

ADVANCED SKILL DEVELOPMENT COURSES



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Additional Skill Acquisition Programme (ASAP)

The Additional Skill Acquisition Programme (ASAP) is a skilling intervention, jointly implemented by the Department of General Education and the Department of Higher Education, Government of Kerala, targeted towards tackling the issue of low employability among youth in Kerala, by imparting foundation skills and industry-relevant training to select students of Government and Government-

aided schools and undergraduate colleges, which are associated Partner Institutions within the programme. From its inception in 2012, ASAP has been able to make commendable impact within the skilling eco-system in the State, both in terms of skilling the youth of the State, as well as implementing national qualification framework and establishing programme-wise quality assurance framework.

Advanced Skill Development Centers (ASDCs)

Realizing the gap between the skill sets required by the industry and the knowledge level of the students in Higher education institutions in the state, ASAP set up its Advanced Skill Development Centres in Engineering Colleges and Polytechnics across Kerala. The ASDCs are envisioned to equip students with futuristic and advanced skill sets required for 4.0 industrial revolution. The training conducted through ASDCs will be in sync with industry requirements regularly updated to meet emerging market needs and will be transacted through qualified and competent professionals thereby equipping students with the skills, capabilities and competencies required to be globally competitive and tap the emerging potential opportunities.

What we do?

Identifying institutions for setting up ASDCs:

The institutions where the ASDCs are set up and courses are offered are identified considering academic factors such as the results of students, interest of the institution fraternity towards new schemes, infrastructure available at the institutions, etc. A nodal officer is also appointed at each ASDC for coordinating the activities for the respective institution.

Faculty Development Programmes:

Based in the underlying perception that the upskilling of the pupil begins with the upskilling of the teacher, ASAP conducts regular "Training of Trainers" programmes to bring to pace the faculty members with the changes in the technologies used by the industry.

Student Mobilization:

ASAP has a strong team of over 200 Programme Managers across the state who are actively involved in student mobilization activities such as campaigning at each

institution and orientation to the students across colleges and subject streams to facilitate informed decision-making.

Offer courses based on Industry Skill Requirements

Based on field surveys and analysis of various studies conducted we list down the courses that are currently industry-relevant. The courses and the curriculum is regularly updated to meet the emerging market needs and prepare human resources in future ready skills demanded by 4th generation industry. The courses offered at ASDCs are either developed in-house by the Curriculum division of ASAP or offered by major industries working in the skill development domain. All the courses offered at ASDCs are NSQF aligned.

Course transaction:

The courses are offered at ASDCs using teaching aids such as videos, presentations and study material, that is available both offline as well as online, to ensure that core

ideas and concepts are delivered in the intended manner. The faculty trained through the FDP aid the students in completing the courses on time. Furthermore, innovative strategies such as focus group discussions are conducted among students at different skill levels to understand their aspirations. Feedbacks are collected from students at regular intervals to formulate training methods that suit student needs.

Assessment & Certification:

The assessments for the courses are conducted by the industry partners through separate assessment platforms. The students successfully completing all Modules and assessments of the course, will be jointly certified by ASAP and the respective industry partner who is the course provider for that course

Courses to be offered in Engineering Colleges:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Artificial Intelligence Developer	756 Hours	S5	Any	ASAP	Rs 35000/-	Exact Amount to be fixed
Life Skill Module	100 Hours	3 rd Semester	Any	ASAP	Rs3000/- Engineering Colleges	Rs 2500/- (BEC Certification)
Google Associate Cloud Engineer	48 Hours	7 th Semester	CS/IT/ECE	Google	NIL	40\$
Robotic process Automation	42 Hours	5 th Semester	Any	UiPath	NIL	150\$
Virtual Reality 201 – beginner Level	60 Hours	5 th Semester	Any	Facebook School of Innovation – sv.co	NIL (for 1st Batch)	NIL (for 1st Batch)
TCS – Industry Honor Certification	4 Semesters (Each Course 90 Hours)	5 th Semester	Any	TCS	Rs 42000/- for 4 electives	IHC will be awarded for students who successfully complete all 4 courses
Salesforce Developer	92 Hours	7 th Semester	Any	Salesforce	NIL	200 \$
Salesforce Administrator/ Business Analyst	48 Hours	3 rd Semester	Any	Salesforce	NIL	200 \$
Generative Design Beginner Level	45 Hours	3 rd Semester	Mechanical/ Civil	AUTODESK		Rs 3000 + GST
AWS Academy Cloud Foundation	20 Hours	5 th Semester	Any	AWS Academy	NIL	50\$ + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75\$ + GST
SDPK Courses	Details will be communicated later					

Courses to be offered in Polytechnics:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Life Skill Module	100 Hours	1 st Semester	Any	ASAP	Rs 1500/- for Polytechnic	Rs 2500/- (BEC Certification)
Salesforce Administrator/ Business Analyst	48 Hours	3 rd Semester	Any	Salesforce	NIL	200 \$
Salesforce Developer	92 Hours	5 th Semester	Any	Salesforce	NIL	200 \$
Generative Design Beginner Level	45 Hours	3 rd Semester	Mechanical / Civil	AUTODESK	NIL	Rs 3000 + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75\$ + GST

AMAZON WEB SERVICES- AWS CLOUD FOUNDATION

ABOUT THE COURSE: AWS Academy Cloud Foundation aims to directly address this problem by offering a robust set of complimentary tools, resources, and certification for students to skill up on the cloud and prepare for the emerging job market and also for the educators looking to enhance the learning experience with cloud computing content. The first course is the

Foundation AWS Certification course on AWS Academy Cloud Foundation. The course provides an overview of the AWS Cloud. It is a Foundational level course with 20 hours of content. The certification cost for the course is USD 100 Each student and educator will receive a 50% discount voucher. Therefore USD 50 + GST is going to be the discounted certification cost.

Objective

- 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.

COURSE OUTCOMES:

After the completion of the course, the

CO 1	Students will be able to describe the six advantages of cloud computing and three cloud deployment models. Understand virtual networking in the cloud with Amazon VPC and differentiate between Structured Query Language and NoSQL databases.
CO 2	Student will be able to use the AWS Cloud Adoption Framework to help organizations transform the way they work and Understand the AWS pricing philosophy
CO 3	Learner will be able to understand the difference between AWS Regions, Availability Zones, and Edge Locations and also understand the different AWS compute services.
CO 4	Student will be able to describe Amazon Elastic Compute Cloud and Explain AWS Lambda, which is server less computing and also describe AWS Elastic Beanstalk and use cases for storage options, along with a demonstration of Amazon Glacier
CO 5	Learner will be able to create virtual firewalls with security groups ☑ Secure delivery of data, videos, applications, and APIs with Amazon Cloud Front and also provide an overview of different database services in the cloud and highlight the differences between unmanaged and managed database solutions

COURSE DETAILS:

PARTICULARS	AWS ACADEMY CLOUD FOUNDATION	AWS ACADEMY CLOUD ASSOCIATE
DURATION	20 Hours	40 Hours
TRAINER	FACULTY COORDINATOR (MENTORSHIP- NO REMUNERATION)	
MODE OF DELIVERY	ONLINE WITH STUDY JAMS	
BENEFICIARY GROUP	SEMESTER 5 th	The students who complete the AWS ACADEMY Cloud Foundation
BRANCH	ANY BRANCH	CS/IT
FEE STRUCTURE	NIL	NIL
CERTIFICATION FEES	\$50 + GST	\$75 +GST

COURSE HIGHLIGHTS

- Industry recognized certifications
- Practical experience working in live environment,
- Gain the real-world experience
- 50% Discount of Certification 100\$ reduced to 50\$
- Successful completion leads to Associate level certification.
- Build your AWS cloud Knowledge with ASAP

SYLLABUS FOR THE COURSE

ENROLLMENT DAY

Introduction to AWS Academy Cloud Foundations - Welcome to AWS Academy Cloud Foundations- Course Overview and Objectives- Creating your AWS Training Portal Account - Access Your Course Materials

MODULE 1 | CLOUD CONCEPTS

Cloud Concepts Overview- Introduction to Cloud Computing - What is Cloud Computing- Digital Training What is Cloud Computing- Lecture Six Advantages of Cloud Computing- What is Amazon Web Services (AWS) - The AWS Cloud Adoption Framework (CAF) - Knowledge Check Cloud Concepts.

Cloud Economics- Fundamentals of Pricing- Total Cost of Ownership- Digital Training Introduction to Cloud Economics - Knowledge Check Cloud Economics **AWS Global Infrastructure Overview-** Introduction to the AWS Infrastructure - AWS Global Infrastructure - Digital Training Introduction to the AWS Infrastructure- AWS Service and Service Category Overview - Knowledge Check AWS Global Infrastructure

MODULE 2 | AWS CORE SERVICE

Introduction to Core Services- **Introduction to Compute** - Compute Services Overview - Introduction to Amazon Elastic Compute Cloud (EC2) - Digital Training Introduction to Compute - Amazon EC2 Console Demo - Introduction to Amazon EC2 - Amazon EC2 Cost Optimization - Introduction to AWS Lambda - Introduction to AWS Elastic Beanstalk - Knowledge Check Compute Services **Storage-** Introduction to Storage- Amazon Elastic Block Store (EBS) - Amazon EBS Demo - Working with EBS - Amazon Simple Storage Service (S3) - Amazon S3 Demo - Amazon Elastic File System (EFS) Video Amazon EFS Demo - Amazon Glacier - Amazon Glacier Demo - Knowledge Check Storage Services **Virtual Private Cloud (VPC)-** Introduction to the Amazon Virtual Private Cloud (VPC) - Amazon Virtual Private Cloud (VPC) - Amazon VPC Security Groups - Amazon VPC Demo - Build your VPC and Launch a Web Server- Amazon CloudFront - Knowledge Check Amazon Virtual Private Cloud **Database-** Amazon Relational Database Service (RDS)- Amazon RDS Demo - Amazon DynamoDB - Amazon Redshift - Amazon Aurora -Build Your DB Server and Interact with Your DB Using an App- Knowledge Check Databases Services

Balancing, Scaling, Monitoring- Elastic Load Balancing (ELB) - Amazon Cloud Watch - Auto Scaling - Digital Training Balancing, Scaling, and Monitoring - Scale and Load Balance Your Architecture - Knowledge Check Balancing, Scaling, and Monitoring

MODULE 3 | **CLOUD SECURITY**

Introduction to Cloud Security - AWS Shared Responsibility Model - AWS Identity and Access Management (IAM)- IAM Demo - AWS Trusted Advisor - AWS CloudTrail - AWS Config - AWS Day One Best Practice Review - AWS Security and Compliance Programs - AWS Security Resources - Digital Training AWS Cloud Security - Introduction to AWS IAM- IAM Demonstration (optional)- Knowledge Check Cloud Security

MODULE 4 | **CLOUD ARCHITECTING**

Introduction to Cloud Architecting - Lecture Introduction to the Well-Architected Framework - Lecture Well-Architected Design Principles - Lecture Understanding Reliability and High Availability - Example Transitioning a Data Center to the Cloud - Digital Training Introduction to Cloud Architecting - Knowledge Check Cloud Architecting

MODULE 5 | **CLOUD SUPPORT**

Introduction to AWS Organizations - AWS Cost Explorer - Overview of AWS Technical Support Plans and Costs - Digital Training Cloud Billing and Support - Knowledge Check Cloud Billing and Support

LAB | **Sandbox**
