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## Developing a Google SRE Culture

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Hi, I'm Kiran Varma, a Curriculum Developer at Google Cloud. Welcome to Developing a Google SRE Culture.

I've teamed up with experts from Google Cloud's SRE and Professional Services teams to create this course for IT and business leaders who want to learn about and embrace SRE culture in their organizations.



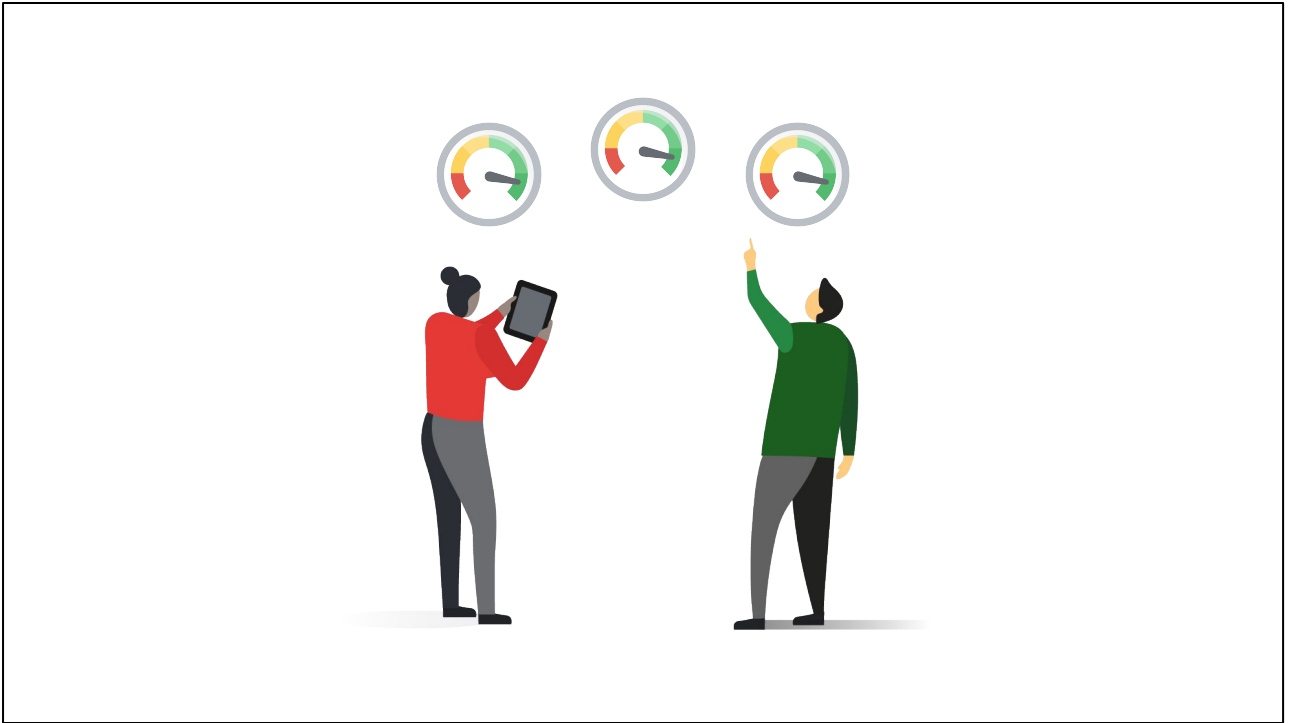
Have you ever had a concern about  
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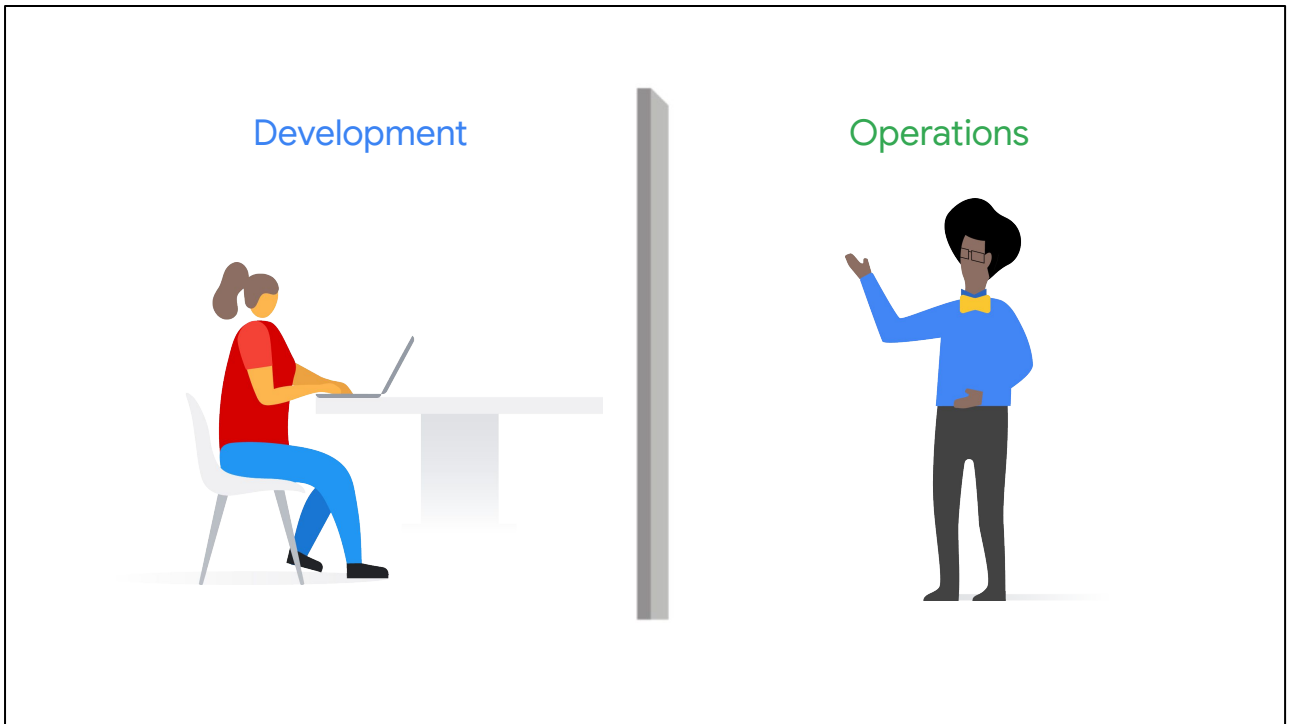
Have you ever seen a decline in customer engagement, but when you question your team, they can't explain why it's happening?



Both your development and operations teams say, “Everything’s green.” But you know there must be something wrong, because your end users—your customers—are telling you so.



If you've spent any significant amount of time producing and running production software, you've probably also felt the frustration of negatively impacting customers when deploying minor updates. You've probably also questioned whether the production freeze your ops team ordered is really based on fact, because you're desperate to push your next release full of important features.



If these situations seem familiar to you, you're probably wondering why your development and operations teams often have conflicting priorities, and why they continue to work in silos.

Google has spent  
years running  
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**scale**

Google has spent years running systems at massive scale, and over time



we've standardized our practices to balance our velocity of features with the risk to reliability, both for us and for our customers.

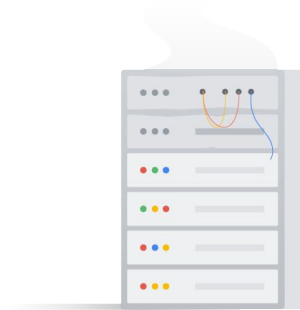


# Site Reliability Engineering

SRE

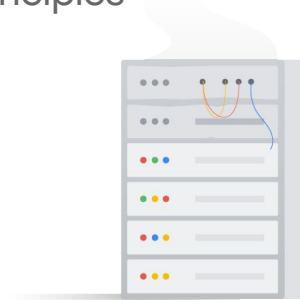
Those practices, combined with the culture to support them, we call site reliability engineering, or SRE.

SRE principles can have a **positive** impact

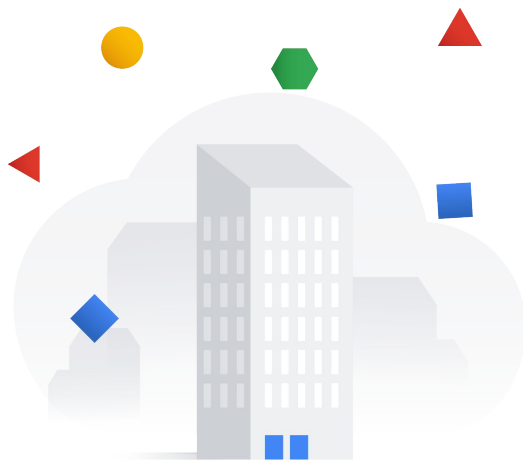


Whether you're still deciding how and when to make the move to the cloud, or you're already an adopter of cloud technology, this course can help you understand how practical and cultural SRE principles can have a lasting, positive impact on both your IT transformation projects and day-to-day work.

Organization size and maturity can affect  
**implementation** of principles



You'll also learn how an organization's size and maturity level for SRE can affect the implementation of these principles.



SRE

DevOps

This course will give you an overview of SRE technical and cultural fundamentals and will explain where and how you can apply them in your organization. Because SRE practices are closely aligned with DevOps philosophy practices, the course will also cover the basics of DevOps. Even if you're already familiar with DevOps practices, you'll hear how Google interprets the philosophy, so hopefully you'll learn something new!

# Learning objectives

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Discuss Google's view on DevOps philosophy and the relationship between DevOps and SRE



Understand the value SRE can provide to your IT operations



Articulate Google's technical and cultural fundamentals of SRE




This course has several overall learning objectives.

By the end of this course, you'll be able to:

- Discuss Google's view on DevOps philosophy and the relationship between DevOps and SRE
- Understand the value SRE can provide to your IT operations
- Articulate Google's technical and cultural fundamentals of SRE

# Learning objectives

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-  Assess your organization's maturity level in adopting SRE
-  Identify what skills to look for in a site reliability engineer, and how to train your existing workforce
-  Understand how Google can help you jumpstart SRE in your organization

- Assess your organization's maturity level in adopting SRE
- Identify what skills to look for in a site reliability engineer, and how to train your existing workforce
- And finally, understand how Google can help you jumpstart SRE in your organization

Now let's review the course components and structure.

## Course components and structure

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- Seven modules
- Video lessons
- Activities
- Practice quizzes
- Final graded assessment

This course has seven modules. The first six consist of video lessons, activities, and quizzes. In the seventh module, you'll need to pass a graded assessment to show what you've learned.

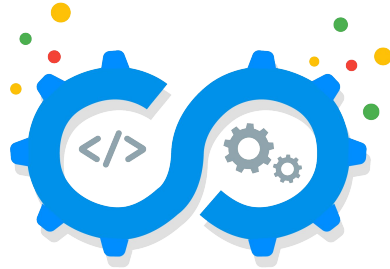
## Module 1: Introduction



The first module is the course introduction and structure, which I'm covering right now.



## Module 2: DevOps, SRE, and Why They Exist



In the second module, *DevOps, SRE, and Why They Exist*, you'll be introduced to DevOps philosophy and how SRE practices emerged.

Journey to SRE



Modules three through five will cover the journey to SRE.

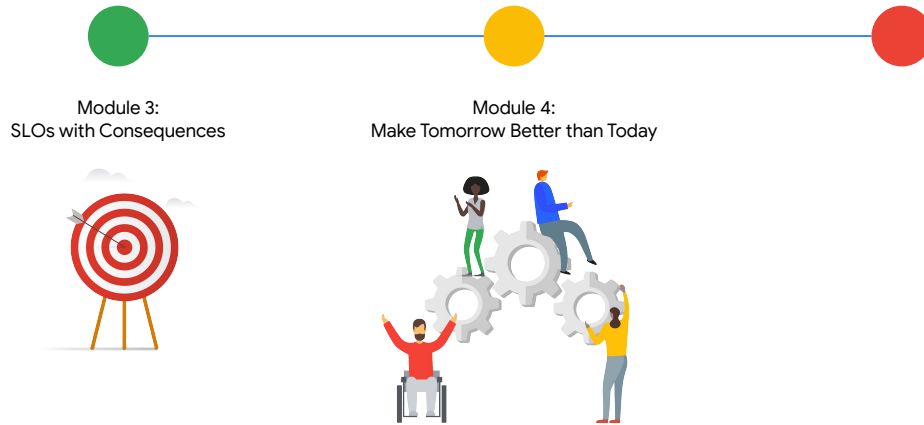
## Journey to SRE

Module 3:  
SLOs with Consequences



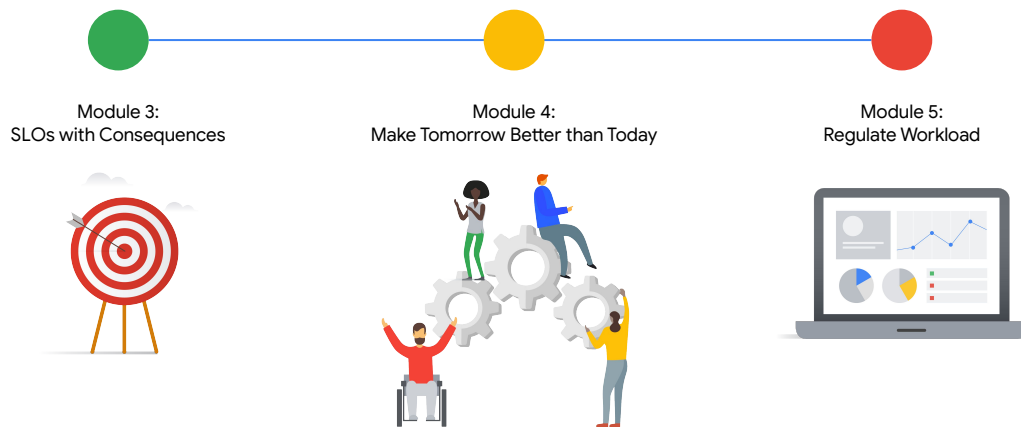
In module three, *SLOs with Consequences*, you'll learn about the SRE concepts of service-level objectives, error budgets, blamelessness, and psychological safety.

## Journey to SRE



Module four, *Make Tomorrow Better Than Today*, will cover the concepts of toil, monitoring, implementing gradual change, and the impact automation has on IT teams.

## Journey to SRE



The fifth module, *Regulate Workload*, covers topics around measurement and the SRE practices related to measuring toil and reliability.

## Module 6: Apply SRE in Your Organization



Once you've learned about the key SRE technical and cultural fundamentals, the sixth module, *Apply SRE in Your Organization*, will discuss steps to begin SRE implementation in your organization.

## Module 7: Final Assessment



Finally, the last module contains a summative graded assessment to evaluate the knowledge you've acquired throughout the course.