

## IS500: PG Diploma in Cloud Computing

<b>Course</b>	:	PG Diploma in Cloud Computing
<b>Code</b>	:	IS500
<b>Starting Date</b>	:	05 February, 2020
<b>Last Date To Apply</b>	:	21 January, 2020
<b>Course Coordinator</b>	:	Course Coordinator: Munivel E Phone: 9443349257 Email: <a href="mailto:munivel@nielit.gov.in">munivel [AT] nielit [DOT] gov [DOT] in</a>

### Course 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.

### Course Objective

The Course is 840 Hrs. (6 Months) program aimed at molding candidates to Skilled System/Cloud Engineer with Information Security knowledge to maintain the Systems, Networks and cloud infrastructure in today's scenario.

### Course Outcome

This skill-oriented course provides candidates with information required for configure 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.

### Course Structure

Sl. No	Course Modules	Duration
1	Introduction to Network Management	2 Weeks
2	Introduction to Windows & Linux Server	3 Weeks

3	Advanced Linux Server	3 Weeks
4	Virtualization	3 Weeks
5	Cloud Computing	2 Weeks
6	Cloud Infrastructure	3 Weeks
7	Cloud Security	2 Weeks
8	Project	6 Weeks

## Course Contents

### 1. Introduction to Network Management

- Introduction to ISO & TCP/IP Stack
- DNS/UDP/IP
- TCP/HTTP/HTTPS
- ICMP/DHCP
- Cabling
- Addressing
- Managing Basic Switches
- Managing Advanced Switches
- Managing Basic Routers

### 2. Introduction to Windows & Linux Server

- Installing Windows Server
- Setting Active Directory
- Managing Active Directory
- Managing User & Group
- Setting File, Web Server
- Backup and Restore
- Introduction to Linux Fundamentals & Commands
- Advanced Linux Commands

### 3. Advanced Linux Server

- Configuring DNS Server
- Configuring Web Server with Virtual Hosting

- Configuring MySQL Server
- Configuring Mail Server
- Configuring File Servers

#### **4. Virtualization**

- Configuring Virtual Box
- Configuring VMware
- Configuring KVM Server
- Configuring Xen
- Configuring Hyper-V
- Deploying Vagrant
- Setting Linux Container
- Configuring Open Storage
- Configuring Open vSwitch

#### **5. 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 OpenStack, XenServer & vSphere**

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

#### **7. Cloud Security**

- Access Control Types
- Cryptography and Algorithm Analysis
- Cloud Monitoring
- Cloud Auditing
- Cloud Automation

- Cloud Security Best Practices
- Cloud Standards

## 8. Project

### Course Fees

1. **General Candidates:** Course Fee is Rs. 60,000/- + GST at actuals

Fees	Amount for General Candidates Including GST	Due Date (on or before)
Advance Fee	₹ 10000/-	<b>28-Jan-2020</b>
1 <sup>st</sup> Installment	₹ 25400/- (if advance deposit paid) else ₹ 35400/-	<b>05-Feb-2020</b>
2 <sup>nd</sup> Installment	₹ 35400/-	<b>08-Apr-2020</b>

2. **SC/ST Candidates:** Tuition Fees/Examination fees are waived for SC/ST students. However they are required to remit an amount of Rs. 7080/- as Advance Security deposit. This amount will be considered as security deposit and will be refunded after successful completion of the course. If the student fails to complete the course successfully this amount along with any other security deposits by the student will be forfeited.

### Registration Fee (non-refundable)

1. SC/ST: Free
2. Others: Rs.1000/-.

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

1. Course postponed and new date is not convenient for the student.
2. Course cancelled.

### Eligibility

1. ME / MTech, BE / BTech, MCA, MSc / BSc (IT / Computer Science / Electronics) or equivalent of any of these.

### Number of Seats 30 (Thirty)

### How to Apply

Candidates are advised to app online from our website <http://14.139.173.196/reg> . After filling the form with all documents and fees, it can be submitted to NIELIT Chennai office in person or through post before starting of the course. Payment towards non-refundable Registration and Course fee can be paid through any one of the following modes:

- ❖ DD drawn from a nationalized bank (preferably SBI) in favor of “NIELIT Chennai” payable at Chennai.
- ❖ Online transaction: Account No: 31185720641 Branch: Kottur (Chennai), IFS Code: SBIN0001669.
- ❖ Pay through Nationalized Bank Debit Card (Service charges applicable)

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.

#### Registration Procedure

All interested candidates are required to fill the Registration form online with registration fees before 22<sup>nd</sup> October, 2018 with all the necessary following documents.

- ❖ Original and self-attested Copies of Proof of Age, Qualifications, etc.
- ❖ One passport size photograph and one stamp size photograph for identity card.
- ❖ Self-attested copy of Govt. issued photo ID card (AADHAR Identity proof must for SC/ST Candidates).
- ❖ Self-attested copy of community certificate (if availing SC/ST fee concession)

Note: Working days are from Monday to Friday (9.00 am to 5.30 pm.)

#### Important Dates

Last date to apply online/offline with Reg. fee	<b>21-Jan-2020</b>
Date of Selection list publication	<b>22-Jan-2020 (5:30 PM)</b>
Last date to pay the advance fee (Rs. 10,000/-)	<b>28-Jan-2020</b>
Counseling/Admission	<b>05-Feb-2020</b>
Last date to pay the first installment	<b>05-Feb-2020</b>
Commencement of classes	<b>06-Feb-2020</b>
Last date to pay the second installment	<b>08-Apr-2020</b>

#### More Details

For more details like How to Apply, Placement, etc please Contact the Course Coordinator.

National of Electronics and Information Technology, Chennai

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