

Site Reliability Engineering (SRE)

Practitioner (DevOps Institute)

Category: Software Development & Programming | **Vendor:** Logical Operations

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Included with the course as standard is the official PeopleCert Exam Voucher. This course introduces a range of practices for advancing service reliability engineering through a mixture of automation, organizational ways of working and business alignment. Tailored for those focused on large-scale service scalability and reliability.

About This Course

This course introduces a range of practices for advancing service reliability engineering through a mixture of automation, organizational ways of working and business alignment. Tailored for those focused on large-scale service scalability and reliability.

Who Should Attend

The target audience for the SRE Practitioner course are professionals including:

Anyone focused on large-scale service scalability and 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

Learning Outcomes

Upon successful completion of this course, participants will be able to:

After completing this course, students will have learned:

Practical view of how to successfully implement a flourishing SRE culture in your organization.

The underlying principles of SRE and an understanding of what it is not in terms of anti-patterns, and how you become aware of them to avoid them.

The organizational impact of introducing SRE.

Acing the art of SLIs and SLOs in a distributed ecosystem and extending the usage of Error Budgets beyond the normal to innovate and avoid risks.

Building security and resilience by design in a distributed, zero-trust environment.

How do you implement full stack observability, distributed tracing and bring about an Observability-driven development culture

Curating data using AI to move from reactive to proactive and predictive incident management. Also, how you use DataOps to build clean data lineage.

Why is Platform Engineering so important in building consistency and predictability of SRE culture

Implementing practical Chaos Engineering.

Major incident response responsibilities for a SRE based on incident command framework, and examples of anatomy of unmanaged incidents.

Perspective of why SRE can be considered as the purest implementation of DevOps

SRE Execution model

Understanding the SRE role and understanding why reliability is everyone's problem.

SRE success story learnings

Detailed Course Outline

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

SLO is a Proxy for Customer Happiness

- Define SLIs that meaningfully measure the reliability of a service from a users 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

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

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

Platform Engineering and AIOps

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

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

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

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
- Culture and Behavioral Skills are key
- SRE Case study

Post-class assignments/exercises

- Non-abstract Large Scale Design (after Day 1)
- Engineering Instrumentation- Instrumenting Gremlin (after Day 2)

Additional Course Details

Nexus Humans Site Reliability Engineering (SRE) Practitioner (DevOps Institute) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Site Reliability Engineering (SRE) Practitioner (DevOps Institute) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Site Reliability Engineering (SRE) Practitioner (DevOps Institute)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Site Reliability Engineering (SRE) Practitioner (DevOps Institute) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Site Reliability Engineering (SRE) Practitioner (DevOps Institute) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Site Reliability Engineering (SRE) Practitioner (DevOps Institute)?

Yes, we provide corporate training, dedicated training, and closed classes for Site Reliability Engineering (SRE) Practitioner (DevOps Institute). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for Site Reliability Engineering (SRE) Practitioner (DevOps Institute)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Site Reliability Engineering (SRE) Practitioner (DevOps Institute) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

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