

# CERTIFICATIONS IN THE CLOUD ERA

*A BRIEF CHAT ABOUT TRAINING AND CAREERS IN  
THE CLOUD*

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Northeast Wisconsin Cloud User Group

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# THE RUN DOWN ON MICHAEL BENDER

- Technologist, Teacher of Things, and Community Leader



- Author Evangelist at Pluralsight
- President and co-found of The Krewe User Groups - <https://www.facebook.com/groups/thekrewe>
- 20+ years of experience in the IT Pro Space
- Main Focus: PowerShell, Automation, Infrastructure as Code, Azure, VMware, and Windows Server



@michaelbender



<https://www.pluralsight.com/authors/michael-bender/>

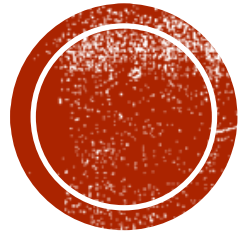


# WHAT'S AHEAD

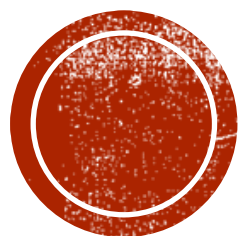


- Should You Get Certified?
- How Do You Pick a Certification?
- Where Do You Start Learning?
- Resources for talk available at <https://bit.ly/mb-nwcug>





**SHOULD YOU GET  
CERTIFIED?**



**YES!!!**



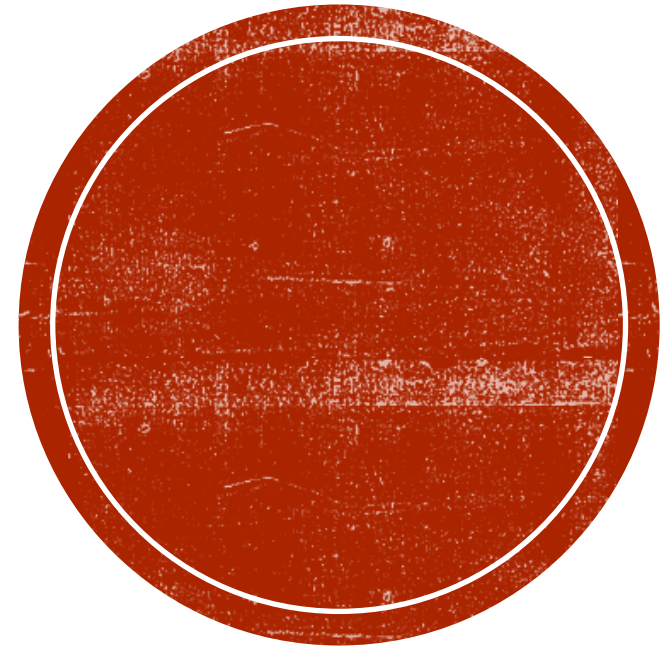
# GET CERTIFIED (OR AT LEAST STUDY FOR ONE)

- Prove to yourself what you know
- Makes your resume and experience stand-out
- It's a great way to motivate yourself
- It provides a concrete set of skills to learn

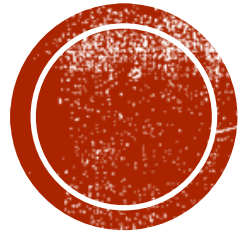


# BUT WHAT ABOUT CHEATERS?

**IF YOUR HIRING FUNCTION  
DOES NOT WEED OUT  
UNQUALIFIED APPLICANTS,  
YOU HAVE MORE  
PROBLEMS THAN HIRING  
SOMEONE WITH PAPER  
SKILLS.**



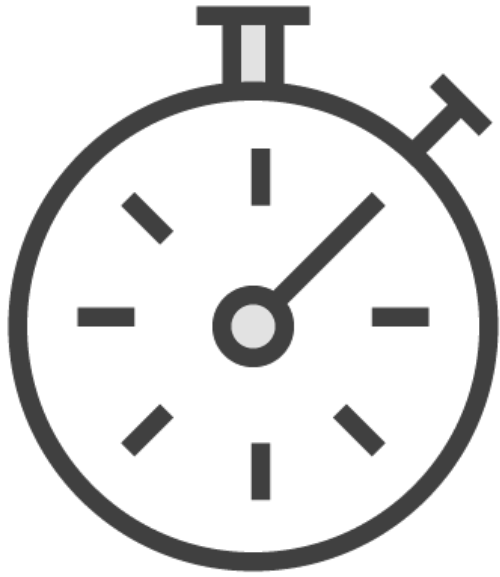




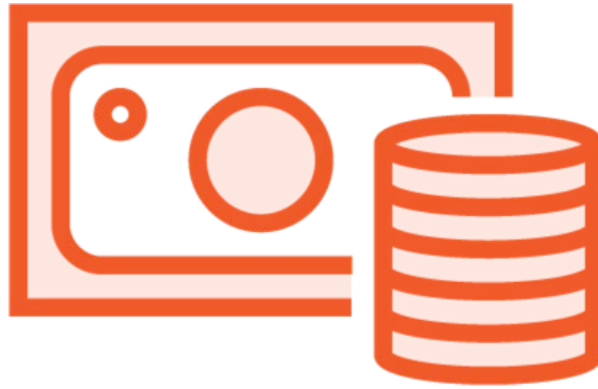
# BARRIERS TO CERTIFICATION



# Barriers to Certification



Time



Cost



Fear

“

**Virtualization and cloud computing certifications pay an average salary of \$136,659 in 2020, increasing over last year's average salary of \$127,494 in 2019.**

”

- Forbes - 15 Top Paying IT Certifications In 2020
- <https://www.forbes.com/sites/louiscolumbus/2020/02/10/15-top-paying-it-certifications-in-2020/#5f5e0750358e>



# REAL WORLD RESULTS

- Base Salary - \$75k
- \$750 in exam costs
  - Online Training
  - Cloud Spend
  - Exam Prep
  - Exam
- 10% Raise with Certification
- Over 5 Years = \$37500

## Calculate Rate of Return on Investment (ROI)

Initial Investment

750

Return Amount (Earnings)

37500

**Calculate**

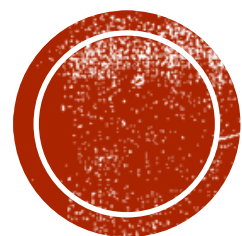
**Reset**

Return on Investment

4900

%





**HOW DO I PICK A CERT?**



# JOB ROLES in the Cloud



Administrator



Developer

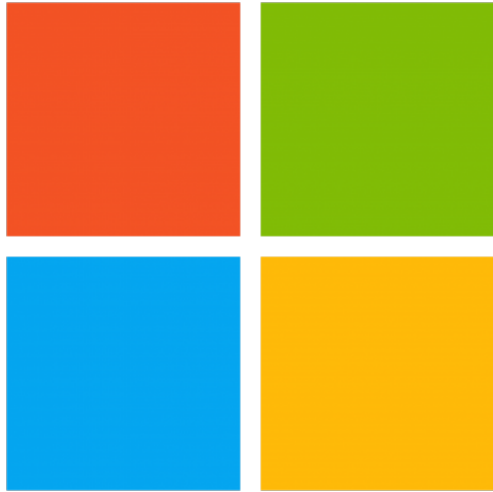


Solutions Architect



Security Engineer

# CHOICES ARE MANY



Microsoft Azure

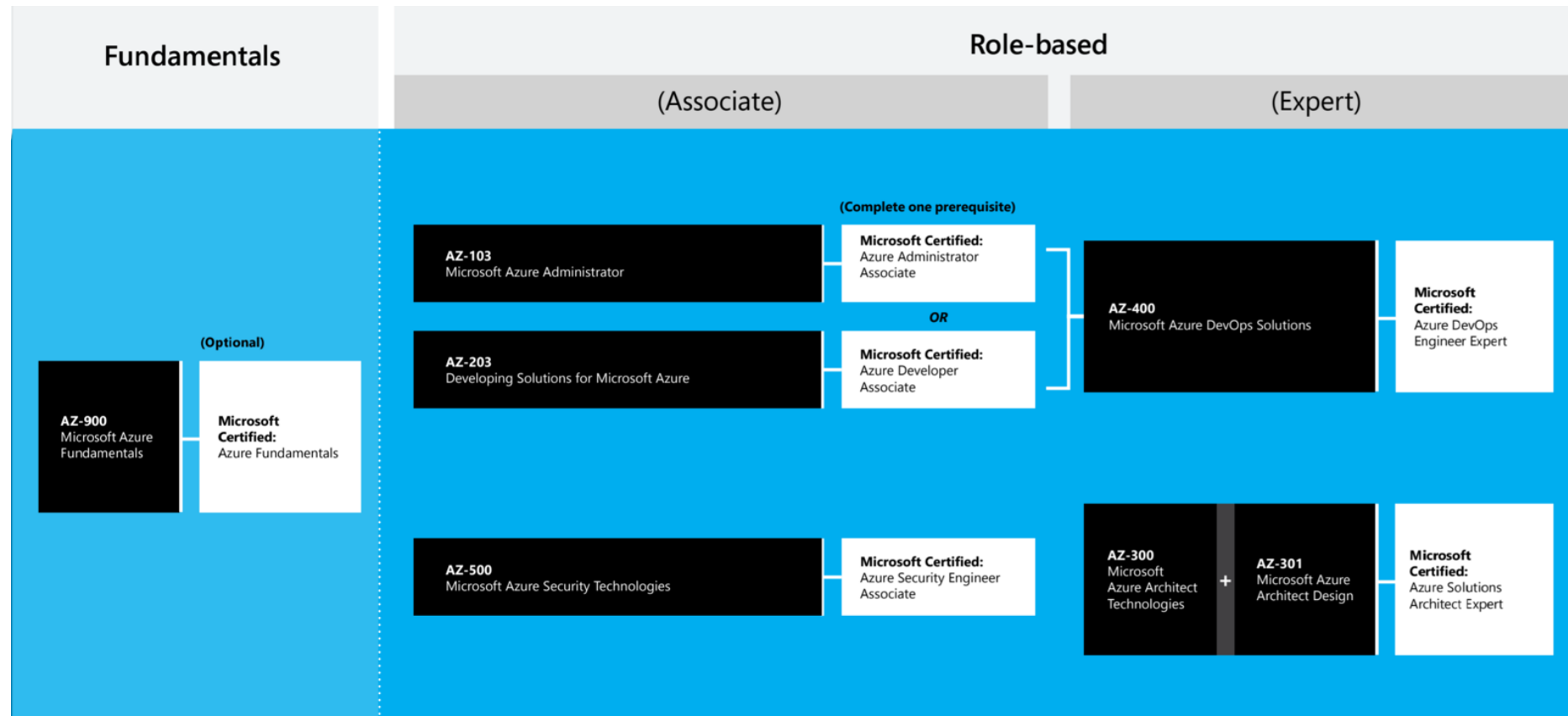


Amazon Web Services  
(AWS)



Google Cloud Platform  
(GCP)

# AZURE CERTIFICATION PATH



Courtesy of Microsoft.com - <https://aka.ms/TrainCertPoster>



# AMAZON CERTIFICATION PATHS

## Available AWS Certifications

Select a certification badge below to learn more.

### Professional

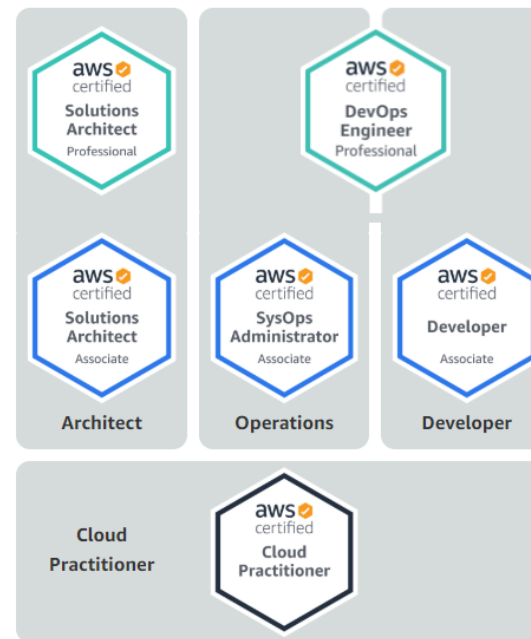
Two years of comprehensive experience designing, operating, and troubleshooting solutions using the AWS Cloud

### Associate

One year of experience solving problems and implementing solutions using the AWS Cloud

### Foundational

Six months of fundamental AWS Cloud and industry knowledge



[Explore what's coming soon »](#)

### Specialty

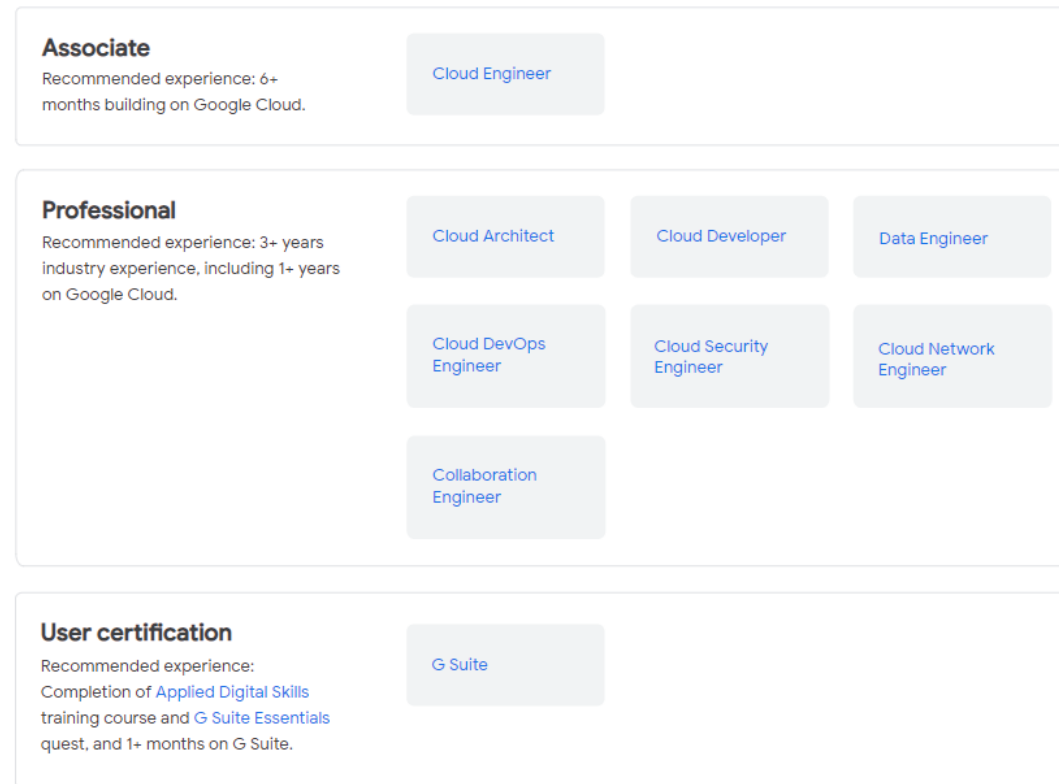
Technical AWS Cloud experience in the Specialty domain as specified in the exam guide



Courtesy of amazon.com - <https://aws.amazon.com/certification/>



# GOOGLE CLOUD CERTIFICATION PATHS

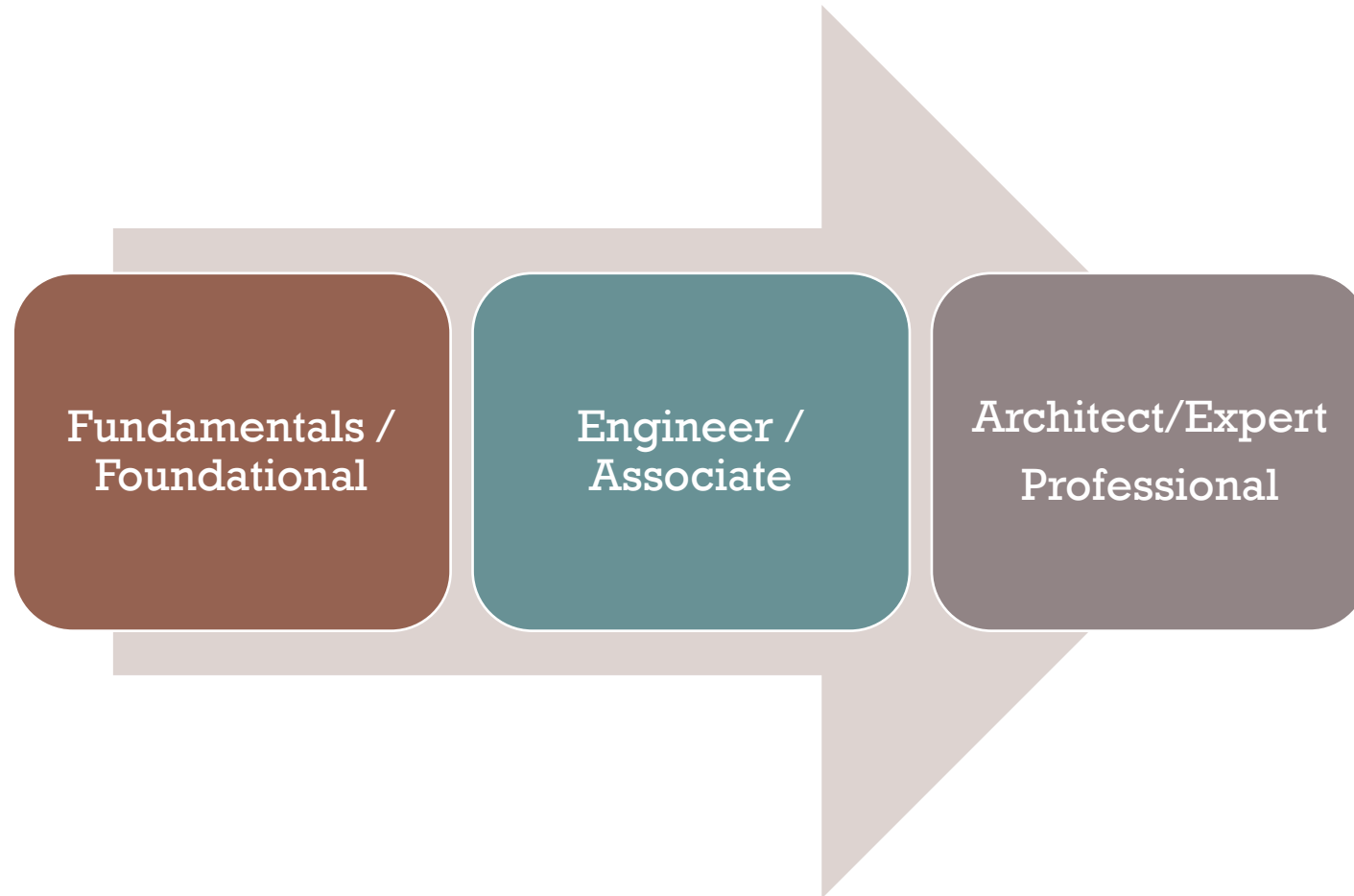


Courtesy of google.com - <https://cloud.google.com/certification>





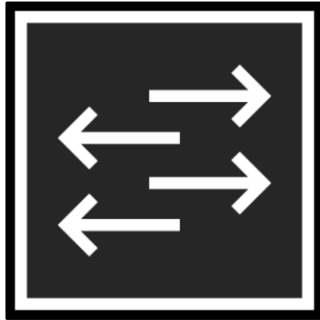
# COMMON SKILLS-BUILDING PATH





# WHERE DO I START LEARNING?

# PATH TO SUCCESS



Choose a  
path



Acquire  
knowledge



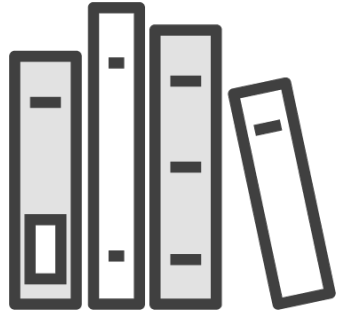
Get hands-on  
experience



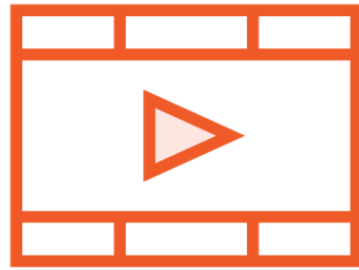
Prove your  
skills



# KNOW YOUR LEARNING STYLE



Books and  
documentation



Online  
content



Classroom  
training



Hands-on  
experience



## Role-based certifications

Earn a technical certification that shows you are keeping pace with today's technical roles and requirements. Skill up, prove your expertise to employers and peers, and get the recognition and opportunities you've earned. Download our [guide to all role-based certifications](#)

[EXPLORE ALL CERTIFICATIONS >](#)

### Explore the most sought after job roles

Select a job role to discover certifications paths.



#### Developer

Microsoft developers design, build, test, and maintain cloud solutions.

[Developer Certifications >](#)



#### Administrator

Microsoft administrators implement, monitor, and maintain Microsoft solutions.

[Administrator Certifications >](#)



#### Solutions Architect

Microsoft solutions architects have expertise in compute, network, storage, security.

[Solution Architect Certifications >](#)



#### Functional Consultant

Functional consultants leverage Microsoft Dynamics 365 to anticipate and plan for customer needs.

[Functional Consultant Certifications >](#)

# Explore Microsoft Role-Based Certs at Microsoft.com

<https://bit.ly/2OTIUpV>





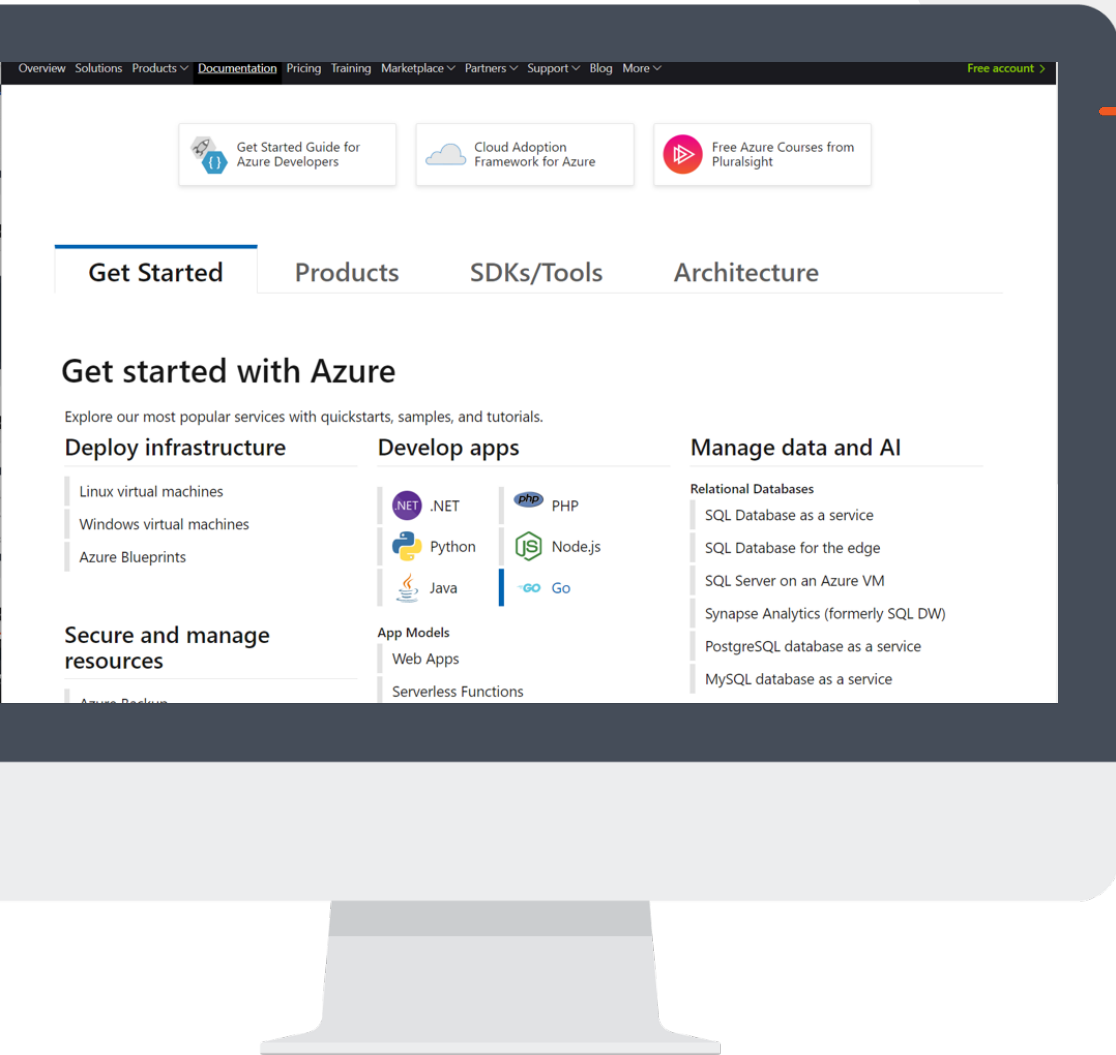
Objective Domain	Sub-Domain	Task / Topic	Confidence Level						
Manage Azure subscriptions and resources (15-20%)			0.00%						
	Manage Azure subscriptions		0.00%						
		assign Administrator permissions	No Idea						
		configure cost center quotas and tagging	No Idea						
		configure policies at Azure subscription level	No Idea						
	Analyze resource utilization and consumption		0.00%						
		configure diagnostic settings on resources	No Idea						
		create baseline for resources	No Idea						
		create and test alerts	No Idea						
		analyze alerts across subscription	No Idea						
		analyze metrics across subscription	No Idea						
		create action groups and action rules	No Idea						
		monitor for unused resources	No Idea						
		monitor spend	No Idea						
		report on spend	No Idea						
		utilize log queries in Azure Monitor	No Idea						
		view alerts in Azure Monitor	No Idea						
	Manage resource groups		0.00%						
		use Azure policies for resource groups	No Idea						
		configure resource locks	No Idea						
		configure resource policies	No Idea						
		identify auditing requirements	No Idea						
		implement and set tagging on resource group	No Idea						
		move resources across resource groups	No Idea						
		remove resource groups	No Idea						
	Manage role based access control (RBAC)		0.00%						
		create a custom role	No Idea						
		configure access to Azure resources by assign	No Idea						
		configure management access to Azure, trust	No Idea						
Implement and manage storage (15-20%)			0.00%						

## Assess your skills by Objective

- Determine where you need to focus
- Build up your weaknesses
- Lean on your strengths
- Remember: You cannot know everything so focus on

Spreadsheet available from build5nines.com at <https://build5nines.com/free-oss-exam-self-assessment-tool/>





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# Get the Technical Knowledge at Docs.Microsoft.com

<https://docs.microsoft.com/azure>



## Exercise Create a Windows virtual machine

10 minutes

This module requires a sandbox to complete. A [sandbox](#) gives you access to Azure resources. Your Azure subscription will not be charged. The sandbox may only be used to complete training on Microsoft Learn. Use for any other reason is prohibited, and may result in permanent loss of access to the sandbox.

[Sign in to activate sandbox](#)

Recall that our company processes video content on Windows VMs. A new city has contracted us to process their traffic cameras, but it's a model we've not worked with before. We need to create a new Windows VM and install some proprietary codecs so we can begin processing and analyzing their images.

### Create a new Windows virtual machine

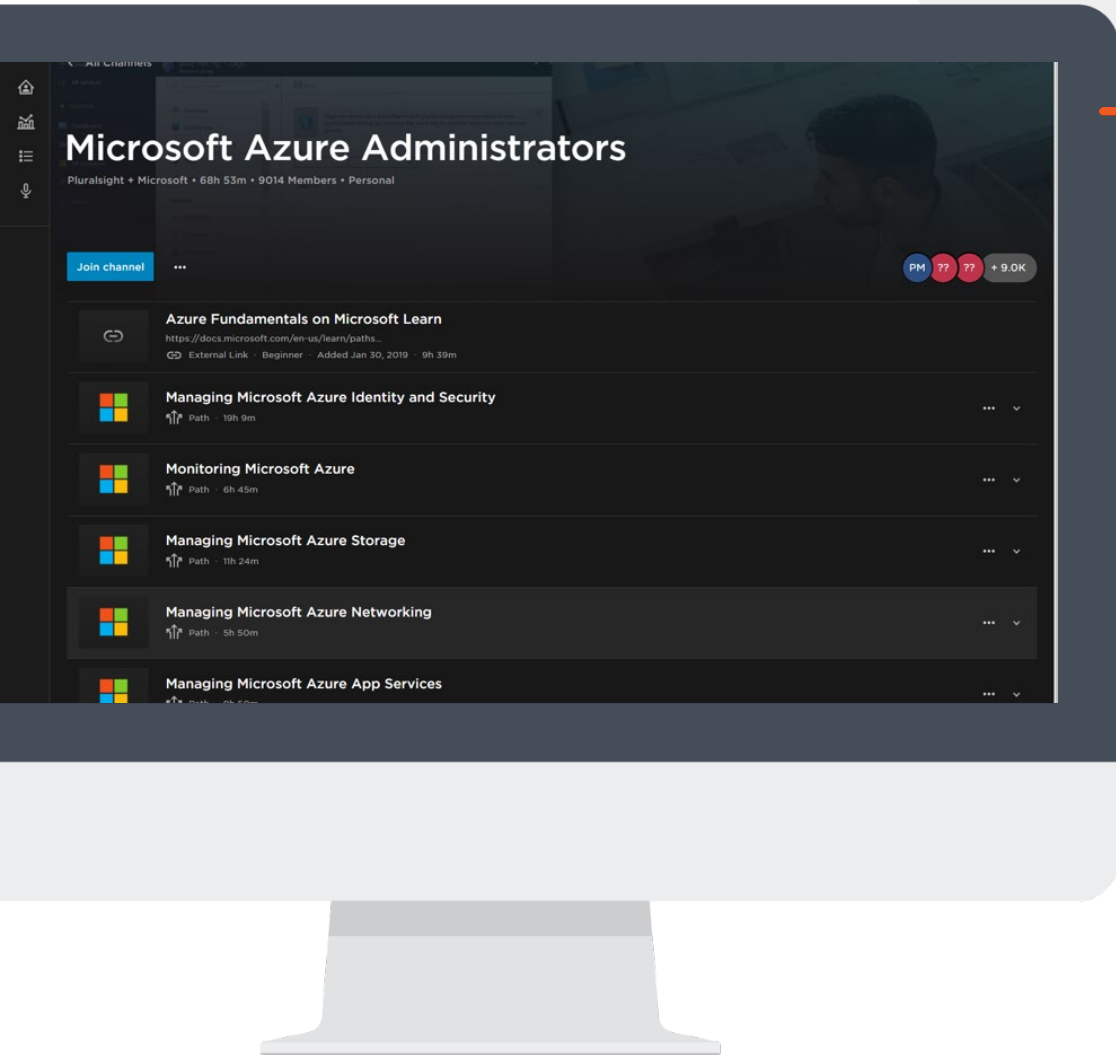
We can create Windows VMs with the Azure portal, Azure CLI, or Azure PowerShell. The easiest approach is the portal because it walks you through the required information and provides hints and helpful messages during the creation of the VM.

1. Sign into the [Azure portal](#) [↗](#) using the same account you activated the sandbox with.

# Hands-on Skills at Microsoft Learn

<https://docs.microsoft.com/Learn>



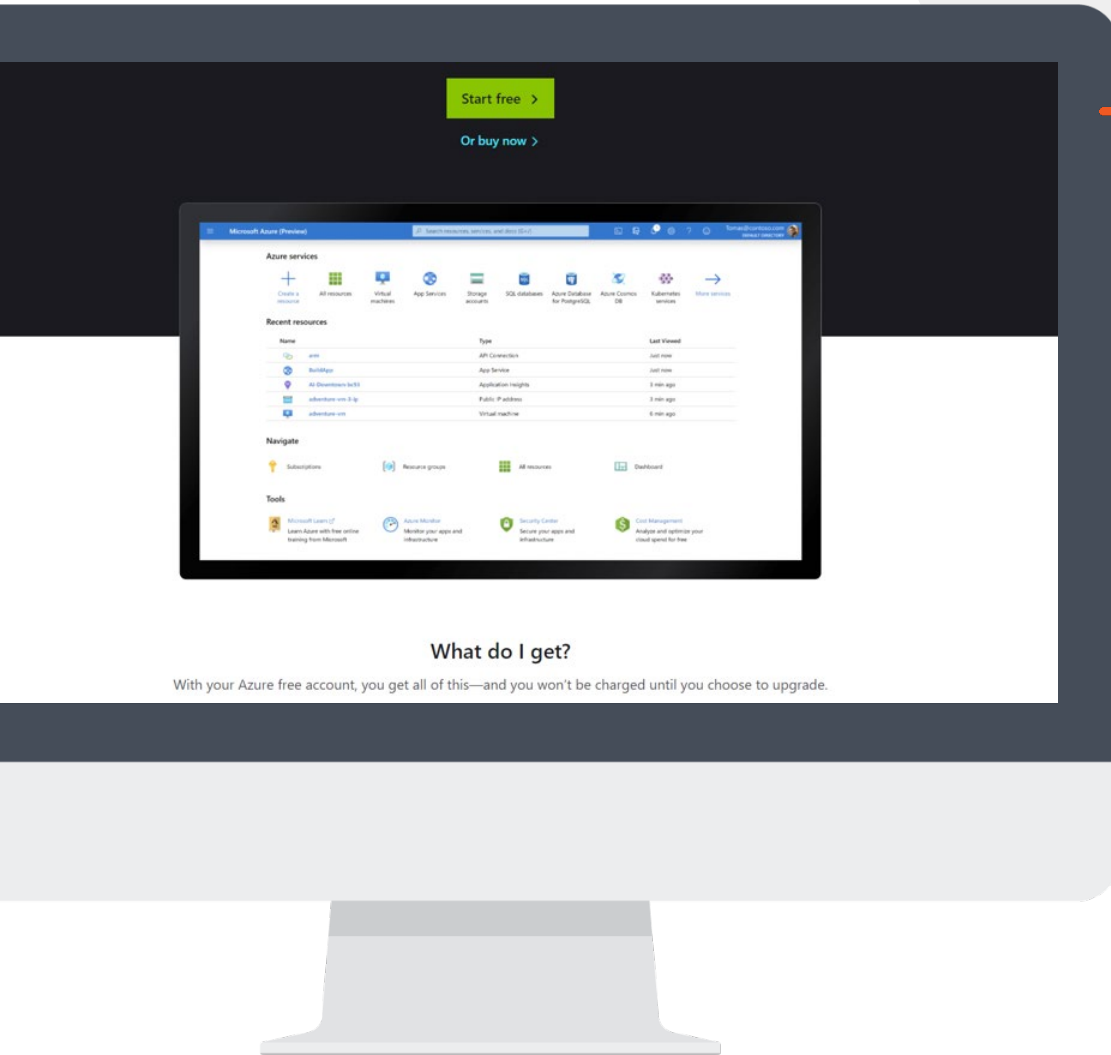


# Free Azure Training from Pluralsight.com

- 130+ free video courses
- Covers 8 Azure Certification learning paths

<http://bit.ly/azure-ps>





# Free Microsoft Azure account

- 30 days and \$200 of credit
- Use Wisely
- Use DevLab options for resources like VMs
- Shutdown/Delete resources when you are done
- Group all hands-on resources in a resource group for easy deletion

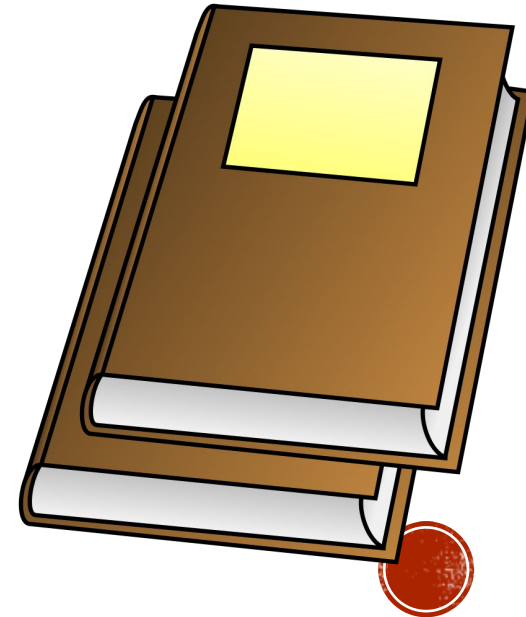
<https://azure.microsoft.com/free>

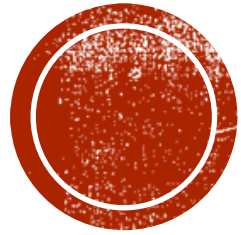




# OTHER LEARNING METHODS

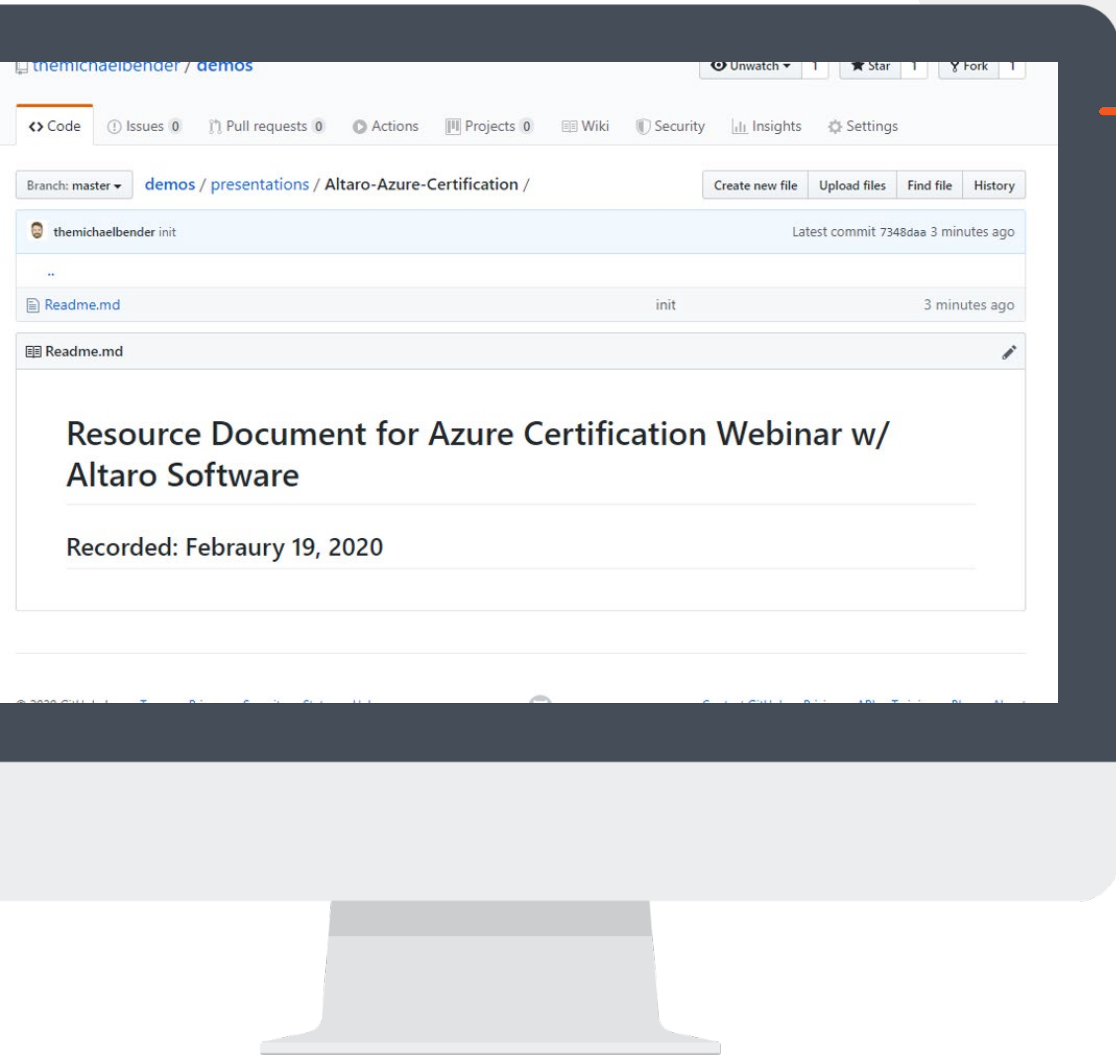
- Training Books
- Classroom Training
- Hands-On Experience
- Teach what you know!
- Become an Advocate of the Technology





# **CERTIFICATION TIPS AND ADVICE**





## Resources for studying and certification

- All Links from this talk
- Blogs from industry experts on cert prep

All Resources available at <http://bit.ly/azcert2020>





## Tips for Certification Exams

Understand how products work together

- Scenario questions are a big part of the exam

Know how to do all.the.things in the UI and the CLIs supported by each platform

Use a Practice test

DO work with the product

DON'T use a braindump



# CERT EXAM QUESTION STRATEGY



- Read the question twice without making a judgement
- Read the ALL of the answers
- Work to eliminate answers that do not fit the question information
- Exam will use distractors that may work in a different scenario
- If you don't have a solid answer, pick one and come back
- Mark questions for review if you are not 100%



# Wrap-Up and Q & A





# THANKS FOR HAVING ME!

- Please reach out if you have any questions!



@michaelbender



<https://www.pluralsight.com/authors/michael-bender/>

Resources for talk available at  
<https://bit.ly/mb-nwcug>

