Manufacturing Plant Reliability Engineering

**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.

Have You Considered a Career in Reliability Engineering?

You might be a great Reliability Engineer if you’re:

Creative, diligent, dedicated, and determined. RTs 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.

Educated from the article, “Have you Considered a Career in Reliability Engineering?” by Michael Blanchard

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