A-P-T RESEARCH, INC.

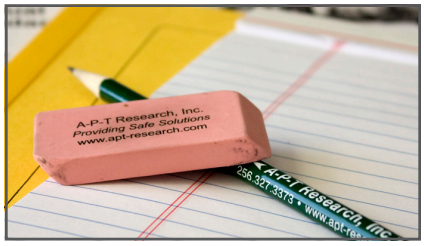
RELIABILITY ENGINEERING

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

Reliability Engineering Course

The Reliability Engineering training course is designed for professionals wanting to advance their understanding and knowledge in reliability engineering tools and techniques and their application in technical assessments and special studies. The course includes an introductory module of key definitions, basic statistics, and a review of the basic principles of the reliability engineering discipline, including a description of a reliability case for establishing and managing a reliability engineering program. The rest of the course modules focus on reliability engineering tools and techniques used by engineering professionals throughout government and industry. The course modules are listed below:

- Introduction
- Probability Basics
- Reliability Engineering Overview
- Failure Modes and Effects Analysis (FMEA)
- Reliability Allocation
- Reliability Prediction
- Reliability Demonstration
- Reliability Growth
- Fault Tree Analysis (FTA)
- Event Tree Analysis (ETA)
- Probabilistic Risk Assessment (PRA)
- Human Reliability
- Accelerated Testing (ALT, HALT, HASS)
- Parts Derating
- Sneak Circuit Analysis
- Availability Analysis.
- Concluding Remarks
- Summary Tables



Course Duration and Format

This is a 3-day course with about 20 hours of lecture and 4 hours 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 be credited with 2.0 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.

Dr. Fayssal Safie, Instructor

Dr. Safie is a Principal Reliability Engineer at APT with over 30 years' experience in the areas of reliability, safety, and quality engineering. He holds Bachelor, Master, and Doctorate degrees in Systems Engineering. He received over 50 honors and awards from NASA and retired from MSFC in 2017 as the Agency Technical Fellow For Reliability and Maintainability Engineering.

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.apt-research.com/training for specific dates and prices.

Contact Information

Megan Stroud
256.327.3373
training@apt-research.com

Other Courses Available

- System Safety Engineering
- Explosives Safety
- Software System Safety
- Risk Management for Safety Engineering
- IMESAFR Software
- SAFER Software

For information on other training classes offered by APT, visit www.apt-research.com/training.