

WEEK 1 - INTRODUCTION, CLOUD FOUNDATIONS

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Opening	20	Recap	20	Recap	20	Recap	20	Recap	20
Welcome & Expectations	45	Activity: Think Big	120	Activity: Cloud Roles	45	Communication and STAR methodology	135	AWS Services and Service category Overview	35
Break	15	Break	15	Break	15	Break	15	AWS Shared Responsibility Model and Self-Study	35
Program Overview and Introductions	60	Introduction to Computing and Knowledge Check	55	Activity: Setting Goals	120	What is Amazon Web Services (AWS) and Self-Study	55	Break	15
Curriculum Overview	30	Lunch	45	Lunch	45	Lunch	45	Amazon Simple Storage Service (S3)	20
Lunch	45	Basic Computing Concepts and Knowledge Check	60	Activity: Career Goals	45	Introduction to AWS Training and Certification	45	Amazon S3 Demo and Self-Study	45
Vendor Introduction	45	Break	15	Break	15	Break	15	Lunch	45
Break	15	Development Team Roles and Knowledge Check	40	Advantages of Cloud Computing and Knowledge Check	95	Fundamentals of AWS Pricing and Self-Study	45	Amazon Elastic Compute Cloud (EC2) and Demo	60
Self-Assessment: Who Am I?	45	What is Cloud Computing and Self-Study	45	Exit Ticket	20	AWS Infrastructure Overview and Self-Study	45	Lab: Introduction to Amazon EC2 and Self-Study	60
Activity: Introduction to Amazon Leadership Principles	30	Exit Ticket	20	Flex Time	30	Exit Ticket	20	Break	15
Introduce Exit Ticket Activity	15	Flex Time	15			Flex Time	10	Recap and Quiz: Cloud Foundations	45
Exit Ticket	20							Review Cloud Foundations	30
Flex Time	65							Exit Ticket	20
								Flex Time	5

WEEK 2 - LINUX

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Introduction to Linux	50	Editing Files	65	Lab: Working with Files and Knowledge Check	60	Managing Services	65	Managing Log Files	70
Lab: Introduction to Linux and Knowledge Check	30	Break	15	Break	15	Lab: Managing Services and Knowledge Check	40	Break	15
Break	15	Lab: Editing Files and Knowledge Check	75	Managing File Permissions	60	Break	15	Lab: Managing Log Files and Knowledge Check	35
Linux Command Line	75	Working with the File System	65	Lab: Managing File Permissions and Knowledge Check	65	Managing Networking	65	Lunch	45
Lunch	45	Lunch	45	Lunch	45	Lab: Managing Networking and Knowledge Check	40	Working with Commands	90
Lab: Linux Command Line and Knowledge Check	45	Lab: Working with the File System and Knowledge Check	60	Managing Processes	65	Break	15	Break	15
Users and Groups	65	Working with Files	65	Break	15	Software Management	40	Lab: Working with Commands	75
Break	15	Exit Ticket	20	Lab: Managing Processes and Knowledge Check	75	Lab: Software Management and Knowledge Check	40	Exit Ticket	20
Lab: Users and Groups and Knowledge Check	60	Flex Time	20	Exit Ticket	20	Exit Ticket	20	Activity: Customer Obsession	50
Exit Ticket	20			Flex Time	10	Flex Time	90	Flex Time	65
Flex Time	10								

WEEK 3 - LINUX, NETWORKING

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
The Bash Shell	75	Challenge Lab: Advanced Bash Shell Scripting on EC2	75	Networking Concepts and Knowledge Check	70	IP Networking in AWS Cloud: Amazon Virtual Private Cloud (VPC)	40	Activity: Learn and Be Curious	50
Break	15	Break	15	Break	15	Break	15	Break	15
Lab: Bash Shell and Knowledge Check	50	Review Linux	30	Internet Protocol (IP)	70	AWS VPC Demonstration	25	Other Common Protocols and Knowledge Check	60
Lunch	45	Lunch	45	Lunch	45	Lab: Build a VPC and a Web Server and Knowledge Check	60	Introduction to Network Security	25
Bash Shell Scripting	110	Outlook	135	Lab: IP Addressing Considerations and Knowledge Check	45	Lunch	45	Lunch	45
Break	15	Break	15	Break	15	Emotional Intelligence	90	Threat Mitigation	20
Lab: Bash Shell Scripting and Knowledge check	55	Introduction to Networking and Knowledge Check	50	IP Subnetting	40	Break	15	Lab: Research Anti-Malware and Knowledge Check	60
Exit Ticket	20	Exit Ticket	20	Lab: Create a Subnetting Plan for a Small Network	60	Alumni presentation with Students	90	Break	15
Flex Time	45	Flex Time	45	Exit Ticket	20	Exit Ticket	20	Emerging Technologies	25
				Flex Time	50	Flex Time	30	Lab: Research MDM Software and Knowledge Check	60
								Exit Ticket	20
								Flex Time	35

WEEK 4 - NETWORKING, SECURITY

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Review Networking	30	Introduction to Security	35	Lab: Security Architecture and Knowledge Check	60	Security Life Cycle - Prevention: Identity Management	30	AWS CloudTrail and Self-Study	30
Break	15	Break	15	Break	15	Break	15	Break	15
Digital Presence	95	Lab: Connecting to Vocareum cloud labs	30	AWS Security Groups and Knowledge Check	20	Lab: Manage passwords and Knowledge Check	45	AWS Config and Self-Study	35
Lunch	45	Lab: Increase your security awareness and Knowledge Check	60	Security Life Cycle - Prevention: Network Hardening and Knowledge Check	40	AWS Identity and Access Management (IAM) and Demonstration	50	Security Life Cycle - Response	45
Interview settings (lecture)	35	Lunch	45	Lunch	45	Lunch	45	Lunch	45
Interview process (lecture)	50	Security Life Cycle - Prevention: Network Discovery	40	Security Life Cycle - Prevention: Data Security	35	Lab: Introduction to IAM and Self-Study	55	Lab: Incident Response and Knowledge Check	45
Interview Practice	45	Lab: Interpret scanning results and Knowledge Check	45	Lab: Protect Data and Knowledge Check	55	Security Life Cycle - Detection	85	Security Life Cycle - Analysis	45
Break	15	Break	15	Security Life Cycle - Prevention: Public Key Infrastructure	35	Break	15	Break	15
Presentation from future peers at company	45	Security Life Cycle - Prevention: Systems Hardening	30	Break	15	Lab: Detect malware	30	Lab: Monitor a system and Knowledge Check	45
Exit Ticket	20	Lab: Harden servers and workstations and Knowledge Check	60	Lab: Configure a PKI and Knowledge Check	75	Lab: Social engineering	30	Activity: Earn Trust	50
Flex Time	45	Security Life Cycle - Prevention: Security Architecture	30	Exit Ticket	20	Lab: Penetration testing and Knowledge Check	60	Exit Ticket	20
		Exit Ticket	20	Flex Time	15	Exit Ticket	20	Flex Time	40
		Flex Time	5						

WEEK 5 - SECURITY, PYTHON PROGRAMMING

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
AWS Trusted Advisor and Self-Study	60	Introduction to Programming - What is Programming?	25	Introduction to Programming - Combine Values into Composite Data Types	15	Introduction to Python	30	Lab: Working with the string sequence and numeric weight of insulin in python and Knowledge Check	60
Break	15	Break	15	Lab: Composite data types	60	Break	15	Break	15
Best Practices for Opening an AWS Account and Self-Study	35	Lab: Hello World	60	Break	15	Lab: Preparing to analyze insulin with Python and Knowledge Check	45	Interview Practice	45
AWS Security Compliance Program and Self-Study	35	Introduction to Programming - Categorize a Value as a Data Type	20	Introduction to Programming - Functions	25	Lunch	45	Lunch	45
Lunch	45	Lunch	45	Introduction to Programming - Follow the Execution Path of a Program	15	Activity: Have a Backbone	50	Flow Control	145
AWS Security Resources and Self-Study	35	Lab: Numeric data types	80	Lunch	45	Break	15	Break	15
Review Security	30	Lab: String data type	60	Lab: Conditionals	60	Python Basics	165	Lab: Calculating the net charge of insulin using python lists and loops and Knowledge Check	55
Break	15	Break	15	Lab: Loops	60	Meet future peers at company	45	Exit Ticket	20
Interview Practice	45	Lab: List, tuple, dictionary	60	Break	15	Exit Ticket	20	Flex Time	30
Hiring Process	60	Lab: Categorize values	60	Introduction to Programming - Version Control	30				
Exit Ticket	20	Exit Ticket	20	Lab: Create a git repository and Knowledge Check	75				
Flex Time	35			Exit Ticket	20				

WEEK 6 - PYTHON PROGRAMMING, DATABASES

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Functions	80	Python for System Administration	80	Knowledge Check (Debugging)	15	Challenge lab: Python	60	Lab: An Intro to databases and Knowledge Check	65
Break	15	Break	15	DevOps and Continuous Integration	40	Break	15	Creating Tables and Learning Different Data Types	90
Lab: Use functions to implement a Caesar Cipher and Knowledge Check	105	Lab: System Administration with Python	60	Break	15	Review Python	30	Break	15
Lunch	45	Lunch	45	Lab: Evaluate a DevOps tool	45	Exploring Cloud Job Postings	90	Lab: Creating tables and data types and Knowledge Check	30
Mods and Libraries	80	Debugging and Testing	70	Lunch	45	Lunch	45	Lunch	45
Break	15	Lab: Using the Debugger	45	Lab: Explore the value of automation	45	Explore Cloud Job Postings discussion	45	Interview Practice	45
Lab: File handlers and modules for retrieving information about insulin and Knowledge Check	55	Break	15	Break	15	Introduction to Databases	40	Break	15
Exit Ticket	20	Lab: Debugging Hello World and Caesar Cipher	90	Lab: Compare and contrast automation and orchestration and Knowledge Check	60	Break	15	Inserting Data into a Database	55
Flex Time	15	Exit Ticket	20	Configuration Management and Knowledge Check	70	Lab: Installing the pub1 database	30	Lab: Inserting Data and Knowledge Check	40
				Fact finding exercise: Python	75	Exit Ticket	20	Exit Ticket	20
				Exit Ticket	20	Flex Time	40	Flex Time	10

WEEK 7 - DATABASES

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Selecting Data from a Database	90	Lab: Performing a Conditional Search and Knowledge Check	45	Lab: Retrieving data from multiple tables and Knowledge Check	55	Self-Study (Amazon RDS and Dynamo DB)	15	Networking (soft skills) Continued	100
Break	15	Break	15	Break	15	Fact finding exercise: Databases and Review	60	Break	15
Lab: Selecting data from a database and Knowledge Check	35	Working with Functions	60	Transactions and Tables	130	Break	15	Interview Practice	45
Resume Creation (Lecture)	35	Lunch	45	Lunch	45	Challenge lab: Build and Access an RDS Server	90	Lunch	45
Lunch	45	Lab: Working with functions and Knowledge Check	60	Lab: Transactions and Tables	25	Lunch	45	Networking Event	180
Work on Resume	45	Organizing Data	55	Amazon RDS and Demonstration	45	Review Databases	30	Exit Ticket	20
Break	15	Break	15	Break	15	Work on Resume	45	Flex Time	25
Performing a Conditional Search	130	Lab: Organizing Data and Knowledge Check	50	Lab: Build Your DB Server and Interact with your DB using an App	45	Break	15		
Exit Ticket	20	Retrieving Data from Multiple Tables	40	Amazon Dynamo DB and Demonstration	25	Networking (soft skills)	95		
		Exit Ticket	20	Exit Ticket	20	Exit Ticket	20		
		Flex Time	25	Flex Time	10				

WEEK 8 - JUMPSTART ON AWS (JAWS)

AWS Architecture, Systems Operations Overview, Tooling and Automation, Compute (Servers)

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Technical thought process	185	Fact Finding exercise: Well-Architected Framework	60	Teamwork and Collaboration (Continued)	90	Café Activity: Install and use the AWS CLI and Knowledge Check	90	Work on Resume	45
Break	15	Break	15	Break	15	Break	15	Break	15
AWS Cloud Adoption Framework	25	Self-Study (Well-Architected)	15	Introduce Systems Operations	15	Review Systems Operations	15	Interview Practice	45
Lunch	45	Review Well Architected	15	Activity: Troubleshooting Knowledge Base Introduction	15	Introduce Tooling and Automation	10	Lunch	45
AWS Well-Architected Framework (WAF)	30	Work on Resume	45	Lunch	45	AWS Systems Manager	30	Introduce Compute (Servers)	10
Deep Dive WAF Principles	20	Lunch	45	Understanding Systems Operations	60	Lunch	45	Computing on AWS and Demonstration	90
Break	15	Teamwork and Collaboration	65	Break	15	Lab: Using AWS Systems Manager	30	Break	15
Understanding Reliability and High Availability	20	Break	15	AWS Identity and Access Management (IAM) Review and Demonstration	90	Administration and Development Tools	25	Managing Your AWS Instances	75
Example of Transitioning a Data Center to the Cloud	30	Teamwork and Collaboration (Continued)	90	AWS Command Line Interface (AWS CLI)	75	Hosting a Static Website on Amazon S3	15	Lab: Creating Amazon EC2 Instances	50
Exit Ticket	20	Exit Ticket	20	Exit Ticket	20	Break	15	Exit Ticket	20
Flex Time	5	Flex Time	45			Café Activity: Create a website on Amazon S3 and Knowledge Check	90	Flex Time	20
						Review Tooling and Automation	15		
						Exit Ticket	35		

WEEK 9 - JUMPSTART ON AWS (JAWS)

Compute (Servers), Compute (Scaling and Name Resolution), Compute (Containers and Serverless), Compute (Databases)

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Challenge lab: Linux EC2 Instance	75	Introduce Computing (Scaling and Name Resolution)	15	Leading the Automatic Scaling Prediction Challenge	85	Fact Finding Exercise: Cloud Foundations 1	90	Containers on AWS	45
Break	15	Break	15	Break	15	Break	15	Break	15
AWS Elastic Beanstalk	35	Elastic Load Balancing	65	Amazon Route 53 and Demonstration	95	Introduce Compute (Containers and Serverless)	10	AWS Step Functions	65
Lunch	45	Lunch	45	Lunch	45	AWS Lambda	30	Café Activity: Working with AWS Lambda	90
Café Activity: Troubleshoot create instance	60	ELB Load Balancers and Listeners	80	CloudFront	15	Lunch	45	Lunch	45
Knowledge Check (Compute [Servers])	15	Break	15	Break	15	Challenge Lab: AWS Lambda	105	Knowledge Check (Compute [Containers and Serverless])	15
Review Compute (Servers)	15	Amazon EC2 Auto Scaling	80	Café Activity: Amazon Route 53 Failover	90	Break	15	Review Compute (Containers and Serverless)	15
Break	15	Lab: Scale and Load Balance Your Architecture	45	Knowledge Check (Scaling and Name Resolution)	15	APIs and REST	30	Break	15
Event	90	Lab: Using Auto Scaling	45	Review Compute (Scaling and Name Resolution)	15	Amazon API Gateway	30	Introduce Compute (Databases)	30
Exit Ticket	20	Exit Ticket	20	Exit Ticket	20	Exit Ticket	15	Amazon Redshift	60
Flex Time	45	Flex Time	5	Flex Time	5	Flex Time	30	Exit Ticket	20
								Flex Time	15

WEEK 10 - JUMPSTART ON AWS (JAWS)

Compute (Databases), Networking, Storage and Archiving

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Amazon Aurora	60	Amazon VPC connectivity	90	Work on Resume	45	Lab: Working with EBS	50	Lab: Managing Storage	50
Break	15	Break	15	Break	15	Break	15	Break	15
AWS Database Migration Service	55	Securing and Troubleshooting Your Network	75	Elevator Pitch	65	Instance Store	60	AWS Storage Gateway	40
Café Activity: Migrate to Amazon RDS	80	Lunch	45	Interview Practice	45	Elastic File System	45	AWS Data Transfer and Migration Services	45
Lunch	45	Lab: Configuring a VPC	50	Lunch	45	Elastic File System Demonstration	15	Lunch	45
Knowledge Check (Compute [Databases])	15	Break	15	Introduce Storage and Archiving	10	Lunch	45	Challenge Lab: Amazon S3	75
Review Compute (Database Services)	15	Café Activity: Troubleshoot an Amazon VPC	90	Cloud Storage Overview	40	Amazon Simple Storage Glacier	60	Break	15
Break	15	Knowledge Check (Networking)	15	Break	15	Break	15	Café Activity: Working with Amazon S3	90
Introduce Networking	10	Review Networking	15	Amazon Elastic Block Store	105	Amazon S3 Glacier Demonstration	10	Knowledge Check (Storage and Archiving)	15
Cloud Networking-Amazon VPC	75	Exit Ticket	20	Amazon EBS Demonstration	20	Deep Dive: Amazon S3 and the AWS CLI	60	Review Storage and Archiving	15
Exit Ticket	20			Exit Ticket	20	Exit Ticket	20	Exit Ticket	20
Flex Time	25			Flex Time	5	Flex Time	35	Flex Time	5

WEEK 11 - JUMPSTART ON AWS (JAWS)

Monitoring and Security, Managing Resource Consumption, Creating Automated and Repeatable Deployments

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Introduce Monitoring and Security	10	Café Activity: Working with AWS CloudTrail and Knowledge Check	90	Café Activity: Optimize Utilization and Knowledge Check	60	Amazon EC2 Launch Templates Demonstration	15	Troubleshoot with AWS CloudFormation	60
Amazon CloudWatch	75	Break	15	Break	15	Break	15	Break	15
Break	15	Review Monitoring and Security	15	Review Managing Resource Consumption	15	Infrastructure as Code	30	Café Activity: Troubleshoot AWS CloudFormation Deployments	45
Deep Dive: Amazon CloudWatch - Logs and Events	60	Introduce Managing Resource Consumption	10	Fact Finding exercise: Cloud Foundations 2	75	Introduction to JSON and YAML	60	Lunch	45
Lunch	45	Introduction to AWS Organizations	25	Lunch	45	Lunch	45	Fact Finding Exercise: CloudFormation	60
Lab: Monitoring your applications and infrastructure	65	Lunch	45	Networking Event	65	AWS CloudFormation	95	Break	15
Break	15	Tagging	35	Introduce Creating Automated and Repeatable Deployments	10	Break	15	Knowledge Check (Creating Automated and Repeatable Deployments)	15
AWS CloudTrail	75	Lab: Managing Resources with Tagging	30	Break	15	Lab: Automate Deployments with AWS CloudFormation	90	Review Automated and Repeatable Deployments	15
AWS Service Integration with Amazon Athena	30	Cost Management and Best Practices and Billing Demonstration	65	Creating Automated and Repeatable Deployments	45	Exit Ticket	20	Challenge Lab: CloudFormation	90
Exit Ticket	20	Break	15	AMI Building Strategy	60	Flex Time	45	Exit Ticket	35
Flex Time	20	AWS Support Services	40	Exit Ticket	20				
		Exit Ticket	20	Flex Time	5				
		Flex Time	25						

WEEK 12 - CERTIFICATION PREPARATION

Course wrap-up, Certification preparation, Cloud Practitioner exam

DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
Recap	20	Recap	20	Recap	20	Recap	20	Recap	20
Work on Resume	45	Cloud Practitioner Essentials Knowledge Checks	75	Review product FAQ, review AWS, AWS whitepapers, exam blueprint	80	Review product FAQ, review AWS, AWS whitepapers, exam blueprint	80	Exam Day	335
Break	15	Break	15	Break	15	Break	15		
Interview practice	80	Cloud Practitioner Essentials Knowledge Checks	80	Review product FAQ, review AWS, AWS whitepapers, exam blueprint	85	Review product FAQ, review AWS, AWS whitepapers, exam blueprint	85		
Lunch	45	Lunch	45	Lunch	45	Lunch	45		
Company Visit	90	Networking Event	90	Mock exam and review	80	Mock exam and review	80		
Break	15	Break	15	Break	15	Break	15		
Company Visit	120	Networking Event	90	Mock exam and review	85	Mock exam and review	85		
Exit Ticket	20	Exit Ticket	20	Exit Ticket	20	Exit Ticket	20		