

MANAGE FAILURE ANALYSIS THROUGH SYSTEMATIC APPROACH



Objective

To equip participant with the knowledge and abilities to carry out effective failure analysis. To help the participant to understand and apply the appropriate system approach.

Duration

2 days | 830am – 530pm | 16 hours

Who should attend

They learners should have at least 2 years working experience so that they can apply their learning at work-place especially in a team-based context.

Pre-requisite

The learners should have at least 2 years working experience with at least GCE O level certificate and assuming a position of supervisory level and above in an organization and be able to:

- Communicate ideas and information to others
- Solve problems using logical thinking process
- Collect and organise information to review data critically
- Plan activities to complete work activities
- Receptive to learning and willing to apply it at workplace

Course Fees

S\$626.40
*Registration Fee of S\$17.28 apply
SDF funding & SkillsFuture applicable
All fees stated are inclusive of 8% GST*

Award of Certificate

WSQ SOA will be issued to participants who have attended 75% of the course and successfully passed the assessment.



SQI
INTERNATIONAL



enquiries@sqi.org.sg



www.sqi.org.sg



+65-6467 4225



1 Sophia Road #05-06/07 Peace Centre S(228149)

Course Contents

Section 1: Course Overview

Section 2: Learning Unit 1 - The Need for Failure Analysis

- Overview of Failure Analysis
- Introduction of the systematic approach to Failure Analysis
- Failure Analysis Overall Process
 - 3 Distinct phases of the Failure Analysis Procedure

Section 3: Learning Unit 2 - Perform Failure Analysis

- Phase 1 - Review on Failure Feedback (Plan)
 - Gather Data of Defects
 - Investigation
- Phase 2 - Failure Analysis (Do) - Laboratory and Reliability Test
 - How to Conduct a Technical Failure Analysis
 - Type of Failure in different industries
 - Electrical Failures
 - Failure of electronic components
 - Non-destructive testing (NDT)
 - Failure Analysis Laboratory Test equipment
 - Metallurgical Testing
 - Reliability Test
 - Laboratory Accreditation Scheme
- Phase 2 - Failure Analysis (Do) - Failure Mode and Effect Analysis (FMEA)
 - Two Categories of FMEA
 - How to perform FMEA
 - Structure Analysis
- Group Discussions
- Phase 2 - Failure Analysis (Do) - Corrective and Preventive Action Stage
 - Corrective and Preventive Action
 - Root Cause Analysis Tools and Techniques
 - Cause and Effect Diagram
 - 5 Why Analysis
 - Limitations of the 5 Whys
 - Implementation Plan
 - 8D Approach
 - Relationship Between FMEA and Root Cause Failure Analysis
 - Monitor the action and evaluation the effectiveness

Section 4: Learning Unit 3 - Post Failure Analysis

- Phase 3 - Communication / Standardisation (Check, Act)
 - Results of Analysis are communicated via various reporting mechanism
 - Management of change
 - Control of document and records Procedure
- Group Discussions



Please refer to this URL
<https://www.sqi.org.sg/courses/>
or QR Code for soft copy
and updated training schedule

Membership Application

Register membership online at
www.sqi.org.sg/membership-join/
or contact us to get the membership
application form.

Membership Categories:

- ~ Organisation membership
- ~ Individual membership

SQI International is a subsidiary of Singapore Quality Institute (SQI). SQI operates as a non-profit professional institute that promotes and advances excellence in the field of quality in Singapore; and actively champions quality initiatives in the region and around the world through networking and collaborating with other international quality organisations.

SQI is a World Partner of the American Society for Quality (ASQ); and a Board Member of both the Asian Network for Quality (ANQ) and the World Alliance for Chinese Quality (WACQ).

