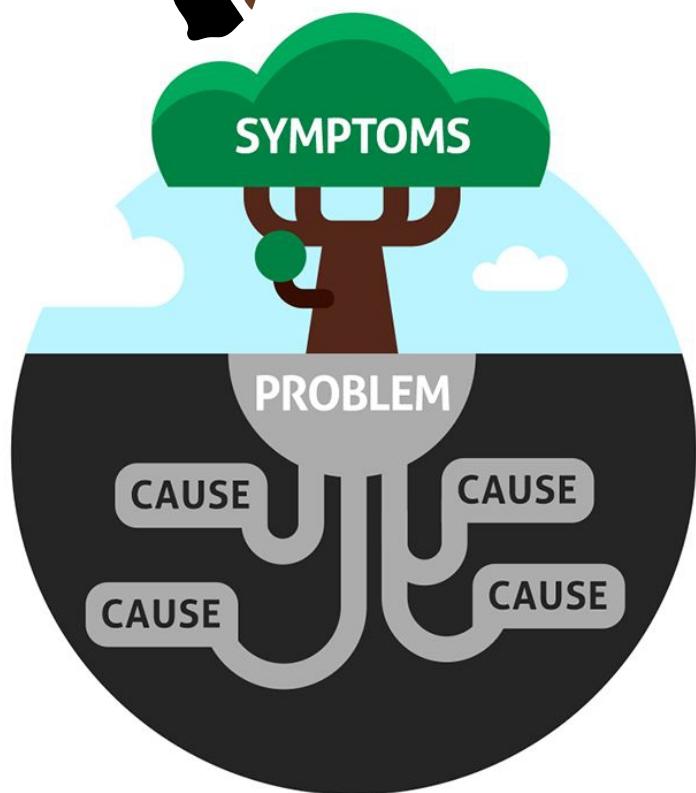




GWIJIAFRICA



THREE
DAY VIRTUAL
COURSE

1st Dec 2021 - 3rd Dec 2021

ADVANCED FAILURE MODES EFFECT ANALYSIS TRAINING & IMPLEMENTATION

YOUR COURSE GWIJI

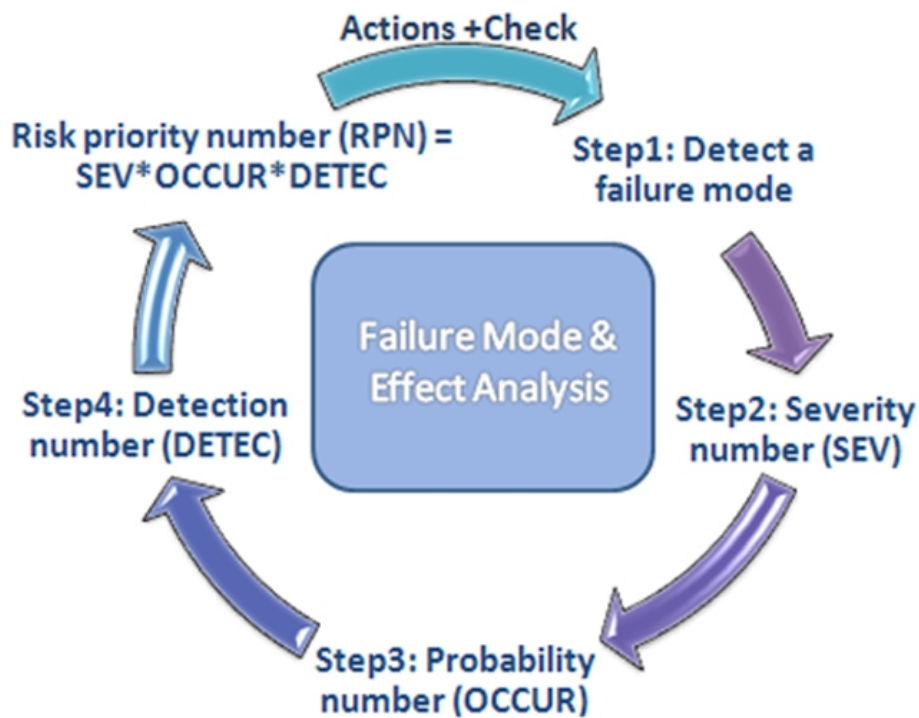


Dr. James Watterson
PHD
Mechanical Engineering

KEY TOPICS

- ➔ FMEA as part of Design for Reliability
- ➔ Risk Analysis and prioritization
- ➔ Keys to success and efficient FMEA development
- ➔ When to use FTA instead of or in combination with FMEA
- ➔ Understanding clearly the guidelines for rating:
 - Severity
 - Occurrence
 - Detection





Workshop Description & Outline

This practical FMEA training course introduces the principles behind the FMEA technique. The FMEA workshop uses a systems approach to failure to provide practicing engineers with a consistent and clear understanding of the relationships between failure modes, mechanisms, effects and causes. When properly applied the FMEA process can be used to:

- Identify critical characteristics of sub-systems and components in a complex products.
- Identify or eliminate the potential causes of failure during the product or design process.
- Develop an effective control plan that will reduce the risk of the project or product failure due to late delivery and cost overruns.

Learning Objectives

- Learn the best practice step by step process for performing FMEAs.
- Proactively consider potential failures, prioritise issues based on risk and then initiate improvements early in development when modifications tend to have the biggest impact on the lowest cost.
- Examine the key factors that contribute to successful FMEA projects and how to implement an effective FMEA process.

Who Should Attend

Because FMEA techniques are applicable to all industry sectors and for most disciplines, Process Engineers, Maintenance, Planning, construction, Managers, supervisors and for anyone that wants to create a searchable knowledge base of reliability-related information for their designs that contribute to the development of test, plans, control plans, future design efforts and many other activities.

Click here & register

Meet The Course Gwiji



Dr. James Watterson

Professional Management
Consultant

James is a highly experienced professional management consultant and lead trainer with over 35 years' experience in various disciplines: Engineering, Maintenance, Marketing, Project and Contract Management in geographies spanning Ireland, UK, Australia, USA, Canada, UAE, India, Pakistan, Iran, Qatar, Saudi Arabia, Ghana, Kuwait, Oman, Trinidad & Tobago, Kuala Lumpur, Bahrain, Sarawak, Libya, Algeria, Nigeria amongst others.

He is a renowned and much respected technical author with titles to his name being:

- Diagnostic Skills
- Rotating Equipment: Maintenance and Troubleshooting
- Tribology: A Simple Guide To The Study of Friction
- A Simple Guide to Understanding Compressors

Professional Memberships:

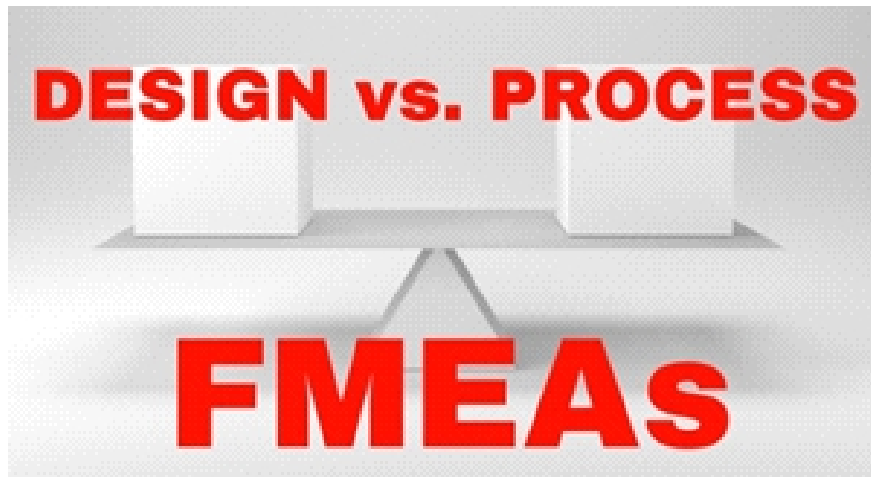
- Fellow of the Institute of Operation's Management
- Fellow of the Royal Graphical Society
- Member of British Institute of Management
- Chartered Member of the Institute of Logistics & Transport
- Member of the American Society for Quality

Global conglomerates that have benefited from Dr. James' expertise include but not limited to:

- ADCO
- ADMA-OPCO
- ARAMCO
- BP-SARAWAK
- CRISTAL
- DEWA
- ENI-GAS
- GASCO
- KUWAIT-KPC
- NIGERIA LNG
- OMAN GAS CORP
- OMAN LNG
- OMAN OCCIDENTIAL
- OMAN RPC
- PRICE WATERHOUSE
- COOPERS
- QP-QATAR
- RASCO OIL
- SABIC INDUSTRIES
- SEC
- SIRTE OIL
- SWEA
- TAKREER
- WAHA OIL
- ZADCO
- ZUETINA



Daily Schedules



- FMEA definition and history
- Application and benefits
- Types of FMEA
 - Products
 - Process
- FMEA as part of Design for Reliability
- FMEA Template
- FMEA P-diagram
- The role of FMEA in reliability Centred Maintenance (RCM)
- How to correctly define functions, failures, effects and causes

Day One

1st Dec 2021



Day Two

2nd Dec 2021

- Team based FMEA
- FMEA processes- how to:
 - Identify functions
 - Define failure modes
 - Defining effects
 - Assigning Severity
 - Understanding causes
 - Mechanisms and Symptoms
- Practices Session
 - Exercise for a functional FMEA and a Butterfly Valve
- Risk Analysis and prioritization

Click here & register

- Keys to success and efficient FMEA development
- When to use FTA instead of or in combination with FMEA
- FMEA actions and tracking
- Calculating Risk Priority Numbers
- Recommended Actions – Prioritising & Planning
- Other tools and techniques used or related to FMEA
- Understanding clearly the guidelines for rating:
 - Severity
 - Occurrence
 - Detection
- State how to prioritise and manage risk



Day Three

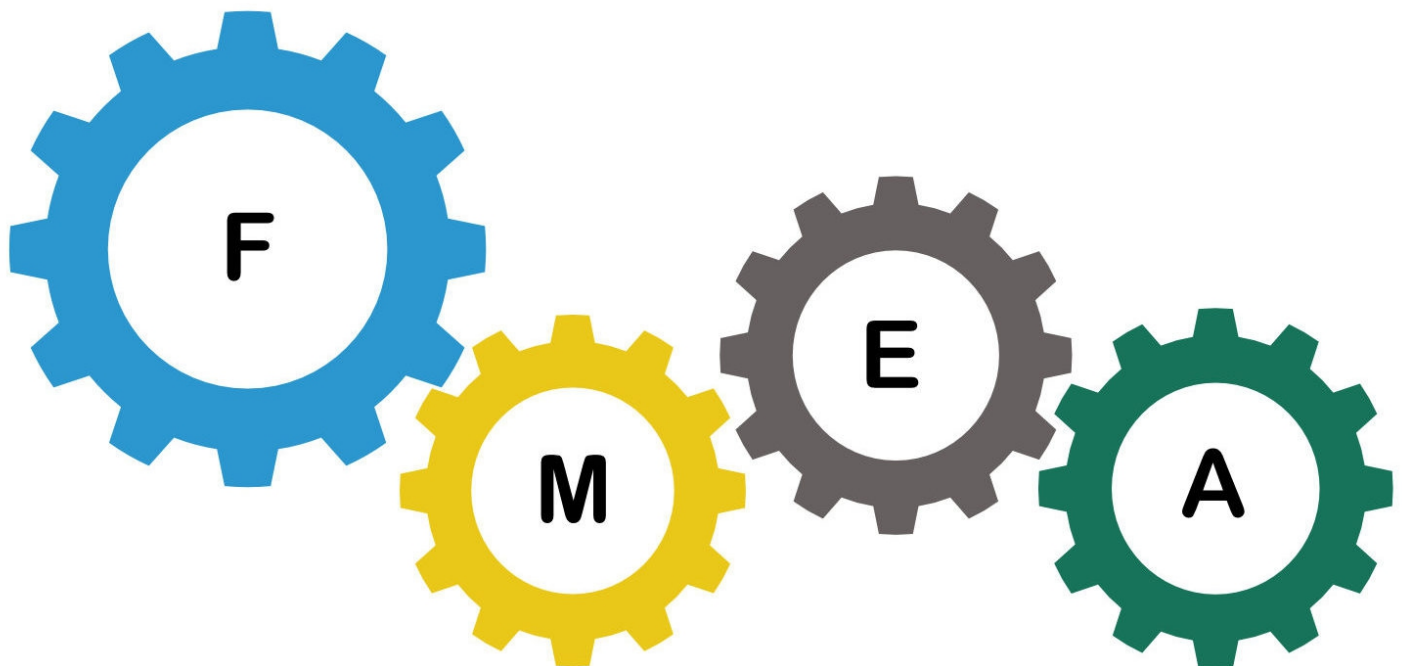
3rd Dec 2021

Failure

Mode

Effect

Analysis



Training Methodology

- Fully comprehensive manual
- Supporting Power Point Decks
- Case/Group Studies
- Videos – Condition Monitoring Techniques

Click here & register



1,000\$
per delegate
Maximum 12 participants

**Register
Online**

+ 16% VAT where applicable

This course is available as a public and in-house and is delivered as a LVT- Live Virtual Training from December 1st - December 3rd

Click here & register



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