100% ONLINE

AVIATION SAFETY MANAGEMENT GRADUATE CERTIFICATE

Purdue's Graduate Certificate in Aviation Safety Management will help you gain knowledge to develop, lead, and execute effective aviation safety programs. Taught by professors with distinguished educational backgrounds and work experience in civilian aviation, military aviation and governmental roles, our industry-specific courses will prepare you for numerous aviation roles.

Economic forecasts suggest that a steady increase in traveling passenger and air cargo requirements will fuel a dramatic expansion of the aviation industry, and require a complete restructure of the existing air transportation system architecture. This industry growth is generating a wide range of opportunities in the aviation industry for individuals who possess aviation and aerospace management skills such as managing risks, safety systems development, and related interdisciplinary skills.

The curriculum is designed to enable aviation professionals to evaluate safety operations within their work place and develop comprehensive aviation safety programs to proactively address potential safety hazards and issues.

This program is 100% online, so you can get your degree at your own pace, from anywhere in the world, choosing times for class work and study that fit your lifestyle. Courses are offered in a rolling format that allows you to complete the 12 required credit hours in 12 months to 3 years, with professors available online or by phone to assist.

LEARNING OBJECTIVES

The learning objectives include:

- Explore the nature of human error and error chains
- Analyze methods for assessing risk and predicting error generation potentials
- Examine strategies to develop protocols for safety management programs

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PLAN OF STUDY

The Aviation Safety Management Graduate Certificate courses are offered on a rolling format, 100% online, that lets you progress through the program at your own pace. The rolling format allows you to complete the 12 required credit hours in 12 months to 3 years.

COURSE OVERVIEW

COURSES	CREDITS
AT 53200 - Contemporary Issues in Transportation Security	3
AT 57200 - Human Error and Safety	3
AT 57300 - Managing the Risk of Organizational Accidents	3
AT 67500 - Aviation Safety Program Development	3
TOTAL	12

NOTE: All courses are subject to change and semester availability may vary.

REQUIRED COURSES

AT 53200 - Contemporary Issues in Transportation Security

Provides extensive multi-modal transportation security experience. Discussion will cover air, maritime, rail, mass transit, trucking and oil pipeline security programs as well as applicable threat mitigation. (3 credits)

AT 57200 - Human Error and Safety

Explores the definition and nature of human error, error chains and casual factors in error generation. Error taxonomies will provide a classification scheme for grouping errors and assessing error criticality. Methods for assessing risk and predicting error generation potentials will be investigated. Accident and incident case studies will be utilized throughout the course to illustrate course concepts. (3 credits)

AT 57300 - Managing the Risk of Organizational Accidents

Examines strategies various industries use to assess the risk of organizational accidents and to develop safety management programs to prevent, capture, and recover from conditions that lead to disastrous outcomes. Strategies such as High Reliability Organizations, Operational Risk Management, Behavioral Based Safety, Tripod Delta, and Safety Cultures are explored as successful methods for improving organizational safety in high-risk environments and endeavors. (3 credits)

AT 67500 - Aviation Safety Program Development

The goals of this course are to create a working safety office that allows students to work as a safety officer reacting to real-life aviation safety problems. In so doing, students will achieve the following objectives and will be able to: (1) describe the regulatory and risk environment in which airline safety offices exist; (2) describe safety theories and models; (3) describe human factors and accident causation; (4) collect and analyze safety related data; (5) prepare documentations for references and trainings; (6) manage an airline safety office and implement safety precedents; (7) process and disseminate information related to accident prevention and risk minimization; (8) audit safety plans for air careers, airports, or FBOs. (3 credits)

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