



**Certified Reliability Leader (CRL) Workshop**

# Course Description

The Association of Asset Management Professionals (AMP) has developed an exam designed to create leaders who focus on delivering value to the triple bottom line of:

- Economic Prosperity
- Environmental Sustainability
- Social Responsibility

# Course Description

*The Certified Reliability Leader certification exam was created to validate the competencies of a professional in an organization who mastered the language, words, phrases, ideas, concepts and foundational knowledge required to engage and empower all stakeholders in an organization as a reliability leader. It also validates those who exercise reliability leadership as natural self-expression. The Certified Reliability Leader (CRL) certification is designed to equip professionals with the skills and knowledge necessary for effective reliability and maintenance management.*

**The course covers a comprehensive range of topics:**

- Participants begin by understanding the critical role of leadership in fostering a culture of reliability.
- learning to develop strategies and visions for reliability improvement.
- They explore asset management principles to optimize asset performance and prioritize critical assets.
- Work execution management involves planning and scheduling maintenance activities, as well as implementing best practices for maintenance procedures.
- Reliability engineering concepts, such as Root Cause Analysis (RCA) and Reliability entered Maintenance (RCM), are covered to address failure modes effectively.
- Additionally, candidates learn about condition monitoring technologies and inspections to identify and prevent potential failures.
- The course emphasizes continuous improvement techniques like Lean and Six Sigma and encourages data-driven decision-making through the measurement and tracking of key performance indicators (KPIs).
- Lastly, participants focus on creating a cultural alignment that supports reliability, engaging employees, and communicating the value of reliability within the organization.

# Course Description

## **The certification process typically includes:**

- workshops, case studies, and examinations to assess candidates' understanding and application of reliability principles and their ability to lead reliability improvements in their workplace.

# Key Takeaways

- **REM (Reliability Engineering for Maintenance)**

1. Reliability engineering emphasizes proactive measures to prevent equipment failures and downtime. Implementing regular preventive maintenance schedules based on equipment condition, usage, and manufacturer recommendations can significantly improve uptime.

- **ACM (Asset Condition Management)**

2. Implement a comprehensive asset inspection and monitoring program to assess the condition of critical equipment regularly. This includes visual inspections, on-destructive testing, and sensor-based condition monitoring to identify early signs of deterioration or potential issues.

- **WEM (Work Execution Management)**

3. Establish a prioritization system for maintenance tasks based on criticality and impact on uptime. Focus on addressing high-priority tasks first to minimize potential disruptions to operations.

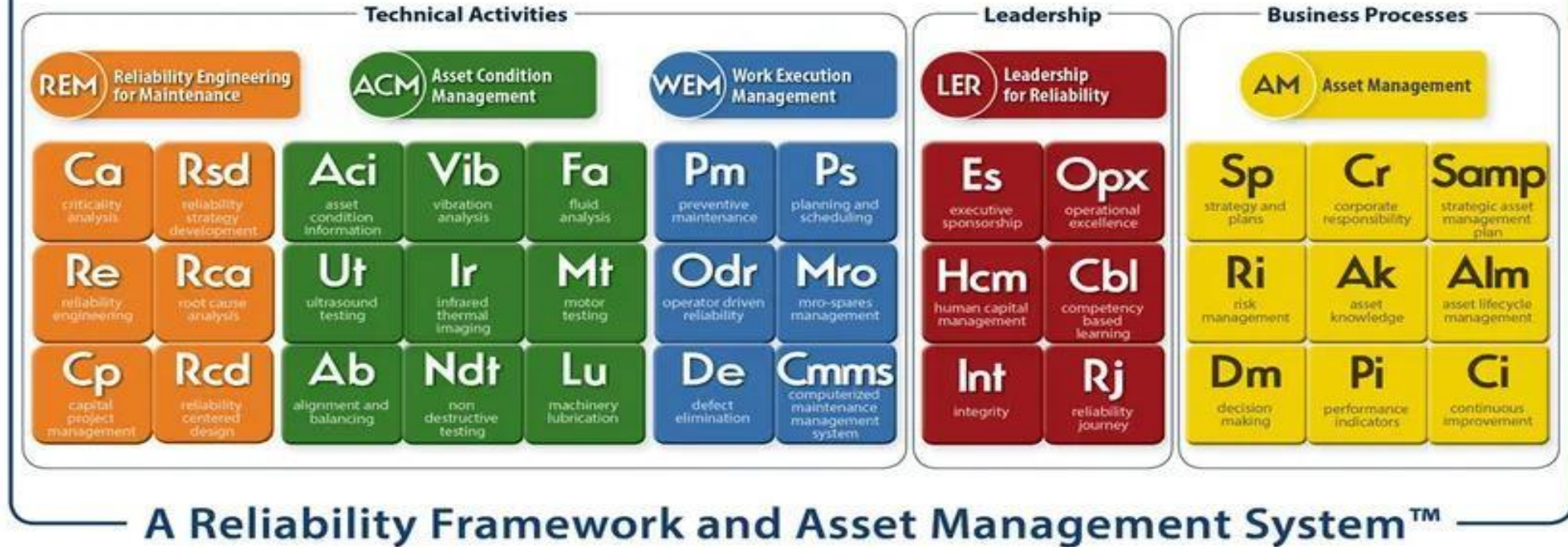
- **LER (Leadership for Reliability)**

4. Establish a culture where reliability is a core value and a shared responsibility among all team members. Leadership should emphasize the importance of uptime and reliability as key performance indicators (KPIs) for the organization.

- **AM (Asset Management)**

5. Prioritize assets based on their criticality and impact on uptime. Allocate resources and focus maintenance efforts on high-priority assets to minimize downtime risks.

# Uptime® Elements™



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# WHO SHOULD ATTEND?

- **Maintenance & Reliability Managers:** Leaders whose driving plant asset performance with goal of achieving highest asset reliability, availability and integrity
- **Maintenance & Reliability Engineers:** Professionals responsible for ensuring the reliability and performance of assets throughout their lifecycle
- **Asset Managers:** Those responsible for overseeing the lifecycle management and performance optimization of assets.
- **Maintenance and Operations Supervisors:** Supervisors overseeing maintenance teams and operational processes.
- **Plant Managers and Operations Managers:** Managers responsible for the overall performance and efficiency of plant operations.
- **Asset Performance Improvement Engineer:** Professionals focused on improving the performance and reliability of critical assets.
- **Engineering Managers:** Managers looking to improve asset reliability and reduce downtime to enhance overall productivity.
- **Maintenance and Reliability Analysts:** Analysts involved in data analysis and decision-making related to maintenance and reliability.
- **Maintenance Planners and Schedulers:** Professionals involved in planning and scheduling maintenance activities



# Course Outline

- **Day 2:**

- **ASSET CONDITION MANAGEMENT**

- Asset Condition Information
- Vibration Analysis
- Fluid Analysis
- Ultrasound Testing
- Machinery Lubrication
- Infrared Thermal Imaging
- Motor Testing
- Alignment and Balancing
- Non-Destructive Testing



# Course Outline

- **Day 3:**  
**WORK EXECUTION MANAGEMENT**
  - Preventive Maintenance
  - Planning and Scheduling
  - Operator Driven Reliability
  - MRO-Spares Management
  - Defect Elimination
  - Computerized Maintenance
  - Management System



# Course Outline

- **Day 4:**  
**LEADERSHIP FOR RELIABILITY**
  - Executive Sponsorship
  - Operational Excellence
  - Human Capital Management
  - Competency Based Learning
  - Integrity
  - Reliability Journey (Formerly known as the travel Guide)



