

## Course Specification

**Title** - Certificate Course in “Cloud Computing Fundamentals with AWS”

**Upon completion of this course, students will be able to do the following (Intended Learning Outcomes):**

- **LO1:** Describe what a cloud service provider (CSP) is and the value they bring to computing
- **LO2:** Describe basic security and compliance aspects of the AWS platform and the shared security model
- **LO3:** Define the billing, account management, and pricing models
- **LO4:** Identify sources of documentation or technical assistance, for example, whitepapers or support tickets
- **LO5:** Describe basic or core characteristics of deploying and operating in the AWS Cloud
- **LO6:** Identify situations where a company should choose the cloud, and why
- **LO7:** Differentiate between on-premises and cloud infrastructure
- **LO8:** Identify how to migrate resources from on-premises infrastructure to cloud infrastructure

**Topic Outline -**

| <b>Topic</b>                          | <b>Allocated Time</b> |
|---------------------------------------|-----------------------|
| Global Infrastructure                 | [04 hours]            |
| Structures of the Cloud               | [04 hours]            |
| AWS Console                           | [04 hours]            |
| Virtual Servers                       | [04 hours]            |
| Content Delivery                      | [04 hours]            |
| Virtual Storage                       | [04 hours]            |
| Cloud Security I                      | [04 hours]            |
| Cloud Security II                     | [04 hours]            |
| Monitoring the Cloud                  | [04 hours]            |
| Databases                             | [04 hours]            |
| Load Balancers and Caching            | [04 hours]            |
| Elastic Beanstalk and CloudFormation  | [04 hours]            |
| Emerging Technologies in the Cloud    | [04 hours]            |
| Billing and Support                   | [04 hours]            |
| Other Cloud Features                  | [04 hours]            |
| Optimizing the Cloud with the AWS CDK | [04 hours]            |

**Target Group -**

- Working professionals
- School leavers
- Anyone who are expecting to build a career in cloud computing.

**Teaching and learning methods -**

- Lectures
- Practical/ Lab sessions

- Activity worksheets
- Discussions

**Assessment** - End-of-course assessment

**Level of complexity** - Beginning to intermediate

**Group size** - Minimum 25

**Duration** - 16 full days and the total time 64 hours (4 hours per day)

**Certification** - Certificate will be issued only upon successful completion of the course as “Certificate of successful completion”

**Fee from Participant** - Rs 30,000.00

**Resource Persons** - Staff members from IT division in area of cloud computing

**Course Coordinator** – Mr. M.I.M. Amjath (Division of Information Technology)