RELIABILITY

RCM III: Deep Dive Into Criticality Analysis

Prioritise assets and maintenance decisions using structured assessment of failure risk, consequence and business impact.



DURATION	3 days	DELIVERY	Public or in-house

Why this programme

Criticality analysis helps organisations distinguish the assets and failure modes that deserve the greatest attention. Done well, it creates a shared, risk-based basis for maintenance strategy, spare-parts decisions, work prioritisation and improvement investment. This programme takes participants through the RCM III criticality process - from defining asset scope and consequences to building, validating and applying a scoring model that teams can defend and use.

What participants will learn

01 Define an asset hierarchy and practical scope for criticality analysis.

02 Identify failure modes, consequences and business impacts.

03 Develop consistent criteria, matrices and scoring rules.

04 Translate results into maintenance, spares and work priorities.

Who should attend

Reliability engineers, maintenance engineers, asset managers, maintenance planners, operations professionals and technical risk managers.

How you will learn

Trainer explanation, guided application and discussion connect the module topics to practical workplace situations. The final emphasis is on applying the methods in your own role or team.

Detailed programme

The sequence and emphasis can be tailored to participant needs.

01 RCM and criticality foundations

- Explain the role of criticality analysis within risk-based reliability decisions.
- Connect asset failure consequences with operational and business priorities.
- Define how the results will inform maintenance, spares and improvement decisions.

02 Asset hierarchy and data

- Set system boundaries and establish a practical asset hierarchy.
- Choose an appropriate level of analysis for the organisation and available data.
- Review functional context and data quality before assessing criticality.

03 Failure modes and consequences

- Identify relevant failure modes and the consequences they may create.
- Consider safety, environmental, operational, quality and financial impacts.
- Use a consistent consequence framework across different assets and systems.

04 Criticality matrices and scoring

- Define likelihood, consequence criteria and scoring rules.
- Consider weighting, calibration and the effects of scoring bias.
- Build a criticality matrix that can be explained and applied consistently.

05 Validation and application

- Review the model with relevant operational and technical stakeholders.
- Check sensitivity and document the assumptions behind the ranking.
- Convert results into maintenance priorities, spares decisions and follow-up actions.

PRACTICAL APPLICATION

A defensible asset-criticality model.

HRD Corp claimable training is arranged through Orange Revolution. Confirm programme eligibility and claim arrangements with ISDS before booking.

Plan your training with ISDS

Discuss fees, trainer arrangements and delivery options for your team.

admin@isds.com.my | +60 18 392 1671 | Course page

Contact: Daud Ibrahim | ISD Solution