

CDS/CA/7.5.1/F 40/R11

COURSE PROSPECTUS

Name of the Group: IT Group

Name of the Course: Advanced Diploma in Information System Security – Level-I

Course Code: SW601

Starting Date: 18th September 2019

Duration: 12 Weeks

Course Coordinator: Sini S Nair, 9447335996

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 a 12 weeks program aimed at molding candidates to Skilled Information System Security knowledge to maintain the Security of Systems and Networks in today's scenario.

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

Course Structure:

Course & Modules Name				
SW601: Advanced Diploma in Information System Security – Level-I				
Modules	Networking Fundamentals with Practical	12 weeks		
	Operating System Administration with Practical			
	Information Security with Practical			
	System Security with Practical			

Other Contents

a. Course Fees:

General Candidates: Course Fee is ₹ 30,000/- + GST@actuals



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SC/ST Candidates: Tuition Fees/Examination fees are waived for SC/ST students admitted under SCSP/TSP. However they are required to remit an amount of ₹ 3540/as Advance caution/Security deposit. This amount will be considered as caution/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 caution/security deposits by the student will be forfeited.

Modular wise Course Fee: Not Applicable

b. **Registration Fee:** An amount of Rs.1000/- (including GST)(nonrefundable) should be paid at the time of registering for the course.

This fee shall be considered as part of course fee, if the student joins the course. If a student register and pay for more than one course and join for any one course, all such amount will be adjusted against the course fee payable.

If the student does not join for the registered course / any of the registered courses, fee paid shall be forfeited.

For SC/ST candidates, the registration fee is Rs.500/- and will be considered as part of caution/security deposit and will be refunded after successful completion of the course. If the candidate does not join or fails to complete the course the amount will be forfeited

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

- Course postponed and new date is not convenient for the student
- ➤ Course cancelled in advance, well before the admission date

c. Course Fee Installment Structure:

Students can pay the full fees of ₹ 35,400/- in advance or as installments as given below

Fees	*Amount for General	Amount for SC/ST Candidates. (considered as	Due Date (on or before)
	Candidates	caution/security deposit)	
Registration	₹ 1000/-	₹ 500/-	During
Fee			Registration
**Advance	₹ 5000/-	₹ 3040/-	12 Can 2010
Fee	₹ 3000/-	X 3040/-	12-Sep-2019
1 st	₹ 29400/-	Nil	10 Can 2010
Installment		INII	18-Sep-2019
*** 2 nd	Not Applicable		
Installment			
Total Fee	₹ 35400/-	₹ 3540/-	-
		(refundable after successful	
		completion of course)	



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- * Above fees is inclusive of GST @ actuals (18%) and revision if any will be applicable at the time of payment.
- ** Advance fee After publication of first selection list, the students in the first selection list have to pay the Advance Deposit within one week to take the provisional admission. Students in the additional selection should pay both Advance and First installment fee together on or before counseling day
- *** 2nd Installment last date is NIL
- d. Eligibility: Diploma in IT/Electronics/ECE Passed OR NIELIT 'A' Level or Any Graduate in CS/Electronics/IT with mathematical back ground OR B.Tech. (CS/IT/Electronics/Electrical/Instrumentation) undergoing (Final Year Students may also apply)
- e. Number of Seats: 15
- f. Selection of candidates: Selection of candidates who have the requisite qualifying degree will be based on the percentage of marks in their qualifying degree subject to eligibility and availability of seats. Selection of candidates who have completed the course but expecting the results shall be based on the aggregate percentage of marks mentioned in their final mark list and on the availability of seats.
- g. Test/Interview: Not applicable
- h. Counseling/Admission: 18th September 2019
- i. Important Dates (if applicable):

Last date to apply online/offline with Reg. fee
Date of Selection list publication
Last date to pay the advance fee (Rs. 10,000/-)
Counseling/Admission
Last date to pay the first installment
Commencement of classes

O2nd September 2019
September 2019(5:30 PM)
12th September 2019
18th September 2019
18th September 2019
19th September 2019

- j. Course Timings: 9.45 A.M to 12.45 PM and 01.45 PM to 5.00 PM [Monday Friday]
- k. Placement: Placement support will be provided, almost all the eligible students placed/working in Cisco, Intel, AT&T, Citrix, PricewaterhouseCoopers, SISA, HCL MHRx, Kane, NTT DATA, Sify, Infosys, Kuliza Technologies, NIT, IIM-K, CSI and IDRBT.
- 1. Lab Facilities: The IT Lab is equipped with Intel Xeon Dual Processor based servers from HP, IBM, DELL, HCL, managed gigabit switches and more than 100 networked PCs with internet facility. SaaS, PaaS and IaaS open source cloud servers. A variety of



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software is available which include various flavors of Windows and Linux Operating Systems like Windows, RedHat Enterprise Linux/CentOS 6/7, RT Linux, OpenStack, CloudStack, OpenVAS/Nesses and various commercial and open source development tools, database and cloud servers.

m. Course Contents:

Module – I: Networking Fundamentals

- I. Introduction to ISO & TCP/IP Stack
- II. DNS/UDP/IP
- III. TCP/HTTP/HTTPS
- IV. ICMP/DHCP
- V. Cabling
- VI. Addressing
- VII. Basic Switches
- VIII. Managed Switches
 - IX. Routing in LAN & Internet

Module – II: Operating System Administration

- I. Installing Windows Server
- II. Setting Active Directory
- *III. Managing Active Directory*
- IV. Managing User & Group
- V. Setting File, Web Server
- VI. Backup and Restore
- VII. Introduction to Linux Fundamentals & Commands
- VIII. Advanced Linux Commands

Module – III: Information Security Concepts

- I. Introduction to Information Security
- II. Configuring SSH
- III. Configuring DNS Server
- IV. Practical on Discovery and scanning techniques (whois domain search query, ping, nslookup, traceroute, visual traceroute, DNS query).
- V. Configuring Web Server with Virtual Hosting
- VI. Practical on Packet Sniffing tool Ethereal.
- VII. Practical on password cracking tools- John the Ripper, Lophtcrack.
- VIII. Practical on Denial of Service, IP spoofing.
 - IX. Practical on network vulnerabilities assessment tool NMAP.
 - *X. Practical on ftp and telnet hacking*

Module – IV: System Security

- I. Practical on OS finger printing using NMAP.
- II. Installation and secure configuration of E-mail server-Postfix.



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- III. Practical on useful utility for Security Administrator like Netcat, TCPdump, LSOf, Ngrep.
- IV. Configuring Web Server
- V. Configuring File Servers
- VI. Installation and Secure configuration of Database Server Oracle /MYSQL/Postgres.
- VII. Practical on Intrusion Detection System using Snort/Tripwire.
- VIII. Practical on Firewall Testing using NMAP
 - IX. Configuring a Proxy Server using Squid
 - X. Configuring a content filter using E2guardian

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