EMBRY-RIDDLE
Aeronautical University

Understanding Safety Management Systems (SMS): Preventing Failure Through Catastrophic Imagination and Assessing Risks

Course Description

This 3-week, part-time online course will prepare managers, entrepreneurs, and organizational members from the sharp end in aviation and other high risk / high consequence areas to understand what the intent of SMS is, why failures happen, and ideally how to avoid them. The course concentrates on the theoretic underpinnings and the scientific discourse behind Safety Management Systems (SMS), and the policies governing it. Participants should expect a workload of 6 hours per week.

Key Learning Objectives and Topics Covered

Upon course completion, participants will be able to:
- Apply failure causation models in rational catastrophic imagination
- Integrate basic systems thinking in accident prevention
- Understand the influence of human factors, organizations, and culture in failure
- Develop risk mitigation approaches based and basic quantitative risk assessment
- Be cognizant of rules and policies in Safety Management Systems

Target Audiences

Managers on all levels, safety officers, aviation psychologists, entrepreneurs, and organizational members from the sharp end in aviation and other high risk / high consequence areas.

Delivery Methods

This is an asynchronous online, instructor-facilitated course. Individual live-interaction with instructors via Zoom is available during scheduled office hours and upon student request. The course must be completed by its scheduled end date. Digital certificates are available upon successful completion of the required discussion posts, in which students will demonstrate the learned concepts, methods, and techniques.

Dates

October 18, 2021 – November 7, 2021
November 8, 2021 – November 28, 2021