

नेशनल इंस्टीट्यूट ऑफ इलेक्ट्रॉनिक्स एंड इन्फॉर्मेशन टेक्नोलॉजी, चेन्नई

National Institute of Electronics and Information Technology, Chennai

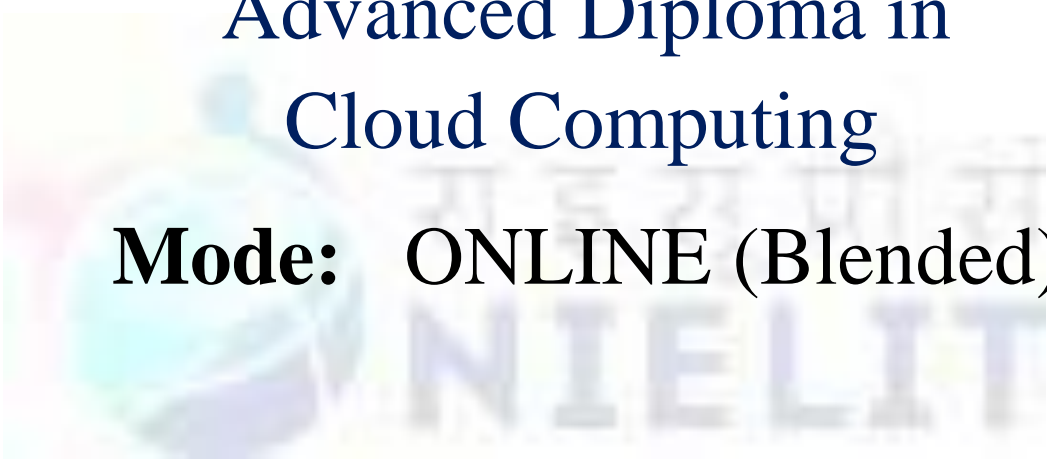
Autonomous Scientific Society of Ministry of Electronics & Information Technology (MeitY), Govt. of India

ISTE Complex, 25, Gandhi Mandapam Road, Chennai - 600025

Course Prospectus

Advanced Diploma in Cloud Computing

Mode: ONLINE (Blended)



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Course Prospectus

Name of the Group: ISM

Course Name: Advanced Diploma in Cloud Computing

Course Code: CC 800

Duration: 420 Hours, 4 Months

Last Date of Registration: 20-10-2021

Display of Provisional Selection List: 21-10-2021

Payment of first instalment fee: 21-10-2021 to 24-10-2021

Course Start Date: 25-10-2021

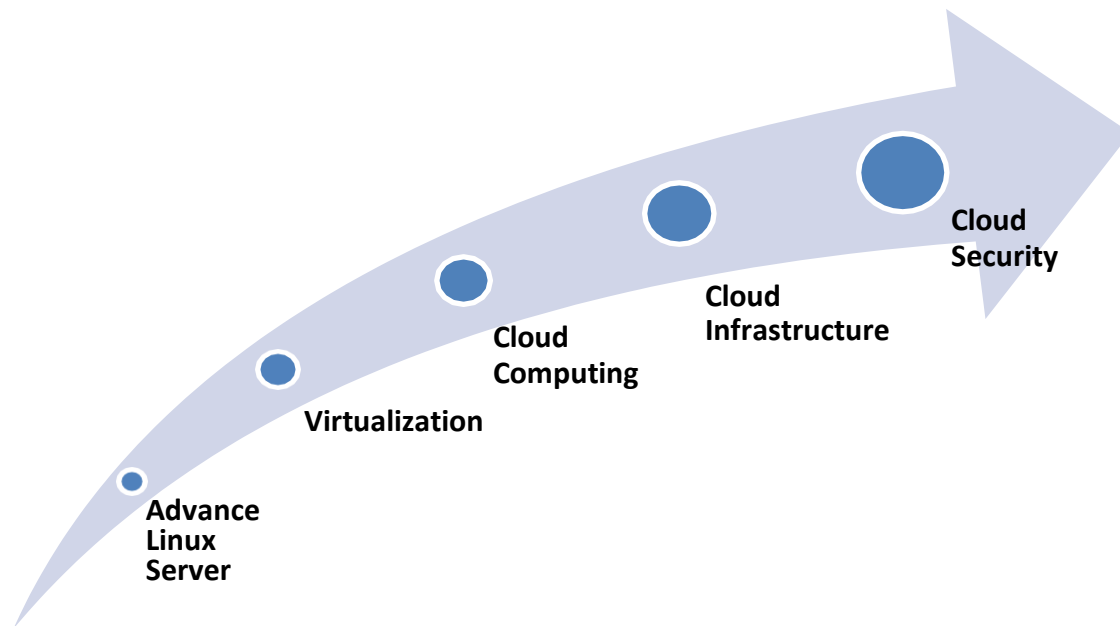
Preamble: Business @ the speed of thought has moved from a buzzword to a business reality owing to the integration of business and technology. Digital infrastructures and information networks have become central to any business activity. The information residing on these computers, networks and in cloud are an essential asset and due care should be taken for its security. The impact of any loss of this asset or any downtime of the infrastructure is quite high with the proliferation of easy-to-use tools and open how-to-discussions, the number of people aiming to hack in to or bring down the network is high, both in this country and abroad. Hence, there is a need for heightened security measures to protect both infrastructure and data.

Objective of the Course:

The Course is 420 Hrs. (4 Months) program aimed at molding candidates to Skilled System/Cloud Engineer to build and maintain the Systems, Networks and cloud infrastructure in today's scenario.

Outcome of the Course: This skill-oriented course provides candidates with information required for configuration and administration of OS Server, Cloud Deployment & its Security and equip them with the skills required to protect & recover the computer systems & networks from various security threats in dedicated or cloud environment.

Full Flow of Course



Course Structure

This course contains total five modules. After completing the first five modules, the students have to do a 210 Hours project using any of the topics studied to earn the Certification.

| Sl. No. | Module Name | Duration (in Weeks) |
|-----------------------|-------------------------------|------------------------|
| 1 | Linux Server Fundamentals | 3 Weeks |
| 3 | Virtualization | 3 Weeks |
| 4 | Cloud Computing (SaaS & PaaS) | 2 Weeks |
| 5 | Cloud Infrastructure (IaaS) | 4 Weeks |
| 6 | Cloud Security | 2 Weeks |
| 7 | Mini Project | 4 Weeks |
| Total Duration | | 18 Weeks |

Course Contents

1. Linux Server Fundamentals

- Introduction to Linux Fundamentals & Commands
- Advanced Linux Commands
- Configuring DNS Server
- Configuring Web Server with Virtual Hosting
- Configuring Mail Server
- Configuring File Server

2. Virtualization

- Configuring Virtual Box
- Configuring VMware
- Configuring KVM Server
- Setting Linux Container

3. Cloud Computing with SaaS & PaaS Cloud

- Introduction to Cloud Computing
- Types of Cloud Services
- Introduction to SaaS Cloud
- SaaS Cloud Deployment with Open Source Tools
- Introduction to PaaS Cloud
- PaaS Cloud Deployment

6. Cloud Infrastructure using XenServer & vSphere

- Introduction to IaaS Cloud
- Types of Cloud Deployment with Xen/KVM
- Setting Private Cloud with XenServer
- Setting Private Cloud with vSphere
- Deployment with Public Cloud AWS

7. Cloud Security

- Security Fundamentals
- Secure DNS Server, Secure Web Server, Secure Mail Server
- Cloud Monitoring
- Cloud Security Best Practices

8. Mini Project

Course Fees

Course fee is Rs. 21,000/- + GST as applicable. (Can be paid as a single instalment of Rs.24,780/- (Including Reg. fee) or in 2 instalments as given below)

| Registration Fee | Rs. 1000/- for all Candidates | |
|------------------|-------------------------------|------------|
| Installment No | (Fee including GST in Rs.) | Last Date |
| 1 | 11,890.00 | 24-10-2021 |
| 2 | 11,890.00 | 24-01-2022 |
| Total | 24,780.00 | |

*GST is Applicable as per Govt. Norms GST (currently it is 18%).

Registration Fee

Registration Fee for all candidates is Rs.1000/-

(non-refundable if candidate is selected for admission but did not join and if a candidate has applied but not eligible.)

However, the above registration fee shall be refunded on few special cases as given below

- ✓ Candidates are eligible but not selected for admission.
- ✓ Course postponed and new date is not convenient for the student.
- ✓ Course cancelled.

Eligibility

- ✓ BE / BTech, BCA, BSc (IT / Computer Science / Electronics) or equivalent of any of these.

Number of Seats: 60 (Sixty) - Total

How to Apply

Candidates can apply online in our website <http://reg.nielitchennai.edu.in>. Payment towards non-refundable registration fee can be paid through any of the following modes:

- ✓ Online transaction: Account No: 31185720641 Branch: Kottur (Chennai), IFS Code: SBIN0001669.

Note: The Institute will not be responsible for any mistakes done by either the bank concerned or by the depositor while remitting the amount into our account

Last date of Registration: 20th October 2021

Registration Procedure

All interested candidates are required to fill the Registration form online with registration fee before **20th October 2021** with all the necessary information.

Selection Criteria of candidates

The selection to the course shall be based on the following criteria:

Selection of candidates will be based on their marks in the qualifying examination subject to eligibility and availability of seats.

- ✓ The first list of Provisionally Selected Candidates will be published on NIELIT Chennai website (www.nielit.gov.in/chennai) on **21-10-2021** by **5:00 PM**. In case of vacancy, an additional selection list will be prepared, and the selection will be intimated by email only.
- ✓ Provisionally selected candidate has to upload there document on registration portal for online verification.
- ✓ For all category :
 - Original copies of Proof of Age, Qualifying Degree (Consolidated Mark sheet & Degree Certificate/Course Completion Certificate), 10th and 12th mark sheets.
 - Self-attested copy of community certificate.
 - One passport size photograph.
 - AADHAR Identity proof
- ✓ After document verification selected candidates have to pay first instalment of Rs. **11,890/-** on or before **23-10-2021** by payment mode mentioned above. Selected candidates are requested to upload the proof of remittance of fee on registration portal and also send the proof of remittance of fee as email to skjha@nielit.gov.in/trng.chennai@nielit.gov.in.

Admission: All provisionally selected candidates whose documents are verified and paid the fees (full or first instalment) and verified by accounts section of NIELIT Chennai will get a welcome message in his login id provided during registration. The credential and url for online portal will be shared through whatsapp or email.

Discontinuing the course

- ✓ No fees under any circumstances, shall be refunded in the event of a student who have completed the process of admission or discontinuing the course in between. No certificate shall be issued for the classes attended. Only Grade Sheet will be issued.

Course Timings: This program is a practical oriented one and hence there shall be more lab than theory classes. The classes and labs are online cloud based from 9.30 am to 5:30 pm and Monday to Friday.

Address:

National Institute of Electronics and Information Technology
ISTE Complex, No. 25, Gandhi Mandapam Road, Chennai – 600025
E-mail: trng.chennai@nielit.gov.in/Phone: 044-24421445
Contact Person: Coordinator, Mobile: 9443349257

Course enquiries

Students can enquire about the various courses either on telephone or by personal contact between 9.30 A.M. to 5.30 P.M. (Lunch time 1.00 pm to 1.30 pm) Monday to Friday.

Placement: Placement assistance is provided to students who qualify our courses.

Important Dates

- Last Date of Registration: 20-10-2021**
- Display of Provisional Selection List: 21-10-2021**
- Payment of first instalment fee: 21-10-2021 to 23-10-2021**
- Course Start Date: 25-10-2021**

Examination & Certification

- ✓ Certification Body: Examination Section, NIELIT Chennai
- ✓ Certificates will be issued after successful completion of all the modules including mini project. For getting Certified Cloud Computing Engineer certificate a candidate has to pass each module individually with minimum required marks.

Examination

Examination scheme for each module is as follows:

| Theory (Each Question will carry 1 mark) Duration (in Min): 90 | | Practical | | | Internal Assessment (Marks) | Project/ Presentation/ Assignment (Marks) | Major Project/ Dissertation | | Total |
|---|----------------------------|-----------|------------------|-----------------|--------------------------------|--|--------------------------------|-------|-------|
| Papers | No. of Questions /Paper | Papers | Duration Min) | Marks /Paper | | | No. Of Projects | Marks | |
| 2 | 100 | 2 | 180 | 50 | 25 | 25 | 1 | 150 | 500 |

| Module Name | Means of Assessment | | | |
|-------------------------------|---------------------|------------|------------|---------------------|
| | Total marks | Written | Practical | Assignment /Project |
| Linux Server Fundamentals | 70 | 40 | 20 | 10 |
| Virtualization | 70 | 40 | 20 | 10 |
| Cloud Computing (SaaS & PaaS) | 70 | 40 | 20 | 10 |
| Cloud Infrastructure (IaaS) | 70 | 40 | 20 | 10 |
| Cloud Security | 70 | 40 | 20 | 10 |
| Mini Project | 150 | - | 125 | 25 |
| Total | 500 | 200 | 225 | 75 |

Grading Scheme

Following Grading Scheme (on the basis of total marks) will be followed:

| Grade | S | A | B | C | D | Fail |
|--------------------|-----------|----------|----------|----------|----------|----------|
| Marks Range (in %) | 85 to 100 | 75 to 84 | 65 to 74 | 55 to 64 | 50 to 54 | Below 50 |

Final Grading as per above grading scheme will be given on the basis of total marks obtained in all modules. For last module grade will be given on the basis of project demonstration.