

# AGRIBUSINESS

Agriculture Bldg. (10), Room 210  
Phone: 805.756.5000; Fax: 805.756.5040  
<https://agb.calpoly.edu>

Department Chair: Bryan Lohmar

## Academic Programs

Program name	Program type
Agricultural Business	BS
Agribusiness	Minor

A Bachelor of Science in Agricultural Business prepares students for exciting and satisfying careers in the dynamic global food and fiber supply chain. The program provides a course of study that develops the requisite critical thinking, problems solving and business skills that are required to have a successful career in firms and organizations that span and support industries and organizations across the entire food and fiber supply chain.

Career opportunities for Cal Poly Agribusiness graduates range from food and fiber production, logistics and transportation, marketing and finance to agricultural support organizations and government agencies, providing a wide range of choices for any graduate.

## Undergraduate Programs

### BS Agricultural Business

The Agricultural Business curriculum has been developed to allow for a flexible course of study. Students can choose to emphasize their upper-division coursework a specific industry area such as Food Retail Management, Finance and Appraisal, Supply Chain Management, and Sales and Marketing or generalize their studies, all while being provided with an industry recognized, business-ready set of skills. Students are encouraged to get involved with academic clubs and teams, which provide additional opportunities for the Learn-by-Doing leadership experience.

### Agribusiness Minor

In today's ever more complex, technology-driven world, it is necessary for any graduate in agriculture to have some exposure to marketing, personnel management, financial management, budgeting, and economics if they are to succeed. The minor is designed to give students in the College of Agriculture, Food and Environmental Sciences this opportunity. Interested students must apply for acceptance into the minor through the Agribusiness Department.

### AGB Courses

#### AGB 101. Introduction to Agribusiness. 4 units

Term Typically Offered: F

Prerequisite: AGB major and freshman standing.

Orientation to the agribusiness sector of agriculture. An overview of the breadth, size, scope and management aspects of the agricultural business complex. Agribusiness students are required to complete this within the first year of the major. 4 lectures.

#### AGB 200. Special Problems for Undergraduates. 1-2 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Consent of department head.

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. Credit can only be used to satisfy free electives. Credit/No Credit grading only.

#### AGB 202. Introduction to Sales. 4 units

Term Typically Offered: F, W, SP

Development of professional business-to-business selling principles within the supply chain, including an introduction to understanding the sales process from different buying and selling perspectives, communication techniques, and basic sales competency. 4 lectures.

#### AGB 212. Agricultural Economics. 4 units

Term Typically Offered: F, W, SP

Theoretical development of factors affecting demand and supply for food and fiber and for agricultural inputs. Methods of selecting optimal levels of agricultural production and consumption variables. Evaluation of market structure and price formulation for agricultural products and resources. Course may be offered in classroom-based or online format. 4 lectures.

#### AGB 214. Agribusiness Financial Accounting. 4 units

Term Typically Offered: F, W, SP

Principles of financial accounting for the agriculture and food industry. Introduction of basic concepts and standards underlying financial accounting systems. Emphasizes the construction of the financial accounting statements and the impact of business transactions on information presented to interested stakeholders. Not open to students with credit in BUS 214. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 activity.

#### AGB 260. Agribusiness Data Literacy. 4 units

Term Typically Offered: F, W, SP

Using data and analysis in making decisions related to agribusiness. Developing basic and intermediate spreadsheet skills necessary to organize, analyze, and summarize information. Development of data management and analysis as tools to assist in agribusiness problem-solving. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

#### AGB 270. Selected Topics. 1-4 units

Term Typically Offered: TBD

Prerequisite: Open to undergraduate students and consent of instructor.

Directed group study of selected topics. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.

#### AGB 301. Food and Fiber Marketing. 4 units

Term Typically Offered: F, W, SP

Prerequisite: AGB 212 or ECON 221.

Food and fiber marketing, examining commodity, industrial, and consumer product marketing from a managerial viewpoint. A global perspective in understanding consumer needs and developing the knowledge of economic, political, social and environmental factors that affect food and fiber marketing systems. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 304. Innovation and Entrepreneurship in Agriculture. 4 units**

Term Typically Offered: F

Prerequisite: AGB 212, ECON 201, or ECON 221.

Innovation and entrepreneurship with application to the Food and Agriculture sector. Identification of opportunities, value proposition, Business Model Canvas (BMC), product market fit and market sizing, minimum viable product, and identification of target market consumers. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 308. Introduction to Agribusiness Finance. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: AGB 214 and AGB 260.

Concepts and analytical methods related to agricultural finance. Focus on applied spreadsheet analysis of financial statements, time value of money, risk and return, portfolio theory, and capital budgeting within the context of financial institutions specific to agriculture. Not open to students with credit in AGB 310. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 309. Advanced Sales Techniques. 4 units**

Term Typically Offered: TBD

Prerequisite: AGB 202.

Expansion of basic sales principles and skills, focusing on prospecting, sales styles, pipelining, forecasting, and product planning. 4 lectures.

**AGB 310. Agribusiness Credit and Finance. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: AGB 214 or BUS 212 or BUS 214.

Financing California's agricultural industry. Sources of credit and types of loans used by agribusinesses. Costs of credit. Financial analysis of agricultural borrowers. Future and present value techniques used in evaluating agricultural investments. Agricultural financial management. Financial capital markets and leasing. Not open to Agricultural Business majors. Not open to students with credit in AGB 308. 4 lectures.

**AGB 311. Intermediate Agribusiness Finance. 4 units**

Term Typically Offered: TBD

Prerequisite: AGB 260 and AGB 310; or AGB 308.

Financial tools applied to the agribusiness industry, focusing on unique risks in agriculture. Risk and return in the production and processing sectors, working capital management, cash flows and financial statement forecasting for agribusiness firms, using spreadsheet analysis. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 312. Agricultural Policy. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: AGB 212 and ECON 222.

Agricultural policy objectives and formulation, resource allocation and production adjustments. Survey of State and Federal agricultural policies as they influence the planning and practices of agribusiness. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 313. Agriculture Economic Analysis. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: AGB 212 and MATH 221.

Advanced agricultural microeconomics with emphasis on mathematical problem solving; production and cost functions, single and multiple input allocation, agricultural output combinations, agricultural market structures, and economies of size. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 318. Global Agricultural Marketing and Trade. 4 units**

Term Typically Offered: SP

Prerequisite: AGB 301.

Analysis of international marketing opportunities for agricultural products. Strategies for enhancing the performance of U.S. agricultural exports/ imports. Impact of government trade policies and regulations, distribution systems, and the changing consumer. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 322. Principles of Agribusiness Management. 4 units**

Term Typically Offered: F

Prerequisite: AGB 212 and AGB 214.

Organization and operation of agribusinesses. Identification of factors affecting profitability. Evaluation of the business for increased efficiency and profit. Application of budgeting to representative firms and independent analysis of an agribusiness. 3 lectures, 1 activity.

**AGB 323. Decision Making with Agribusiness Accounting Information. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: AGB 214.

Decision making using agribusiness accounting information. Focus on setting and monitoring objectives, analysis, forecasting and budgeting, business ethics, and decision making. Topics covered within the food supply chain. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 activity.

**AGB 326. Rural Property Appraisal. 4 units**

Term Typically Offered: W

Prerequisite: AGB 308 or AGB 310.

Methods of rural appraisal, including farms, ranches and other rural properties, use of county records, appraisal practice on different types of rural properties, discussions with professional appraisers. 3 lectures, 1 activity.

**AGB 327. Agribusiness Data Analysis. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: STAT 251 and AGB 260.

Methods in agricultural business data analysis, including multiple regression analysis, analysis of variance, and time series analysis. Applications include agricultural price forecasting and estimation of the determinants of food and fiber demand. 3 lectures, 1 activity.

**AGB 328. Decision Tools for Agribusiness. 4 units**

Term Typically Offered: F, W, SP  
Prerequisite: STAT 251 and AGB 260.

Development of agribusiness modeling techniques that are applied to solving a diverse and unique set of resource allocation issues encountered throughout the agricultural and food retail sectors. Techniques include linear programming, decision analysis, and computer simulations. Course may be offered in classroom-based or online format. 3 lectures, 1 activity.

**AGB 335. Agricultural Lending. 4 units**

Term Typically Offered: W  
Prerequisite: AGB 308 or AGB 310; and AGB 323.

Structure and performance of the agricultural lending industry. Advanced agricultural loan analysis and risk assessment. Agricultural loan documentation, securitization of farm loans, and farm bankruptcy. Exploration of interest rate impacts on agricultural lending. 4 lectures. Formerly AGB 410.

**AGB 339. Internship in Agribusiness. 1-12 units**

Term Typically Offered: TBD  
CR/NC  
Prerequisite: Consent of internship instructor.

Selected students will spend up to 12 weeks with an approved agricultural firm engaged in production or related agribusiness. Time will be spent applying and developing agribusiness functional and managerial skills and abilities. One unit of credit may be allowed for each full week of completed and reported internship. Degree credit limited to 6 units. Credit/No Credit grading only.

**AGB 369. Agricultural Personnel Management. 4 units**

Term Typically Offered: F, W, SP  
Prerequisite: AGB 212 or ECON 201 or ECON 221; and junior standing.

Standard topics of California agricultural personnel management: recruitment; appraisal and performance evaluation; compensation; training and development; discipline; safety and health; labor relations; and immigration policy. Systemic approach to aspects of managing human capital, and how to implement human resource policies. Not open to students with credit in AGB 401. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

**AGB 370. World Food Economy. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 312 and AGB 313.

International agricultural production, economics, and distribution. Comparative and competitive advantage in world agriculture. Food security issues and regional analysis of agriculture policies. The future of agriculture from a global perspective. 4 lectures.

**AGB 400. Special Problems. 1-2 units**

Term Typically Offered: TBD  
Prerequisite: Consent of department head or instructor.

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

**AGB 404. Food Retail Management. 4 units**

Term Typically Offered: W, SP  
Prerequisite: AGB 301.

Uses and techniques in management of perishable and non-perishable food commodities at the retail level. Issues in traditional versus new models of retail with emphasis on the marketing mix. Introduction to vendor, category and shelf management. 4 lectures.

**AGB 405. Agribusiness Marketing Research Methods. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 301 and AGB 327.

Agricultural marketing research data collection and analysis. Emphasis on food sector market segmentation, product positioning, new product testing, sales forecasting, and marketing plan development through secondary and primary data sources. Experimental research design and implementation. 4 lectures.

**AGB 406. Agribusiness Marketing Planning. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 301; and AGB 327 or AGB 328.

Development of agribusiness marketing plans in self-managed teams. Emphasis on developing presentation skills. Integration of marketing mix, particularly promotional elements in developing agribusiness marketing strategy emphasized. 4 lectures.

**AGB 411. Agribusiness Risk Management. 4 units**

Term Typically Offered: F  
Prerequisite: AGB 301; AGB 308; and AGB 327 or AGB 328.

Risk management strategies and tools applied to the agribusiness industry, focusing on risks in agriculture. Forward contracting, futures and options, swaps, crop insurance, trading and hedging strategies, and their applications to agribusiness problems. 4 lectures.

**AGB 412. Advanced Agricultural Policy. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 312.

Agricultural resource allocation issues with emphasis on policies that impact the production of food and fiber and inputs used in their production. Special topics in agricultural resource allocation stressing issues and policies emphasizing economic externalities. 4 lectures.

**AGB 422. Transportation and Logistics in Global Agribusiness. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 328.

Scope and elements of the agribusiness logistics system including supply and distribution channels, transportation, inventory, warehousing, packaging, and order processing. 4 lectures.

**AGB 425. Agribusiness Supply Chain Management. 4 units**

Term Typically Offered: TBD  
Prerequisite: AGB 323; and AGB 327 or AGB 328.

Focus on the development and application of decision models in food supply chains with emphasis on demand forecasting, aggregate planning, inventory management (cycle and food safety), supply network design, transportation, coordination and sourcing. 4 lectures.

**AGB 427. Advanced Agribusiness Data Analysis. 4 units**

Term Typically Offered: TBD

Prerequisite: AGB 327 or AGB 328 or graduate standing and consent of instructor.

Advanced topics in agricultural business data analysis. Topics include advanced agricultural price analysis, advanced linear programming in agribusiness, and advanced agricultural business operations analysis. The Class Schedule will list topic selected. 4 lectures.

**AGB 440. Field Studies in Agribusiness. 2 units**

Term Typically Offered: TBD

Prerequisite: Senior standing.

Visitation to selected agribusinesses. Organization, operation, services and problems considered. Can only be taken once for credit in the major.

**AGB 445. Produce Marketing. 4 units**

Term Typically Offered: TBD

Prerequisite: Senior standing and AGB 301.

Directed group study of fresh fruit and vegetable sales and marketing. Analysis of marketing from the perspective of the Grower Shipper, Specialty Produce Marketer, Terminal Market Wholesaler, Food Broker, Food Service Supplier, Retailer and International Marketing. Field trip required. 2 lectures, 2 seminars.

**AGB 450. Agribusiness Strategy Formulation. 4 units**

Term Typically Offered: TBD

Prerequisite: AGB 323; and AGB 327 or AGB 328.

Development of strategy for agribusinesses where an uncontrollable environment makes output and results highly unpredictable; emphasis on the total enterprise. Case analysis. 4 lectures.

**AGB 452. Agricultural Market Structure and Strategy. 4 units**

Term Typically Offered: TBD

Prerequisite: AGB 313.

Development of skills for quantity and price determination in a noncompetitive setting. Emphasis on examining the agribusiness industry structures that exist and their effects on decision-making. The use of game theory demonstrated as a strategy formulation tool. 4 lectures.

**AGB 462. Senior Project - Applied Agribusiness Problems. 4 units**

Term Typically Offered: F, W, SP

Prerequisite: Senior standing; Agricultural Business major; AGB 301; AGB 308 or AGB 310; AGB 312; AGB 313; AGB 323; and AGB 327 or AGB 328.

Selection and analysis of agribusiness problems and opportunities in directed group-based projects. Exploration of problems which agribusiness graduate students may encounter in marketing, finance, management and production in the food and fiber industry. Formal report and presentation required. 4 lectures.

**AGB 463. Senior Project - Agribusiness Consulting. 4 units**

Term Typically Offered: TBD

Prerequisite: Senior standing; Agricultural Business major; AGB 301; AGB 308 or AGB 310; AGB 312; AGB 313; AGB 323; and AGB 327 or AGB 328.

Client-centered course where self-managed teams develop solutions to agribusiness problems. Exploration of problems typical to those which agribusiness graduates may encounter in marketing, finance, management and production in the food and fiber industry. Formal report and presentation to client required. 4 lectures.

**AGB 470. Selected Advanced Topics. 1-4 units**

Term Typically Offered: SP

Prerequisite: Consent of instructor.

Directed group study of selected topics for advanced students. Open to undergraduate and graduate students. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.