

Basic Reliability Engineering Concept & Applications For Maintenance (2-Day) Course Overview

Developing Good Foundation of Reliability Engineering Analysis for effective Maintenance Decisions Support

Course Content

Basic Reliability Engineering

- Introduction
- Understanding data requirements
- Statistics primer for reliability analysis
- Basic reliability engineering analysis and interpretation
- Degradation analysis (6 regressions model) to calculate life of critical component

Applied Reliability Engineering

- Component duty cycle
- Preventive maintenance optimization:
 - ◆ Deterministic model
 - ◆ Stochastic/probability models (5 variants)
- Maintenance inspection optimization
- Other applications
 - ◆ System reliability analysis (serial and parallel systems)
 - ◆ K-out-of-n parallel redundancies
 - ◆ Parallel redundancies

Data Cleansing and Toolkit Classwork sessions

- Data cleansing
- Weibull parameters estimation and reliability calculation
- Degradation analysis
- Failure finding interval optimization
- Preventive maintenance optimization (consists of 6 models)

Benefit From the Course

Attending the basic reliability engineering application concept & application for maintenance course is an excellent way to learn what reliability engineering is and how reliability engineering analysis work to support maintenance decisions in your organization.

At Basic Reliability Engineering and Application course you will:

- Gain an understanding on how to use the various reliability engineering tools in various applications;
- Learn what constitute a good reliability engineering data, how to filter reliability engineering data, how to model/design reliability engineering data into your asset hierarchy, how to model existing data to produce good reliability engineering data, and how to construct failure mode collection schemes as per good reliability engineering data requirements;
- Learn how to estimate and interpret Weibull distribution parameters, how to use life parameter to support maintenance decision, and how to estimate life of critical component (it is always replaced before fail);
- Gain an understanding on how to optimize preventive maintenance interval base on maintenance objectives (minimize maintenance cost or minimize breakdown time); and
- Gain understanding on how to choose the best maintenance tactics to improve your asset reliability.

Who Should Attend

Anyone who has responsibility for:

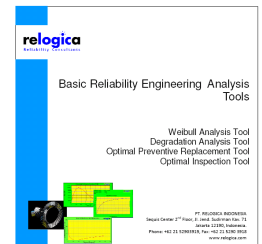
- Failure estimation and Reliability Analyses;
- Maintenance Tactics Improvements (managers, superintendents, engineers, planners);
- Anyone with an interest in improving performance of asset reliability.

Class Size

Class size will be limited to not more than 12 participants to ensure quality learning experience. If there are insufficient registrants, the class will be cancelled and your fee will either be applied to a future course or refunded in full - your choice.

Course Material

- Each participant will receive:
 - ◆ Presentation material in hard copy
 - ◆ Supplement of exercise such as Weibull paper
 - ◆ Excel based prebuilt model for Weibull calculator, degradation analysis, preventive maintenance optimization, and failure finding interval optimization
 - ◆ Each participant must bring their own laptop for the class work and exercises

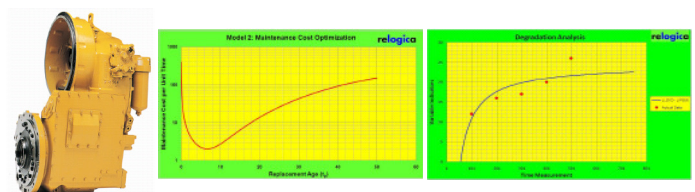


Instructor

The course, will be taught by our certified reliability engineering practitioner who have extensive experiences in various industries including oil & gas, petrochemicals, chemical process, mining, and manufacturing. Our instructor is:

• Aries Nurhadi

Is a mechanical engineer with majoring in mechanical design and industrial control system. He has over 15 years of combined working experience in oil field service, manufacturing and as management consulting specializing in reliability engineering concepts and applications



To learn more about our courses, please contact us at:

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Phone: +6221 5290 3919
Fax: +6221 5290 3918
Email: courses@relogica.com

Or visit our website: www.relogica.com

Basic Reliability Engineering Concept & Applications For Maintenance (2-Day)

Registration Form

Please indicate the basic reliability engineering concept & applications for maintenance course dates below by marking the box (✓) next to the dates

- | | |
|--|---|
| <input type="checkbox"/> 08 - 09 February 2011 (Jakarta)
<input type="checkbox"/> 21 - 22 February 2011 (Sangatta)
<input type="checkbox"/> 24 - 25 March 2011 (Jakarta)
<input type="checkbox"/> 09 - 10 June 2011 (Jakarta) | <input type="checkbox"/> 02 - 03 August 2011 (Jakarta)
<input type="checkbox"/> 06 - 07 September 2011 (Balikpapan)
<input type="checkbox"/> 04 - 05 October 2011 (Jakarta)
<input type="checkbox"/> 08 - 09 November 2011 (Jakarta) |
|--|---|

Course @ Jakarta
Hotel Mulia
Jl. Asia Afrika, Senayan
Jakarta 10270
Indonesia

Course @ Sangatta
Hotel Royal Victoria
Jl. Pendidikan, Sangatta
Kutai Timur, Kalimantan Timur
Indonesia

Course @ Balikpapan
Hotel Novotel
Jl. Brigjen Ery Suparjan No. 2
Balikpapan, Kalimantan Timur
Indonesia

Please register the following delegate(s) for the two-day basic reliability engineering and application course:

Name: _____	Title: _____	E-mail: _____
Name: _____	Title: _____	E-mail: _____
Name: _____	Title: _____	E-mail: _____
Name: _____	Title: _____	E-mail: _____
Name: _____	Title: _____	E-mail: _____
Name: _____	Title: _____	E-mail: _____

Your Name : _____

Company : _____

Address : _____

Phone. : _____ Fax. : _____

E-mail : _____

Fees & Payment

USD 650 fees per participant (For Kalimantan Course)
USD 450 fees per participant (For Jakarta Course)

For organization with more than 3 participants, we will apply a USD 50 discount per participant. Please bring your computer to the course.

Please transfer payment to the account below and please send us the proof of transfer by fax.

Bank Central Asia (BCA) Cabang Setiabudi Plaza
 Account Number : 7660 123 231 (US Dollar)

Registration

Please return this form (completed) via Fax to:
 PT. Relogica Indonesia
 Fax No.: +62 21-52903918

or e-mail the information above to:
courses@relogica.com, with subject "**BREA2D [Date]**".

Should cancellation occurs, we will either fully refund your money or apply it for future course credit, Your choice.