

# Courses in Aviation Administration

## The Program – General Description

The Bachelor's of Science degree program in Industrial Technology with the option in Aviation Administration at California State University, Los Angeles, was developed in response to needs identified by the airlines and the aviation industry, and in cooperation with those area community colleges offering two year aviation programs.

The 180 quarter units of coursework required for the degree will include the aviation or business sequence of courses (21 semester units/31.5 quarter units) taken at a community college, as well as applicable transfer courses in general education. The upper division courses taught at California State University, Los Angeles, build on the lower division courses taken at community college. Partner community colleges include: Cypress; Glendale; Long Beach City; Mt. San Antonio; Orange Coast; San Bernardino; and West Los Angeles Colleges.

## Community College Articulation

Students interested in the Aviation Administration degree, should first complete an aviation, or business program, at one of these institutions offering lower division aviation courses as well as be encouraged to take as many transferable general education courses, possible, but not to exceed 105 quarter units, the maximum transferable units allowed, leaving at least 81 quarter units left to be taken at California State University, Los Angeles.

## Admission Requirements

Generally, if a student was in good standing at the last college attended, he or she may be admitted as an undergraduate transfer student. Detailed information contained in the University's catalog may be obtained from community college counselors, or from the California State University, Los Angeles, at the Office of Admissions.

Students desiring more specific information regarding admission and the Aviation Administration Program may telephone the Department of Technology, (323) 343-4550 for an appointment with Dr. Keith Mew, Ph.D., the aviation advisor, or call him directly at (323) 343-4568.

## Internship and Career Opportunities

Every student who enters the CSULA Aviation Administration program will have an opportunity to take an internship at an airline or airport. Partnership organizations include Los Angeles World Airports, Airport Group International and Southern California Association of Governments. Graduates of the program working at airports, the FAA and TSA earn salaries of over \$80,000, while senior airline pilots make up to \$150,000. For those wanting military careers, officer selectivity is enhanced by an aviation administration program baccalaureate degree.

**There are only four universities in California that offer an aviation administration program. Of these four, CSULA is the most accessible for Los Angeles based students.**

### TECH 340 -- Airline Operations (4)

Operational techniques and current problems confronting airlines: control tower operations, airport lighting, radio and meteorological service, reservations, ticketing, passenger trends, feasibility route studies, fire and crash protection, and air route traffic control centers. Free field trip included.

### TECH 341 - General Aviation Operations & Administration (4)

History, scope & managerial perspective of general aviation industry. Focus on Fixed Based Operators, including marketing, methods of acquiring aircraft, promotion & sales management. Free field trip included.

### TECH 342 -- Airline Administration (4)

Airline scheduling, marketing and organization; air carrier familiarization; effect of federal regulations; industrial, financial, and economic decision making.

### TECH 343 -- Airport Administration (4)

Organization, personnel, maintenance, zoning, adequacy of facilities, financing, planning, operations, revenues and expenses, public relations, evaluation and safety; socio-economic effect of airports on the communities served.

### TECH 344 -- Aviation Law (4)

Local, state, federal and international aviation laws and regulations, include safety and economic regulations and air legal systems.

### TECH 345 -- Air Cargo

Students play the role of an entrepreneur who is considering starting up a new cargo airline. Course consists of series of analyses used in building a business plan including forecasting, payload/range analysis, weight & balance and a cash flow of costs and revenues.

### TECH 346 - National Airspace System & Air Traffic Control (4)

U.S. system of air navigation and air traffic control, including communications, air navigation, radar, air traffic control facilities, airspace, and authorized flight procedures. Free field trip included.

### TECH 440 --- Safety Factors in Aviation (4)

Aviation safety related to flight, passenger service, air traffic controller, maintenance, and ground/air operations. History, accidents, terminology, liability, worker performance, information sources, and safety program organization.

### TECH 441 --- Aviation Sales (4)

Case study analysis of marketing decisions of regional and major airlines. Requires analysis of key airline business relationships including demand and supply, payload and range, market demand, costs and revenues and break-even point.

### TECH 442 --- Airport Planning (4)

Project based simulated airport master plan. Includes forecasting demand/capacity analysis, facility planning & CAD sketching.

### TECH 443 --- Air Transportation (4)

Case study based class analyzing the effects of deregulation, general aviation, and commercial airline business decisions. Includes development and status of air transportation; facilities, state and federal regulations, legal characteristics, problems and services of U. S. carriers; organizational function of Federal Aviation Administration and the National Transportation Safety Board.

### TECH 447 --- Senior Seminar- Aviation Problems (4)

Pre-requisite – upper division standing.

Selected readings and topics on current aviation issues; interaction with aviation executives; emphasis placed on the transition from student to the aviation job market.

### TECH 454L --- Airport Finance (4)

Interactive Microsoft Excel problem-based analysis of airport operations budget and airport development feasibility gives students understanding of interaction between airport costs and airline contributions.

### TECH 454L --- Airline Finance (4)

Airline simulation based class which requires students to own and manage an airline, make a series of expansion decisions to grow their airline based on analysis of airline balance sheets, income statements, and cash flows. This is an interactive problem solving course.

## Degree Requirements

### In Industrial Technology – Aviation: (40 units minimum):

#### Required

- TECH 447 Seminar-Aviation Problems (4)  
TECH 400 Written Communication Skills (4)

#### Select 32 units from the following Technology Electives:

- TECH 340 Airline Operations (4)  
TECH 341 General Aviation Operations and Administration (4)  
TECH 342 Airline Administration (4)  
TECH 343 Airport Administration (4)  
TECH 344 Aviation Law (4)  
TECH 345 Air Cargo (4)  
TECH 346 National Airspace System and Air Traffic Control (4)  
TECH 440 Safety Factors in Aviation (4)  
TECH 441 Aviation Sales (4)  
TECH 442 Airport Planning (4)  
TECH 443 Air Transportation (4)  
TECH 454L Airport Finance  
TECH 454L Airline Finance

### In Business, Accounting, Economics, Marketing, Law (32 units minimum):

#### 20 units Required as follows:

- ACCT 300 Managerial Accounting (4)  
  
CIS 294 Business Computer Systems (4)  
Or  
Tech 291 Computers in Technology (4)  
(or equivalent course previously completed in data processing)  
  
FIN 305 Commercial Law (4)  
MKT 304 Principles of Marketing (4)  
MKT 350 Introduction to Transportation (4)

#### Economics - Select 4 units from the following:

- ECON 303 Money, Banking, and the Economy (4)  
ECON 310 Economics of the Business Firm (4)

#### Marketing - Select 8 units from the following:

- MKT 340 Principles of Advertising (4)  
MKT 342 Consumer Behavior (4)  
MKT 452 Physical Distribution Management (4)  
MKT 453 Special Topics in Transportation (4)  
MKT 455 International Transportation Seminar (4)

## Electives

Select with the consent of the advisor, courses from the following list:

#### Finance

- FIN 303 Business Finance (4)  
FIN 330 Credits and Collections (4)  
FIN 338 Real Estate Principles (4)  
FIN 339 Real Estate Practice (4)  
FIN 436 Business Risk Management (4)

#### Geography

- GEOG 358 Technology and Environment (4)  
GEOG 410 Weather and Climate (4)  
GEOG 453 Locational Analysis (4)  
GEOG 467 Transportation (4)  
GEOG 481 Political Geography (4)

#### Information Technology

- CIS 283 Introduction to Application Programming (4)  
CIS 301 Management Information Systems (4)  
CIS 310 Software and Hardware Concepts (4)  
CIS 407 Micro-computer Applications Programming (4)  
CIS 413 Planning & Controlling the Automated Office  
CIS 484 Communications Systems (4)

#### Management

- MGMT 307 Management and Organizational Behavior (4)  
MGMT 308 Business Responsibilities in Society (4)  
MGMT 469 Managing Human Resource Development (4)  
MGMT 470 Managerial Leadership and Motivation (4)  
MGMT 473 Personnel Management (4)  
MGMT 485 Project Management (4)

#### Public Administration

- POLS 404 Urban Government and Politics  
POLS 460 Foundations of Public Administration (4)  
POLS 461 Dynamics of Urban Administration (4)  
POLS 463 Public Personnel Administration (4)  
POLS 466 Public Financial Administration (4)  
POLS 472 Organization and management (4)



CALIFORNIA STATE UNIVERSITY  
LOS ANGELES

---

# Industrial Technology Aviation Administration

---

Department of Technology  
School of Engineering and Technology

<http://www.calstatela.edu/academic/ecst/tech/aviation/index.htm>



For Information Contact:

**Keith Mew, Ph.D.**

Tel: (323) 343-4568

E-mail: [kmew@calstatela.edu](mailto:kmew@calstatela.edu)

Fax: (323) 343-4571

Revised: 10 May 2004