

SRE Foundation Course (SREF)

Course Duration: 16 hours

OVERVIEW

The SRE (Site Reliability Engineering) FoundationSM course is an introduction to the principles & practices that enable an organization to reliably and economically scale critical services. Introducing a site-reliability dimension requires organizational re-alignment, a new focus on engineering & automation, and the adoption of a range of new working paradigms.

The course highlights the evolution of SRE and its future direction, and equips participants with the practices, methods, and tools to engage people across the organization involved in reliability and stability evidenced through the use of real-life scenarios and case stories. Upon completion of the course, participants will have tangible takeaways to leverage when back in the office such as understanding, setting and tracking Service Level Objectives (SLO's).

The course was developed by leveraging key SRE sources, engaging with thought-leaders in the SRE space and working with organizations embracing SRE to extract real-life best practices and has been designed to teach the key principles & practices necessary for starting SRE adoption.

This course positions learners to successfully complete the SRE Foundation certification exam.

COURSE OBJECTIVES

The learning objectives for the SRE Foundation course include a practical understanding of:

The history of SRE and its emergence at Google

The inter-relationship of SRE with DevOps and other popular frameworks

The underlying principles behind SRE

Service Level Objectives (SLO's) and their user focus

Service Level Indicators (SLI's) and the modern monitoring landscape

Error budgets and the associated error budget policies

Toil and its effect on an organization's productivity

Some practical steps that can help to eliminate toil

Observability as something to indicate the health of a service
SRE tools, automation techniques and the importance of security
Anti-fragility, our approach to failure and failure testing
The organizational impact that introducing SRE brings

AUDIENCE

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

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

LEARNER MATERIALS

Sixteen (16) hours of instructor-led training and exercise facilitation
Learner Manual (excellent post-class reference) including:

Course slideware

Value Added Resources

Glossary

Participation in exercises and discussions designed to apply concepts

Case stories

Access to additional sources of information and communities

CERTIFICATION EXAM

Successfully passing (65%) the 60-minute examination, consisting of 40 multiple-choice questions, leads to the SRE (Site Reliability Engineering) Foundation certificate. The certification is governed and maintained by the DevOps Institute.