

## INTRODUCTION

Reliability, Availability & Maintainability (RAM) are becoming very important aspects for the Product and Process Industries worldwide. The customers are well informed about the RAM's requirements, and demanding certain target values for these probabilities. Considering the fact, that the Reliability Predictions are useful for the companies in the project bid stage itself to have a clear understanding of the design parameters and the goal setting gaps.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 2 Full days programme on **“Reliability Engineering - Concepts, Calculations, Techniques & Tools”** for designers, R&D Engineers and Quality personnel.

Various techniques and tools are required to be practised in the industry today to keep up with the pace. This program is designed to introduce these tools and techniques to the participants, and they can be able to do calculations, Plots and estimates as per the end client requirements.

## FOCUS AREAS

- Reliability / Availability / Maintainability.
- Recap of Statistics & Probability.
- Various types of Failures & Failure Analysis Techniques.
- Predictions Using MIL 217 & NSWC.Exponential / Normal / Weibull Distribution.
- **Weibull Plotting for LDA**
- FTA / RBD / Boolean Truth Table

## KEY TAKE AWAYS

After undergoing the programme, the participants will be able to –

1. Understand about the basics of Reliability Engineering.
2. Understand about various types of Tools & Techniques used in Reliability Engineering.
3. Understand and apply Reliability Prediction for both Electronics & Mechanical Systems.
4. Calculate Failure rates & MTBF
5. Understand various Lifetime Distributions & to perform Life Data Analysis.
6. Understand about the basics of Maintainability & Availability.

## PARTICIPATION FEE

**Rs. 10450/-**  
+18% GST  
**IMTMA Members/ Micro Companies/ Individuals/  
Educational Institutions / Students/ IMTMA Non  
Members/ Others**

**USD 415/-**  
**Overseas Participants**

**Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company**

## PARTICIPANT PROFILE

Programme will be beneficial for Managers and Engineers from Design, Production, R&D and NPD divisions. Programme is relevant to industry viz., Any Process Industry, Auto OEMs, Auto ancillaries, Pump Manufacturers, Aerospace ancillaries, Defence & Railway Establishment, General Engineering and Engineering Service providers. Faculties from educational institutes can also participate in the programme.

## FACULTY

This Program will be conducted by Mr. Sivanarul Selvan P.  
Mr. Sivanarul Selvan P. is the well-known specialist consultant and Instructor in the RAMS Field, having a total of 30 years of experience, and served Multinational Companies and an entrepreneur. He is an Instrumentation & Control Engineer with CAD/ CAM/ CAE & Programming knowledge. He is practising RAMS for the last 15 years, and executed many Training Programs and Consultancy assignments to various Industrial verticals. He is specialized in RAMS, Reliability TEST methods & Plans, HALT, HASS & ALT, Physics of the failure, Design of Experiments, LEAN – Six Sigma.

### For Registration Contact

**B.L Patil**  
**Programme Coordinator**  
+91 7899799296  
[blpatil@imtma.in](mailto:blpatil@imtma.in)  
**Back End Operations**  
9742626488  
[enquiry@imtmablr.com](mailto:enquiry@imtmablr.com)

### Contact Address

**INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION**  
@ BIEC, 10th Mile, Tumkur Road, Madavara Post,  
Bangalore - 562 123  
Tel : 080-66246600  
Fax : 080-6624-6658



imtmatraining.67038796@hdfcbank

**REGISTRATION :** Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.

**Important Information :** Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.