

A photograph of three business professionals in a meeting. A man in a dark suit is pointing at a laptop screen. A woman with short grey hair in a dark blazer is looking at the screen. Another woman in a light grey blazer is sitting to the right, looking towards the laptop. The background is a bright, modern office setting.

SAFETY MANAGEMENT SYSTEM (SMS) COURSE CURRICULUM

Senior executives, safety professionals, and front-line personnel will acquire a thorough foundation in all areas of Safety Management System (SMS) theory, principles, and application concepts. Our SMS courses present the “Four Components of SMS” (Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion) and include Human and Organizational Hazards, Organizational Responsibilities, SMS Training, and Implementation. All MITRE SMS courses are FAA-accepted and meet the expectations of the ICAO Annex 19 and Safety Management Manual 9859.

Who Should Attend this Course

Operators, developers, and manufacturers in the following areas:

- Air Charters
- Airlines
- Airports
- Air Taxis
- Air Tour
- Autonomous Vehicles
- Corporate Aviation
- Medical Helicopters
- Rail
- Repair Stations
- PMA Part Providers
- Training Schools
- Transit Authorities
- Urban Air Mobility

Contact us at
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Module 1: Context and Resources

- Why SMS
- SMS References

Module 2: Introduction to SMS

- Evolution of Safety Oversight
- The Organizational Accident
- High-level theories and concepts of SMS

Module 3: The SMS Table

- The four components of SMS
- Data sources for Safety Risk Management (SRM)
- The relationship between SRM and Safety Assurance (SA)
- External Audits of SMS

Module 4: The SMS Business Case

- Balancing production and protection
- Mitigating risk to As Low As Reasonably Practical (ALARP)
- SMS Case Studies

Module 5: Human Error and SMS

- Defining errors
- Causality of errors
- Real-life examples of systemic errors
- The MITRE Error Control Model

Module 6: Positive Safety Culture

- Exhibiting Positive Safety Culture
- Indicators for a Positive Safety Culture
- Five aspects of a Positive Safety Culture
- At-risk behavior

Module 7: SMS Requirements

- Requirements for a State Safety Program (SSP) and a service provider's SMS
- Acceptable Level of Safety (ALoS)
- Indicators (measures), Targets (goals), and Requirements (initiatives)
- Introduction to SMS guidance material

Module 8: SMS Policy

- Constructing the SMS Policy
- Turning policy into procedures with controls
- Quality Management Systems
- Emergency Preparedness
- SMS Record Keeping

Module 9: Organizational Structure and Responsibilities

- Establishing an SMS organization within your existing organization
- Understanding the interactions required of an SMS organization
- Responsibilities of key safety personnel

Module 10: Safety Risk Management

- The Risk Management process
- When to use SRM
- Describe the system or task
- Identify hazards and their consequences (outcomes)
- Analyze and assess risk
- Risk mitigation strategies
- Apply SRM documentation

Module 11: Safety Assurance

- Methods to monitor and measure the effectiveness of risk controls
- Differences between internal self-audits and internal evaluation
- Multiple sources of operational data

Module 12: Safety Promotion

- Supporting the Positive Safety Culture
- State (CAA) Safety Promotion
- Corporate Programs for SMS Safety Promotion

Module 13: SMS Training

- The need for SMS training
- Requirements for SMS training

Module 14: Next Steps

- Implementation
- Planning Your SMS
- Implementation considerations

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.