



# Site Reliability Engineering (SRE) Fundamentals™

## Overview

**Site Reliability Engineering (SRE) Fundamentals™ certification is to impart, test and validate knowledge of SRE vocabulary, principles and practices.**

**Site Reliability Engineering (SRE) Fundamentals™ certification helps Engineers to understand the basic foundations of Site Reliability Engineering**

## Exam Requirements

- **Attend a face-to-face or virtual course taught by a Certified Site Reliability Engineering (SRE) Fundamentals™ trainer**
- **Have 16 hours of live online or 16 hours of in-person training with Certified Site Reliability Engineering (SRE) Fundamentals™ trainer**
- **After successfully completing the course, you will need to accept the License Agreement to take the 45 question Site Reliability Engineering (SRE) Fundamentals™ test**
- **To pass the test, correctly answer 32 out of the 45 questions within the 60-minute time limit**
- **Maintain your Site Reliability Engineering (SRE) Fundamentals™ certification by renewing your certification annually**

## Modules

### Module 1: Introducing SRE

- DevOps
- SRE
- SRE Terminologies
- Toil
- Type of Toils

### Module 2: Service Level Objectives

- Service Level Objectives
- SLO Data Components and Metrics
- Measuring and evaluating Service Level Objectives (SLOs)
- Steps for measuring and evaluating SLOs
- Service Level Objectives challenges
- SLO best Practices

### Module 3: Service Level Indicators

- Service Level Indicators



- SLIs vs. SLOs vs. SLAs
- Identifying SLI
- Define Programmatic SLIs

#### **Module 4: Error Budgets**

- What is an error budget?
- Why do you need an error budget?
- Benefits of error budgeting
- Error Budget Policies
- Positive Error budget

#### **Module 5: Reduce Toil**

- What is operations toil?
- Why Toil Matters
- Why toil has to be less
- How to Calculate TOIL
- Strategies for reducing operations toil

#### **Module 6: Chaos Engineering**

- Chaos Engineering
- Need for Chaos Engineering
- Benefits of Chaos Engineering
- Chaos Engineering and Testing
- Chaos Engineering and DevOps
- How Chaos Engineering works
- Chaos Engineering Experiments
- What is Chaos Monkey

#### **Module 7: Managing Risk**

- Risk Management
- Unplanned Downtime
- Identify Risk in Services

#### **Module Quizzes**

#### **Use Cases**

### **Study Material**

- **Student Study Book**
- **Mock Exam Paper(s)**
- **Module Wise Quiz**
- **Use Cases**



- Case Studies

## **Duration**

16 HRS

## **Target Audience**

- Anyone starting or leading a move towards increased reliability
- Anyone interested in modern IT leadership and organizational change approaches
- Business Managers
- Business Stakeholders
- Change Agents
- Consultants
- DevOps Practitioners
- IT Directors
- IT Managers
- IT Team Leaders
- Product Owners
- Scrum Masters
- Software Engineers
- Site Reliability Engineers
- System Integrators
- Tool Providers