knowledge of the functional disciplines of Business and Economics with an in-depth study of particular discipline(s).

The college's educational philosophy follows the Cal Poly tradition—that of enlisting maximum student involvement in the learning process through case analysis, special projects, internships, computer simulations and other learn-by-doing exercises. The college has state-of-the-art computer facilities which are available to students to meet their coursework needs. Educational programs are designed to help the student achieve maximum personal development, to prepare the student for entry into the business world, and to foster citizenship, leadership, and constructive community living. The curricula include general education requirements and specialized studies in the student's major field. Optional areas of concentration within each major enable the student to select the program most closely suited to the chosen career field.

### **Student Services Office**

**Jere Ramsey, Director**  
**Business Bldg., (03) Room 101**  
**805 756-1769**

The Student Services Office coordinates business student organizations, centralizes employment opportunities (co-op, internship, part-time), manages the Multicultural Business Center, counsels students with academic difficulties, organizes business student orientation programs, and provides tours for prospective students and their families.

### **Advising Center**

**Edwina Baltierra, Academic Adviser**  
**Business Bldg. (03), Room 100**  
**805 756-2601**

The College of Business Advising Center provides academic advising services to all majors within the College of Business in conjunction with each student's faculty adviser. The Advising Center is open five days a week, eight hours per day during the quarter.

Faculty advisers provide information on course content, career planning, and specific areas of the concentration. Students may also seek information concerning graduate

schools, co-ops, internships, and future jobs. Faculty advisers are assigned by the student's area office or by the student's concentration.

The Advising Center provides advice and clarification of university and college policies and procedures. Academic and administrative progress of all College of Business students is monitored within the Advising Center. Students who are interested in the Business, Economics, or Packaging minors are also assisted here. Most student-related forms (such as curriculum substitution forms, withdrawal forms, and change of major forms) are processed in the Advising Center. Advisers are available by appointment to assist students with course scheduling. A majority of questions concerning general education and breadth and interpretation of transfer credit may be answered in the Advising Center upon the student's receipt of the initial evaluation provided to the student by the Evaluations Office.

Each College of Business student has a file in the Advising Center which is maintained in order to track the student's progress. Student evaluations, file information, and SIS+ (the Cal Poly student information database) are used for general advising purposes including: tracking student degree progress, monitoring student's grade point averages, verifying satisfaction of the Graduation Writing Requirement and United States Cultural Pluralism requirement, and on-course pre-graduation completion checks.

This office houses a wealth of information for students, including curriculum sheets and flowcharts for all College of Business majors, information on minors, articulation agreements, petitions and substitution forms, faculty directory information (including office numbers, office hours, telephone numbers, and e-mail addresses) and updates on course offerings and finals schedules. The Advising Center staff is available to answer most university and college questions or refer the student to the appropriate service on campus.

### **Transfer Students**

Transfer students to the College of Business should refer to the curricula listed for the appropriate major. Please note that all lower division courses may be completed at most California Community Colleges. Full time students who have successfully completed all lower division courses prior to transferring to the College of Business can usually anticipate graduating in six to eight quarters.

# Bachelor of Science Degree Programs

**BS Business Administration**  
**BS Economics**  
**BS Industrial Technology**

## BS BUSINESS ADMINISTRATION

This program provides students with the knowledge and analytical skills essential for employment in all sectors of business and industry, as well as for managerial careers in governmental and other non-profit organizations.

Opportunities for specialization are provided for students preparing for careers in accounting, financial management, marketing management, management information systems, international business management, general management, and human resources management.

The Business Administration degree program consists of five components: Major, Concentration, Support, General Education, and Electives.

- 60 units upper division       GWR
- 2.0 GPA                               USCP

\* = Satisfies General Education requirement

### MAJOR COURSES

BUS 214 Financial Accounting .....	5
BUS 215 Managerial Accounting .....	4
BUS 207 Business Law .....	4
BUS 404 Govt/Social Influences on Business .....	4
BUS 391 Management Information Systems .....	4
BUS 346 Principles of Marketing .....	4
BUS 342 Financial Management .....	4
BUS 371 Production and Operations Management ..	4
BUS 387 Organizational Behavior .....	4
<i>International business. Select one:</i>	
BUS 402, 410, 433, 446; ECON 401.	
(Accounting Concentration: may take BUS 427) ..	4
BUS 401 Business Strategy and Policy Seminar .....	4
BUS 461 Senior Project.....	2
BUS 462 Senior Project.....	2
Concentration courses (see following pages).....	27-34

**76-83**

### SUPPORT COURSES

ECON 221 Microeconomics.....	4
ECON 222 Macroeconomics (D3)* .....	4
ECON elective (300-400 level) .....	4
MATH 221 Calculus for Business and Econ (B2)*	4
STAT 251 Statistical Inference-Mgt. I (B2)* .....	4
STAT 252 Statistical Inference-Mgt. II (Area B)* ...	5

**25**

## GENERAL EDUCATION (GE) ..... 55

72 units required; 17 of these units are in Support.

→See page 79 for complete GE course listing.

→Minimum of 3 GE courses required at the 300-400 level.

### Area A Communication (minimum 11 units)

Take one course from A1, A2, A3:

- A1 Expository Writing
- A2 Critical Thinking
- A3 Speech

If less than 11 units, take one additional course in:

- A4 Argumentative Writing

### Area B Science and Mathematics (minimum 8 units)

13 units are in Support.

Take one course from B1a and one from B1b; one with lab

- B1a Physical Sciences elective
- B1b Life Sciences elective
- B2 Mathematics and/or Statistics \*see Support
- Area B \* see Support

### Area C Arts and Humanities (minimum 15 units)

Take one course from each Area C category:

- C1 Literature
- C1 Philosophy
- C2 Fine/Performing Arts
- C3 Lit/Phil/Arts (300-400 level)

If less than 15 units, take one additional course from C1, C2, C3

### Area D Social, Political, Economic Inst. (min. 11 units)

4 units in Support. No more than one course in any Area D category.

Take one course from D1a and one from D1b

- D1a HIST 202 (USCP) or HIST 204 or LS 211
- D1b POLS 110 or LS 212

Take two courses from D2, D4a, D4b

- D2 History (300-400 level)
- D3 Economics \*see Support
- D4a Social Institutions
- D4b Social Institutions (300-400 level)

### Area E Life Understanding (minimum 3 units)

No more than one course in any Area E category.

Take one course from E1 or E2

- E1 PSY 201/PSY 202
- E2 Self Development

### Area F Technology (minimum 2 units)

Take one course from F1 or F2

- F1 Computer Literacy
- F2 Technology Elective

### Additional GE Courses (minimum 5 units)

To complete 72-unit requirement, select additional courses from Areas A, C, D, E. No more than one additional course per area.

## ELECTIVES ..... **23-30**

**186**

# Accounting

**Business Bldg. (03), Room 403  
805 756-1384**

**Area Coordinator, Charles R. (Tad) Miller**

James A. Anderson	M. Zafar Iqbal
Mary Beth Armstrong	Earl C. Keller
William C. Boynton	Kathryn A. S. Lancaster
Janice L. Carr	John C. Robison
Douglas C. Cerf	

The primary objectives of the Accounting Area are to:  
 1) provide students within the College of Business with the ability to understand and interpret accounting information that is relevant to business decisions; 2) prepare students for careers as professional accountants; and 3) provide students from other colleges within the university with an introduction to accounting and its uses.

## ACCOUNTING CONCENTRATION

This concentration prepares students for accounting careers in public accounting, industry, and government. The concentration builds on the principles of financial and managerial accounting coursework (BUS 214, 215) included in the core program of the business major. The concentration requires 28 additional units of accounting study consisting of 20 required units and 8 units of accounting electives. The elective courses afford students an opportunity to pursue further study in a variety of accounting subjects such as taxation, international accounting, and others.

BUS 314 Tax Accounting .....	4
BUS 321 Intermediate Accounting I .....	4
BUS 322 Intermediate Accounting II.....	4
BUS 323 Intermediate Accounting III .....	4
BUS 425 Auditing.....	4
Adviser approved electives .....	8
	28

# Finance

**Business Bldg. (03), Room 402  
805 756-2821**

**Area Coordinator, Kenneth D. Riener**

John Dobson	Luc Soenen
Larry R. Gorman	Alan M. Weatherford
John R. Lindvall	

The finance area prepares students for successful careers in the corporate world. In addition to dealing with the role of financial markets and institutions, the finance courses typically take a company perspective. Emphasis is placed on the role of the financial manager as it applies to a small company as well as a multinational firm. Students are provided with a thorough understanding and working knowledge of the many aspects related to the finance function.

## FINANCIAL MANAGEMENT CONCENTRATION

This concentration provides both depth of exposure in finance as well as breadth of exposure to related fields for students interested in careers in finance. Students are exposed to specialized coursework in corporate finance, investments, real estate, and financial markets. In addition, coursework in computer science, management information systems, accounting, and economics is encouraged to provide broader familiarity with these important "tool" areas of finance. Successful graduates are much in demand for positions in banking, corporate financial planning, real estate, and many other business areas.

BUS 321 Intermediate Accounting I .....	4
BUS 431 Security Analysis and Portfolio Management.....	4
BUS 433 International Business Finance Management.....	4
BUS 443 Case Studies in Finance .....	4
Adviser approved electives.....	11
	27

# Global Strategy & Law

Business Bldg. (03), Room 406  
805 756-5068

**Area Coordinator, Allan Bird**

Dan Bertozzi, Jr.	Colette Frayne
Lee B. Burgunder	J. Michael Geringer
Christopher Carr	Michael Levenhagen
Paul L. Dempsey	

The faculty in the Global Strategy and Law Area offers coursework in the fields of international management, business strategy and policy, and the legal, regulatory, and political environment of business. The courses offered in this Area integrate the teachings from other more functionally oriented Areas in the College of Business, with the objective of preparing students for strategic management and leadership in enterprises doing business in an increasingly global business environment.

**INTERNATIONAL BUSINESS MANAGEMENT CONCENTRATION**

This concentration is designed to provide the student the opportunity to develop proficiency in the subject matter basic to an occupational goal in the management of international/multinational operations. It provides cultural understanding, organizational knowledge and analytical skill central to international business management.

ECON 401 International Trade .....	4
ECON 402 International Monetary Economics <i>or</i>	
BUS 433 International Business Finance .....	4
BUS 302 International Cross Cultural Mgmt. ....	4
BUS 384 Human Resources Management .....	4
BUS 403 Adv. Seminar in International Mgmt. ....	4
BUS 446 International Marketing .....	4
Adviser approved electives .....	7

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# Management

Business Bldg. (03), Room 405  
805 756-2012

**Area Coordinator, James Sena**

Joseph Biggs	Patricia A. McQuaid
Rebecca Ellis	Eldon Y. Li
Barry Floyd	David A. Peach
Kay M. Glasgow	A. B. (Rami) Shani
Ray M. Haynes	Michael W. Stebbins

The Management Area offers coursework in organization behavior, human resources management, management information systems, operations management, management science, and entrepreneurship. The Area objectives include: 1) to provide students with knowledge, skills, and competencies critical to managerial success in small and complex organizations; 2) to prepare students for initial employment and subsequent management career advancement; 3) to help professionally oriented students use theory, concepts, analytical tools, and problem solving techniques; and 4) to provide experiences that integrate functional business knowledge.

The Management Area includes the following concentrations: Human Resources Management, Management, Management Information Systems.

**HUMAN RESOURCES MANAGEMENT CONCENTRATION**

This concentration prepares students for entry and advanced positions in personnel and labor relations. The concentration develops knowledge and competencies in staffing, employee training and development, compensation and benefits, union contract negotiation and administration, and related personnel subjects.

The two areas of interest within this concentration relate to labor management relations and personnel management. Students learn how to perform the functions of recruitment, selection, development, compensation, contract negotiations, and administration.

BUS 384 Human Resources Management.....	4
BUS 471 Compensation .....	4
BUS 475 Staffing .....	4
BUS 476 Employee Training and Development.....	4
Adviser approved electives.....	16

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32

**MANAGEMENT CONCENTRATION**

This concentration prepares students for supervisory and staff positions in both small and large enterprises. Students focus on small business management and entrepreneurship subjects or select a course of study tailored to their particular industry and occupational goals.

BUS 382 Organization and Management Theory .....	4
BUS 384 Human Resources Management .....	4
BUS 302 International Cross Cultural Management ...	4
BUS 478 Organization Design .....	4
BUS 488 Small Business Management .....	4
Adviser approved electives .....	8
	28

**MANAGEMENT INFORMATION SYSTEMS CONCENTRATION**

The MIS concentration is a blend of computer science and business information systems knowledge. Students gain competencies in computer programming, analysis, design, and implementation of information systems. At graduation, students pursue diverse management and MIS opportunities within corporations and consulting firms.

CSC 101 Fundamentals of Computer Science I .....	4
CSC 102 Fundamentals of Computer Science II .....	4
CSC 103 Fundamentals of Computer Science III.....	4
BUS 393 Advanced Management Information Systems I .....	5
BUS 394 Advanced Management Information Systems II .....	5
Adviser approved electives .....	12
	34

*Independent Course of Study*

**Business Bldg. (03), Room 455  
805 756-2285**

**Area Coordinator: Walter E. Rice, Associate Dean and Director of Undergraduate Programs**

Students have the option of choosing one of the previously mentioned concentrations or 27 units of adviser approved electives selected according to individual talents and interests. This option allows students to blend courses from a variety of areas to achieve specific career objectives.

*Marketing*

**Business Bldg. (03), Room 405  
805 756-1413**

**Area Coordinator, Teresa (Terri) Swartz**

Norm A. Borin	Lynn E. Metcalf
Jeffrey Danes	John C. Rogers
R. Krishnan	

The objective of the Marketing Area is twofold: 1) to prepare students for rewarding careers in marketing, and 2) to provide non-marketing students with a basic understanding of marketing and its role in business. At the heart of marketing is a customer-focus; the same is true of the Area and its faculty. The marketing faculty is very student-oriented and is committed to helping students develop the skills necessary to successfully transition from the academic environment to the business world. The Area offers classes in the undergraduate and graduate degree programs offered through the College and works to tailor its courses to meet student needs.

**MARKETING MANAGEMENT CONCENTRATION**

This concentration emphasizes coursework in a variety of areas including marketing research, buyer behavior, promotion, sales management, product management and services marketing. Graduates of this concentration are in demand for positions in marketing intelligence, research, advertising, product management and sales management.

BUS 347 Marketing Research I.....	4
BUS 348 Buyer Behavior .....	4
BUS 455 Marketing Management .....	4
Electives selected from: BUS 349, 446, 447, 448, 449, 450, 452, 453, 454, 451, 470 .....	16
	28

# Economics

**Business Bldg. (03), Room 407  
805 756-2783**

**Area Coordinator, Artemis Papakyriazis**

George L. Beardsley, Jr.	Walter E. Rice
Phillip Fanchon	Alden F. Shiers
Timothy W. Kersten	Daniel J. Villegas
Michael L. Marlow	Daniel P. Williamson
Panagiotis Papakyriazis	

The Economics degree program prepares students for employment in the private and public sectors of both the domestic and international levels as economists, analysts and general managers. The teaching of economics in high school is another occupational field for the economist. The program also prepares students to undertake graduate study in economics, law, business administration and related fields in the social sciences. The Economics Area supports the concept of international education and encourages its students to investigate opportunities for overseas study.

**BS ECONOMICS**

- 60 units upper division       GWR
- 2.0 GPA                               USCP
- \* = Satisfies General Education requirement

**MAJOR COURSES**

BUS 214 Financial Accounting .....	5
BUS 215 Managerial Accounting .....	4
ECON 221 Microeconomics.....	4
ECON 222 Macroeconomics (D3) * .....	4
ECON 310 Quantitative Methods in Economics .....	4
ECON 311, 312 Intermediate Microeconomics.....	4,4
ECON 313, 314 Intermediate Macroeconomics.....	4,4
ECON 337 Money, Banking and Credit .....	4
ECON 417 Development of Economic Analysis .....	4
ECON 461 Senior Project.....	2
ECON 462 Senior Project.....	2
MATH 221 Calculus-Business & Econ. (B2)* .....	4
Restricted electives to be selected from:	
ECON 105, 303, 304, 306, 323, 324, 339, 401, 402, 403, 410, 413, 431, 432, 433, 434 .....	12
Concentration courses or adviser approved electives	24
	<b>89</b>

**SUPPORT COURSES**

BUS 207 Business Law .....	4
STAT 251 Statistical Inference-Mgt I (B2)* .....	4
STAT 252 Statistical Inference-Mgt II (Area B)* ...	5
	<b>13</b>

**GENERAL EDUCATION (GE)**

**55**

72 units required; 17 of these units are in Major/Support.  
→See page 79 for complete GE course listing.  
→Minimum of 3 GE courses required at the 300-400 level.

**Area A Communication** (minimum 11 units)

Take one course from A1, A2, A3:

- A1 Expository Writing
- A2 Critical Thinking
- A3 Speech

If less than 11 units, take one additional course in:

- A4 Argumentative Writing

**Area B Science and Mathematics** (minimum 4 units)

13 units are in Major/Support.

Take one course from B1a and one from B1b; one with lab

- B1a Physical Sciences elective
- B1b Life Sciences elective
- B2 Mathematics and/or Statistics \*see Major
- Area B \* see Major/Support

**Area C Arts and Humanities** (minimum 15 units)

Take one course from each Area C category:

- C1 Literature
- C1 Philosophy
- C2 Fine/Performing Arts
- C3 Lit/Phil/Arts (300-400 level)

If less than 15 units, take one additional course from C1, C2, C3

**Area D Social, Political, Economic Inst.** (min. 11 units)

4 units are in Major.

No more than one course in any Area D category.

Take one course from D1a and one from D1b

- D1a HIST 202 (USCP) or HIST 204 or LS 211
- D1b POLS 110 or LS 212

Take two courses from D2, D4a, D4b

- D2 History (300-400 level)
- D3 Economics \*see Major
- D4a Social Institutions
- D4b Social Institutions (300-400 level)

**Area E Life Understanding** (minimum 3 units)

No more than one course in any Area E category.

Take one course from E1 or E2

- E1 PSY 201/PSY 202
- E2 Self Development

**Area F Technology** (minimum 2 units)

Take one course from F1 or F2

- F1 Computer Literacy
- F2 Technology Elective

**Additional GE Courses** (minimum 9 units)

To complete 72-unit requirement, select additional courses from Areas A, C, D, E. No more than one additional course per area.

<b>ELECTIVES</b> .....	<b>29</b>
	<b>186</b>

**Curricular Concentrations**

Economics majors may take any concentration offered by the College of Business or the Political Science or Social Sciences departments in lieu of the economics concentrations described below, provided appropriate prerequisites are satisfied. Students may also choose to select Adviser Approved Electives in place of a concentration.

**BUSINESS AND INDUSTRIAL ECONOMICS CONCENTRATION**

The Business and Industrial Economics concentration, designed for those students who intend to seek business and industrial application of the economics discipline, provides a balanced program of economic and business theory and application.

ECON 306 Applied Forecasting.....	4
ECON 403 Industrial Organization .....	4
ECON 413 Labor Economics.....	4
BUS 382 Organization and Management Theory .....	4
Adviser approved electives .....	8
	24

**INTERNATIONAL TRADE AND DEVELOPMENT CONCENTRATION**

This concentration provides a core of trade and development theory, plus study in ancillary elective fields that meet the occupational needs of students. It is designed for those students interested in working in an international area in the public or private sectors.

ECON 325 Underdevelopment and Economic Growth.....	4
ECON 401 International Trade .....	4
ECON 402 International Monetary Economics.....	4
Foreign language .....	4
Adviser approved electives .....	8
To be selected from upper division courses with BUS prefix, or any other discipline with approval of adviser.	
	24

**QUANTITATIVE ECONOMICS CONCENTRATION**

This concentration will offer a combination of mathematics, statistics, and quantitative economics courses. As a unit they are designed to provide the graduate with a background adequate for employment in a variety of business and other situations where the economic decision makers rely on the precision of the mathematician's tools, or for entrance to graduate study in such fields as economics, business administration, or operations research.

ECON 306 Applied Forecasting.....	4
ECON 339 Econometrics .....	4
Adviser approved electives.....	16
	24

**ADVISER APPROVED ELECTIVES**

Students have the option of choosing one of the above mentioned concentrations or 24 units of adviser approved electives. Students can study the interrelationships among different disciplines. The world is rapidly changing and the technological and sociological prototypes might not be applicable any longer. Evolution in science and technology is changing the social and economic structure and the student is encouraged to explore these changes. Students select courses according to individual talents and interests.

Students select courses with adviser approval .....	24
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# Industrial Technology

**Business Bldg. (03), Room 409**  
**805 756-2676**

**Area Coordinator, Fred P. Abitia**

Larry W. Gay                      Lynn S. Mosher  
 Roger L. Keep                    Anthony J. Randazzo  
 Lezlie A. Labhard

The BS in Industrial Technology emphasizes preparation for technical leadership responsibilities with a broad variety of industries including manufacturing, communication, transportation and utility services. Students who enjoy working with people in solving technical problems are particularly well-suited for careers in industrial technology. Through the selection of appropriate electives, students may prepare for professions in industrial sales, marketing and training, production, quality management, facilities management, and packaging is provided

## BS INDUSTRIAL TECHNOLOGY

- 60 units upper division       GWR
- 2.0 GPA                               USCP

\* = Satisfies General Education requirement

### MAJOR COURSES

IT 137 Electronic Systems .....	4
IT 150 Mechanical Systems .....	4
IT 260 Manufacturing Processes .....	4
IT 303 Industrial Quality Management.....	4
IT 326 Product Evaluation.....	4
IT 327 Plastics Technology .....	4
IT 329 Industrial Materials .....	4
IT 330 Fundamentals of Packaging .....	4
IT 332 Electrical Power Systems .....	4
IT 333 Introduction to CAD and MIS.....	4
IT 345 Applied Production Management.....	4
IT 350 Electrical and Mechanical Controls .....	4
IT 402 Technical and Management Presentations ...	4
IT 410 Industrial Planning .....	4
IT 411 Industrial Safety and Health Management ...	4
IT 428 Industrial Management and Strategy.....	4
IT 461 Senior Project.....	3
Adviser approved electives .....	14
<b>81</b>	

### SUPPORT COURSES

BUS 214 Financial Accounting .....	5
BUS 215 Managerial Accounting .....	4
BUS 342 Financial Management .....	4
BUS 346 Principles of Marketing.....	4
BUS 371 Production and Operations Management .	4
BUS 387 Organizational Behavior .....	4
BUS 404 Gov. & Social Influences/Bus. (D4b)*.....	4

CHEM 110 World of Chemistry - Essentials or CHEM 111 Survey of Chemistry (B1a)* .....	4/5
ECON 211 Principles of Economics (D3)* .....	3
MATH 131/141/221 Calculus (B2)* .....	4
PHYS 121, 122 College Physics (Area B)* .....	4,4
STAT 217 Appl. Statistics-Liberal Arts or STAT 218 Appl. Statistics-Life Sciences (B2)*...	4
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## GENERAL EDUCATION (GE)

72 units required; 27 of these units are in Support.  
 →See page 79 for complete GE course listing.  
 →Minimum of 3 GE courses required at the 300-400 level.

### Area A Communication (minimum 11 units)

Take one course from A1, A2, A3:

- A1 Expository Writing
- A2 Critical Thinking
- A3 Speech

If less than 11 units, take one additional course in:

- A4 Argumentative Writing

### Area B Science and Mathematics (minimum 2 units)

20 units are in Major.

Take one course from B1b:

- B1a Physical Sciences \*see Support
- B1b Life Sciences elective
- B2 Mathematics and/or Statistics \*see Support
- Area B \* see Support

### Area C Arts and Humanities (minimum 15 units)

Take one course from each Area C category:

- C1 Literature
- C1 Philosophy
- C2 Fine/Performing Arts
- C3 Lit/Phil/Arts (300-400 level)

If less than 15 units, take one additional course from C1, C2, C3

### Area D Social, Political, Economic Inst. (min. 8 units)

7 units in Support. No more than one course in any Area D category.

Take one course from D1a and one from D1b

- D1a HIST 202 (USCP) or HIST 204 or LS 211
- D1b POLS 110 or LS 212

Take one course from D2, D4a,

- D2 History (300-400 level)
- D3 Economics \*see Support
- D4a Social Institutions

- D4b Social Institutions (300-400 level) \*see Support

### Area E Life Understanding (minimum 3 units)

No more than one course in any Area E category.

Take one course from E1 or E2

- E1 PSY 201/PSY 202
- E2 Self Development

### Area F Technology (minimum 2 units)

Take one course from F1 or F2

- F1 Computer Literacy
- F2 Technology Elective

### Additional GE Courses (minimum 4 units)

To complete 72-unit requirement, select additional courses from Areas A, C, D, E. No more than one additional course per area.

<b>ELECTIVES</b> .....	<b>8</b>
	<b>186</b>

# Academic Minors

**Business  
Economics**

**Integrative Technology  
Packaging**

## *Business Minor*

**College Advising Center  
Business Bldg. (03), Room 100  
805 756-2601**

This minor provides non-business students with an introduction to the body of knowledge expected of persons pursuing careers in business. A business minor will give a student a competitive edge when applying for certain jobs, by providing concepts, tools and skills which will enhance one's progress in a career. In addition, students who plan on a career in the non-business sector will gain a greater appreciation of the challenges and opportunities facing business, now and in the future.

Enrollment is limited and selection will be made based upon the applicant's performance in the prerequisite courses listed below. After admission to the minor, the student must complete the remaining required courses. **At least 16 units must be completed after admission to the program.**

**Prerequisites.** The following courses must be taken *before* admission to the minor. Since admission is competitive, selection will be based on performance in these courses.

- BUS 212 Financial Accounting-Nonbusiness Majors (4)  
or BUS 214 Financial Accounting (5)
- BUS 207 Business Law (4)
- ECON 221 Microeconomics (4)
- ECON 222 Macroeconomics (D3) (4)
- STAT 251 Statistical Inference-Management I (B2) (4)
- STAT 252 Statistical Inference -Management II (B2) (5)

<b>Required courses</b>	<i>Units</i>
BUS 207 Business Law .....	4
BUS 212 Financial Accounting for Nonbusiness Majors or BUS 214 Financial Accounting .....	4/5
BUS 215 Managerial Accounting .....	4
BUS 342 Financial Management .....	4
BUS 346 Principles of Marketing.....	4
BUS 382/BUS 384/BUS 387.....	4
BUS 391 Management Information Systems or BUS 371 Production and Operations Mgt.....	4
	28/29

## *Economics Minor*

**Economics  
Business Bldg. (03), Room 407  
805 756-2783**

This minor is designed to give students from other majors a general competency in economics. Students are encouraged to meet with the adviser of the Economics Minor to develop a course of study that complements their major curriculum. For more information, contact the Economics Area office.

	<i>Units</i>
<b>Required courses</b> .....	6-8
ECON 211 Principles of Economics (3) or ECON 222 Macroeconomics (4) (D3)	
ECON 212 Principles of Economics (3) or ECON 221 Microeconomics (4)	
<b>Electives</b> .....	16-18
Any other courses offered by the Economics Area to complete the minimum requirement of 24 units.	

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## *Integrative Technology Minor*

**Industrial Technology**  
**Business Bldg. (03), Room 409**  
**805 756-2676**

This minor is an interdisciplinary program. Students learn about the technical, social and business issues related to the use of new technology and how the technology is integrated into corporate operations. The minor appeals to students who are majoring in nontechnical disciplines.

	<i>Units</i>
<b>Required courses</b> .....	17
IME 157 Electronic Manufacturing (3)	
IME 214 Production Control (2)	
IME 234 Robotics Assembly (2)	
IME 319 Human Factors Engineering (3)	
IT 303 Industrial Quality Control Mgt (4) (F2)	
PSY 494 Psychology of Technological Change (4)	
<b>Management electives</b> ( <i>select one</i> ).....	3-4
BUS 381 Industrial Management (4)	
BUS 383 Industrial Relations (3)	
BUS 384 Human Resources Management (4)	
<b>Humanities electives</b> ( <i>select one</i> ).....	4
HUM 402 Values and Technology (4) (C3)	
<b>Social and Behavioral Sciences electives</b> ( <i>select one</i> ) .....	4
BUS 404 Government and Social Influence on Business (4) (D4b)	
PSY 302 Behavior in Organizations (4)	
SPC 213 Organizational Communication (4)	
—————	
	27-29

## *Packaging Minor*

**Industrial Technology**  
**Engineering West Bldg. (21), Room 126**  
**805 756-2058**

**Packaging Program Coordinator, Larry W. Gay**

The purpose of this interdisciplinary minor is to complement the student's degree major with a planned curriculum in packaging. The program is designed to capitalize on theories and skills learned in other disciplines thereby uniquely preparing students for success as packaging professionals in positions ranging from highly technical research and development through purchasing, production, sales and management.

Students gain the skills needed for the design of package forms and graphics, the specifications of materials and machinery to be used, the evaluation of package systems, as well as the planning and coordinating of packaging requirements. These specialized skills result from an integration of knowledge gained through the packaging curriculum with that of the major discipline. A significant understanding of packaging issues and their impact on the industry is also gained.

<b>Required courses</b> .....	20
CHEM 110 World of Chemistry - Essentials (4) or CHEM 111 Survey of Chemistry (5) (B1a)	
FSN 230 Elements of Food Processing (4)	
IT 327 Plastics Technology (4)	
IT 330 Fundamentals of Packaging (4)	
PHYS 104 Introductory Physics (B1a) (4) or PHYS 121 College Physics (B1a) (4)	
<b>Adviser approved electives</b> .....	9
<i>Select 9 units from the following list. Two courses must be 300-400 level to be selected with adviser's approval.</i>	
FSN 154 Basic Calculations Food Processing (4)	
FSN 230 Elements of Food Processing (4)	
FSN 325 Food Quality Control (5)	
FSN 334 Food Packaging (3)	
GRC 337 Consumer Packaging (3)	
IT 375 Packaging Material and Product Testing (4)	
IT 408 Protective Packaging (4)	
IT 409 Machinery for Packaging (4)	
IT 435 Package Development Management (4)	

# Graduate Programs

## Master of Business Administration

**David Peach, Director**  
**Graduate Management Programs**  
**Business Bldg. (03), Room 107**  
**805 756-2637**

### General Characteristics

Cal Poly's MBA program is designed to prepare students to enter successful management positions of high responsibility. The program is based on the recognition that future business leaders must function in an environment that places more emphasis on technology; is facing more globalization in markets and organizations; and is placing increased importance on societal factors such as pollution, equal rights, ethical behavior and corporate citizenship.

The primary objectives of the MBA program are to:

- Provide students with a broad-based understanding of fundamental concepts, principles and practices in multiple business disciplines;
- Instill in students an integrated understanding of business dynamics for effective responses to the changing global business environment;
- Help the students acquire skills in formulating, analyzing and implementing significant business decisions; and
- Develop in students the skills that are necessary to work with other people in effective organizations in a changing global environment.

### Prerequisites

With the exception of prior background in quantitative analysis, there are no specific prerequisite courses for the MBA program. See the MBA curriculum for details.

### Admission to the MBA Program is based upon:

- a) Successful completion of an accredited undergraduate program of study;
- b) The student's undergraduate record, with particular emphasis placed on performance during the last 90 units (or equivalent);
- c) Achievement on the Graduate Management Admission Test (GMAT); and
- d) Prior work experience.

### Program of Study

The MBA is a two-year program of graduate work. The first year offers students an integrated understanding of concepts and tools of the various business disciplines. The

courses offered contain material that is commonly referred to as the core of business knowledge. The first year provides a collaborative learning environment in which future business managers can acquire basic knowledge and skills in all business disciplines. Ethical and international business issues are specifically addressed in many courses.

The second year consists primarily of elective courses, based upon the belief that people learn best when their past experiences and training can be made an integral part of the learning process. Various course sequences are offered to allow students to specialize in particular fields. Students are also permitted to develop their own sequences of elective courses. The second-year electives are continually reviewed for currency and relevance. Satisfactory completion of a comprehensive examination (incorporated into GSB 562) is a requirement of the MBA program. *Students are encouraged to challenge first-year GSB courses based on their previous work. . As a policy, MBA students will not be permitted to take more than two classes at the 400 level.*

### MBA

GSB Core (three 12-unit classes) .....	36
<i>The MBA program is currently undergoing change and core classes are being offered on an experimental basis. For more information, contact Director of Graduate Manganement Programs.</i>	
GSB electives .....	44
<i>Select at least one course from:</i>	
<i>GSB 578, 587; BUS 410, 446; ECON 401; AGB 563</i>	
GSB 562 Seminar in General Management and Strategy .....	4
Adviser approved electives .....	12
	16

### MBA, SPECIALIZATION IN AGRIBUSINESS

This specialization is offered in conjunction with the Agribusiness Department, College of Agriculture. It requires the completion of six graduate courses taught by the Agribusiness Department. These courses are taken in lieu of electives in the MBA program. Satisfactory completion of a comprehensive examination is required. The MBA Agribusiness Specialization is designed for those interested in agribusiness management careers. Graduates will be prepared for large farm and ranch management as well as for positions in supporting agribusiness industries such as commodity marketing or food processing. *Students are encouraged to challenge first-year GSB courses based on their previous work.*

**MBA Specialization in Agribusiness**

GSB Core (three 12-unit classes).....	36
<i>The MBA program is currently undergoing change and core classes are being offered on an experimental basis. For more information, contact Director of Graduate Management Programs.</i>	
GSB electives.....	24
<i>Select at least one course from:</i>	
<i>GSB 578, 587; BUS 410, 446; ECON 401; AGB 563</i>	
GSB 562 Seminar in General Management and Strategy	4
AG 539 Graduate Internship in Agriculture.....	4
AGB 514 Agribusiness Managerial Leadership and Communication .....	4
AGB 543 Ag. Policy and Program Analysis .....	4
AGB 554 Managing Price Risk in Agribusiness .....	4
AGB 555 Tech/Economic Change Agribusiness ....	4
AGB 563 International Agric Trade/Market Dev ...	4
Adviser approved electives .....	8
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**ARCHITECTURAL MANAGEMENT TRACK**

This program is available only to those students who are enrolled in Cal Poly's College of Architecture program. Students who fulfill all the requirements will first receive the Bachelor of Architecture and then the MBA. During the fifth year of the architecture program, students who have been admitted to this program are allowed to take GSB courses as outlined below. By April 15th of the 5th year, students must formally apply for admission to the MBA program. Acceptance to the MBA program is conditional upon the successful completion of the fifth year.

**MBA, Architectural Management Track**

GSB Core (three 12-unit classes).....	36
<i>The MBA program is currently undergoing change and core classes are being offered on an experimental basis. For more information, contact Director of Graduate Management Programs.</i>	
ARCH 521 Graduate Architectural Design Project or adviser approved elective .....	5,5,5
GSB 562 Seminar in General Management and Strategy .....	4
GSB electives .....	36
<i>Select at least one course from:</i>	
<i>GSB 578, 587; BUS 410, 446; ECON 401; AGB 563</i>	
GSB or ARCH electives .....	8
	<hr/> 8

**Engineering Management, MBA & MS**

**David Peach, Director  
Graduate Management Programs  
Business Bldg. (03), Room 107  
805 756-2637**

The joint Engineering Management specialization is an interdisciplinary program linking the MBA and MS in Engineering degree programs. It is a cooperative effort between the College of Engineering (Industrial and Manufacturing Engineering Department) and the College of Business. Students are required to have a prerequisite degree in engineering, computer science, or similar technical degree to be admitted to both the College of Engineering and the College of Business, and to be enrolled in both degree programs. Successful participants will be awarded both MBA and MS in Engineering degrees each with a specialization in Engineering Management. The three major objectives are:

- 1) to integrate knowledge and skills from engineering and business disciplines for effective responses to rapidly changing technological and business environments;
- 2) to prepare engineers for effective participation in management of technology, management of technology-based organizations, and management of technological change; and
- 3) to take advantage of the unique background of program participants and the unique strengths of Cal Poly.

**MBA/MS Engineering Management**

*Students are encouraged to challenge any of the first-year GSB courses based on previous work.*

GSB Core (three 12-unit classes) .....	36
<i>The MBA program is currently undergoing change and core classes are being offered on an experimental basis. For more information, contact Director of Graduate Management Programs....</i>	
<sup>1</sup> GSB electives .....	16
<i>Select at least one course from:</i>	
<i>GSB 578, 587; BUS 410, 446; ECON 401; AGB 563</i>	
GSB 562 Seminar in General Management and Strategy.....	4
IME 502 Graduate Survey .....	3
IME 556 Technological Project Management .....	4
IME 557 Technological Assessment .....	4
IME 580 Manufacturing Systems.....	4
IME 596 Team Project.Internship (10) or IME 599 Design Project/Thesis (9).....	10/9
<sup>1</sup> Engineering electives .....	16/17
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<sup>1</sup> Engineering electives to be selected with College of Engineering adviser's approval. GSB electives to be selected with College of Business adviser's approval.

# *Industrial & Technical Studies, MA*

**Anthony Randazzo, Graduate Coordinator**  
**Business Bldg. (03), Room 317**  
**805 756-1618**

**General Characteristics**

The Master of Arts in Industrial and Technical Studies is designed to prepare students for professional responsibilities and leadership in a broad range of positions in industry and education. It is a 45 unit degree program. The core curriculum is designed to provide a broad industrial background for the student, while the free electives allow for the student to gain an element of expertise in a selected area of interest or an area related to the student’s career path.

**Admission Requirements**

In addition to the general admissions requirements of the University, specific requirements are:

- Completion of a four year college course of study, and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association;
- Good academic standing at the last college or university attended;
- Attainment of a grade point average of at least 2.8 in the last 90 quarter units (60 semester units) attempted;
- Successful completion of a screening interview conducted by the graduate coordinator; and
- Satisfactory performance on the General Test of the Graduate Record Examination (GRE).

Foreign students must meet additional requirements as specified in the Graduate Studies section of this catalog.

If the student meets the general requirements for graduate and postbaccalaureate studies, the student will be considered for admission in one of two categories:

**Graduate conditionally classified** - The student may be admitted to the graduate degree program if, in the opinion of the graduate coordinator, deficiencies can be remedied by additional preparation.

**Graduate classified** - The student may be admitted to the graduate degree program unconditionally if, in the opinion of the graduate coordinator, the student meets the standards and displays potential for academic success. To pursue a graduate degree, the student will be required to fulfill all of the professional, personal, scholastic, and other standards prescribed by the Industrial and Technical Studies Graduate

Program and the University. For more information, please contact the graduate coordinator.

**Program of Study**

The MA in Industrial and Technical Studies is an integrated program of graduate coursework. Students may begin study in any quarter and courses are frequently scheduled in the late afternoon, evening or summer to accommodate those individuals who are employed full-time.

The program is designed for students who have a baccalaureate degree in Industrial Technology, or who have comparable technical and professional preparation. Students with a baccalaureate degree in a non-technical field will be required to complete 15 units of approved technical courses prior to submittal of a Formal Study Plan.

With approval of the Graduate Coordinator, students may select the option of thesis/project or comprehensive examination and adviser approved electives. Those who choose the comprehensive examination, must take the examination within one year of completing the last IT graduate course on the Formal Study Plan. Failure to do so will necessitate that the student complete a thesis or project to fulfill the requirement of the degree.

A minimum grade point average of 3.0 must be maintained in coursework taken to satisfy the requirements for the degree, as presented on the formal study plan. All candidates must meet the current Graduation Writing Requirement. All requirements for the degree must be completed within a seven-year period. The time limit for the thesis or project is three years.

**MA Industrial and Technical Studies**

IT 505 Graduate Seminar .....	3
IT 515 Historical and Philosophical Perspective of American Industry .....	3
IT 520 Organization and Administration of Industrial and Technical Environments .....	3
IT 521 Training in Industrial & Technical Systems .	3
IT 522 Facility Planning .....	3
IT 527 Technical Trends and Issues.....	3
IT 580 Graduate Research in Industrial and Technical Systems .....	3
IT 599 Thesis/ Project <i>or</i> Adviser approved coursework and comprehensive examination .....	5
Professional/technical electives.....	19
<i>Elective courses at the 400–500 level chosen with approval of the Graduate Coordinator</i>	