

# Site Reliability Engineering (SRE) Foundation- accredited training with exam

Introduces a range of practices for improving service reliability through a mixture of automation, working methods and organizational re-alignment. Tailored for those focused on large-scale service availability.

Today's organizations deal with a higher volume of change in a more complex tech environment leading to a higher risk of outages and incidents. IT teams must improve service reliability and system resiliency. With automation and observability becoming key factors for more efficient and rapid deployments, the SRE profile has become one of the fastest-growing job roles.

## THE AIM OF A TRAINING PROJECT:

- The SRE (Site Reliability Engineering) Foundation <sup>SM</sup> 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.



## Training recipients

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



## Benefits

Benefits for Organizations

- Enhanced stability and reliability of services
- Better understanding of how production services work
- Increased balance between technical investment in reliability and customer experience
- Greater appreciation of the operational impact of services in development teams
- Improvements in staff morale and retention

Benefits for Individuals

- Improved work balance with ring-fenced time for improvement

- Less stressful on-call experiences and a reduction in overall call-out volumes
- Broader skills-based capabilities that leverage the latest in automation
- Improvement in workplace culture
- Opportunities for “shifting left” and helping to ensure development teams deliver more reliable services



## Training program

1. Module 1: SRE Principles & Practices
  - What is Site Reliability Engineering?
  - SRE & DevOps: What is the Difference?
  - SRE Principles & Practices
2. Module 2: Service Level Objectives & Error Budgets
  - Service Level Objectives (SLO's)
  - Error Budgets
  - Error Budget Policies
3. Module 3: Reducing Toil
  - What is Toil?
  - Why is Toil Bad?
  - Doing Something About Toil
4. Module 4: Monitoring & Service Level Indicators
  - Service Level Indicators (SLI's)
  - Monitoring
  - Observability
5. Module 5: SRE Tools & Automation
  - Automation Defined
  - Automation Focus
  - Hierarchy of Automation Types
  - Secure Automation
  - Automation Tools
6. Module 6: Anti-Fragility & Learning from Failure
  - Why Learn from Failure
  - Benefits of Anti-Fragility
  - Shifting the Organizational Balance
7. Module 7: Organizational Impact of SRE
  - Why Organizations Embrace SRE
  - Patterns for SRE Adoption
  - On-Call Necessities
  - Blameless Post-Mortems

- SRE & Scale
- 8. Module 8: SRE, Other Frameworks, The Future
  - SRE & Other Frameworks
  - The Future



## Expected preparation of the participant

An understanding and knowledge of common DevOps terminology and concepts and related work experience is recommended.



## Training Includes

- Access to a platform with accredited training materials
- Voucher for the Site Reliability Engineering (SRE) Foundation online exam

Additional options:

- Take2 re-sit exam: 200 zł. (Attention: purchasing this option is only possible through Altkom Academy before the training)



## Language

- Training: English
- Materials: English
- Exam: English

## Examination method

The participants receive vouchers, which are valid for 6 months, for online exam.

Having completed the training, the participant receives an e-mail with guidelines how to register on the exam. The date is determined directly with PeopleCert, with the use of participant's account.

Online exam is conducted in the presence of proctor – a person from PeopleCert, who connects remotely with training participant's desktop and observes the course of exam via Internet camera.

The person who takes the exam is obliged to show the place where he is going to write the exam to proctor via Internet camera. Proctor checks if there are not any other persons and study aids in the room.

## Duration

2 days / 16 hours

## Examination description

Site Reliability Engineering (SRE) Foundation Exam:

- Exam duration 60 minutes
- 40 multiple-choice questions
- Required 65%
- Opened book