

CENTRE OF EXCELLENCE—



A BRIEF PROFILE ON.....



AWS Academy courses –
Bridging the gap between
academia and industry.

A rectangular button with a yellow background and a dark border is positioned on a dark blue background that resembles a circuit board. The text 'LEARN MORE' is written in white, uppercase, sans-serif font on the button.

LEARN MORE

6/19/2024





VISION-MISSION OF INSTITUTE



Vision of Institute

The Center of Excellence for AWS Cloud is to provide students with the opportunity to improve their Cloud Technology skills and to prepare them for a variety of placement driven opportunities. Also, students who have strong command of the utilization of Cloud Services are better equipped to work on cutting-edge technologies such as artificial intelligence, machine learning, internet of things, and so on.

Mission of Institute

The mission of the institute is to educate young aspirants in various technical fields to fulfill global requirement of human resources by providing sustainable quality education, training and invigorating environment besides molding them into skilled competent and socially responsible citizens who will lead the building of a powerful nation.



INDEX
1.About the COE(AWS Academy)
2.Objectives
3. Advisory Board members/Active Member details
4. Coordinator details
5. MOU details
6. List of Equipments/Software details
7. List of Experiments/Contents delivered to Students
8. Roadmap
9.Outcome:- i) List of AWS Certified Students ii) List of Placed Students
10. Media Coverage



AWS

AWS is a cloud computing platform and an online portal that allows to access and manage cloud services and resources provided Amazon AWS. Amazon Web Services has been providing world-leading cloud technologies that help any organization and any individual build solutions to transform industries, communities, and lives for the better. These services and resources include storing your data and transforming it, depending on your requirements. To get access to these resources and services, we need to have an active internet connection and the ability to connect to the Amazon AWS portal.





THINGS ABOUT AWS



- The genesis of AWS came in the early 2000s. After building Merchant.com, Amazon's e-commerce-as-a-service platform that offers third-party retailers a way to build their own web-stores, Amazon pursued service-oriented architecture as a means to scale its engineering operations, led by then CTO Allan Vermeulen.
- In July 2002 Amazon.com Web Services, managed by Colin Bryar, launched its first web services, opening up the Amazon.com platform to all developers. Over one hundred applications were built on top by 2004
- Jeff Barr, an early AWS employee, credits Vermeulen, Jassy, Bezos himself, and a few others for coming up with the idea that would evolve into EC2, S3, and RDS.
- In September 2007, AWS announced its annual Start-up Challenge, a contest with prizes worth \$100,000 for entrepreneurs and software developers based in the US using AWS services such as S3 and EC2 to build their businesses
- It's free to start and follows a pay-per-use model, which means you pay only for the services you opt for.
- Interestingly, 80 percent of the Fortune 1500 companies use AWS services for their cloud computing needs.
- AWS supported many programming languages, including Java, Node Js, and C#.
- Another benefit of AWS is the number of Regions it has around the world. There are 33 Geographic Regions spread around the globe, which is the highest number of data centers for any cloud platform, with announced plans for 21 more Availability Zones and seven more AWS Regions in Malaysia, Mexico, New Zealand, the Kingdom of Saudi Arabia, Thailand, Taiwan, and the AWS European Sovereign Cloud



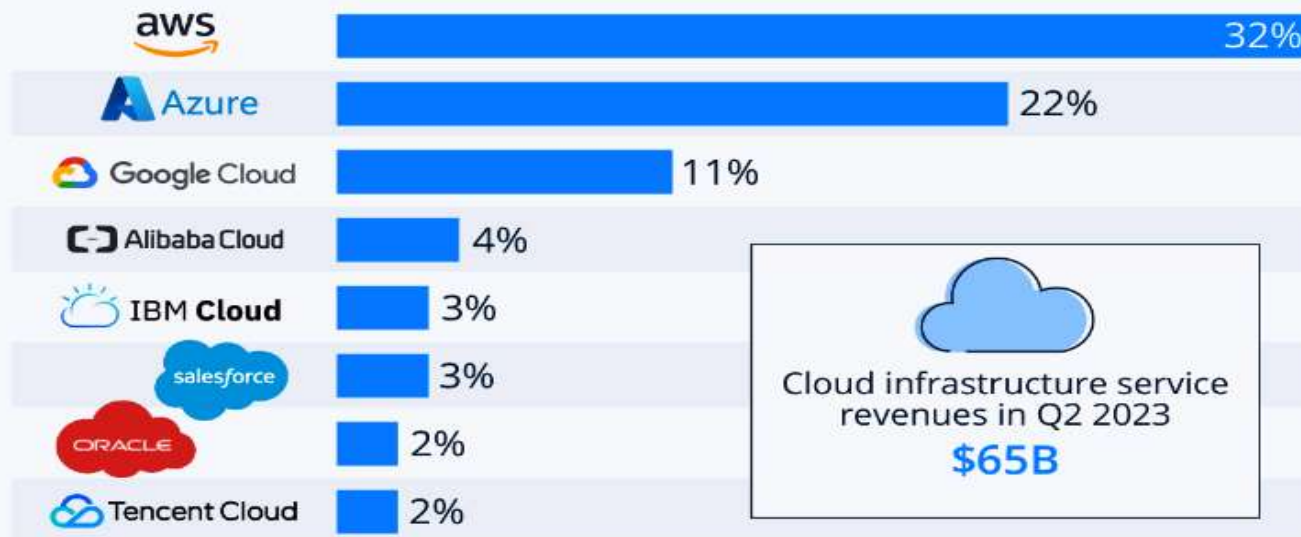


AWS MARKET CAPTURED



Amazon Maintains Lead in the Cloud Market

Worldwide market share of leading cloud infrastructure service providers in Q2 2023*



* Includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services



AWS Services

Deployment & Management

Infrastructure Services

- Amazon EC2
- Amazon ElastiCache
- Amazon S3
- Amazon AppStream
- Amazon CloudFront

Mobile Services

- Amazon AppSync
- Amazon MobileHub
- Amazon S3

Enterprise Applications

- Amazon WorkSpaces
- Amazon WorkDocs
- Amazon WorkMail

Application Services

Integration & Analytics

- Amazon Kinesis
- Amazon EMR
- Amazon Athena
- Amazon Redshift
- Amazon ElastiCache
- Amazon CloudWatch

Development & Management

- Amazon CodeBuild
- Amazon CodeDeploy
- Amazon CodePipeline

Database

- Amazon RDS
- Amazon Aurora
- Amazon DynamoDB

Foundation Services

Connect

- Amazon Connect
- Amazon Chime

Storage & Content Services

- Amazon CloudFront
- Amazon S3
- Amazon S3 Glacier
- Amazon S3 Glacier Deep Archive
- Amazon S3 Outposts

Compute

- Amazon EC2
- Amazon EC2 Instance Scheduler
- Amazon EC2 Spot Instance
- Amazon EC2 Auto Scaling

Networking

- Amazon Route 53
- Amazon CloudFront
- Amazon S3



AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Provide basic knowledge of AWS Academy Cloud Foundations to every CSE, IT and Non CSE/IT students.

Provide high-quality training programs to students and educators.

Foster collaboration between academia and industry to design the contents of a course.

Promote the adoption of best practices and standards in AWS Academy Cloud Foundations.



ADVISORY BOARD MEMBERS/ACTIVE MEMBERS DETAILS



S.No	Faculty	Designation	Contact No	Email ID	Certification
1	Mr. Jagbeer Singh	Assistant Professor	9528165242	jagbeer.singh@miet.ac.in	AWS CP, AWS SAA, AZ-900, AZAI,AZPL
2	Mr. Hemant Baranval	Assistant Professor	9810642398	hemant.branval@miet.ac.in	
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4	Dr. Anamika Singh	Assistant Professor	9005232195	anamika.singh@miet.ac.in	AWS CP
5	Mrs. Himanshi Agarwal		9107650243	himanshi.agarwal@miet.ac.in	



CPOC/ EDUCATOR DETAILS

S.No	Faculty	Designation	Contact No	Email ID	Certification
1	Mr. Jagbeer Singh	Assistant Professor	9528165242	jagbeer.singh@miet.ac.in	AWS CP, AWS SAA, AZ-900, AZAI,AZPL



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AWS Skills to Jobs Tech Alliance Program Terms & Conditions

Last Updated January 19, 2024

AWS Contracting Party: Amazon Web Services India Private Limited	Customer Name: <u>Miet Institute of Engineering & Technology</u> ["you"]
By: <u>[Signature]</u> Name: <u>Kayank APOra</u> Title: <u>Authorised Signatory</u> Signature Date: <u>JANUARY 31, 2024</u>	By: <u>[Signature]</u> Director (Admn) Name: <u>Puneet Agarwal</u> Title: <u>Vice-Chairman</u> Signature Date: <u>29/01/24</u>
Address: Block E, 14th Floor Unit Nos. 1401-1421, International Trade Tower, Nehru Place, New Delhi, India, 110019, India	Address: <u>MIET, Meerut-250005</u> Attention: <u>Jagbeer Singh</u> Email Address: <u>jagbeer.singh@miet.ac.in</u>

This AWS Skills to Jobs Tech Alliance Program (the "Program") Agreement (this "Program Agreement") is entered into between you and the relevant AWS Contracting Party as defined in the AWS Customer Agreement or other written agreement governing your use of the Services (the "AWS Agreement") ("AWS") (each, a "Party" and collectively, the "Parties"), and is effective as of the last signature date above. This Program Agreement is made a part of the AWS Agreement, as both may be updated from time to time. Capitalized terms used but not defined herein shall have the meanings set forth in the AWS Agreement. If there is a conflict between the AWS Agreement and this Program Agreement, this Program Agreement will prevail.

The AWS Agreement and this Program Agreement contain terms that govern your participation in the Program. By accepting the terms of this Program Agreement, you represent that: (1) you are lawfully able to enter into such agreements, and (2) if you are entering into this Program Agreement on behalf of an educational institution or entity ("Entity"), you have legal authority to bind that Entity.

I. Program Details

AWS or its affiliates will provide advice and recommendations to you on any or all of the following topics: (i) modernizing your education program by incorporating cloud/other skills identified by both Parties; (ii) leadership development; (iii) faculty development; (iv) employer engagement; and (v) student career support. You acknowledge and agree that you will not share with AWS or its affiliates any personal data from student(s) or employee(s) under the Program.

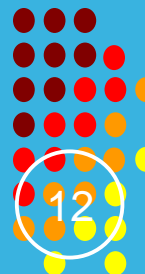
The Parties acknowledge and agree that AWS or its affiliates will not deliver any trainings or courses directly to you, including any students, under the Program.



Miet Institute of Engineering & Technology

[Signature]

Director (Admn)



LIST OF EQUIPMENTS/SOFTWARE DETAILS

- Windows 10 (professional /enterprise)/ Linux / Unix any OS
- 4GB -16 GB RAM
- Chrome (latest version)/ Mozilla / Firefox etc.
- Admin Rights
- Should be able to take RDP of VM on public IP address and Port **Port 53 (UDP)**. This port is used to access DNS servers. · Port 443 (TCP) This port is used for client application updates, registration, and authentication.
- Internet Connection with 100 Mbps
- VS Code.



LIST OF EXPERIMENTS/CONTENTS TO STUDENTS:-



Module-1:

Cloud Concepts Overview

Introduction to cloud computing

Advantages of the cloud

Introduction to AWS

Moving to the AWS Cloud

Activity: Sample Exam Question

Knowledge check

Module-2:

Cloud Economics and Billing

Fundamentals of pricing

Total cost of ownership

Activity: Simple Monthly Calculator

Delaware North case study

AWS Organizations

AWS billing and cost management

Billing dashboards



Module-3:

AWS Global Infrastructure Overview

AWS global infrastructure

Demo: AWS global infrastructure

AWS services and service categories

Activity: AWS Management Console Click through

Module-4:

Cloud Security

AWS shared responsibility model

Activity: AWS Shared Responsibility Model

AWS IAM Demo: AWS IAM Console

Securing a new AWS account

Lab: Introduction to AWS IAM

Securing accounts

Securing data

Working to ensure compliance



LIST OF EXPERIMENTS/CONTENTS TO STUDENTS:-



Module-5:

Networking and Content Delivery

Networking basics

Amazon VPC

VPC networking

Activity: Label This diagram

Demo: Amazon VPC Console

VPC security /

Activity: Design a VPC /

Lab: Build a VPC and Launch a Web

Module-6:

Cloud Security

AWS shared responsibility model

Activity: AWS Shared Responsibility Model

AWS IAM Demo: AWS IAM Console

Securing a new AWS account

Lab: Introduction to AWS IAM

Securing accounts

Securing data

Working to ensure compliance





LIST OF EXPERIMENTS/CONTENTS TO STUDENTS:-



Module-6:

Compute

Compute services overview

Amazon EC2 part 1

Amazon EC2 part 2

Amazon EC2 part 3

Demo: Amazon EC2

Lab: Introduction to Amazon EC2

Activity: Amazon EC2 Versus Managed Services

Demo: Amazon EC2 Part Console

Amazon EC2 cost optimization

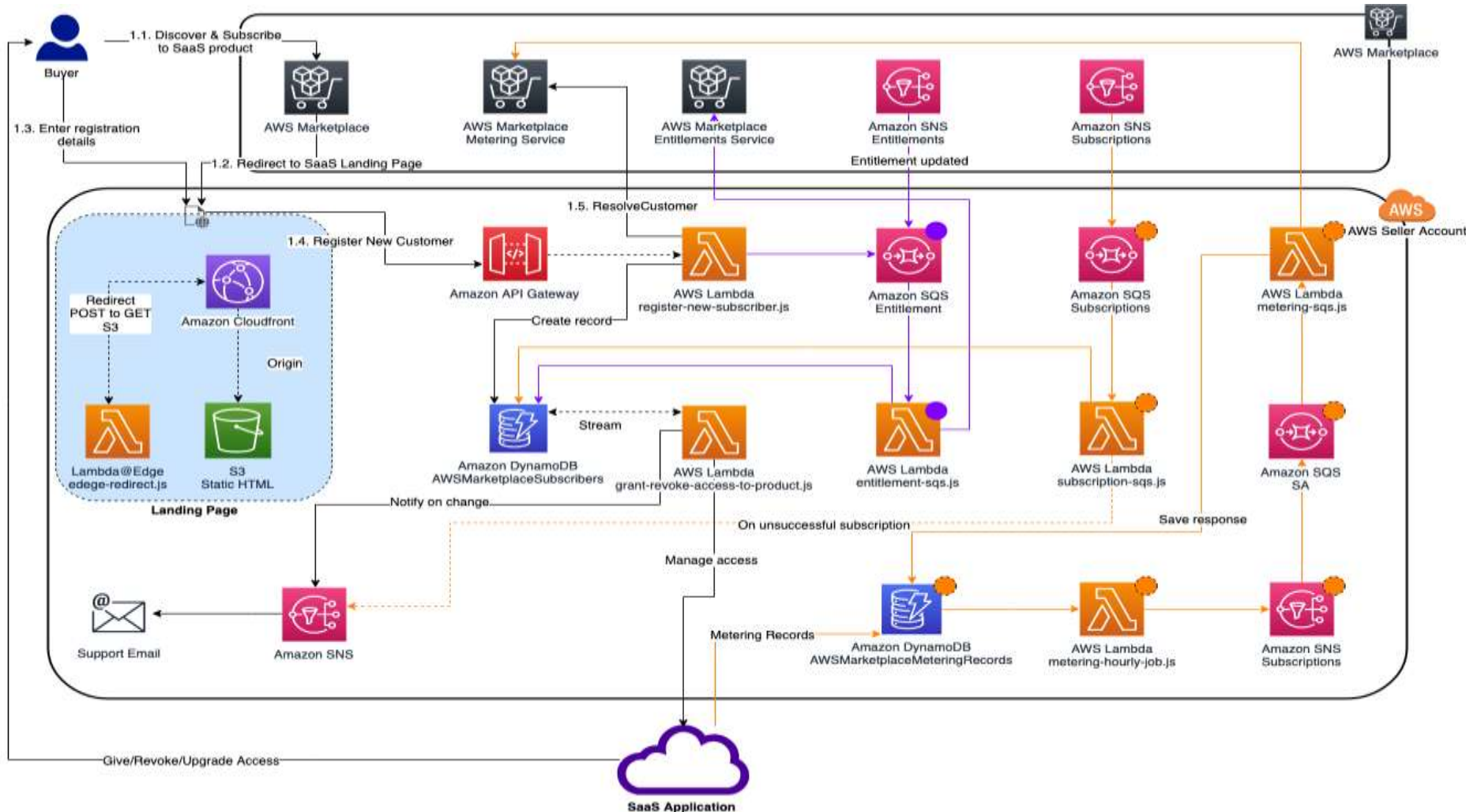
Container services

Introduction to AWS Lambda

Activity: AWS Lambda







- AWS Certified Students

➤ 749+ students have AWS Azure Certifications, List is attached

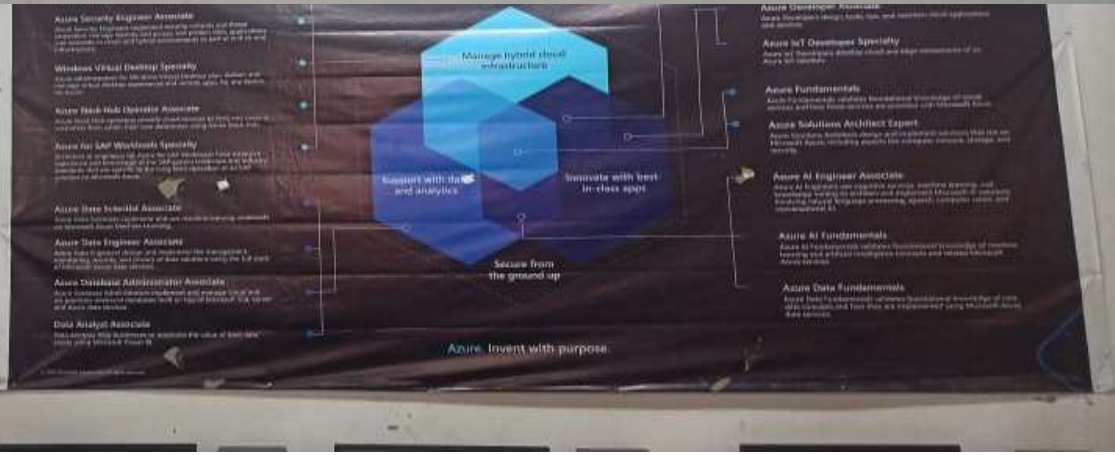




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February 15, 2024 | Taj MG Road, Bengaluru

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Bridging the Gap







Understanding State Skilling Interventions



Dr. N. Mohan Sheriff
Vice President
Naan Mudhalas
Development



Dr. Muralee Ganan Mannin
CEO
University of Kerala



Bridging the Skills Gap,
Building the Future



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THANK YOU