COURSE TITLE

CERTIFIED RELIABILITY ENGINEER (CRE)

Introduction

As a Certified Reliability Engineer (CRE) you will understand how to use the principles of performance evaluation and prediction to improve product/system safety, reliability, and maintainability.

CREs use engineering, probability, statistics, and other tools to ensure that their products and systems are more efficient and reliable

Price

Member: S$$4,275.00
Non-Member: S$$4,723.84

*All fees stated are inclusive of Registration & Exam. Fee and 9% GST

OBJECTIVES

This course provides participants with the knowledge in Reliability Engineering. The program covers the basic principles in Reliability, Availability and Maintainability, Reliability Management Control and the tools used in Reliability Engineering. At the end of the course, participants will be able to:

- Assume the role of a reliability engineer in planning and implementing the Reliability Program as well as predict, test and improve product reliability.
- Be adequately prepared to sit for the CRE examinations conducted by ASQ.

SQI INTERNATIONAL

WHO SHOULD ATTEND

Engineers and managers who intend to acquire knowledge in reliability engineering and mathematical methods to improve product reliability diagnose and solve various reliability problems for overall improvement of the quality systems.

ENTRY REQUIREMENT

- Diploma with at least 4 years working experience in the quality related field; or
- Degree with at least 2 years work experience in the quality related field.

2026
Course Brochure

CERTIFIED COURSES: CERTIFIED RELIABILITY ENGINEER (CRE)

COURSE CONTENTS

Reliability Management and Product Safety & Liability
- **Planning & Resource Management**
- **Operations Management**

Probability & Statistical Tools
- **Basic Concept**
- **Statistical Inference**
- **Design of Experiments**

Modeling and Predictions
- **Reliability Allocation**
- **Reliability Modeling**
- **Reliability Predictions**

Reliability Tools in Design & Development
- **Developing customer needs**
- **Design Techniques**
- **Parts Control & Management**
- **Management Technique**

Data Collection and Analysis and Corrertive Action
- **Failure Reporting & Corrective Action Systems**
- **Root Cause Analysis**
- **Fault Tree Analysis (FTA)**

Reliability Testing
- **Pre-development Planning**
- **Development Testing**
- **Product Testing**

Maintainability and Availability
- **Planning & developing a maintability program**
- **Maintenance Prediction**
- **Availability**
- **Design for maintainability**
- **Built-in Test**
- **Design Review**

TRAINER

This course is conducted by Trainers who are experts in their domains of quality principles, systems & standards, statistical principles and applications, measurement systems, problem solving and improvement tools and techniques, reliability management and product safety applications.

AWARD OF CERTIFICATE

Certificates will be issued upon successful completion of the written examination, which is typically held approximately four weeks after the conclusion of the course.

DURATION

Every Saturdays
9am – 4pm
4 months
106 hours

CONTACT

(+65) 6467 4226
401 Macpherson Road #03-16/17
Macpherson Mall
Singapore 368125
enquiries@sqi.org.sg
www.sqi.org.sg

CQI | IRCA
APPROVED TRAINING PARTNER

WACQ

Board Member of
ANQ
ASIAN NETWORK FOR QUALITY

Our Work Partner in Quality
ASQ

TÜV SÜD
ISO 9001
CERT NO: 2012-09-8