



## **Reliability Availability Maintainability (RAM) Training**



VELOSI TRAINING  
INSTITUTE L.L.C.

# Introduction

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Velosi Training Institute LLC is a new venture of Velosi Asset Integrity Limited, which offers a comprehensive range of specialized courses in Certified Technical Training, Exam Preparatory, HSE, Training in Oil and Gas Field, ISO, NEBOSH, IOSH, Food Safety Courses, Administrative & Business related trainings, Mobius and CertNexus.

Our most valuable asset at Velosi, as a globally recognized training provider, is our experienced trainers, who are experts in their fields and can tailor the curriculum to our clients' specific needs in order to sharpen their knowledge, prepare them for the next phase of their careers, and implement best industry safety practices.

## Course Overview

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Velosi is conducting Reliability, Availability, and Maintainability Training online.

Reliability, Availability, and Maintainability (RAM) focuses on actions in order to help attendees enhance the performance of materiel systems. RAM provides extensive processes and techniques to study and manage the total Life Cycle Costs of an asset to boost cost-efficiency. Underlines 'design for RAM' and 'RAM verification' activities to provide the viewpoints of the producer and customer.

This comprehensive training will focus on the fundamental concepts of Reliability, Availability, and Maintainability (RAM) and efficient processes and techniques necessary to use RAM in practice.

## Learning Objectives:

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By the end of this course, participants will learn to:

- Define and Benefits reliability, availability, maintainability, and their differences.
- Understand how RAM is linked to life cycle cost.
- Know the benefits and limitations of reliability, availability, and maintainability.
- Understand qualification, quality conformance, and their differences.
- Define the nature of basic system reliability models.
- Understand Failure Mode and Effects Analysis (FMEA).

## Who should attend?

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This course is appropriate for a wide range of professionals but not limited to:

- Project managers, Project engineering managers, Capability development personnel, and Project technical personnel.
- Systems engineers, Hardware and software engineers, Process engineers, Maintenance professionals, and Design engineers.
- Reliability specialists and Product/ program managers.

## Benefits

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Learning is an investment that pays off in the long run. It allows a person to expand their career prospects, improve their professional skills, and become more competent.

- Career Development
- Increased Job Opportunities
- Technical Expertise
- Worldwide Recognition





# Course Outline

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## Day 1:

- Overview of RAM and its maintenance.
- Maintainability and Availability Principles.
- Reliability Mathematics and Failure Physics.
- Exponential Distribution and Reliability Models.
- Learn the importance and implementation of Failure-Rate Data.

## Day 2:

- Applying Probability Density Functions Appropriately.
- Testing Tools for Reliability to Efficiently Apply test methods.
- Software Life Cycle Model and Testing.
- Software Testing and Limitations.
- Extensive Study of Extensions and Applications of Safe Introduction of Software Using Scale Up.

## Day 3:

- Factors Affecting Software Reliability Operations.
- Overview of Software Reliability Models.
- Data Analysis for Models.
- Software Reliability Prediction Models.
- Software Reliability Estimation and Accelerated Life Testing Models.

## Day 4:

- Software Reliability Metrics and its Application.
- Software Fault Trees.
- Application and Importance of Software FMEAs.
- System Reliability Software Redundancy.
- Techniques to Improve Software Reliability.

## Day 5:

- Managing Software Reliability.
- Numerical Reliability Framework.
- Reliability Management, Additional Metrics Implications.
- Warranty and Maintenance.
- Preventive Maintenance Models, Effective Maintenance, and Optimum Policy.

## Training Details

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<b>Trainer Qualification</b>	Our trainer holds both Bachelors and Master Degrees in Mechanical Engineering with advanced training in reliability engineering. He brings over 14 years of experience in training, developing, executing and sustaining World Class Maintenance and Reliability Systems in compliance with various ISO standards. He has led and managed teams of solutions-oriented professionals focused on world-class processes.
<b>Mode of Training</b>	Training will be conducted via Microsoft teams online. Meeting invites will be shared on the day before the first day of training.
<b>Course Material</b>	<ul style="list-style-type: none"><li>• Presentation Slides</li><li>• Training Recordings</li><li>• Study References</li></ul>
<b>Number of Participants per Class</b>	Minimum of 10 students per batch Course Duration is 25 hrs. Including examination & clarifications. The training schedule is flexible and will be either in the mornings on the weekends and evenings on weekdays as per Velosi's Approved Training Schedule.
<b>Registration / Payment Method</b>	The interested participants should register his/her name and other necessary details through Velosi's online registration form or email confirmation to the designated contact person. Payment must be settled in full after the registration process. Payment can be made online through the payment link provided by Velosi or through bank transfer.
<b>Certification Issuance Policy</b>	The training certificate (Digital Copy) will be awarded to participants who completed the training and passed the exam with 80% or higher score.

## Discount Scheme

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Participants can avail discount of either an early bird or group discount whichever is higher with additional discount when signing up for 2 or more courses.

### Early Bird Discount:

- 10% Discount if you register 2 weeks in advance.
- 5% Discount if you register 1 week in advance.

### Group Discount (same company only)

- 15% Discount for groups of 5 or more.
- 10% Discount for groups of 3-4.

### Bundle Discount

- Sign up for 2 courses and get an extra 10% off.
- Sign up for 3 courses and get an extra 15% off.

## Why Choose Us

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- In-Depth Comprehensive Explanation of all Sections.
- Continuous Assessment with Section-wise Practice Tests.
- Study Material in the form of PPT, Group Discussions, etc. written in very easily understandable manner.
- Technical clarifications at all levels during/after training.
- Providing Real Exam Questions & Answers.
- Offers reasonable price and seasonal discounts.
- Give flexibility in training schedule.
- Ability to learn at your own time with access to live recordings.
- Incorporate Case Studies from Real-World Situations.
- Trainees are eligible to earn Continuing Professional Development (CPD) credits.



## Other Courses We Offer:

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- **Velosi Certified Programs**
  - Certified Fire Protection Professional
  - Certified PHA HAZOP Leader
  - Certified Process Design Professional/Expert
  - Certified Reliability Professional
  - Certified SIL Professional/Expert
  - Certified Asset Integrity Professional/Expert
  - Certified Tableau Data Analyst
  - Certified Environment Impact Assessment Professional
  - Certified NDT Professional Level 1
  - Certified NDT Professional Level 2
- **Some of our Oil & Gas Field Training**
  - Asset Integrity Management
  - Pipeline Integrity Management
  - Wellhead Integrity Management
  - Structural Integrity Management
  - Safety Integrity Level (SIL)
  - Process Engineering - AutoCAD Training Course
- **Health, Safety & Environment (HSE) Training**
- **ISO Training**
- **NEBOSH Training (Certificates, Awards & Diplomas)**
- **Mobius Courses**
  - Asset Reliability Practitioner
  - ISO 18436 Category II & III
  - ISO 18436-2 Category I-V
  - Mobius Vibration Analysis
- **Exam Preparation Training**
  - BCSP Associate Safety Professional (ASP)/ Certified Safety Professional (CSP)
  - NFPA Certified Fire Protection Specialist (CFPS)
  - EXIDA Certified Functional Safety Professional/Expert (CFSP/CFSE)
  - ABIH Certified Industrial Hygienist (CIH)
  - SMRP Certified Maintenance and Reliability Professional (CMRP)
  - PMI Project Management Professional
  - API Training (510, 571, 579, 580, 581, 653 & RP 2SIM)
  - Sig Sigma Green Belt
  - ASNT NDT Level III
- **Food Safety Training**
  - Basic Food Hygiene Training (level 2)
  - Intermediate Food Hygiene Training (Level 3)
  - Advance Food Hygiene Training (Level 4)
  - HACCP Awareness Training (Level 2)
  - Intermediate HACCP Training (Level 3)
  - Advance HACCP Training (Level 4)
- **IOSH Training (Managing, Leading & Working Safely)**
- **High-field (HABC) Accredited Training**
- **Administrative & Management Skills Training**
- **CertNexus Courses**
  - Cybersecurity
  - Internet of Things
  - Artificial Intelligence
  - Data Science
  - Data Ethics

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