

Have You Considered a Career in Reliability Engineering?

You might be a great Reliability Engineer if you're....

Creative, diligent, dedicated, and determined. REs need to be able to solve problems effectively, learn along the way, and make decisions quickly. Essential soft skills include problem-solving, teamwork, composure under pressure, written and verbal communication, and relationship building.



Manufacturing Plant Reliability Engineer

Education:

A mechanical or electrical engineering degree. Applicable certifications include the Reliability Engineering Certification and Certified Maintenance and Reliability Professional (CMRP).

Responsibilities

- Identify and manage asset and system reliability risks that could negatively impact operations.
- Achieve maximum asset and system uptime by tracking and finding ways to minimize production losses and high costs.
- Manage risks to attain strategic objectives using tools such as criticality analysis, FMEA, RCA, and critical spares analysis.
- Manage the Predictive
 Maintenance Strategy and the
 online condition monitoring
 programs.
- Provide engineering support in the design and installation stages of new assets and the modification of existing assets.
- Help facilities management, technicians, and production personnel to mitigate operational issues.



Reliability Design Engineer

Education:

Typically requires an advanced degree in engineering or physics. Applicable certifications include the Reliability Engineering Certification and the Certified Reliability Engineer.

Responsibilities

- Evaluate and qualify new product designs for reliability.
- Plan and implement accelerated life tests, write test reports, and lead design failure mode and effects analysis.
- Perform reliability budgeting, estimating, and reliability risk mitigation.
- Follow the reliability life cycle of products from concept to design, development, manufacturing, field operation, and field returns to design in and confirm reliability at every stage.
- Generate maintenance task analyses and maintenance plans, and conduct maintainability demonstrations to help translate customer requirements into product specifications.



Site Reliability Engineer

Education:

BS degree in computer science or a related discipline, or equivalent experience. Applicable certifications include the Certified Site Reliability Engineer.

Responsibilities

- Apply software development skills and mindset to IT operations, with the goal of improving the reliability of large systems through automation and continuous integration and delivery.
- Ensure the reliability and availability of cloud-based platform services, query execution, data processing, and more.
- Learn how to work closely with product developers to ensure that the designed solution responds to availability, performance, security, and maintainability requirements.

To learn how you can earn your Reliability Engineering Certification, please visit our <u>website</u> or email <u>education@LCE.com</u>.

Adapted from the article, "Have you Considered a Career in Reliability Engineering?" by Michael Blanchard

