



Electronics & ICT Academy IIT Guwahati, Assam



An Initiative of Department of Electronics & Information
Technology (DeitY),
Ministry of Communications and IT,
Government of India

A Faculty Development Programme on

Cloud Computing with AWS



Organized in association with IIIT Guwahati and
support from Kovid Academy.

Applications are invited from Faculty Members/ Research
Scholars/PG & UG Students/Lab Technicians/Project Staffs
from Universities/Colleges/Schools & Industry Personnel to
attend a Training programme on
“Cloud Computing with AWS”

Course Date: 05-10 December 2016

Last Date of Registration: 26.11.2016

(Dates are extended till 02.12.2016)

(Online Registration Link will be open from 18.11.2016)

Venue: IIIT Guwahati, Assam

Supported by

Department of Electronics and Information
Technology (DeitY)

Ministry of Communications and
Information Technology,
Government of India



सत्यमेव जयते

Objective of the Course

Course Objective is to provide basic knowledge in
Cloud Computing using AWS. The programme will
focus on practical aspects and include examples which
are relevant to the current industry requirements.

Course Programme

Training Programme is split into two parts: Lectures
and Labs/Hands-on sessions daily. Course contents are
as follows:

1. Introduction to Cloud Computing.
2. Cloud Computing Models.
3. Scalability of Applications
4. Higher Availability Architecture
5. Scalable Resource
6. IP Addressing Schemes
7. Elastic Load Balancer (ELB)
8. Amazon Machine Image (AMI)
9. Relational Database Service (RDS) and S3.

**Certificate with grades will be given by E&ICT
Academy, IIT Guwahati to the participants.**

Who Can Attend

Programme is open to Faculty Members, Research
Scholars, PG & UG Student, Lab Technicians and
Project Staffs from Universities, Colleges & Schools.
Industry Personnel working in the concerned/allied
discipline may also apply.

How to Apply

Online – The participants may log on to the E&ICT
Academy, IIT Guwahati website:
<http://eictacad@iitg.ernet.in> and fill up the
application form.

Through Email – Scanned copy of the filled in
application form duly endorsed by the, forwarding
authority is to be mailed at E&ICT Academy’s email
id (eictacad@gmail.com, eictacad@iitg.ernet.in).
Application format given in this brochure may also
be downloaded from the website.

Registration Form

Name of the Applicant (first, last):

.....

Gender:

Designation:

Highest Qualification:

Name and Address of the Organization/Institute:

.....

City/town:.....

Email:.....

Phone Number:.....

Mobile Number:.....

Do you need accommodation?

(Yes/No):.....

DD Number:.....Date:.....

Issuing Bank:..... payable at:

Transaction ID (Applicable for Online Transfer):.....

Signature of the Applicant:.....

Signature and Seal of the Forwarding Authority

Name

Designation

*Note: The Faculty/Staff are requested to submit the NOC
from respective department before attending the session.*

Registration Fee

Registration Fee (Including course material)

Rs. 2,500/- for Faculty, Lab Technicians and Project Staff

Rs. 5,000/- for Industry Personnel, Research Scholars
and Students.

**Mode of Payment: Demand Draft in the
name of “Registrar, IIT Guwahati”**

OR

For Online Transfer

Bank Name: State Bank of India

Account Name: IIT Guwahati R&D E&ICT Academy

Account No.: 36071160089

IFSC Code: SBIN0014262

Bank Name: State Bank of India

Bank Address: IIT Guwahati, GHY- 39.

Course Outcome

- Creating Linux and Windows instances with required security.
- Installing and configuring a highly available two-tier application using ELB and Auto-Scaling.
- Creating backups using Snapshots.
- Leveraging Cloud Front for high performance edge and cache content delivery.
- Implementing a relational database with Relational Database Service (RDS).
- Installing applications across regions for HA using Route53 routing policies.
- Planning and creating virtual networks on AWS Visualizing the utilization metrics with CloudWatch.
- Adding and removing instances with Auto Scaling and adding dynamically to ELB.
- Benchmarking Cost, Security and Fault tolerance Using various types of objects and archival storage.
- Loading data into DynamoDB tables Evaluating disaster recovery options using AMI and Route53.

Note:

A major part of the labs will be done on the AWS cloud, so every participants are requested to carry their own individual laptop with the below minimum configuration for all the practicals.

RAM : 4GB

HDD : 200 GB free

Pre- Requisites for the Course

The participants of the course are expected to have a prior knowledge of the following concepts:

- Basics of Client-Server Architecture.
- Basics of Relational Database.
- Windows/Linux Operating System.

Hands-on Session

The Hands- on session will include the following:

- Setting up a Virtual Private Cloud.
- Install a HTML application either on Windows/Linux. across regions using Route53 routing policies.
- Create a Two Tier application (Like WordPress) with using ELB, Auto Scaling and RDS.

Contact Hours for the Course
50 Hrs (Theory, Hands-on & Tutorial)

Course Coordinators from Academy

- **Prof. Ratnajit Bhattacharjee**
Principal Investigator
E&ICT Academy, IIT Guwahati
- **Prof. Rohit Sinha**
Co-Principal Investigator
E&ICT Academy, IIT Guwahati
- **Dr. Gaurav Trivedi**
Co-Principal Investigator
E&ICT Academy, IIT Guwahati

Expert from Academia

- **Prof. Ratnajit Bhattacharjee**
Professor, Electronics and Electrical Engineering,
IIT Guwahati
- **Dr. Arnab Sarkar**
Assistant Professor, Computer Science and
Engineering, IIT Guwahati.
- **Dr. Ferdous Ahmed Barbhuiya**
Assistant Professor, Computer Science and
Engineering, IIT Guwahati.

Expert from Industry

- **Mr. Praveen Sripati (Expert Speaker)**
Principal Architect,
Kovid Academy, Hyderabad.

Contact Details

For more details or any queries please contact
Course Coordinator: Feroza Haque,
IIT Guwahati
Email: eictacad@iitg.ernet.in,
eictacad@gmail.com
Phone No: +91-3612586442

For details of the programme and course
contents etc., please log on to **Electronics**
and **ICT Academy website:**
<http://eict.iitg.ernet.in/>

About E&ICT Academy

Electronics and ICT Academy is an initiative of Department of Electronics & Information Technology (DeitY) Ministry of Communications and IT, Govt. of India for Faculty/ Research Scholar Development Programme.

Academy has planned short term training programmes on fundamental and advanced topics in IT, Electronics & Communication, Product Design, Manufacturing with hands on training and project work using latest software tools and systems.

In addition, the Academy will conduct specialized/customized training programmes and research promotion workshops for corporate sector & educational institutions.

How to reach IIT Guwahati

The Institute is operating from temporary premises at the Assam Textile Institute campus, in the heart of Guwahati city and is well connected to other parts of the country by road, rail or air. There are direct air services from/to Mumbai, New Delhi, Bangalore and Kolkata with connectivity to all major cities in the country and direct train services from/to all the metropolis and other major cities. Air India, Jet Airways, Air Asia, IndiGo, SpiceJet, GoAir and Vistara operate regular flights to and from Guwahati.

The institute is around 1.8 km from the Guwahati Railway station and around a 50 minute drive from the airport. Pre-paid taxis are available in the airport. Taxis are available for transport within the city and can be booked online (prime cabs, swiss cabs, ola, etc.). Auto-rickshaws are available but there are no meters and fares have to be negotiated beforehand. There is also an extensive network of city buses.

Institute address of IIT Guwahati
Indian Institute of Information Technology
Assam Textile Institute Campus
Ambari
G. N. Bordoloi Road
Guwahati 781001