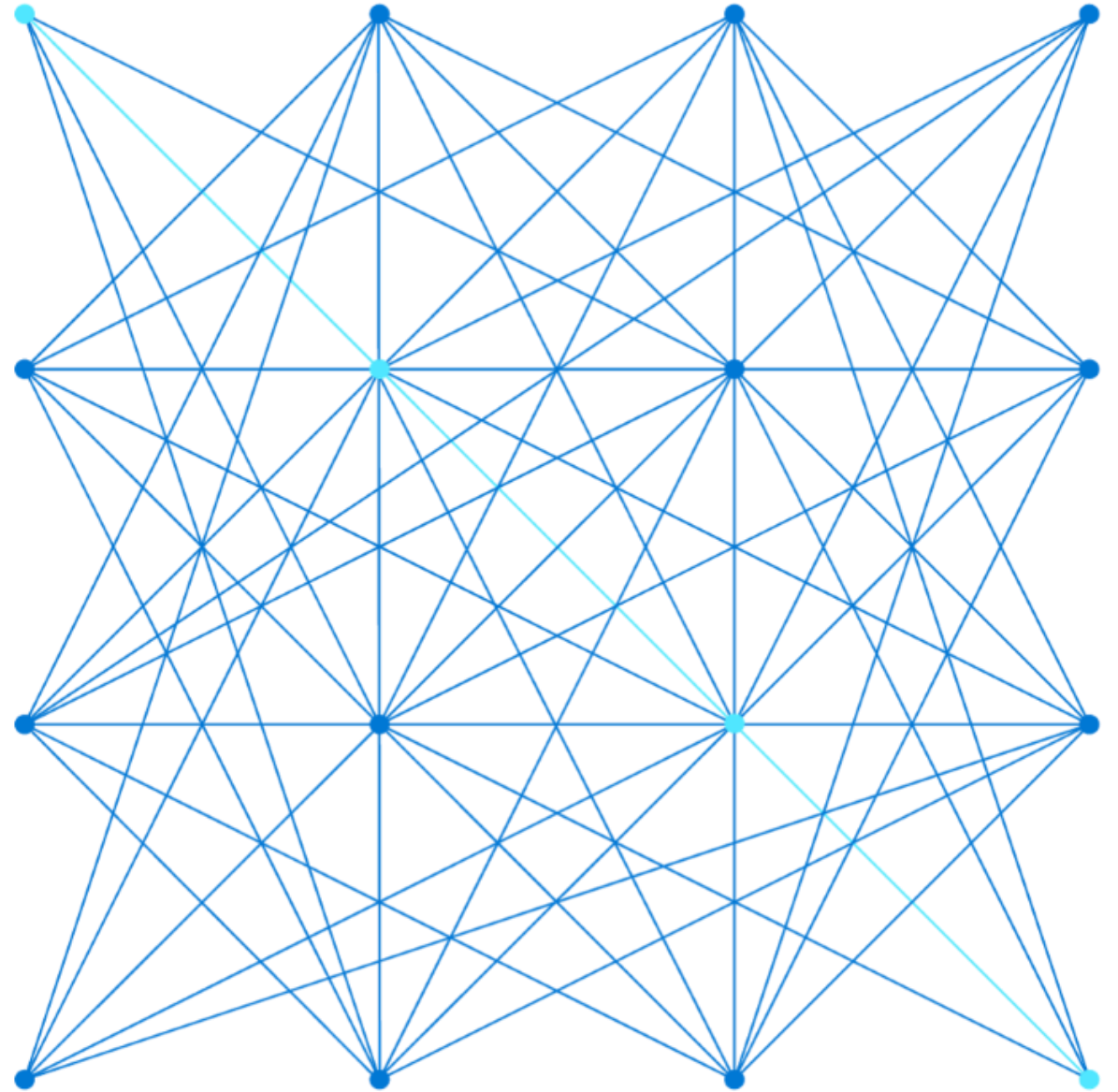


AZ-400.00 Designing and Implementing Microsoft DevOps Solutions



Instructor Introduction

Instructor: Mark (ddls)

Comp.Sci background & 30+ years industry experience building and deploying many workloads.

Current job, mixture of

- Software architecture & development
- Azure architecture
- Aws architecture
- Office 365
- Training



Student Introductions

Your name

Company affiliation

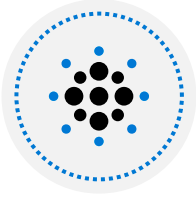
Title/function

Microsoft Azure experience

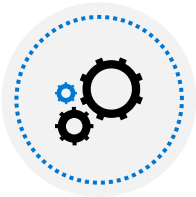
Your expectations for the course



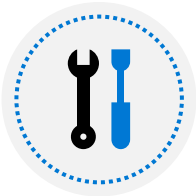
DevOps role



DevOps professionals combine people, process, and technologies to continuously deliver valuable products and services that meet end user needs and business objectives.

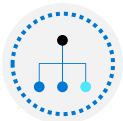


DevOps professionals streamline delivery by optimizing practices, improving communications and collaboration, and creating automation. The professionals design and implement strategies for application code and infrastructure that allow for continuous integration, continuous testing, continuous delivery, continuous monitoring, and feedback.



Azure DevOps professionals must be able to design and implement DevOps practices for version control, compliance, infrastructure as code, configuration management, build, release, and testing using Azure technologies.

Course outline



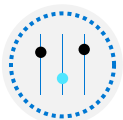
Module 1: Planning for DevOps



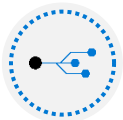
Module 2: Getting Started with Source Control



Module 3: Managing Technical Debt



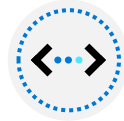
Module 4: Working with Git for Enterprise DevOps



Module 5: Configuring Azure Pipelines



Module 6: Implementing Continuous Integration using Azure Pipelines



Module 7: Managing Application Configuration and Secrets



Module 8: Implementing Continuous Integration with GitHub Actions



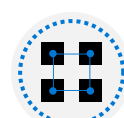
Module 9: Designing and Implementing a Dependency Management Strategy



Module 10: Designing a Release Strategy



Module 11: Implementing Continuous Deployment using Azure Pipelines



Module 12: Implementing an Appropriate Deployment Pattern

Course outline (continued)



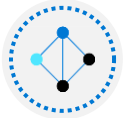
Module 13: Managing Infrastructure and Configuration using Azure Tools



Module 14: Using Third Party Infrastructure as Code Tools Available with Azure



Module 15: Managing Containers using Docker



Module 16: Creating and Managing Kubernetes Service Infrastructure



Module 17: Implementing Feedback for Development Teams



Module 18: Implementing System Feedback Mechanisms



Module 19: Implementing Security in DevOps Projects



Module 20: Validating Code Bases for Compliance

AZ-400 Certification areas

Study Areas	Weights
Develop an Instrumentation Strategy	5-10%
Develop a Site Reliability Engineering (SRE) Strategy	5-10%
Develop a security and compliance plan	10-15%
Manage source control	10-15%
Facilitate communication and collaboration	10-15%
Define and implement continuous integration	20-25%
Define and implement a continuous delivery and release management strategy	10-15%

- Percentages indicate the relative weight of each area on the exam.
- The higher the percentage, the more questions you are likely to see in that area.

Hands-on labs (optional)

- All hands-on labs are optional
- There are 25 labs written for this course.
- We'll be doing about half of them during class time, the others can be done as homework or some time later.

Azure Pass (Follow these instructions exactly)

It is **very important** that you create a new Microsoft Account before redeeming your Azure Pass!

1. Create a new **Microsoft Outlook** account – **VERY IMPORTANT**. DO NOT USE an existing Microsoft account
2. Write down your user id and password
3. Redeem your azure pass using the promotion code.
 - <https://www.microsoftazurepass.com>
 - (**Sign in using the credentials from step 1 – VERY IMPORTANT**).

Lab: Validate Lab Environment



Lab overview:

In this lab you will set up the lab environment for the rest of the course.

My training philosophy

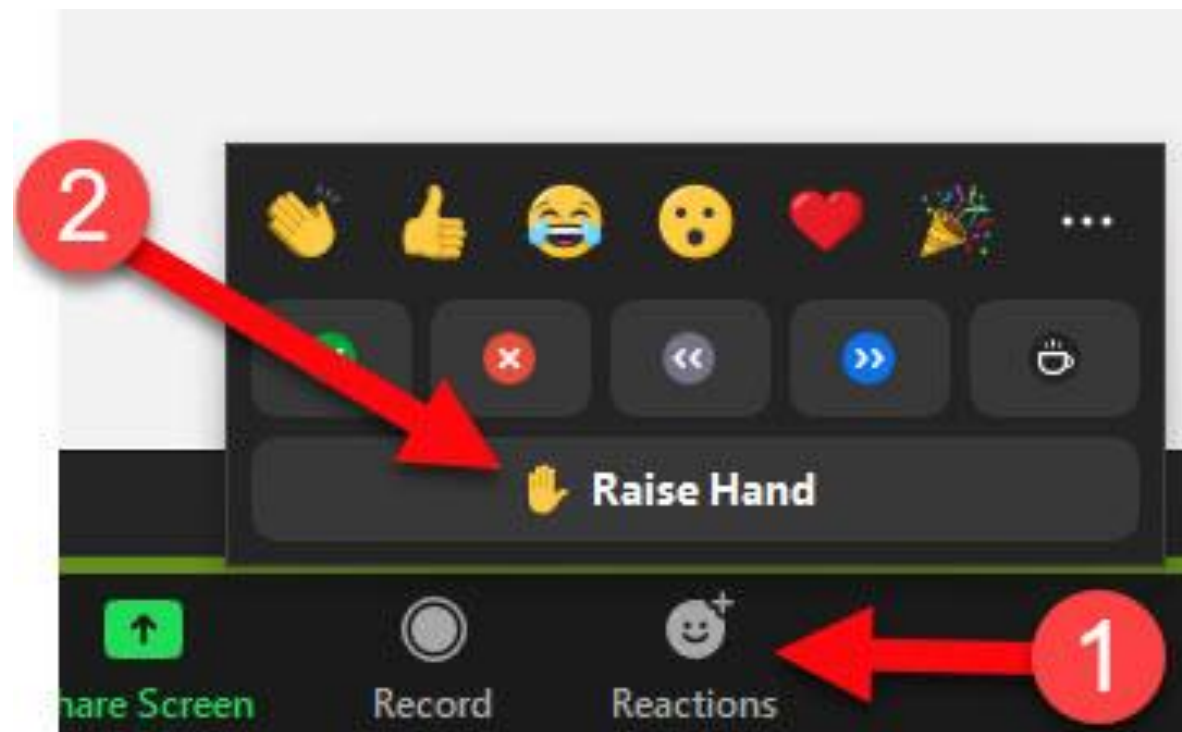
- We're in a boat; we are the crew; I'm steering. (we're aiming to arrive at the same destination....and what is that destination?)
- You all have skills, let's draw on those skills.
- There may be some sections where you have,
 - In-depth knowledge
 - Previous experience
 - Opinions
 - A different understanding to me
- Don't be afraid to speak up, especially when everybody else seems to understand a topic but you are new to it.



Facilities

- Class hours (9am – 5:00pm 'ish?)
- Lunch (approx. 12:30-13:10)





Additional materials (from me, not Microsoft)