

# RISK MANAGEMENT FOR SAFETY ENGINEERING

*Training offered by A-P-T Research, Inc.*

As a discipline, safety engineering exists in many sectors of our economy, and managing risk is the primary function of the discipline. Practitioners have applied their techniques in aerospace, transportation, explosives, testing, industrial, and chemical operations for decades. More recently, the medical, food service, and environmental sectors have begun establishing practices with similar overarching purpose.

This course provides an overview of the underlying processes used to manage risks and demonstrates the common elements that can be applied to any sector of our economy. The most common of these processes is IARA, an acronym for Identify, Assess, Reduce, Accept. The safety case approach is also presented and benefits reviewed. The necessary understanding begins with the language and math needed to communicate and develop a risk management program. The history of improvements made in management processes is reviewed. Pascalian methods are highlighted.

The first half of this five-day class is applicable to managing safety risks from any and all sectors. The second half focuses on specific practices applicable to system safety, range or launch safety, explosives safety, industrial or OSHA safety, operational safety, reliability, software safety, and quality.

This course is designed for safety engineers at all levels, as well as system engineers, and program and project managers. The beginning safety engineer will learn techniques to identify hazards as risk factors and methods to reduce the risks. The journeyman safety engineer will recognize practices used in their sector, and learn how other sectors apply similar techniques. Systems engineers and managers will gain an understanding of how safety engineering integrates into overall systems engineering, and recognize the importance of the “accept” function within overall management.

Course instructors have over 40 years of experience as practicing safety engineering professionals. They will provide numerous experience-based insights during the course.

## Course Duration and Format

The course is 36 hours over 5 days, with about 6 hours of lecture each day and time for students to complete workshop problems or review course materials with the instructor. Class size will be limited to 30 attendees. Attendees of this course will typically be awarded up to 3.6 Continuing Education Units (CEU) upon completion of this course.



## Safety Engineering and Analysis Center

The APT Safety Engineering and Analysis Center (SEAC) is conveniently located in Cummings' Research Park near Redstone Arsenal in Huntsville, AL.

### Where

The A-P-T Research, Inc. Safety Engineering and Analysis Center in Huntsville, AL or customer location as requested.

### Schedule & Cost

Offered on a regular basis. Visit [www.apr-research.com/training](http://www.apr-research.com/training) for specific dates and prices.

### Contact Information

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### Other Courses Available

- System Safety Engineering
- Software System Safety Engineering
- Explosives Safety
- Reliability Engineering
- IMESAFR Software
- SAFER Software
- Counter-IED Training & Training Devices

For information on other training classes offered by APT, visit [www.apr-research.com/training](http://www.apr-research.com/training).

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