




# THE CMRP ROADMAP

Preparing for the certification exam

# THE CMRP CERTIFICATION

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The Certified Maintenance & Reliability Professional (CMRP) program is the leading credential for certifying the knowledge, skills and abilities of maintenance, reliability and physical asset management practitioners and professionals.

The CMRP is offered through the Society for Maintenance & Reliability Professionals (SMRP) and its certifying organization SMRPCO.

It is the only certification program of its kind accredited by the American National Standards Institute (ANSI), which follows the globally-recognized International Organization for Standardization (ISO) standards for its accreditation purposes.

**The exam assesses an individual's aptitude within the five pillars of the SMRP Body of Knowledge (BoK):**

1. Business & Management
2. Equipment Reliability
3. Manufacturing Process Reliability
4. Organization & Leadership
5. Work Management

Each pillar details an area of maintenance, reliability and physical asset management that individuals should be proficient in to improve their careers. Several of the pillars also address technical and "people" skills that help individuals better manage relationships with colleagues.

# WHY CERTIFY?

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The CMRP certification provides validation for real-world knowledge and skills of practitioners and professionals.

According to a SMRPCO Certification Survey, four out of five CMRP-certified individuals would recommend the CMRP as a means to advance their careers.

Earning your certification shows employers, colleagues and peers your commitment to continuing education and training.

There are over 5,000 CMRP-certified individuals worldwide.

Many employers use the CMRP certification as a prerequisite for hiring to ensure they bring the most talented employees onto their teams.

SMRP offers continuing education opportunities such as webinars, workshops and other educational sessions that count toward recertification hours.



# MAPPING SUCCESS

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## Education – Formal

Vocational training, along with two- and four-year often explore topics in their curriculum that relate to the five pillars. These learnings are a great starting point for building knowledge of the five pillars of the BoK.



## Education – Hands-on Training

There are many opportunities available to individuals outside of the classroom to continue their learning. These may include other certifications or on-the-job training programs.



## Career Level

Individuals at particular levels within their careers already possess skills that lend experience in the five pillars of the BoK. Many of these skills will be outlined in job postings and position descriptions.



## Education – Online Training

Different from both classroom learning and job training, education can also be accessed through web-based services like webinars, online courses and presentations.



## Books & Publications

Suggested readings from leading professionals and thought leaders that focus on maintenance, reliability and physical asset management topics.



## Professional Conferences

Professional conferences, including those with specific industry focuses, feature sessions geared toward the five pillars of the BoK taught by successful and knowledgeable professionals.



## Job Projects

Day-to-day life in a facility or office includes oversight and execution of projects that give an individual practical, real-world knowledge that can be applied to the CMRP exam.



## Volunteer Organizations

SMRP offers a variety of opportunities for individuals to become more familiar with BoK topics through volunteer positions and responsibilities. There are also opportunities outside of SMRP with other organizations such as educational institutions and those focused on related areas.

To help individuals prepare for the exam, current CMRP-certified professionals have identified eight areas that help individuals master the five pillars of the BoK and adequately prepare for the CMRP exam.

# CMRP ROADMAP

SMRP Body of Knowledge

## 1. BUSINESS & MANAGEMENT

## 2. MANUFACTURING PROCESS RELIABILITY

## 3. EQUIPMENT RELIABILITY

## 4. ORGANIZATION & LEADERSHIP

## 5. WORK MANAGEMENT



### Education - Formal

Mechanical / Chemical / Industrial B.S. Engineering Degree

Technical Education (2-Year Vocation)

Vocational Training

B.S. Reliability Engineering

Business Degree (B.A., MBA)



### Education - Hands-on Training

Military Career (Related Field)

Craft Training

CMRT Certification

Reliability Short Courses (3-5 Day Length)

CAMA Certification (ISO 55000)

University Reliability Diploma / Certification (Multi-Week)



### Education - Web-based

Vendor Presentation

Online Course

Online Training (Multiple Courses)

SMRP BoK Webinar Series

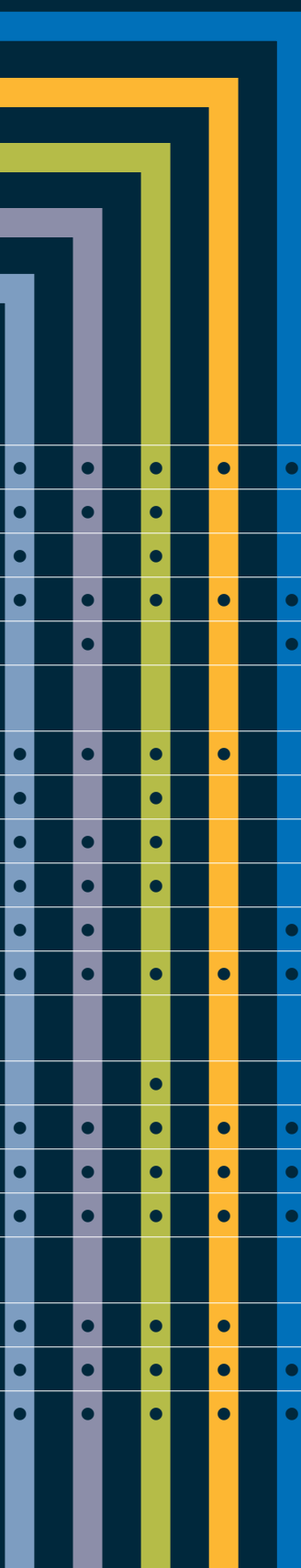


### Conferences

Maintenance & Reliability Conference

SMRP Annual Conference & Symposium

SMRP Chapter Conferences





## Career

Craft Supervisor	•	•	•		
Maintenance Engineer	•	•	•	•	•
Reliability Engineer	•	•	•	•	•
Technical Manager		•		•	•
Process Engineer		•		•	•
Consultant (with MBA)	•	•			•
Maintenance Manager	•		•	•	



## Books & Publications

"Maintenance Strategy" by Anthony Kelly					•
"Toyota Way: 14 Management Principles from the World's Greatest Manufacturer" by Jeffrey K. Liker					•
"Juran's Quality Handbook, 7th Edition" by Joseph A. DeFeo				•	
"Maintenance & Reliability Best Practices" by Ramesh Gulati			•	•	
"World Class Manufacturing" Richard J. Schonberger				•	
"Gateway to World Class Maintenance" by Anthony M. Smith & Glenn R. Hinchcliffe			•		
"Making Common Sense Common Practice" by Ron Moore		•	•	•	•
"The 7 Habits of Highly Effective People" by Stephen R. Covey		•			
"Successfully Installing TPM in a Non-Japanese Plant" by Edward H. Hartmann		•			
"Computerized Maintenance Management Systems" by Terry Wireman	•				
"Maintenance Planning and Scheduling Handbook" by Doc Palmer (first 3 chapters)	•				



## Projects

Reliability Improvement	•		•		
Machine Redesign	•		•	•	
TPM Project	•		•		
Parts Optimization	•		•		
Preventive Maintenance (PM) Creation / Optimization			•		
Storeroom Project	•		•		
Lean Project	•	•	•	•	
Six Sigma Project		•	•	•	•
Maintenance Strategy Deployment / Implementation	•	•	•	•	
Root Cause Analysis			•	•	
Business Case Development		•			•



## Volunteer Organizations

SMRP Chapter	•	•	•	•	
SMRP Committee Participation	•	•	•	•	•
American Society of Mechanical Engineers (ASME) Chapter Participation	•	•	•	•	
Professional Society Participation					•
Paper Presentation	•	•	•	•	•
College Internship in Reliability Field			•	•	•
Speaking at Conferences		•			•

**Ready to take the exam?** Learn more about registration fees and how to sign up for an in-person or computer-based exam at [smrp.org/certification](https://smrp.org/certification).



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& Reliability Professionals**

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