Worldwide 2006-2007 Catalog

(Formerly Extended Campus)

The following additions or changes apply to the 2006-2007 Worldwide volume of the Embry-Riddle Aeronautical University Catalog with the effective date of July 1, 2006 through June 30, 2007.

New Certificate Program: Airport Management Certificate of Completion (Effective 2/1/07)

The new Airport Management Certificate of Completion program has been implemented at ERAU-Worldwide. Below are the course requirements:

Airport Management

Certificate of Completion

The advent of the Small Aircraft Transportation System in the United States and creation of Very Light Jet aircraft may serve as catalysis for current small underutilized airports to become very active. The Airport Management Certificate provides the current or future airport managers with an understanding of the operations and management of airports which emphasizes the important role in any of the aviation degree programs. Whether students are interested in airport management as a career field or another segment of aviation such as the airlines, general aviation or government, how the airport interfaces with these segments is an integral part of his/her overall education. This certificate also provides an opportunity to acquire an in-depth analysis of the phases of airport management; specifically, master planning or the physical facility planning, economics of master planning or the physical facility planning, economics of airport operation and organizational structure. The student will be introduced to such areas as the history of airports in the United States including major Federal legislation affecting their development. In addition, students may study the controlling factors in the development of an airport such as size and forecasting volumes, design considerations and zoning laws. Students will also analyze the factors involved in airport terminal development including location, size, and functional relationships of space and accommodation of ground transportation.

Required Courses:

Course	Title	Credits
ASCI 254	Aviation Legislation	3
ASCI 401	Airport Development and Operations	3
MGMT 408	Airport Management	3
MGMT 412	Airport Planning and Design Standards	3

Take two of the following courses:

ASCI 320	Commuter Aviation	3
ASCI/SFTY 345	Aviation Safety Management Program	3
ASCI/SFTY 350	Aircraft Crash and Emergency Management	3
ASCI/SFTY 409	Aviation Safety	3
ASCI 405	Aviation Law	3
ASCI 412	Corporate and Business Aviation	3
MGMT 324	Aviation Labor Relations	3
MGMT 331	Transportation Principles	3
MGMT 406	Strategic Management of Technical Operations	3
MGMT 410	Management of Air cargo	3
MGMT 418	Airport Administration and Finance	3
MGMT 425	Trends and Current Problems in Air Transportation	3
MGMT 426	International Aviation Management	3

MGMT 499	Special Topics in Management	3
SCTY 400	Airport Security	3
SCTY 488	National Security Issues and Terrorism	3
Total Credits:		**18**

New Minor Courses of Study: Airport Management (Effective 2/1/07)

The new Airport Management Minor Courses of Study program has been implemented at ERAU-Worldwide. Below are the course requirements:

Airport Management

Minor Courses of Study

Required Courses:

Course	Title	Credits
ASCI 254	Aviation Legislation	3
MGMT 408	Airport Management	3
MGMT 412	Airport Planning and Design Standards	3

Take two of the following courses:

ASCI 320	Commuter Aviation	3
ASCI/SFTY 345	Aviation Safety Management Program	3
ASCI/SFTY 350	Aircraft Crash and Emergency Management	3
ASCI/SFTY 409	Aviation Safety	3
ASCI 401	Airport Development and Operations	3
ASCI 405	Aviation Law	3
ASCI 412	Corporate and Business Aviation	3
MGMT 324	Aviation Labor Relations	3
MGMT 331	Transportation Principles	3
MGMT 406	Strategic Management of Technical Operations	3
MGMT 410	Management of Air cargo	3
MGMT 418	Airport Administration and Finance	3
MGMT 425	Trends and Current Problems in Air Transportation	3
MGMT 426	International Aviation Management	3
MGMT 499	Special Topics in Management	3
SCTY 400	Airport Security	3
SCTY 488	National Security Issues and Terrorism	3
Total Credits		**15**

Course Change: PHYS 201 and PHYS 352 changed to WEAX 201 and WEAX : (Effective 11/1/06) – Ref: Page 78

PHYS 201 Meteorology I and PHYS 352 Meteorology II have been changed to WEAX 201 Meteorology I and WEAX 352 Meteorology II. The courses have been updated as follows:

METEOROLOGY

WEAX 201
Meteorology I (3,0)
3 Credits

This is a survey course in atmospheric science that includes applications to flight. Included is a systematic development of the following: thermal patterns, atmospheric moisture, horizontal and vertical pressure patterns, clouds, atmospheric circulation, local winds, stability, air masses, fronts, fog, icing, thunderstorms, jet streams and turbulence. Students will study and make use of surface weather observations, surface maps, and constant pressure maps.

WEAX 352
Meteorology II (3,0)
3 Credits
An expansion of Meteorology I, this course includes the following theoretical concepts: hydrostatic instability, baroclinic instability, thermal wind, and kinematic fields. These will be integrated into realtime weather analysis of synoptic patterns involving mid-latitude cyclones, frontal systems, and jet streams. The anatomy of severe thunderstorms, particularly as applied to aviation hazards, will be treated in detail through analysis of recent synoptic data. Practical application will be achieved in current weather discussions, which will be given by teams of students. In addition, study of weather radar, solar aspects, and satellite meteorology will be accomplished. Prerequisite: WEAX 201.

Course Update : MGMT 682 description updated (Effective 11/1/06) – Ref: Page 100

MGMT 682 Concepts of Integrated Logistics updated, removing MGMT 681 as a pre-requisite. Updated course description listed below:

MGMT 682
Concepts of Integrated Logistics
3 Credits
This course details the importance of integrating logistics into all functions of a business from initial conceptualization of the enterprise through its ultimate demise. Students learn the best business practices needed to fully integrate logistics and understand the significant financial advantages that can result from effective integration efforts.

New Course: MGMT 685 Replaces MGMT 681: (Effective 8/1/06) – Ref: Page 100

New course MGMT 685 Global Logistics and Supply Chain Management replaces MGMT 681 Principles & Applications of Logistical Science. Course description for the new course listed below.

MGMT 685
Global Logistics and Supply Chain Management
3 Credits
Today, globalization is affecting almost every aspect of the world's economy. The focus of this course is on understanding the role of logistics and supply chain management in meeting the needs of the transnational enterprise, from the sourcing of raw materials, to manufacturing, to delivery to the final customer and back when necessary. Successful students will understand the scope of logistics in the global economy; the role of the government in controlling international trade and its impact on logistics; the impact of regional trading blocs on logistics and supply chain management; strategies for designing global supply chain networks; strategies for supporting different market entry alternatives; the impact of different transportation modes on global supply chain management; the role of freight forwarders, export management companies, and other intermediaries; the use of free trade zones; the use of international commerce terms and international contracts; the impact of the choice of currency on the enterprise; documentation associated with international logistics and supply chain operations; and

supply chain security. A number of case studies are also analyzed throughout the course to highlight important principles and best practices in global logistics and supply chain management.
Prerequisites: MGMT 682 and MGMT 683.

Updated Course Description: ASCI 690 (Effective 8/1/06) – Re: Page 93

The course description for ASCI 690 Graduate Capstone Project has been updated. The updated course description is listed below.

ASCI 690
Graduate Capstone Project
3 Credits
This course provides the student with an opportunity to conduct an investigation into a problem related to an aviation/aerospace topic, thus demonstrating the student's expertise in problem definition, analysis, and solution processes and requires the student to demonstrate expertise in the technical aspects of writing. This course is included in the MAS curriculum to provide the student with the opportunity to pursue a project of special interest. This is a required course for the degree. Under special circumstances approved by the Program Chair a student may be authorized to pursue a thesis.
Prerequisite: GCPP 605.

Update: AT 300 and 302 Courses – online only (Effective 8/1/06) – Ref: Page 64

Add caveat: AT courses are available online only.

New Course: (Effective 7/1/06)

GENERAL EDUCATION

GNED 101
Fundamentals of College Student Success (1,0)
1 Credit
This performance-oriented course is designed to increase success in college by empowering students to develop the necessary skills, knowledge and habits for learning. Topics include: college life; learning strategies and styles; self-assessment and awareness; setting college and career goals; values clarification; test preparation, test taking, problem solving; campus diversity and wellness. The course will also provide students with a comprehensive introduction to study skills; --critical thinking, reading, listening, speaking, and writing a research paper; computer literacy and library research.

Correction: Restore TMGT 646 to MSTM Program Outline (Effective 7/1/06) Ref: Page 52

The following course, TMGT 646 Operations Research and Management Science, will be added back to the Master of Science in Technical Management degree plan, replacing MGMT 646 Structure and Applications of Quantitative Decision Processes for the Technical Manager.

TMGT 646
Operations Research and Management Science
3 Credits
In this course, students explore quantitative methods for program management. Topics include forecasting and probability distributions, decisions theory and decision making under conditions of risk and uncertainty,

marginal analysis, linear programming applications including problems of minimization and maximization, transportation and warehousing, assignment and scheduling and ingredient blending, queuing theory and waiting lines, network models such as minimum spanning tree, maximal flow and shortest route techniques, simulation and modeling, regression analysis, and time series analysis.