

Course Title: Site Reliability Engineering (SRE) Practitioner?	Course Duration: 3.0 Days
Exam: Included	Exam Type: Proctored Exam
Qualification: Site Reliability Engineering (SRE) Practitioner? Certificate	

Course Syllabus

Our Site Reliability Engineering (SRE) Practitioner? training course covers the following Modules:

Module 1: SRE Anti-Patterns

- Rebranding Ops or DevOps or Dev as SRE
- Users notice an issue before you do
- · Measuring until my Edge
- False positives are worse than no alerts
- Configuration management trap for snowflakes
- The Dogpile: Mob incident response
- Point fixing
- Production Readiness Gatekeeper
- Fail-Safe really?

Module 2: SLO is a Proxy for Customer Happiness

- Define SLIs that meaningfully measure the reliability of a service from a user's perspective
- Defining System boundaries in a distributed ecosystem for defining correct SLIs
- Use error budgets to help your team have better discussions and make better data-driven decisions
- · Overall, reliability is only as good as the weakest link on your service graph
- Error thresholds when 3rd party services are used

Module 3: Building Secure and Reliable Systems

- SRE and their role in Building Secure and Reliable systems
- Design for Changing Architecture
- Fault-tolerant Design
- Design for Security
- Design for Resiliency
- Design for Scalability
- Design for Performance
- · Design for Reliability
- Ensuring Data Security and Privacy

Module 4: Full-Stack Observability

- Modern Apps are Complex & Unpredictable
- Slow is the new down



- · Pillars of Observability
- · Implementing Synthetic and End-user monitoring
- · Observability driven development
- Distributed Tracing
- What happens to monitoring?
- . Instrumenting using Libraries and Agents

Module 5: Platform Engineering and AIOPs

- Taking a Platform Centric View solves Organisational scalability challenges such as fragmentation, inconsistency, and unpredictability
- How do you use AlOps to improve resiliency?
- How can DataOps help you in the journey?
- · A simple recipe to implement AIOps
- · Indicative measurement of AIOps

Module 6: SRE & Incident Response Management

- SRE Key Responsibilities towards incident response
- DevOps & SRE and ITIL
- OODA and SRE Incident Response
- Closed Loop Remediation and the Advantages
- Swarming Food for Thought
- AI/ML for better incident management

Module 7: Chaos Engineering

- · Navigating Complexity
- Chaos Engineering Defined
- Quick Facts about Chaos Engineering
- Chaos Monkey Origin Story
- Who is adopting Chaos Engineering?
- · Myths of Chaos
- Chaos Engineering Experiments
- GameDay Exercises
- · Security Chaos Engineering
- Chaos Engineering Resources

Module 8: SRE is the Purest form of DevOps

- Key Principles of SRE
- · SREs help increase reliability across the product spectrum
- Metrics for Success
- · Selection of Target areas
- SRE Execution Model
- Cultural and Behavioral Skills are key
- SRE Case study

Course Overview

Our three-day Site Reliability Engineering (SRE) Practitioner? training course introduces ways to scale services economically and reliably in an organisation. This Site Reliability Engineering (SRE) Practitioner? training explores strategies to improve agility, cross-



functional collaboration, and transparency of the health of services towards building resiliency by design, automation, and closed-loop remediations.

Course Learning Outcomes

Our Site Reliability Engineering (SRE) Practitioner? training course will teach you to become proficient in the following:

- Successfully implement a flourishing SRE culture in your organisation.
- Manage the organisational impact of introducing SRE.
- Build security and resilience by design in a distributed, zero-trust environment.
- Prepare for the DevOps Institute SRE Practitioner certification exam.
- Participation in unique exercises designed to apply concepts.
- · Get sample documents, templates, tools, and techniques.
- · Access to additional value-added resources and communities.
- · Continue learning and face new challenges with after-course one-on-one instructor coaching.

Audience

Our Site Reliability Engineering (SRE) Practitioner? training course will benefit several individuals and organisations. Including but not limited to:

- Anyone starting or leading a move towards increased reliability
- · Anyone interested in modern IT leadership and organisational 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

Entry-Level Requirements

Our Site Reliability Engineering (SRE) Practitioner? training course recommends having experience at the level of our <u>Site Reliability</u> <u>Engineering (SRE) Foundation?</u> training course and knowledge of common SRE terminology, concepts, principles, and related work experience are recommended.

Recommended Reading

There is no recommended reading for our Site Reliability Engineering (SRE) Practitioner? training course.



What's Included

Our Site Reliability Engineering (SRE) Practitioner? training course includes the following:

- 3-day instructor-led training course
- DevOps Institute certification exam included
- · After-course coaching available
- · Pre-reading
- Course Manuel
- Quizzes
- Exercises

Exam Information

Site Reliability Engineering (SRE) Practitioner? Examination:

• Duration: 90 minutes.

• Questions: 40 Multiple-Choice

• Passing Score: 65%

· Certification Validity: 2 Years

• Pass Mark: 26/40

The certification is governed, administered and maintained by the DevOps Institute.

What's Next

Our <u>DOI DevOps Foundation</u> training course is designed for a broad audience, enabling those on the business side to obtain an understanding of micro-services and containers. Those on the technical side will obtain an understanding as to the business value of DevOps to reduce cost (15-25% overall IT cost reduction) with increased quality (50-70% reduction in change failure rate) and agility (up to 90% reduction in provision and deployment time) to support business objectives in support of digital transformation initiatives

Additional Information

Our SSite Reliability Engineering (SRE) Practitioner? training course will help you qualify for in-demand roles such as:

- Business Manager
- · Business Stakeholder
- Change Agent
- Consultant
- DevOps Practitioner
- IT Director
- IT Manager
- IT Team Leader
- Product Owner
- Scrum Master
- Software Engineer
- Site Reliability Engineer
- System Integrator



• Tool Provider

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