

APPLIED RELIABILITY



Introduction

Reliability - Have you ever wondered how a product could have lasted so long a time and given you such a pleasure to use? On the other hand, the same product could have performed poorly in a different environment and you swore never to use it again! They have a theme in common and that has to do with the Reliability of the product. Whether in new product development, production, maintenance of a system and the warranty of the product, we all deal with reliability in different ways.

This brief course is designed to impart a simple and systematic understanding of reliability engineering with a practical bent to the participant.

Duration

2 days | 9am – 5pm | 14 hours

Who should attend

This course is suitable for managers, engineers, engineering assistant from the Production, Process, Quality, Maintenance, Research & Development and Operation areas.

Entry Requirement

Participants should have basic knowledge of statistics and bring along a scientific calculator.

Course Fees

Member: S\$684.52

Non-Member: S\$758.64

All fees stated are inclusive of Registration Fee and 9% GST

Award of Certificate

Certificate of Completion will be issued to participants who have attended at least 75% of the course.



SQI
INTERNATIONAL



enquiries@sqi.org.sg



www.sqi.org.sg



+65-6467 4225



401 MacPherson Road #03-16/17 MacPherson Mall
Singapore 368125

Course Contents

- The evolution of Quality and Reliability
- Reliability and its relation to Quality
- What is Reliability? And how it's different from Quality
- How does Quality affect Reliability?
- Definition of Reliability and what does it mean?
- Does it make business sense anymore to have it more "reliable"?
- Perceptions of Reliability. How does one define reliability in quantitative terms?
- MTTF and MTBF
 - Dangers of mis-using MTBF / MTTF. How not to use this term wrongly.
 - Censoring Data; dealing with the lefts and rights of it.
- Failure rates and the Bathtub curve.
 - Decreasing, Increasing and Constant failure rates. What does it all mean?
 - The Weibull in action! An all in one solution?
- Probability Series, Parallel or mixed systems.
 - Building-in redundancy in products.
- Fault Tree Analysis
- Reliability Apportioning or Allocation
- Increasing the reliability of a system. Back to Quality!
- Maintenance and availability.
 - Coming up with a replacement strategy
 - How warranty costs make a lot of business cost sense?
- Reliability - the many facets of engineering and operations.
- Product Reliability Qualification Phases. How it all adds up? e.g. HASS / HALT / ALT
- Reliability in Production - Ongoing Reliability Monitoring or Testing (ORM / ORT)



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).

