Embry-Riddle Aeronautical University

CELEBRATING FIFTY YEARS OF AVIATION EDUCATION

1926-1976

Graduate Catalog 1976-1978

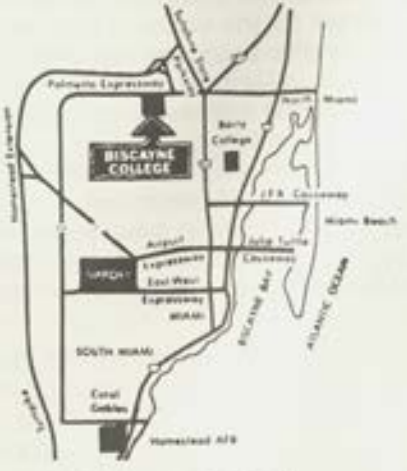
Teaching Aviation Sciences Since 1926

ACCREDITED BY THE
SOUTHERN ASSOCIATION OF COLLEGES
AND SCHOOLS
Offers Master's Degree Programs in

Aviation Management and Aeronautical Science

on the campus of

BISCAYNE COLLEGE



MIAMI, FLORIDA
Graduate Center Telephone (305) 621-5203

a word from the president

In choosing a graduate school you are about to make one of the most important decisions in your life. I hope the information in this catalog will help you make the decision which is right for you.

The nation's bicentennial year is a golden anniversary for Embry-Riddle Aeronautical University—marking 50 years of service and acknowledgement as the world's leader in higher aviation education. This reputation for leadership is founded on three principal characteristics: the professional quality of our instruction, our total commitment to aviation education and our innovative programs in response to the growth of the aviation industry.

Every member of our graduate faculty who teaches aviation related courses has had extensive industry experience in both public and private enterprise. This enables the faculty to provide an important link between theory and practice. A constant exposure to "real world" experience helps our students develop the critical, analytical, problem solving and decision-making skills they will need to cope effectively with the dynamic challenges of the aviation industry.

Because of our total commitment to aviation education, Embry-Riddle has the active interest and support of aviation leaders on our Board of Trustees and on advisory committees. These leaders have been of great assistance in formulating our curriculum so that it meets the rapidly changing needs of the aviation industry in addition to providing a solid foundation in traditional core courses for the Master's Degree.

Embry-Riddle's innovative programs are offered at the undergraduate level on the home campus in Daytona Beach, at the Miami Education Consortium and at other consortia and residence centers throughout the U.S., England, Germany, Spain and Greece.

We have played a pioneer role in the development of graduate level programs which are professionally meaningful.

If you are interested in a future in aviation and are willing to attain the high standards set by Embry-Riddle, we invite you to apply for enrollment to become a part of the Embry-Riddle tradition of excellence in higher aviation education.

Sincerely,

Jack R. Hunt

Jack R. Hunt
President

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Counseling/Registration—Payment of Fees	September 19-30
Classes Begin	October 3
End of Course Add Period	October 7
End of Course Withdrawal Period	November 4
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Counseling/Registration—Payment of Fees	December 12—January 6
Classes Begin	January 9
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Counseling/Registration—Payment of Fees	March 13-24
Classes Begin	March 27
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Summer 1978

Counseling/Registration—Payment of Fees	June 5-16
Classes Begin	June 19
End of Course Add Period	June 23
End of Course Withdrawal Period	July 21
End of Term	August 25

Fall 1978

Counseling/Registration—Payment of Fees	September 18-29
Classes Begin	October 2
End of Course Add Period	October 6
End of Course Withdrawal Period	November 3
End of Term	December 8

general information

general information

A Golden Year

The year 1976 is a banner year for the United States—the Bicentennial—and a truly golden year for Embry-Riddle Aeronautical University. It's our fiftieth anniversary!

In those 50 years we have grown from a small flight school; first to Embry-Riddle International School of Aviation, then to Embry-Riddle Aeronautical Institute and finally to the full university we are today.

Our three colleges have programs which range from certificates in maintenance and flight technology on through the Associate in Science Degree, the Bachelor of Science Degree and Master's Degrees in Aviation Management and Aeronautical Science.

Embry-Riddle students come from all over the world and Embry-Riddle graduates are working all over the world in the field of aviation.

All of this began in 1926 at Lunken Airport in Cincinnati, Ohio, with aviators T. Higby Embry and J. Paul Riddle. They had a mail carrying operation and found it was more expedient to train their own pilots and mechanics.

Two years later Embry-Riddle joined with similar air carriers to form American Airlines. Its flying school operation subsequently was moved to Miami, Florida.

The small flight school grew rapidly and soon became recognized nationally and internationally as a leader in aeronautical education. At the outbreak of World War II it assisted the U.S. Army and the Air Forces of England and France in training pilots and mechanics.

As its curriculum grew, it became a leader in the field of aviation academics as well as flight.

As part of its growth process, Embry-Riddle moved to its present site at Daytona Beach Regional Airport in 1965. Here, a $25 million campus has been designed on 86 well placed acres. When it's completed, the Daytona Beach campus will accommodate 5,000 students.

Right now, Embry-Riddle has an enrollment of more than 3,400, with 1,850 on the main campus. There are students at consortia and resident centers throughout the U.S. and at resident centers in Germany, England, Spain and Greece. The students come from all 50 states and more than 40 countries.

Embry-Riddle returned to the Miami area in 1971, joining with Barry College to form the Miami Education Consortium (MEC). The MEC enables students to acquire undergraduate degrees while employed full-time in occupations with irregular work schedules.

During the same year, plans were initiated to offer aviation oriented graduate programs in the Miami area. The first of these, the Master of Aviation Management, was offered at the Embry-Riddle Graduate Center on the Biscayne College campus beginning in 1973. A second degree, the Master of Aeronautical Science, was added to the Graduate Center offerings in 1975. Both programs have grown steadily and consideration is being given to opening additional centers.

Graduates are now serving in various capacities with the airlines, general aviation manufacturers and fixed base operators, in airport management including port authorities, governmental units and aviation education.

Embry-Riddle Aeronautical University will continue to answer the increasing demand for new programs and to anticipate future demands of the aviation industry.

Philosophy

Embry-Riddle Aeronautical University accepts as a responsibility:

- The personal task of preparing students for responsible citizenship.
- The educational task of adequately preparing students for productive occupational and professional careers in aviation.
- The industrial task of maintaining the closest liaison with the aviation community and of maintaining a continuing dialogue with all elements of aviation.

Statement of Purpose

In accordance with the philosophy of the University, the following statement of purpose has been adopted:

- To prepare the student for immediate productivity and effective contributions to aviation.
- To develop within the student the ability to evaluate objectively the economic, political and moral affairs of man and society and to make advanced studies and research available to the student.
- To provide the facilities, faculty and staff for the professional and intellectual climate needed to inspire students to acquire a high degree of inquisitiveness, professionalism, and skill in their chosen aviation fields.
- To develop and maintain professional aviation-oriented educational programs consistent with high standards.
- To maintain a constant and dynamic reevaluation of the various programs offered.
- To provide each student with an awareness of self through courses in the humanities and the social sciences.
- To sponsor and promote research activities appropriate to these purposes.

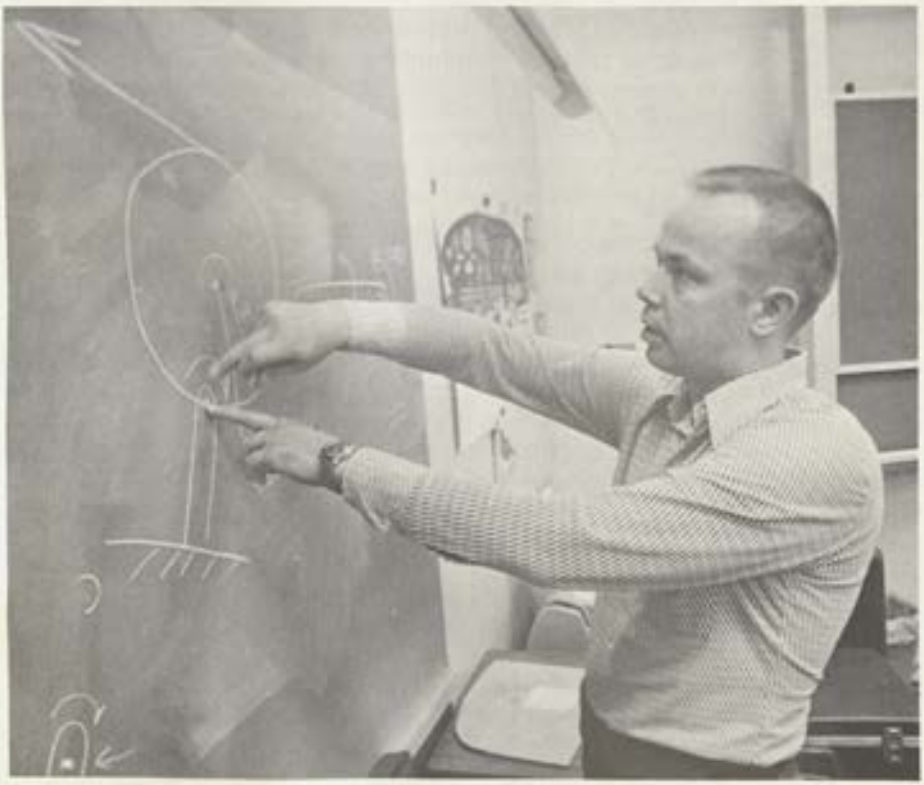
Accreditation and Affiliation

Embry-Riddle Aeronautical University is an accredited member of the Southern Association of Colleges and Schools. The engineering degree programs are accredited by the Engineers' Council for Professional Development, the national engineering accrediting agency. Technical programs in Aircraft Maintenance and Flight Technology are fully approved by the Federal Aviation Administration.

The University holds membership in the Independent Colleges and Universities of Florida, Florida Association of Colleges and Universities, and national, regional and state memberships in the following: American Association of Collegiate Registrars and Admissions Officers, American College Public Relations Association, National Association of College Admissions Counselors, College Placement Council, National Association of Student Personnel Administrators, Institute of International Education, Aviation Education Review Organization, American Society for Engineering Education.

Statement of Policy

Embry-Riddle Aeronautical University adheres to the principle of equal educational and employment opportunity without regard to race, sex, color, creed, or national origin. This policy extends to all programs and activities supported by the University.



educational resources

Location

Embry-Riddle Graduate Center is situated in one of the major cosmopolitan areas of the country. Miami, Florida is a world-famous, year-round resort and sports center, offering a perfect blend of climatic and geographic endowments.

As the "Air Hub of the Americas," Miami has become the air link between North America, the Caribbean, and Latin America. Miami International Airport is second only to New York's John F. Kennedy Airport in volume of international air cargo in the United States. In addition to the domestic and international scheduled passenger-cargo airlines, there are approximately 40 non-scheduled air cargo carriers flying freight and express in and out of Miami.

Some of the country's busiest general aviation airports are located in the Dade-Broward County area, including Fort Lauderdale-Hollywood Airport, Opa-Locka and Tamiami.

Approximately 70,000 Miamians hold aviation-related jobs and account for some $600 million in annual payroll.

The location of the Graduate Center offers the student a unique opportunity for exposure to the aviation environment. Some of the most knowledgeable leaders of the Miami aviation community are available to the student as graduate faculty members.

Physical Facilities

The Graduate Center is located on the campus of Biscayne College, twenty minutes north of downtown Miami. The Miami expressway system provides ready access from the surrounding areas and suburbs. Adequate parking is available at the campus. The Director's office and graduate classrooms are located on the second floor of the main academic building at the Biscayne campus. A lounge is available to graduate students for study and for informal visits with other graduate students.

Libraries

The University's library resources for advanced study and research are readily available. Both the Biscayne College library and the Graduate Center reference room are located in the main academic complex. Inter-library loan service from other institutions is provided for those engaged in

research. This includes resource materials from airlines in the Miami area as well as materials from the Embry-Riddle home campus library.

Computer Facilities

A computer terminal linked with the computer facilities at the home campus in Daytona Beach is available for student usage.

Research

The George R. Wallace Research Center, located on the Daytona Beach campus, is responsible for all research and development activities of the University. Graduate students may submit worthy research papers and participate in the Center's activities. Students are encouraged to submit reports for publication in the Embry-Riddle Aviation Research Journal which is published annually.

Housing

There are many apartments and efficiency units within ten minutes of the Biscayne College campus. Assistance is offered through the Director's Office.

admission to graduate study

General Requirements

Students should apply for admission at least 60 days prior to the start of the term in which they plan to enroll. Applicants who possess a baccalaureate degree from an accredited college or university may be admitted with FULL graduate standing providing the student's background evidences an understanding of the concepts of economics (macro and micro), accounting, statistics, and management. Evidence may consist of completed undergraduate courses, experience, or satisfactory scores on examinations administered by USAFI/DANTES and CLEP. The following Embry-Riddle Aeronautical University undergraduate courses fulfill Master's program prerequisites:

Economics: EC 110, Macroeconomics, and EC 210, Microeconomics.
Accounting: MS 110, Accounting I, and MS 112, Accounting II (MS 112 is not a prerequisite for the Master of Aeronautical Science degree program).
Statistics: MA 211, Statistics with Aviation Applications OR MA 222, Business Statistics.
Management: MS 200, Principles of Management.

In addition to these requirements, applicants for the Master of Aeronautical Science degree must possess a Commercial Pilot certificate with Instrument rating (or the military equivalent) or the academic training associated with these qualifications. The following Embry-Riddle Aeronautical University undergraduate courses fulfill these prerequisites:

Flight: FA 305 Advanced Flight II
Aeronautical Science: AS 100, Foundations of Aeronautics; AS 102, Navigation I; AS 201, Meteorology; AS 202, Navigation II; AS 203, Aircraft Engines-Reciprocating; AS 210, Aircraft Systems and Components; and, AS 311, Aircraft Engines - Turbine.

Holders of advanced degrees seeking admission to the program will be judged for admission primarily upon the record of their previous graduate study.

Undergraduate students in their final term of study at accredited colleges and universities may apply for admission with full graduate standing providing they have the background preparation described above. Such admission is contingent upon the recommendation of the Graduate Student Standards Committee, subsequent presentation of an undergraduate degree, and a supplementary transcript of all courses not previously reported.

Graduates of accredited colleges and universities who do not present evidence of understanding of the concepts established as prerequisites for admission with full graduate status may be admitted to graduate study in PROVISIONAL status. In such cases, applicants will be admitted to full graduate status upon providing satisfactory evidence of completion of all prerequisites. A student admitted in provisional status will be limited to enrollment in those graduate courses for which his background evidences an acceptable level of understanding of concepts. Students may take a maximum of 12 credit hours while in provisional status.

Graduates of accredited colleges and universities who do not intend to work toward a graduate degree may be admitted as SPECIAL students at the discretion of the Graduate Student Standards Committee.

International Students

The credentials of applicants from foreign countries are evaluated in accordance with the general regulations governing admission. An application, application fee, photograph, and detailed transcripts of undergraduate records must be submitted to the Director at least six months in advance of the beginning of the term in which the applicant seeks admission. The six month period will allow time for the exchange of necessary correspondence and documents relative to securing passports and visas for study in the United States. Applications received from international students will not be processed without payment of the application fee.

Candidates for admission are required to consult the American Consulate or the American Embassy in their country of residence and make arrangements to take an English language examination. The results of this examination are an important factor in determining the acceptability of an applicant. Embry-Riddle must receive this information directly from the Consular Office or Testing Center before a decision concerning admission will be made.

In addition, candidates for admission must complete all arrangements for the necessary American currency to cover tuition and living expenses. The student must furnish an advance statement of financial support. The amount of financial sutport required will be reflected in the letter sent to the student after receipt of the application for admission. The statement of financial support also is an important factor in determining the acceptability of an applicant.

Upon approval for admission, an advance deposit in the amount of $600 U.S. currency is required. This deposit will apply toward tuition and textbook expenses during the initial term of enrollment. The $600 deposit must be received by the Graduate Center Director before the letter forwarding

the Certificate of Eligibility (Form I-20) is transmitted. This Certificate of Eligibility must be presented to the nearest office of the American Consulate in order to obtain the student visa and must be in the possession of all international students prior to departure from their country. A change of immigration status from tourist visa (or other) to student visa is not possible after the student's arrival at the Graduate Center.

Transfer Students

A candidate for admission who has previously been enrolled in graduate study at another accredited institution must arrange for an official transcript to be sent directly to the Graduate Center Director from the Registrar of each institution attended. If requested, the candidate must present the catalog of the institution from which he transfers, marked to indicate courses taken. Transfer credit will be accepted as indicated on page 17.

Advanced Standing

A maximum of four credit hours of advanced standing, applicable only toward the Master of Aeronautical Science degree, may be granted to an applicant possessing an Airline Transport Pilot certificate and appropriate aircraft type ratings. This credit will be granted as follows:

- Airline Transport Pilot Certificate — 2 Credit hours
- Type rating - Reciprocating Powered Aircraft — 1 Credit hour
- Type rating - Turbine Powered Aircraft — 1 Credit hour

Application Procedures

To be admitted, interested individuals must forward a completed application to the Director, Embry-Riddle Aeronautical University Graduate Center, 16400 N.W. 32nd Avenue, Miami, Florida 33054. The following must also be submitted to the Director:

- An official transcript from each college or university attended.
- If applicable, certification of experience when necessary to substantiate understanding of concepts of one or more prerequisite subject areas.
- If applicable, an official test report of USAFI/DANTES and/or CLEP examinations when necessary to substantiate understanding of concepts of one or more prerequisite subject areas.
- If applicable, a copy of FAA pilot certificates or certification of military pilot qualification.
- An application fee of $25 (non refundable).

Students will be admitted to the program in a PROVISIONAL status until official transcripts and records confirm initial counseling discussions. All official records must be received prior to the end of the first term in which the student is enrolled in order to receive credit for the courses taken.

the master's degree programs

Academic Goals

The purpose of the Master's degree programs in aviation is to produce leaders of high competence who have had meaningful learning experiences under competent guidance. It is highly desirable that the unique professional experiences of a student be acknowledged as having intrinsic value in the total professional preparation of the student. Consequently, the graduate programs capitalize upon the student's employment experiences in aviation. Embry-Riddle graduate students, in many cases, are personnel who have already established themselves in aviation careers.

The graduate programs cement the theoretical and practical experiences of the student in a meaningful fashion. In so doing, the University seeks to bring about a true synthesizing of professional preparation and experience.

Program Features

- Applicants holding a bachelors degree *in any area of study* may enter at the graduate level and complete a degree program with a *minimum of undergraduate prerequisites.*
- Students lacking undergraduate prerequisites may *enroll in other graduate courses* while fulfilling established prerequisites.
- Up to *twelve credit hours of relevant study may be transferred* from other accredited graduate programs.
- *Executives who are acknowledged leaders in their respective aviation fields* serve as adjunct faculty.
- Four terms are offered annually, enabling *full-time students to complete the program within one year.* Part-time students can complete the program in less than two years.
- *All class periods are taped "live,"* and stored on cassette tapes, enabling students to make up classes they are unable to attend because of occupational commitments.
- *Classes are scheduled evenings and weekends* to meet the needs of working students.

- Instructional methodology may include *weekend seminars, independent study, traditionally scheduled class meetings or combinations of these.*
- *Individual counseling by the Program Director is available to all students.*
- *Small class sizes* permit student-teacher interaction and maximum sharing of opinions, experience and knowledge.
- Assistance is available to students in areas such as Veteran's Benefits, loans, and housing.

degree of master of aviation management

The Master of Aviation Management is a professional degree primarily for individuals seeking to become managers in the aviation industry and for those presently serving in management positions in the industry. However, the program offers enough flexibility to permit individuals working in other industries to pursue the advanced degree specializing in non-aviation areas.

The program is not designed to provide specialists in such areas as accounting, finance, marketing, operations research, personnel, etc., but, instead, to develop a well-rounded manager who can coordinate the activities of such specialists toward the goals and objectives of the organization.

While the program provides the traditional foundation courses in management, it also emphasizes practical applications of management theory to the aviation industry. Diversity of skills and employment capability are key aims of the program. The program permits obtaining a degree in a field related to one's occupation and also presents managerial principles applicable to all industries thereby providing a significant flexibility for the individual.

The Curriculum

Thirty-six (36) trimester hours of graduate study are required. Eighteen (18) credit hours are required core courses, with the remaining eighteen (18) hours electives. Required core courses emphasize the tools and techniques of management; electives emphasize the application of these techniques to more specific aviation problems.

CORE COURSES

MS 510 Advanced Organization Theory
MS 520 Quantitative Methods in Business
MS 530 Management Information Systems
MS 540 Personnel Management and Industrial Relations
MS 550 Marketing Management
MS 560 Current Problems in Aviation

ELECTIVE COURSES (Select 6)

MS 500 Government Role in Aviation
MS 570 International Developments in Aviation
MS 590 Portfolio Theory and Capital Markets
MS 595 Small Business Management
MS 600 Transportation Principles
MS 605 Airline Operations and Management
MS 618 Corporate Finance
MS 620 Managerial Psychology
MS 625 Airline Marketing Management
MS 632 Aviation Labor Relations
MS 635 Business Policy
MS 638 Managerial Economics
MS 645 Airport Management
MS 650 Advanced Managerial Accounting
MS 655 Aviation Law and Insurance
MS 660 Money and Banking
MS 665 Public Administration
MS 695 Special Project
AS 508 Aircraft Accident Investigation and Aviation Safety
AS 530 Corporate Aviation Operations
AS 545 Maintenance Technology
AS 610 Advanced Aircraft Systems
AS 636 Advanced Aviation Planning Concepts
AS 640 Supply and Distribution
AS 641 Production and Procurement
AS 642 Research and Development
AS 650 Aerospace Control/Communication Systems

All courses are non-sequential and are assigned a credit value of three trimester hours. New students may enroll and start the program with any course; however, undergraduate prerequisites must be completed before the student may enroll in a graduate course for which a prerequisite has been established.

Elective courses enable the student to select courses suited to his or her individual interests, aspirations, and occupational needs.

degree of master of aeronautical science

The Master of Aeronautical Science program provides a professional degree for the student who desires to pursue a career in technically oriented aviation activities. The program is a specially planned and integrated curriculum designed to meet the educational requirements of those students who would direct and supervise technical activities including operations, maintenance, logistics, safety, systems and meteorological functions.

This program stresses the development of both technical and managerial skills needed by current and future directors, supervisors and potential leaders. It is also concerned with the ability of these individuals to deal with problems of choice and complexity involved in the successful adaptation of functions and organizations to new requirements in an ever-changing environment.

The program provides the student with an opportunity to achieve individual fulfillment and contribute significantly to the aviation industry, which represents an extremely important national asset. Program emphasis is placed on the interaction of different facets of the aviation industry and their interrelationship with other sectors of the national economy. The student is encouraged to gain a deeper appreciation of the contributions aviation has made, is making and may be expected to make to the technological, economic, social, political and human advancement of society.

The Curriculum

Thirty-six (36) trimester hours of graduate study are required. Twenty-one (21) credit hours are required core courses, with the remaining fifteen (15) hours electives. Of the five elective courses, at least two must be selected from aeronautical science courses. Required core courses emphasize technical knowledge across the broad spectrum of aviation operations, safety, communications and aircraft systems as well as the tools and techniques of management. The electives permit a concentration or cross-sectional selection of courses concerned with various aspects of aviation operations, logistics or management.

CORE COURSES

AS 508 Aircraft Accident Investigation and Aviation Safety
AS 610 Advanced Aircraft Systems
AS 650 Aerospace Control/Communications Systems
MS 510 Advanced Organization Theory
MS 530 Management Information Systems
MS 540 Personnel Management and Industrial Relations
MS 605 Airline Operations and Management

ELECTIVE COURSES (Select 5)

AS 530 Corporate Aviation Operations
AS 545 Maintenance Technology
AS 550 Airline Transport Pilot
AS 560 Aviation Psychology
AS 601 Advanced Meteorology
AS 636 Advanced Aviation Planning Concepts
AS 640 Supply and Distribution
AS 641 Production and Procurement
AS 642 Research and Development
MS 500 Government Role in Aviation
MS 520 Quantitative Methods in Business
MS 550 Marketing Management
MS 560 Current Problems in Aviation
MS 570 International Developments in Aviation
MS 595 Small Business Management
MS 620 Managerial Psychology
MS 625 Airline Marketing Management
MS 632 Aviation Labor Relations
MS 645 Airport Management
MS 655 Aviation Law and Insurance
MS 665 Public Administration

All courses are non-sequential and are assigned a credit value of three trimester hours. New students may enroll and start the program with any course; however, undergraduate prerequisites must be completed before the student may enroll in a graduate course for which a prerequisite has been established.

Elective courses enable the student to select courses suited to his or her individual interests, aspirations, and occupational needs.

academic regulations

Length of Term, Classes and Hours

The academic year at the Graduate Center is composed of four 10-week terms. The Fall term begins in early October; the Winter term in January; the Spring term in March; and the Summer term in June. Each course will provide for 45 hours of instruction and have a value of three trimester hours. A trimester hour is equivalent to a semester hour.

Graduate Center classes are scheduled during the evening hours and on weekends in order to accommodate the working student.

Grading and Grade Reports

The following four-point scale is used to document student performance:

Grade	Achievement Rating	Quality Points
A	Excellent	4
B	Good	3
C	Satisfactory	2
F	Failure	0
I	Incomplete	0
W	Withdrawal without penalty	0

A grade of "W" will be issued to a student withdrawing prior to the date indicated in the graduate studies calendar (p. v). Withdrawal must have prior approval of the Graduate Program Director. If a student withdraws from a course after the specified date, a grade of "I" will be assigned.

If incomplete work resulting in an "I" grade is not completed by the end of the second term subsequent to the term in which the "I" grade was assigned, the grade will become a permanent "I" and the student will be required to re-register for the course in order to receive credit for it.

Grade reports are mailed to students as soon as possible after course grades are submitted by instructors. Information on grades is not given over the telephone nor to students inquiring in person.

Grade Point Average

The grade point average (GPA) is determined by dividing the total number of grade points earned at Embry-Riddle by the total number of trimester hours attempted. When a "W" or "I" grade is recorded for a course, the hour value does not count as hours attempted.

In calculating the GPA, a repeated course shall be considered an additional course.

The University reserves the right to withdraw the enrollment privilege of a student whose cumulative grade point average in the program falls below 2.50.

Graduation Honors

The Master of Aviation Management and/or the Master of Aeronautical Science degrees will be granted "With Distinction" to students with a cumulative grade point average of 3.50 or higher for all graduate courses completed with Embry-Riddle.

Course Load

The maximum graduate course load of full-time students is established as nine credit hours per term. Students working in excess of 25 hours per week will be classified as part-time students and are limited to a maximum of six credit hours each term.

Exceptions to these limits may be authorized by the Graduate Center Director only when the student has demonstrated exceptional academic performance in graduate work previously completed with the University.

Degree Time Limit

A master's degree program must be completed within seven years of the time a student initially enrolls in the program.

Residence Credit

A minimum of 24 credits of graduate work must be completed with Embry-Riddle Aeronautical University for award of either the Master of Aviation Management or the Master of Aeronautical Science degree.

Transfer Credit

A maximum of twelve credit hours may be transferred from graduate programs at other accredited colleges and universities toward the Master of Aviation Management degree. Courses completed within five years of enrollment in this program in which a grade of "B," or higher, was achieved may be transferable. A course transferred to satisfy a required course must be equivalent to one of the core courses. A course transferred for elective credit must be in the management or aeronautical science area, but need not be equivalent to one of the specific elective courses offered in the program.

A maximum of twelve credit hours may be transferred from graduate programs at other accredited colleges and universities toward the Master of Aeronautical Science degree. Courses completed within five years of enrollment in this program in which a grade of "B," or higher, was achieved may be transferable. Of these, no more than six credit hours may be used to satisfy core course requirements. A course transferred to satisfy a required

course must be equivalent to one of the seven core courses. A course transferred for elective credit must be in either the management or aeronautical science area but need not be equivalent to one of the listed elective courses in this program. Of the twelve credit hours which may be transferred from other graduate programs, a maximum of four credit hours may be granted as elective credit to an applicant possessing an Airline Transport Pilot certificate and appropriate aircraft type ratings.

Transferability of credit toward both degree programs will be determined by the Graduate Student Standards Committee.

Course Availability

Every effort will be made to provide sufficient offerings each term in order that students may carry a normal (nine credit hours) full-time load on a continuing basis. However, course offerings in any one term will be in direct proportion to the total enrollment within the programs and the degree demands of students. Certain courses may be offered for several consecutive terms and then not be available again for several terms.

The University reserves the right to cancel a particular course offering in any term in which enrollment does not reach a minimum of 15 students by the end of the registration period. Students enrolled in such courses will be informed promptly of this action and will be permitted to transfer without additional charge into another course. Should his schedule not permit a student to make this transfer, tuition for the cancelled course will be refunded in full.

Examinations for Prerequisite Courses

CLEP or USAFI/DANTES examinations will be accepted where such examinations measure competency in the subject matter of prerequisite courses and a satisfactory score is attained. USAFI/DANTES and CLEP subject examination scores as recommended by the American Council on Education are accepted for prerequisites.

Credit for the subject examinations will be accepted for equivalent ERAU courses with the approval of the Graduate Student Standards Committee. The credit will be awarded only for examinations taken prior to enrolling as a degree candidate. After enrolling, a student may apply to take ERAU administered course equivalency exams.

Application for Degree

Application for either degree must be submitted to the Graduate Center Director during the registration period of the term in which the student expects to graduate. The prescribed graduation fee must be submitted with the application. A student may graduate at the end of any term.

Graduation Requirements

In order to graduate with either the Master of Aviation Management or Master of Aeronautical Science degree, a student must:

- Successfully complete all required courses.
- Have completed a minimum of 36 hours of graduate work acceptable toward the degree.
- Have completed a minimum of 24 hours of course work with Embry-Riddle.

- Have achieved a cumulative grade point average of 3.0 or higher for all graduate work completed with Embry-Riddle.
- Satisfy all financial obligations.
- Be recommended by the faculty and Dean of the College.

A student may pursue both degrees. A minimum of twelve additional hours, thus a minimum total of 48 hours of applicable graduate work, must be completed to be awarded both degrees. At least 18 hours must be in Aviation Management courses and 18 in Aeronautical Science courses. Additionally, core course requirements of both programs must be satisfied.

Withdrawal from the University

A graduate student who withdraws from the University must apply to the Graduate Center Director for permission to withdraw in good standing. All accounts must be paid in full at the time of withdrawal.

Student Rights and Privacy

Rights and privacy of students is the subject of Public Law 93-380 which became effective November 19, 1974. The law requires a student to sign individual release forms for each company, school, etc., to whom he wants information released. Additionally it allows students to review their files. Any student desiring more information should contact the Graduate Center Director.

course descriptions

Aeronautical Science

AS 508 - Aircraft Accident Investigation and Aviation Safety **3 Credits**

A critical analysis of aircraft accidents including development, evaluation and subsequent use of aircraft accident investigation data. With this data base, accident prevention and development and evaluation of aviation safety procedures are examined in detail. Particular emphasis is placed on the human factors which may contribute to accidents in transport category and general aviation operations. The student will evaluate the function, organizational structure and results of N.T.S.B. (National Transportation Safety Board) accident investigations. He will examine and analyze both the narrative and brief format styles of N.T.S.B. accident reporting. Included is a study of Title 49, Chapter VII of the Federal Register which contains the regulations governing the N.T.S.B. The student will identify some of the problems confronting aviation safety, state possible solutions to these problems, and describe various human factors which, in various combinations, have led to aircraft accidents for both single pilot and two or three man crew operations. Prerequisite: None.

AS 530 - Corporate Aviation Operations **3 Credits**

Examines the establishment and operation of a corporate flight department. Operational and administrative factors peculiar to corporate aviation are analyzed. The procedures and techniques generally accepted as standards by professional corporate operations are treated in relation to independent corporate experiences. The student will be presented with a practical view of the corporate aviation environment and should acquire an appreciation for its mission of management mobility and an understanding of how to apply the facilities available to accomplish it. FAA requirements and the contributions and limitations of aviation to the company's financial well being are also studied. Prerequisite: None.

AS 545 - Maintenance Technology **3 Credits**

A detailed analysis of maintenance regulations, structure, capabilities and limitations of maintenance organizations, maintenance functions accomplished at depot and airport levels, and maintenance inspection and reporting requirements. The student will analyze preventive and corrective maintenance practices, maintenance scheduling, processing of reparables, and maintenance inspections conducted by commercial airlines and fixed base operators. Included are case studies on maintenance actions to be taken in typical and unique situations. A major objective is to understand the interface of maintenance functions with supply operations and training activities. Management functions and responsibilities directly related to the aircraft maintenance effort are analyzed. Prerequisite: None.

AS 550 - Airline Transport Pilot **3 Credits**

Preparation for the Airline Transport Pilot written examination. Upon completion of the course, arrangements are made for the student with sufficient flight hours to take both the written and flight examinations required for the ATP. The student will receive intensive instruction in the following areas included in the FAA written exam: Federal Aviation Regulations, Airman's Information Manual, aviation weather, weight and balance, jet transport characteristics, aircraft performance, terminal instrument approach procedures and special problems involving estimated enroute flight times, required fuel, endurance, off-course procedures, wind, airspeed adjustments, cabin pressurization and Mach Number. Prerequisite: Commercial or military instrument pilot rating.

AS 560 - Aviation Psychology **3 Credits**

A detailed consideration of theory and research concerning personal interaction processes in representative aviation environments and human engineering factors related to the design and operation of aerospace vehicles and components. Attention is given to psychological and physiological aspects of aviation variabilities in performance of ground support personnel and flight crews under conditions of fatigue and emotional stress. The student should appreciate body tolerances to the effects of acceleration and deceleration, aerodynamic factors and atmospheric considerations in the performance of aircrew personnel. Identification and analysis of psychiatric and physiological considerations in selection of aircrew and ground support personnel are treated, as are human factor considerations in the design of aircraft instruments, instrument panels and overall cockpit layout. Prerequisite: Commercial or military instrument pilot rating.

AS 601 - Advanced Meteorology **3 Credits**

The course strengthens the meteorological background of the aviation professional. It includes a study of the laws of radiation, upper atmosphere meteorology and synoptic meteorology, as applied to modern forecasting techniques. The student should acquire detailed knowledge of the results of national and international conferences on aeronautical and aerospace meteorology, and be able to apply this knowledge to current trends and project it to future developments and capabilities in the forecasting,

analysis and operational use of meteorological phenomena. Prerequisite: AS 201, Meteorology, or commercial or military instrument pilot rating.

AS 610 - Advanced Aircraft Systems **3 Credits**

An analysis of current "state-of-the-art" aircraft systems and projection of current research trends to future air vehicle requirements and applications. The capabilities and limitations of aircraft propulsion, electrical, environmental, control and navigation systems and subsystems are treated in detail and an evaluation of their future development to meet tomorrow's requirements is made. Emphasis is placed on future propulsion developments and applications, including power plants using exotic fuels and nuclear, electric, ionic, photonic and laser propulsion devices. Systems requirements for operation in near and outer space are analyzed in detail. These include heat protection systems and stability and control systems for atmospheric entry. Ballistic and lifting trajectories are also considered. Prerequisite: AS 210, Aircraft Systems and Components, or commercial or military instrument pilot rating.

AS 636 - Advanced Aviation Planning Concepts **3 Credits**

The course is designed for current or potential aviation managers/decision-makers. It provides the student with an understanding of the various types and sources of data which the aviation planner/decision-maker uses in carrying out his responsibilities. Data available and how it is used in aviation planning and decision-making is covered. An analysis is made of data required to reach decisions on such questions as airline route structure development and expansion, fleet modernization and anticipated markets. The student will study the application of computer technology, models, simulation, heuristics, economic analysis, value theory and payoff tables as tools to aid the aviation planner/decision-maker. The application and limitations of these tools to the factors of risk, uncertainty, experience, judgment, intuition and creativity are also discussed. Prerequisites: Understanding concepts of management and economics - MS 200, EC 110 and EC 210.

AS 640 - Supply and Distribution **3 Credits**

A treatment of the control and distribution of aircraft, aircraft parts and components for aviation operations ranging from the fixed base operator to worldwide commercial airline operations. The structure of aviation supply organizations, priority systems, cost categories, inventory control and the application of electronic data processing equipment to the supply and distribution functions are discussed. Supply management is analyzed from the standpoint of economy and customer satisfaction through case studies of different aviation endeavors, ranging from the typical airline operation to the aircraft supply and distribution services provided under the terms of contracts between aircraft companies and foreign governments. The student is exposed to the technical aspects of aviation supply and their application to a wide variety of circumstances under which aircraft supply and distribution services are required. Prerequisite: Understanding concepts of management - MS 200.

AS 641 - Production and Procurement **3 Credits**

An analysis of the relationship between, and the methods of, aircraft procurement and production. The student is exposed to different types and typical provisions of procurement contracts and what type or types would be most appropriate in a given situation. Aircraft manufacturing processes and techniques, the importance of meaningful manufacturing schedules, quality control and the role of development projects in the production process are discussed. From a given set of specifications, an analysis of procurement and production actions from contract preparation through final production and testing of the end item is made. The effects of cost overruns and contract changes are also discussed. Prerequisites: Understanding concepts of management and economics - MS 200, EC 110 and EC 210.

AS 642 - Research and Development **3 Credits**

A study of the types and sources of research for the aviation industry. Distinctions are drawn between research and development and emphasis is placed on future development to meet changing requirements. The structures of the aviation industry, educational institutions and specified corporations for basic and applied research are treated. An analysis is made of how research is funded, specifications determined, and the relationship of research and development to procurement and production. Also discussed are the factors which contribute to the lead time required between initial development and initial production. An examination is made of how aircraft and component test programs are designed to meet regulatory requirements. Prerequisites: Understanding concepts of management and economics - MS 200, EC 110 and EC 210.

AS 650 - Aerospace Control/Communication Systems **3 Credits**

The course provides a detailed analysis of current and future trends in the control and navigation of aerospace vehicles. Emphasis is placed on current capabilities and future requirements of both aircraft-installed and ground based equipment for the navigation and control of commercial and private aircraft. Problems of air traffic control and communications in an overcrowded environment are examined, with an in depth exploration of potential aids to navigation and control. The latter will include an expansion or adaptation of onboard and ground based computers, satellite communications and telemetry, and the extension of course line computer, LORAN, VLF, Doppler and Inertial Navigation use. Application of systems analysis to automatic flight control, flight director and auto-land systems will be discussed. Space navigation and control methods and communication problems, both terrestrial and extra-terrestrial, will be explored. Also included is the application of techniques developed in the U.S. space program to the navigation and control of commercial and private vehicles of the future. Prerequisites: AS 103 - Flight Rules and Regulations and AS 202 - Navigation II or commercial or military instrument pilot rating.

Aviation Management

3 Credits

MS 500—Government Role in Aviation

The course will set forth both the regulatory and promotional roles of federal and state governments toward all aspects of aviation, both airline service and general aviation. Particular attention will be paid to the detailed federal regulation of safety and the economic life of the airlines, as well as to both civil and military research and development. Prerequisite: None.

MS 510—Advanced Organization Theory **3 Credits**

Dynamics of organizations: the organization seen as an open system interacting with a rapidly changing environment, as a structure of organized human cooperation, as an instrument of managerial strategy. The interactions of authority, delegation, reporting and feedback design are examined; current theory and research are applied to organization processes and design. Prerequisite: Understanding concepts of management—MS 200.

MS 520—Quantitative Methods in Business **3 Credits**

A comprehensive study of the concepts and principles of quantitative methods used in the field of management. The course is designed for students who have no previous background in quantitative methods beyond basic statistics and who intend careers as administrators, consultants, executives, or managers. The course objectives are: to introduce the important ideas in quantitative methods, to give the student enough understanding and confidence to appreciate the strengths and inherent limitations of the subject, and to demonstrate the cohesiveness of the methodology. Prerequisite: Understanding concepts of statistics and accounting—MA 211 or MA 222 and MS 110 and 112 (lab fee required).

MS 530—Management Information Systems **3 Credits**

A comprehensive study of the principles and concepts in the area of management information systems. The course objectives are: to bridge the gap between the tools and techniques and the management practitioner, and to provide a sound understanding of how these tools and techniques can be used to create viable management information systems. Prerequisite: Understanding concepts of statistics—MA 211 or MA 222 (lab fee required).

MS 540—Personnel Management and Industrial Relations **3 Credits**

An in-depth study of those areas which will provide managers and personnel administrators the expertise to develop and management the human resources needed to achieve organizational goals. The impact of trade unionism on the personnel functions will be analyzed. Areas of concentration will include: recruiting, selecting, training, manpower planning, wage and salary administration, union negotiations, motivation, interpersonal and group behavior. Prerequisite: Understanding concepts of management—MS 200.

MS 550—Marketing Management **3 Credits**

Analysis of marketing problems and determination of marketing policies in product development, promotion, pricing, channel selection; marketing management problems such as: marketing objectives, developing the marketing plan, implementation, appraisal and control. Prerequisite: Understanding concepts of economics—EC 110 and 210.

MS 560—Current Problems in Aviation **3 Credits**

An analysis of the major problem areas in aviation, covering all types of civil aviation with particular attention to the economic problems of airlines, the congestion problems at airports and in the airways, and the problems of the non-airline ("general aviation") operator. The student should obtain an across-the-board picture of aviation problems and an insight into the conflicting interests involved. Prerequisite: None.

MS 570—International Developments in Aviation **3 Credits**

An analysis of the major problem areas in international aviation, with a focus on United States policies with respect to these areas. The scope of the course will cover international airline service, the world network of airways and airports, the aircraft manufacturing industry, and the political climate in which international actions take place. Prerequisite: None.

MS 590—Portfolio Theory and Capital Markets **3 Credits**

Concepts and principles of security analysis and portfolio management, suitable for either the individual investor, the financial officer of a firm, or an owner of a firm. The objective is to enable the student to determine the likely or possible outcome from investing in particular securities or capital goods, and to use quantitative techniques of selection and surveillance of a bundle of securities appropriate to the status of an individual or firm. Prerequisite: Understanding concepts of statistics—MA 211 or MA 222.

MS 595—Small Business Management **3 Credits**

Isolates and examines for solution the significant problems encountered by men who desire to manage their own small business. Studies in depth and identifies the factors of small concerns that are distinct in nature or scope from those of big business management. The objective is to develop the student's understanding of the economic and social environment within which the small concern functions, and which both aids and restricts freedom of entrepreneur decision. Prerequisite: Understanding concepts of management—MS 200.

MS 600—Transportation Principles **3 Credits**

An analytical survey of the several modes of cargo and passenger transportation—air, rail, motor, water, and pipeline—with emphasis on basic principles. A review of the historical development of the transport system, its impact on the economic, social and political life of the nation, and the

growth of an elaborate governmental regulatory system. The course will deal with the dilemmas and conflicts to be found in our current serious transportation problems: financial problems of the carriers, overtaxed facilities in some areas and overcapacity in others, overreliance on the private automobile for passenger transport and the accompanying decline in public transit, environmental impact of transportation decisions, and the protection and promotion of consumer interests. Prerequisite: Understanding concepts of economics and management—EC 210 and MS 200.

MS 605—Airline Operations and Management **3 Credits**

An integration of the components and characteristics of the airline industry with the functions of management in airline operations. The various categories of air carriers and their particular role in serving the air transportation needs of the country will be studied. The characteristics of the airline industry as distinct from other industries will be examined. Elements of airline organization including organizational planning, line and staff responsibilities and factors influencing decisions on organizational alternatives will be explored. A complete review and analysis will be made of the departmental structure of an airline including the purpose, scope, and functions of operations departments and staff. Prerequisite: Understanding concepts of management—MS 200.

MS 618—Corporate Finance **3 Credits**

A critical study of current concepts in finance with major emphasis on the administrative and managerial implications. The course will be divided into three parts, the first part dealing with general corporate finance applicable to any large business organization. The second part covers airline financial policy, planning and management specifically. Included in this part are problems of profitability peculiar to the airline industry, airlines financial requirements and projections, sources of funds for airlines, airline cash management and financial planning, price elasticity and fare levels, industry competition and its financial implications and the future and its financial challenges. The third part deals specifically with airline financial accounts and statements. Prerequisite: Understanding concepts of management—MS 200.

MS 620—Managerial Psychology **3 Credits**

An examination into the understanding of the causes and implications of human behavior in the organizational environment. This course will provide an opportunity for the student to become familiar with the methods, subject matter and literature in the field of managerial psychology in order to consider the human problems facing management, purpose solutions, and evaluate the comparative theories explaining and describing human behavior. In the context of the managerial environment, class discussion will be devoted to subjects concerning causation in behavior perception, personality, learning theory, behavior modification, motivation and work, systems psychology, and influencing behavior. Prerequisite: None.

MS 625—Airline Marketing Management **3 Credits**

Provides an in-depth study of the functions and basic concepts in marketing air transportation services. Passenger and cargo markets including determinants of travel demand, growth factors, seasonality, cargo traffic categories, and characteristics will be analyzed. The product and service elements including equipment, inflight and ground services; methods of selling and service including the role of advertising and travel agents; airline marketing organizational structure; pricing and cost environment; and fundamental principles of schedule planning will be examined. Prerequisite: Understanding concepts of economics—EC 110 and 210.

MS 632—Aviation Labor Relations **3 Credits**

A survey of the growth, structure, objectives and collective bargaining practices of organized labor unions and their effect on aviation management. The first part of the course gives the student a broad historical sketch of the development of labor institutions here and abroad as related to airlines. In the next part, wage and employment determination are treated, first in the abstract world devoid of trade unions, and then in a more realistic world of organized labor, strong employees and collective bargaining. The third part of the course covers the airline industry in depth with particular attention to unionization of flight personnel. Prerequisite: Understanding concepts of management—MS 200.

MS 635—Business Policy **3 Credits**

Problems, methods, and analytical framework for building and maintaining consistent and effective policy in the business enterprise; environmental constraints and their effect on corporate leadership in planning and policy formulation. Prerequisite: Understanding concepts of management—MS 200.

MS 638—Managerial Economics **3 Credits**

This course develops some of the more sophisticated tools of analysis in the fields of both macro and micro economics. In the area of aggregate economics, the applications of economic theory to current problems are stressed; in the area of pricing, emphasis is on those situations which are characteristic of the actual market—where an admixture of the competitive and monopolistic elements is the rule, rather than the exception. Prerequisite: Understanding concepts of economics and management—MS 200 and EC 110 & 210.

MS 645—Airport Management **3 Credits**

Provides an in-depth study of the major functions of airport management and the concepts underlying airport planning and construction. The course is designed to acquaint the student with the complex area of operational techniques and current problems confronting airport management. Familiarization with the methods of financing, granting rights of use, and determination of landing fees and rental rates are important areas of study in this course. Students will examine the nature of airport capital and operating costs and methods of allocating costs of users. The socio-economic effect of airports on the communities they serve will be explored. Prerequisite: Understanding concepts of management—MS 200.

MS 650—Advanced Managerial Accounting **3 Credits**

The objective of this course is to explain how accounting data can be interpreted and used by management in planning and controlling business activity. In this course the student will acquire a knowledge of the usefulness and limitation of accounting and how it can help managers operate more effectively. Prerequisite: Understanding concepts of accounting and management—MS 110, 112 and 200.

MS 655—Aviation Law and Insurance **3 Credits**

Examination of the governmental regulatory functions affecting statutory and administrative law pertaining to aviation. Students will study the underlying legal principles pertaining to the conduct of an aviation enterprise and the impact of law on business policies and operations. This portion of the course will be national and international in scope. The second part of the course will deal with the legal aspects of business contracts, negotiable instruments and the commercial code as they pertain to aviation. Thirdly, the student will be introduced to the common law and the principles of insurance and risk with respect to the aviation industry. This course is designed to provide the student an insight into the legal environment faced by an aviation firm. Prerequisite: None.

MS 660—Money and Banking **3 Credits**

Analysis of the monetary and commercial banking systems; and nature and role of money, current money and income theory, monetary policy and commercial banking operations. Includes structure and operation of the money market; the demand and supply of loanable funds, Treasury securities, commercial paper, bankers acceptances, investment banking and the Securities Exchange Commission; the open market operations of the Federal Reserve and U.S. Treasury financing. Prerequisite: Understanding concepts of economics—EC 110.

MS 665—Public Administration **3 Credits**

Analysis of the functions and problems of managers in the public service with emphasis upon the interaction of politics upon administrative behavior. Primary focus upon the managerial roles within the Federal bureaucracy with additional exploration of state and local government administration. Consideration of the unique processes and problems encountered in personnel management, finance, public relations, legal restraints, and accountability within the public sector. Exploration of the dynamic growth in size and complexity of governmental institutions. Prerequisite: Understanding the concepts of management—MS 200.

MS 695—Special Project **3 Credits**

Students may elect, with the approval of the Graduate Program Director, to perform special directed analysis and/or independent studies. The student will develop a detailed proposal of his planned study/research and present it to the Graduate Program Director for approval not less than three weeks prior to registration/enrollment in the course. Prerequisite: Approval of the Program Director.

financial information

Tuition and Fees

Application Fee, Degree Student (one time)	$25.00
Application Fee, Special student (one time)	15.00
Change from Special to degree Student (one time)	15.00
Tuition, (per credit hour)	75.00
Registration Fee, (per term)	10.00
Deferred Payment charge	5.00
Late registration Fee	10.00
Change of Registration Fee	5.00
Lab Fee (certain designated courses)	10.00
Graduation Fee (payable upon application)	20.00

Payment Procedures

Registration, when accepted by the University, constitutes a financial contract between the University and the student. Failure to make payments of any amounts owed to the University when they become due is considered sufficient cause, until the debt has been satisfied, to suspend the student and withhold grades, transcripts, diplomas, and degrees.

Tuition and fees are payable in full upon registration. An installment plan for tuition payment, with the first of three installments due at the time of registration, is available. Details of the plan will be furnished by the Graduate Center Director upon request.

Refunds

Students are accepted with the understanding that they will remain for the entire term unless suspended or dismissed. The University makes its commitments on a term basis, according to the number of enrolled students, and is not relieved of its obligations when students withdraw. Therefore, no refunds of tuition or fees will be made after the end of the registration period for a given term.

Financial Aid

Federally Insured Student Loans: Students who are citizens or nationals of the U.S. are eligible to borrow up to $2500 for graduate study. Under this program, the student borrows from an eligible lender, such as a bank, credit union, or savings and loan association, normally located in the state of which the student is a resident. A loan of more than $2000, or an adjusted family income of more than $15,000, requires a Financial Statement, to be filed with the College Scholarship Service, in order to apply for Federal interest benefits. The Financial Statement must be filed with the College Scholarship Service at least six weeks prior to submitting a loan form to the University Financial Aid Office for processing. No statement is required if the student elects to pay the 7% interest on the loan while in school. Repayment, of principal and interest, begins nine months after the student leaves school. The student should apply for the loan at least six weeks prior to the term for which the loan is to be used. Applications can be obtained from the lender, or the University Financial Aid Office.

Veterans Benefits: The graduate degree programs have been approved by the State of Florida for Veterans educational benefits. Eligible students planning to utilize VA benefits should contact the Graduate Center Director three months prior to their planned enrollment to process the required Veterans Administration forms.

faculty and administration

the graduate council

The Graduate Council serves in an advisory capacity to the Embry-Riddle Vice President of Academic Affairs. It initiates or reviews policies dealing with new and continuing degree programs, curricula, faculty qualifications, research needs, library accommodations, academic standards, instructional methods, evaluation procedures, and other matters of academic concern.

Council members are selected on the basis of their unique backgrounds in education, research, aviation, or management.

John P. Eberle, Chairman

B.S., Public Administration, American University; M.A., Public Administration, American University; Ph.D., Public Administration, American University. Dr. Eberle is presently Professor of Management with Embry-Riddle Aeronautical University.

Steven Altman

B.A., Mathematics, UCLA; M.B.A., University of Southern California; D.B.A., University of Southern California. Dr. Altman is presently the Chairman of the Division of Management at Florida International University and adjunct Professor of Management at Embry-Riddle Aeronautical University.

John M. Archibald

B.Ed., Education, University of Miami; M.S., Technical Education, Florida International University. Mr. Archibald is presently a Professor of Aeronautical Science at Miami-Dade Community College.

Robert M. Brown

B.A., Economics, Hobart College; M.A., Personnel Administration, George Washington University. Mr. Brown is presently the Chairman of the Aeronautical Science Division at Embry-Riddle Aeronautical University.

E. Lowell Chrisman

B.S., Oklahoma State University; M.L., University of Pittsburgh; M.A.T., Duke University. Mr. Chrisman is presently Division Chairman, Aviation Management, and a Professor of Management Science and Mathematics with Embry-Riddle Aeronautical University.

Harold E. Green

B.S., Education, Central Missouri State College; M.S., Education, University of Missouri; Ed.D., University of Missouri. Dr. Green is presently Director of Florida Technological University Residence Center—Daytona Beach.

Milton Horwitz

B.S., University of Maryland; M.Ed./Ed.D., Administration/Education, Auburn University; J.D., Emory University. Dr. Horwitz is presently Professor of Aeronautical Science with Embry-Riddle Aeronautical University.

R. Bruce Morrin

B.S., Military Science, U.S. Naval Academy; M.A., Education, Colgate University; M.S., Business Administration, George Washington University. Mr. Morrin is presently an Assistant Professor of Aeronautical Science at Embry-Riddle Aeronautical University.

William E. O'Connor

A.B., English and International Relations, Brown University; M.A., Foreign Affairs, George Washington University; Ph. D., International Studies, American University. Dr. O'Connor is presently Professor at Aviation Management with Embry-Riddle Aeronautical University.

B. John Shinn

B.A., Electrical Engineering, University of Connecticut; M.S., Electrical Engineering, University of Connecticut; Ph.D., Electrical Engineering, Yale University. Dr. Shinn is presently Manager, Advanced Technologies Engineering with the Apollo Systems Department, General Electric Company, Daytona Beach, Florida.

Alexander T. Wells

B.A., Economics, Hunter College of the City University of New York; M.A., Economics, DePaul University; Ed.D., Candidate, Nova University. Mr. Wells is presently the Director of the Graduate Program.

advisory committee

The Industry Advisory Committee is composed of key executives in the Miami aviation community who meet with Embry-Riddle representatives to offer advice on keeping the graduate curriculum closely adapted to the needs of the aviation industry.

the graduate faculty

Based on the philosophy that a balance between theoretical and practical instruction is the most beneficial, graduate faculty members have been selected on the basis of a combination of their academic qualification and their experience in the particular subject area applicable to the curriculum. Executives who are acknowledged leaders in their respective fields will also serve as adjunct faculty.

John S.M. Albert

B.S.M.E., Mechanical Engineering, Borough Polytechnic, London England; MBA, Management, New York Institute of Technology. Mr. Albert is presently a Project Engineer in the Engine Service Center of Eastern Airlines. His previous work experience includes engineering positions with the Boeing Company and the London Transport Board. He teaches Advanced Aircraft Systems.

Steven Altman

B.A., Mathematics, UCLA; M.B.A., University of Southern California; D.B.A., University of Southern California. Dr. Altman is currently the Chairman of the Division of Management and Assistant Professor of Management of Florida International University, Miami. He teaches Advanced Organization Theory and Quantitative Methods in Business.

John M. Archibald

B.Ed., Education, University of Miami; M.S., Technical Education, Florida International University. Mr. Archibald is presently a Professor of Aeronautical Science at Miami-Dade Community College. He has extensive airline experience both in flight operations and Maintenance Management. He teaches Aircraft Accident Investigation and Aviation Safety.

John F. Baggaley

B.A., Psychology, University of South Dakota; M.S., Industrial Psychology, Purdue University. Mr. Baggaley is presently Manager of Management Development for National Airlines. He teaches Managerial Psychology.

Ivan H. Carr

B.S.I.E., Industrial Engineering, University of Florida; M.S.E., Industrial Engineering, University of Florida. Mr. Carr is currently Head-Planning Section for the Dade County Aviation Department. He teaches Airport Management.

Wayne F. Cascio

B.A., Psychology, Holy Cross University; M.A., Experimental Psychology, Emory University; Ph.D., Industrial Psychology, University of Rochester. Dr. Cascio is presently an Assistant Professor of Psychology at Florida International University. He teaches Managerial Psychology and Personnel Management and Industrial Relations.

Winston T.H. Chiao

B.A., National Taiwan University; M.B.A., Graduate School of Business, Columbia University. Mr. Chiao is presently Manager of Passenger Fares Development for Eastern Airlines. He teaches Airline Operations and Management.

George Edwards

B.B.A., Accounting (Public), City College of New York; M.B.A., Accounting (Tax), City College of New York; LL.B., Law, New York University. Mr. Edwards is a tax consultant and teacher. He teaches Advanced Managerial Accounting and Corporate Finance.

Morton Ehrlich

B.B.A., City University of New York; Ph.D., Economics, Brown University. Dr. Ehrlich is presently Corporate Economist and Vice President of Eastern Airlines. He teaches Current Problems in Aviation, Managerial Economics, and Public Administration.

Bruce E. Golden

B.S., Biology/Chemistry, Loyola University; J.D., Loyola University School of Law. Mr. Golden is presently Director of Labor Relations for National Airlines. He teaches Government Role in Aviation and Aviation Labor Relations.

Stuart A. Goldstein

B.A., University of Maryland; LL.B., University of Maryland School of Law. Mr. Goldstein is presently Staff Attorney for the Airline Pilots Association. He teaches Government Role in Aviation, Aviation Labor Relations, and Aviation Law and Insurance.

Leonard G. Klingen

B.A., Economics, University of New South Wales; M.A., Economics, University of Sydney; Ph.D., Economics and Finance, University of Miami. Dr. Klingen is presently Manager of the Operations Research Department for Eastern Airlines. He has written several books on the subject of economics and operations research and is credited with numerous articles appearing in trade publications. He teaches International Developments in Aviation, Managerial Economics and Money and Banking.

Irwin Kruger

B.B.A.: MBA: Ph.D., Educational Research and Statistical Methodology, University of Miami. Dr. Kruger is presently an Assistant Professor of Management Science at the University of Miami. He teaches Quantitative Methods in Business and Management Information Systems.

Peter W. Murray

B.A., History, University of Notre Dame; M.B.A., Transportation, Wharton School of Business Graduate School, University of Pennsylvania. Mr. Murray is presently Manager of Market Planning in the Planning Department of Eastern Airlines. He teaches Airline Marketing Management.

Fred T. Scharrer, Jr.

B.B.A., Management, University of Miami. Mr. Scharrer, after completing service as a Navy Carrier Pilot in WWII, has held several piloting positions in Corporate Aviation for over twenty-five years. He has been employed by Ryder System, Inc. for twenty years and is presently Director of Flight Operations and Chief Pilot. He teaches Corporate Aviation Operations.

Valdur Silbey

B.S.B.A., Business Administration; M.B.A., Business Administration, University of South Carolina; Ph.D., Business Administration, Wharton School of Business, Graduate School, University of Pennsylvania. Dr.

Silbey is presently an Assistant Professor of Management at Florida International University. He teaches Quantitative Methods in Business and Management Information Systems.

Bernard Sprecher
B.S., Accounting, Temple University; M.B.A., Accounting, Temple University. CPA (Pennsylvania). Mr. Sprecher is presently Director of Systems and Procedures for National Airlines. He teaches Advanced Managerial Accounting.

Ronald H. Vogel
B.S., Marketing, Illinois Institute of Technology, Ph.D., Marketing, University of Michigan. Dr. Vogel is presently a permanent faculty member of the marketing Department of Florida International University in Miami, has several publications in Industrial & International Marketing, and has presented international speeches. He teaches Marketing Management.

officers of the university

Jack R. Hunt
President .A.A., Compton Jr. College; B.S., Pepperdine College; M.S., Barry College; Commercial Pilot, LTA and HTA.

Hugh B. Manson
Executive Vice President .B.S., University of Florida; B.S.A.E., Georgia Institute of Technology; Commercial Pilot ASMEL-I.

Frank G. Forrest
Vice President—Plans B.S., U.S. Military Academy; M.A., Stetson University; Ph.D., United States International University; Commercial Pilot, ASMEL-H.

Ralph D. Henry
Vice President—University Relations, B.A., Hamline University, St. Paul, Minnesota.

L. William Motzel
Vice President—Academic Affairs .B.A., University of Notre Dame; M.E.E., Saint Louis University; Ph.D., Catholic University of America. Private Pilot, ASEL.

Richard H. Pierce
Treasurer .B.A. University of Maine; M.B.A., George Washington University; Commercial Pilot, Rotary and Fixed Wing, Instrument Rating.

Dianne R. Thompson
Secretary .A.A., Daytona Beach Junior College.

board of trustees

The Board of Trustees is composed of members of national, state and local prominence, plus two faculty members and two students, devoted to the education of young people in aviation skills. These members serve without remuneration and give freely of their time in establishing broad policy and providing guidance to the administration in the furtherance of the educational goals and objectives of the University.

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