



**INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
SCHOOL OF VOCATIONAL EDUCATION & TRAINING  
(SOVET)**

**Application Form for esttt. of Programme Study Centres (PSC)**

**(1) PG Diploma in Information Security (PGDIS)**

**(2) PG Certificate in Information Security (PGCIS) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester)**

**(3) Advanced Certificate in Information Security (ACISE) (With an exit option of Certificate in Information Security (CISE) after successfully completion of first three courses of 12 Credits)**

Dear Sir/Madam,

I am delighted to inform you that IGNOU is ready to launch **PG Diploma in Information Security (PGDIS) (one year duration) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester) and Advanced Certificate in Information Security (ACISE) (six month duration) (With an exit option of Certificate in Information Security (CISE) after successfully completion of first three courses of 12 Credits)**. Please find enclosed the **Programme Information Sheet and Performa of the Application** to be completed and submitted to IGNOU.

Kindly note the following:

- 1) On receipt of your application by IGNOU and if found satisfactory, the process of inspection and approval of your Institute as **Programme Study Centre (PSC)** will be undertaken.
- 2) Institute will be communicated with regard to promotional efforts and admission process so as to commence the classes on schedule.
- 3) The filled in application along with supporting document may be sent to the address given below so that the same can reach us on or before 31-05- 2011.

**Programme Co-ordinator  
Room No. 19, Block-1  
SOVET, IGNOU  
Maidan Garhi  
New Delhi-110068**

- 4) My Colleague, Ms. Urshla Kant, Assistant Professor, School of Vocational Education and Training, IGNOU is the Programme Coordinator for the above programmes. Please feel free to contact her either on her **telephone No. 011-29571123** or her e-mail. [urshlakant@ignou.ac.in](mailto:urshlakant@ignou.ac.in) for seeking any clarification.
- 5) In case you need any further clarification/ information please feel free to contact the school. We will be more than delighted to be of assistance to you.

We recognize your role and contribution to the success of this academic endeavour. The ultimate objective is being to fulfill the aspirations of our students and the need of the Information Security.

With kind regards,

Yours Sincerely,

**(Prof. C.G. Naidu)  
Director (SOVET)**

**INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
SCHOOL OF VOCATIONAL EDUCATION & TRAINING (SOVET)**

**Programme Information Sheet**

**(1) PG Diploma in Information Security (PGDIS)**

**(2) PG Certificate in Information Security (PGCIS) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester)**

**(3) Advanced Certificate in Information Security (ACISE) (With an exit option of Certificate in Information Security (CISE) after successfully completion of first three courses of 12 Credits)**

These innovative Programmes in the area of Information Security from IGNOU envisages to combine the strength of both IGNOU and Programme Study Centres to bridge the gap in awareness and competency required by various categories of people as the users of Internet and various IT enabled services about deeper aspects of Information Security, responsible use and management of IT services. Certification of skills would help them in getting gainful employment in the emerging global market. It incorporates the flexibility of open and distance learning with continuing education through the conventional system by way of Face-to-Face interaction at the Programme **Study Centre (PSC)** for both theory and practical components.

Name of the Programme	: <b>(1) PG Diploma in Information Security (PGDIS) (2) PG Certificate in Information Security (PGCIS) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester)</b>
Programme Code	: <b>(1) PGDIS (2) PGCIS</b>
Number of Credits	: <b>32</b>
Duration	: <b>1 Year</b>
Medium of Instruction	: <b>English</b>
Programme Fee	: <b>Rs. 8000/- (per semester)</b>
Eligibility	: <b>A. B.Sc (Computer Science)/ B.C.A/ B.Tech (Computer Sc.)/ B.Tech (IT) or its equivalent</b>  <b>B. Bachelor Degree in any discipline or its equivalent from the recognized University/ Institute with CIT/CIC from IGNOU</b>  <b>C. Bachelor Degree in any discipline or its equivalent from the recognized University/ Institute with 1 year working experience in Computer application/IT.</b>

## Course Details:

### Semester one:

Sl.No.	Course Code	Title of the course	Type of course compulsory/optional	Credits	Theory/Practical/Project
1.	MSEI-021	Introduction to Information Security	Compulsory	4	Integrated (Theory & Practical)
2.	MSEI-022	Network Security	Compulsory	4	Integrated (Theory & Practical)
3.	MSEI-023	Cyber Security	Compulsory	4	Integrated (Theory & Practical)
4.	MSEI-024	Policy, Standards and Laws	Compulsory	4	Theory
Total				16	

### Semester Two:

Sl.No.	Course Code	Title of the course	Type of course compulsory/optional	Credits	Theory/Practical/Project
5.	MSEI-025	Application and Business Security Developments	Compulsory	4	Integrated (Theory & Practical)
6.	MSEI-026	BCP, DR Planning and Audit	Compulsory	4	Integrated (Theory & Practical)
7.	MSEI-027	Digital Forensics	Compulsory	4	Integrated (Theory & Practical)
8.	MSEP-028	Project	Compulsory	4	Project
Total				16	

## Structure of this Programme

### PG Diploma in Information Security

**Duration : 1Year Semester: 2 Semesters No. of Credits: 32**

**(With an exit option of PG Certificate in Information Security after successfully completion of first semester)**

#### **Target Group:**

**A. B.Sc (Computer Science)/ B.C.A/ B.Tech (Computer Sc.)/ B.Tech (IT) or its equivalent**

**B. Bachelor Degree in any discipline or its equivalent from the recognized University/ Institute with CIT/CIC from IGNOU**

**C. Bachelor Degree in any discipline or its equivalent from the recognized University/ Institute with 1 year working experience in Computer application/IT.**

## 1<sup>st</sup> Semester

### Course 1: Introduction to Information Security– (4 Credits, Compulsory, Theory and Practical) : MSEI-021

#### **Block 1: Business Needs and Security Awareness**

**Unit 1. Information Technology Concept and Application**

**Unit 2. Security Awareness**

**Unit 3. Information Security: Overview**

**Unit 4. Legal and Ethical Issues**

#### **Block 2: Security Threat and Vulnerability.**

**Unit 1. Introduction to Security threats and Vulnerability**

(Computer as a target, as a mean of resource or as a mean of attack)

**Unit 2. Malware**

(Viruses, Worms, Trojan horses)

**Unit 3. Hacking: Issues and Techniques**

**Unit 4. Security Counter Measures**

#### **Block 3: Networking Concepts and Attacks.**

**Unit 1. Introduction to Data Communication and Transmission Media**

**Unit 2. Overview of Networking technologies**

(Topologies)

**Unit 3. Network Management and Protocol**

**Unit 4. Network Attacks**

#### **Block 4: Operating System Concepts**

**Unit 1. Introduction to Operating System**

**Unit 2. Operating System Security: An Overview**

(Authentication, Access controls, Security models, Updates, Patches, Integrity checks, Antivirus software)

**Unit 3. Operating System Hardening and Controls**

**Unit 4. ADC/SAMBA**

(File servers)

### Course 2: Network Security–(4 Credits, Compulsory, Theory and Practical): MSEI-022

#### **Block 1: Introduction to Network Security**

**Unit 1. Network Security Concepts**

(Threats, Mechanism)

**Unit 2. Network Security Techniques**

( Digital Water marking, ATC)

**Unit 3. Identity Management**

(Biometrics, All Physical Security, login, Finger Printing)

**Unit 4. Security Issues in Wireless and next generation networks**

## **Block 2: Secure Protocols**

### **Unit 1. Introduction to Secure Protocols**

### **Unit 2. Specific Protocol-I**

(at network level eg. IPSec, VPN, SHCN, SSL)

### **Unit 3. Specific Protocol-II**

(at Application level eg. PGP, SHTTP, SSH etc)

## **Block 3: Cryptography Techniques**

### **Unit 1. Introduction to Cryptography**

### **Unit 2. Symmetric Key Cryptography**

### **Unit 3. Asymmetric Key Cryptography**

(Hash function)

### **Unit 4. Applications of cryptography**

(Steganography, PK(Public key infrastructure), DH(Diffe-Hellman key), Electronic Signatures)

## **Block 4: Network Security Technology**

(Firewalls, Routers etc)

### **Unit 1. Firewalls**

(Network, Application and Host based Firewalls, Proxy)

### **Unit 2. IDS/IPS/Honey Pots**

### **Unit 3. Scanning and Analysis Tools**

## **Course 3: Cyber Security– (4 Credits, Compulsory, Theory and Practical): MSEI-023**

## **Block 1: Information Gathering**

### **Unit 1. Social Engineering**

### **Unit 2. E-mail Crime and Investigation**

### **Unit 3. Reverse Engineering**

### **Unit 4. Cracking Methodology**

## **Block 2: Database Security**

### **Unit 1. Introduction to Database Concepts**

### **Unit 2. Handon Database usage and Hacking Attempt**

### **Unit 3. Database Security-I**

(Distributed Databases, Security aspects related to centralized Distributed Database)

### **Unit 4. Database Security-II**

(Concurrency, Failure recovery, Fault tolerance, Transaction theory)

## **Block 3: WEB Technology**

### **Unit 1. Introduction to WEB Architecture**

(W3C)

### **Unit 2. Client Site Scripts**

### **Unit 3. Server Site Scripts**

### **Unit 4. Attacks on WEB Application**

## **Block 4: Internet Technology**

### **Unit 1. Internet Architecture**

### **Unit 2. Social Networking Sites**

**Unit 3. Advanced Searching Techniques**

(Search engines like Google etc)

**Unit 4. Latest trend in Internet Securities**

(Web 2.0)

**Course 4: Policy, Standards and Laws–(4 Credits, Compulsory, Theory): MSE-024**

**Block 1: Security Standards**

**Unit 1. Introduction to Security Policies and Standards**

(Need, Methods, Various Standards: ISO 27001, HIPA, Vertical)

**Unit 2. Security Framework Standards**

(ISO Standards-all)

**Unit 3. Security Mechanism Standards**

(Encryption, Digital Signatures, Techniques, Algorithm)

**Unit 4. Security Protocol Standards**

(Entity authentication protocol, Key establishment, Time stamping)

**Block 2: ISO Standards**

**Unit 1. Study of ISO Standards: A complete Case Study**

**Block 3: Cyber Laws**

**Unit 1. International Treaties, Conventions and Protocols concerning cyberspace**

(Guidelines issued by various ministries, Alternative Dispute Resolution, Online Dispute Resolution)

**Unit 2. Information Technology Amendment Act 2008-I**

(In Introduction: Criminal Law & Constitutional Law in brief)

**Unit 3. Information Technology Amendment Act 2008-II**

(Limitations)

**Unit 4. Cyberspace and IPR**

(Search engines, Web crawling, Indexing, searching, Ranking of web pages, Spamdexing)

**Block 4: Cyber Crimes and Regulation**

**Unit 1. Introduction to Computer Crimes**

**Unit 2. Conventional Crimes through Computer**

**Unit 3. Crimes and Torts committed on a Computer Network**

**Unit 4. Crimes relating to Data Alteration/ Destruction/ Theft of source code and Database**

(Online Dispute Resolution, theft of source code; a case study)

**2<sup>nd</sup> Semester**

**Course 5: Application and Business Security Developments– (4 Credits, Compulsory, Theory and Practical) : MSEI-025**

**Block 1: Application Development Life Cycle**

**Unit 1. Application Design**

**Unit 2. Application Coding**

**Unit 3. Application Testing**  
**Unit 4. Application Production and Maintenance**

**Block 2: Secure Application Development-I**

**Unit 1. Critical Application Security Concepts**  
**Unit 2. Input Validation and Encoding**  
**Unit 3. Authentication, Authorization and Session Management**  
**Unit 4. Encryption, Confidentiality and Data Protection**

**Block 3: Secure Application Development -II**

**Unit 1. Data Access**  
**Unit 2. Error Handling and Logging**  
**Unit 3. Server Configuration and Code Management**  
**Unit 4. Application Threat Modeling**

**Block 4: Application Testing and Ethical Hacking**

**Unit 1. Assessment Methodologies and Tools**  
**Unit 2. Application Security Assessments**  
**Unit 3. WEB Application Scanning and Vulnerability Assessment**  
**Unit 4. WEB Application Ethical Hacking**

**Course 6: BCP, DR Planning and Audit– (4 Credits, Compulsory, Theory and Practical) : MSEI-026**

**Block 1: Risk Analysis**

**Unit 1. Introduction to Risk Analysis**  
**Unit 2. Risk Assessment**  
**Unit 3. Risk Analysis Techniques and Methodologies**  
**Unit 4. Risk Mitigation**

**Block 2: Business Continuity**

**Unit 1. Need for a Business Continuity Program**  
**Unit 2. Overview of Business Continuity Management Life Cycle**  
**Unit 3. Defining Organization's Business Continuity Requirements**  
**Unit 4. Identifying and Selecting Business Continuity Strategies**

**Block 3: DR Strategies**

**Unit 1. Developing Plans for Computer System Recovery**  
**Unit 2. Developing Plans for Business Resumption**  
**Unit 3. Plan Templates and Software Tools**  
**Unit 4. Implementing Crisis Management Framework**

**Block 4: BCM Program Management**

**Unit 1. Maintaining and Administering BCM Plans**  
**Unit 2. Auditing and Evaluating BCM plans**  
**Unit 3. Developing and Implementing a BCM Response**  
**Unit 4. Disaster Simulation Exercise**

**Course 7: Digital Forensics– (4 Credits, Compulsory, Theory and Practical) :**  
**MSEI-027**

**Block 1: Cyber Crime and Cyber Forensics**

**Unit 1. Various Types of Cyber Crimes**

**Unit 2. Banking and Financial Crimes**

**Unit 3. Identify Thefts and Data Thefts/ Source Code Thefts**

**Unit 4. SPAM and BOTNETS**

( 1 Case Study on Nigerian Letter Fraud)

**Block 2: Digital Forensics**

**Unit 1. Digital Investigation**

**Unit 2. Data Acquisition and Information Gathering**

**Unit 3. Forensic Examination of Systems**

(Keyword, Data recovery, Various tools NKS)

**Unit 4. Forensic Examination of Network Devices**

(Routers, Firewalls, IDS/IPS etc)

**Block 3: Mobile Forensics**

**Unit 1. Introduction to Mobile Forensics and Technologies**

**Unit 2. Analysis of CDR's**

**Unit 3. Application of SIM Card Reader's**

**Unit 4. Forensic Examination of Mobile Devices**

(Mobile Frauds)

**Block 4: Security Issues in Wireless Technologies**

**Unit 1. Introduction to Wireless Technologies**

**Unit 2. Wireless Devices**

**Unit 3. Securing Wireless Network**

**Unit 4. Ethical Hacking- Wireless Security**

**Course 8: MSEP-028 Project– 4 Credits**



Name of the Programme	: <b>(3) Advanced Certificate in Information Security (ACISE) (With an exit option of Certificate in Information Security (CISE) after successfully completion of first three courses of 12 Credits)</b>
Programme Code	: <b>ACISE CISE</b>
Number of Credits	: <b>18</b>
Duration	: <b>6 Months</b>
Medium of Instruction	: <b>English</b>
Programme Fee	: <b>Rs. 4000/- (one time)</b>
Eligibility	: <b>10<sup>th</sup> or its equivalent</b>

### Course Details:

Sl.No.	Course Code	Title of the course	Type of course compulsory/optional	Credits	Theory/Practical/ Project
1.	OSEI-041	Information Security	Compulsory	4	Integrated (Theory & Practical)
2.	OSEI-042	Securing Internet Access	Compulsory	4	Integrated (Theory & Practical)
3.	OSEI-043	Information Technology Security	Compulsory	4	Theory
4.	OSEI-044	Server Security	Compulsory	6	Integrated (Theory & Practical)
Total				18	

## Structure of this Programme

### Advanced Certificate in Information Security

**Duration : 6 Months      No. of Credits: 18**

**(With an exit option of Certificate in Information Security after successfully completion of first three courses of 12 Credits)**

**Target Group: 10<sup>th</sup> Pass or its equivalent**

**Course 1: Information Security– (4 Credits (1 Credit-Theory and 3 Credit-Practical), Compulsory) : OSEI-041**

#### **Block 1: Overview of Information Security**

##### **Unit 1. Information Security Concepts**

(How to Secure Software)

##### **Unit 2. User Habits**

**Unit 3. Threats, Vulnerability and Malware**

(Viruses, Worms, Trojan horses)

**Unit 4. Impact of Hardware and Software Protocols with Preventive Measures**

**Block 2: Securing Desktop**

**Unit 1. Securing Desktop Concerns**

**Unit 2. Securing Files and Folders with Password**

(Poweron Password, Login Password)

**Unit 3. User Restricted Data, Sharing of Files and Secure Downloading from Internet**

**Unit 4. Security Threats due to Software Piracy**

**Block 3: Securing Data**

**Unit 1. Securing, Backup and Restore Strategies for Data**

**Unit 2. Concepts of PC auditing**

**Unit 3. Snapshot Utility**

**Unit 4. Defragmentation**

**Block 4: Securing Connectivity**

**Unit 1. Secure Network Connectivity**

**Unit 2. Firewalls**

**Unit 3. Encryption**

**Unit 4. Using some secure protocols**

**Course 2: Securing Internet Access–(4 Credits (1 Credit-Theory and 3 Credit-Practical), Compulsory) : OSEI-042**

**Block 1: Secure Browsing**

**Unit 1. Browsing History**

**Unit 2. Cookies, E-mail and Internet Applications**

**Unit 3. Log Files, Plug-ins and Scripts**

**Unit 4. Protecting from Fake Websites**

**Block 2: Internet Transaction Security**

**Unit 1. Secure Protocols**

**Unit 2. Privacy policies**

**Unit 3. How Identity Theft Works and its Prevention**

**Unit 4. Credit Card Fraud**

**Block 3: Securing Web Services**

**Unit 1. Security Challenges Specific to Web Services**

**Unit 2. Web Application Security Testing**

**Unit 3. Cyber Forensics, Digital Certificates and Digital Watermarking**

**Unit 4. Threat Profile, Risk Analysis and Defence Against Threats**

**Block 4: Securing during Mobility**

**Unit 1. Security in Wireless Environment**

**Unit 2. Wi-fi, Blue tooth, LAN**

**Unit 3. Digital Incident Response**

**Unit 4. Industry Perspective**

**Course 3: Information Technology Security– (4 Credits-Theory, Compulsory) :**  
**OSE-043**

**Block 1: W3C Compliance**

**Unit 1. Introduction to W3C**

**Unit 2. Recommendations and certifications of W3C**

**Unit 3. W3C Standards and Practices**

**Unit 4. How do we Improve Internet Privacy using W3C**

**Block 2: Introduction to ISO 27000**

**Unit 1. Need of Certification**

**Unit 2. ISO/IEC 27000 family of Information Security Management Systems (ISMS) standards**

**Unit 3. Cyber Security Standards**

**Unit 4. Employee perspective of ISO 27000**

**Block 3: Information Technology Act**

**Unit 1. Introduction to Information Technology Amendment Act 2008**

(Unique ID (UID), Limitations of Information Technology Amendment Act 2008)

**Unit 2. Legal Implications of Personal Security**

**Unit 3. Common Cyber Crimes and Government Laws and Rules in Information security**

**Course 4:– Server Security (6 Credits (1 Credit-Theory and 5 Credit-Practical), Compulsory): OSEI-044**

**Block 1: Email Security**

**Unit 1. Email Servers**

**Unit 2. Email Forgery and Spamming**

**Unit 3. Password Attack Vectors**

**Unit 4. Account Security**

**Block 2: Windows Security**

**Unit 1. Windows System Architecture**

**Unit 2. Windows System Security**

**Unit 3. Hacking Windows**

**Block 3: Linux Security**

**Unit 1. Linux System Architecture**

**Unit 2. Linux System Security**

**Unit 3. Hacking Linux**

**Block 4: Webserver Security**

**Unit 1. Understanding Web Technologies**

**Unit 2. Web Application Attacks**

**Block 5: Wireless Network Security**

**Unit 1. Wireless Network Concepts**

**Unit 2. Wireless Attacks**

**Unit 3. Wireless Security Measures**

## **Block 6: Software Security**

### **Unit 1. Recovering Software Codes**

### **Unit 2. Understanding Software Code**

### **Unit 3. Developing Software Patches and Code**

Note: All applicable topics should be explained for Open office and MS-Word.

**The eligibility conditions for the academic counselors for both theory and practical are as follows:**

**A) For PG Diploma in Information Security (PGDIS) (one year duration) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester)**

Qualification: MCA/ M.Tech/ B.Tech/ B.E (CSE/IT) with relevant experience of 2 years

**B) Advanced Certificate in Information Security (six month duration) (With an exit option of Certificate in Information Security after successfully completion of first three courses of 12 Credits)**

Qualification: Graduate and adequate familiarity to Internet and basic computer system

**INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
SCHOOL OF VOCATIONAL EDUCATION & TRAINING**

Application, Norms and Standards to become an Approved Programme Study Centre (PSC) for **PG Diploma in Information Security (PGDIS) (one year duration) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester) and Advanced Certificate in Information Security (ACISE) (six month duration) (With an exit option of Certificate in Information Security (CISE) after successfully completion of first three courses of 12 Credits)**

Guidelines for applying:

1. The Institute must be a Registered Society/Trust/Company.
2. Softwares and equipment required for the Computer Laboratory which are window based licensed and open source

**B) For PG Diploma in Information Security (PGDIS) (one year duration) (With an exit option of PG Certificate in Information Security (PGCIS) after successfully completion of first semester)**

**Course 1: Introduction to Information Security– (4 Credits, Compulsory, Theory and Practical)**

**Block 1: Business Needs and Security Awareness**

**Block 2: Security Threat and Vulnerability.**

**Unit 1. Introduction to Security threats and Vulnerability**

**BFB Tester**

**CROSS (Codenomicon Robust Open Source Software**

**Gendrame**

Metasploit

Nessus (Sedulity OS EH Edition)

Niko

Wireshark (Sedulity OS EH Edition)

Oedipus

**Paros**

**Flaw Finder**

**Unit 2. Malware**

Nuclear RAT V2.XX

SubSeven

Turkojan4.exe

Hydra

etherflood.zip

iris.zip

networkview.exe

smac20\_setup.exe

snort-2.8.6.1.tar.gz

Snort\_2\_8\_6\_1\_Installer.exe

NetBus

Back Orifice

wireshark-win32-1.4.0.exe

### **Unit 3. Hacking: Issues and Techniques**

NovaBACKUP  
DT Utilities  
PC Backup  
Genie Backup Manager  
Acronis True Image  
NTI Backup Now  
Acronis Backup & Recovery Norton Ghost  
PowerBackup  
BullGuard Backup  
TurboBackup  
Nmap  
snort  
netcat  
Metasploit  
Kismet  
Nikto  
Ethercap  
GFI LanGaurd  
Super Scan  
Retina

### **Unit 4. Security Counter Measures**

firestarter-1.0.3.tar.gz  
kerio-kwf-whql-6.7.1-6399-win32.exe  
kmyfirewall-1.1.1.tar.bz2  
NPF\_Retail(2).EXE  
zapSetup\_93\_037\_000\_en.exe  
snort  
Windows/ Linux Firewall  
Zone Alarm Pro  
Segate Personal Firewall

### ***Block 3: Networking Concepts and Attacks.***

#### **Unit 1. Introduction to Data Communication and Transmission Media**

**subnet calculator**

**Angry IP Scanner**

#### **Unit 2. Overview of Networking technologies**

RouterWatchDemoSetup.exe  
SolarWinds-Subnet-Calculator.exe  
bos\_sub.exe  
TCPtracertoute  
Tctrace  
itrace

#### **Unit 3. Network Management and Protocol**

Wireshark (Sedulity OS EH Edition)  
cain and abel  
Ethercap

#### **Unit 4. Network Attacks**

doshttp\_setup.exe  
ca\_setup.exe  
dsniff-2.3(2).tar.gz  
dsniff-2.3.tar.gz  
etherflood.zip

iris.zip  
networkview.exe  
smac20\_setup.exe  
snort-2.8.6.1.tar.gz  
Snort\_2\_8\_6\_1\_Installer.exe  
wireshark-win32-1.4.0.exe

#### Sniffers

- 1.DSniff
- 2.Ettercap
- 3.Ettercap-GTK
- 4.ntop
- 5.SMBRelay3
- 6.SSLDump
- 7.Tcpick
- 8.Wireshark
- 9.xspy

### ***Block 4: Operating System Concepts***

#### **Unit 1. Introduction to Operating System**

#### **Unit 2. Operating System Security: An Overview**

john-16w  
kerbcrack  
lc4setup.exe  
lc5setup.exe  
legion  
lms.exe  
makestrm.exe  
md5sum.exe  
Merge Streams  
nbname.cpp  
nbtdeputy  
NTFS and ADS.htm  
ntinfoscan.exe  
NTLM Authentication.ppt  
Nt\_rootkit0.40  
Offline NT Password Resetter  
psexec  
pwdump2  
pwdump3v2  
remoxec  
1.5nmap  
2.Autoscan  
3.Nmap  
4.onesixtyone  
5.p0f  
6.Protos  
7.ssllscan  
8.Xprobe2  
9.Zenmap

#### **Unit 3. Operating System Hardening and Controls**

opt crack  
lopth crack  
gpedit

#### **Unit 4. ADC/SAMBA**

Windows ADC installation and setups

**Course 2: Network Security--(4 Credits, Compulsory, Theory and Practical)**

**Block 1: Introduction to Network Security**

**Unit 1. Network Security Concepts**

ipscanner  
port scanners  
Nmap  
netcat  
whois

**Unit 2. Network Security Techniques**

port blockers  
IDS and Firewall  
Network monitoring and Tracking  
logs maintains

**Unit 3. Identity Management**

LaptopAlarmSetup.exe  
nTracker\_Trial.zip  
TrueCrypt Setup 7.0a.exe  
truecrypt-7.0a-linux-x86.tar.gz  
websetupLite.exe

**Unit 4. Security Issues in Wireless and next generation networks**

Backtrack4.0  
Airsnarf - A rogue AP setup utility.htm  
Airsnot  
Cqure AP  
NetStumblerInstaller.exe  
WEPCrack  
WiFiScanner-Linux  
Wireless Hacking Tools  
Wireless Security Tools.htm  
airopeek.exe  
airsnarf-0.2.tar.gz  
arppoisson  
kismet  
widzv1  
wlanexpert  
\*.Aircrack -ng  
\*.Airmon-ng  
\*.Airodump-ng  
\*.AirSnarf  
\*.ASLEAP  
\*.Cowpatty  
\*.Genpmk  
\*.Kismet  
\*.Mackchanger  
\*.WEPbuster  
2.Cracking  
\*.Aircrack -ng  
\*.Airmon-ng  
\*.Airodump-ng  
\*.AirSnarf  
\*.ASLEAP  
\*.Cowpatty



- \*.Genpmk
- \*.Kismet
- \*.WEPbuster

### **Bluetooth**

- 1.Blueprint
- 2.BlueSmash
- 3.Btcsanner
- 5.Minicom
- 6.obexFtp
- 7.Ussp-Push

### **RFDI**

- 1.RFIDIOt Frosch
- 2.RFIDIOt Frosh
- 3.RFIDIOt PCSC

## **Block 2: Secure Protocols**

Implementation of https  
Implementation of smtps  
Implementation of Ssh

## **Block 3: Cryptography Techniques**

### **Unit 1. Introduction to Cryptography**

### **Unit 2. Symmetric Key Cryptography**

### **Unit 3. Asymmetric Key Cryptography**

### **Unit 4. Applications of cryptography**

afe\_setup.exe  
ahtmllepp109\_setup.exe  
encryptmyfolder.exe  
glue.zip  
StegSpy2.1.zip  
stool.exe  
*Microsoft Cryptography tools*  
cert2spc.exe  
MakeCat.exe  
signer.dll.zip  
stool.exe  
wondercrypt  
encryptor

## **Block 4: Network Security Technology**

### **Unit 1. Firewalls**

firestarter-1.0.3.tar.gz  
kerio-kwf-whql-6.7.1-6399-win32.exe  
kmyfirewall-1.1.1.tar.bz2  
NPF\_Retail(2).EXE  
zapSetup\_93\_037\_000\_en.exe  
snort  
Firewall  
ADMmutate-0.8.1.tar.gz  
bro-1.5-release.tar.gz  
nidsbench.tar.gz  
Blackice

### **Unit 3. Scanning and Analysis Tools**

tripwire-2.3.1-2.tar.gz

tcpreplay-3.4.4.tar.gz

fragroute-1.2.tar.gz

AntiFirewall

backstealth

dnsdigger.zip

firewalk

### **Portscanning**

1.Autoscan

2.Nmap

3.propecia

4.UnicornScan

5.Zenmap

### **Service Fingerprinting**

1.Amap

2.Httpprint

3.Httpprint\_GUI

### **Identify Live Hosts**

1.0trace

2.5nmp

3.Autoscan

4.Fping

5.Hping2

6.Hping3

7.Netdiscover

8.Nmap

9.onesixtyone

10.sslscan

11.TCPtraceroute

12.Zenmap

### **Network Mappings**

1.5nmp

2.Amap

3.Httpprint

4.Httpprint\_GUI

5.Autoscan

### **6.Fping**

7.Hping2

8.Hping3

9.P0f

10.ike-scan

11.Netdiscover

12.Netmask

### **13.Nmap**

14.onesixtyone

15.Propecia

16.PSK-Crack

17.sslscan

18.XProbe2

19.0trace

20.TCPtraceroute

21.Protos

22.UnicornScan

23.Zenmap

### **Identify Live Hosts**

1.0trace

2.5nmp

3.Autoscan

- 4.Fping
- 5.Hping2
- 6.Hping3
- 7.Netdiscover
- 8.Nmap
- 9.onesixtyone
- 10.ssllscan
- 11.TCPTraceroute
- 12.Zenmap

### **OS-Fingerprinting**

- 1.nmap
- 2.Autoscan
- 3.Nmap
- 4.onesixtyone
- 5.p0f
- 6.Protos
- 7.ssllscan
- 8.Xprobe2
- 9.Zenmap

## **Course 3: Cyber Security– (4 Credits, Compulsory, Theory and Practical)**

### **Block 1: Information Gathering**

#### **Unit 1. Social Engineering**

#### **Unit 2. E-mail Crime and Investigation**

65Advanced Stealth Email Redirector.zip  
aep.zip  
Email\_Spider\_Easy.zip  
empasrec.zip  
freesmtp.zip  
mailpv.zip  
MSN Explorer Password Recovery Software.exe  
Nucleus-MSN-Password.exe  
SECRET\_INSTALL.EXE  
smtpserver.exe  
Yahoo Messenger Archive Recovery Software.exe  
Exim/ Postfix MTA configuration

#### **Unit 3. Reverse Engineering**

3568\_ResHack.zip  
adc-0.69.zip  
boomerang-linux-alpha-0.3.tar.gz  
boomerang-win32-alpha-0.3.1.zip  
hw32v601.exe  
idademo54.exe  
PE.Explorer\_setup.exe  
PE.Explorer\_setup.zip  
spices.zip  
spicesdc.zip  
Hex Edit  
Evans Debugger  
OllyDBG

#### **Unit 4. Cracking Methodology**

65Advanced Stealth Email Redirector.zip  
FlexiSpy.rar  
remotedesktopspy-setup.exe

spybuddy-setup-sw.exe  
spyhunterS.exe  
WCASSU54.exe  
007PWD11.EXE  
Accent\_Office\_Password\_Recovery\_1[1].02\_by\_AmoK  
CMOSDEL.EXE  
John the ripper  
M0ong4B0oNg4.zip  
NeverExpire.msi  
advanced i messenger password recovery  
aopb.zip  
aoxppr\_p.zip  
ares.zip  
ariskkey.exe  
brutus-aet2.zip  
brutusaet2.zip  
setup\_akll.exe  
Perfect Keylogger.exe  
XP Logon Password Logger.exe  
Log Monitors.zip  
iks2k20d.exe  
E-Mail Keylogger.exe

#### **VPN**

- 1.iike-scan
- 2.PSK-Crack

#### **SMB Analysis**

- 1.SMBClient.py

#### **Password Attacks**

- 1.Password offline Attacks
  - \*.bkhive
  - \*.john
  - \*.samdump2
  - \*.sqlpat
  - \*.wyd
- 2.password online attacks
  - \*.BruteSSH
  - \*.hydra
  - \*.Lodowep
  - \*.Medusa
  - \*.SSHater
- 3.chntpw

### **Block 2: Database Security**

#### **Unit 1. Introduction to Database Concepts**

##### **MySQL Server Configuration**

#### **Unit 2. Hand on Database usage and Hacking Attempt**

Blindfolded\_SQL\_Injection.pdf  
DataThief  
MSSQL Server Named Pipe Privilege Escalation Exploit.htm  
Manipulating Microsoft SQL Server Using SQL Injection.doc  
Microsoft SQL Server DoS Remote Exploit (MS03-031).htm  
Oracle Auditing Tools  
Oracle SID Enumeration  
Oracle SQL Injection.mht  
Oracle XDB FTP Service UNLOCK Buffer Overflow Exploit.htm  
PHP-NUKE version = 6.9 cid sql injection Remote Exploit.htm

SQL Injection Passwd.txt  
SQLInjectionWhitePaper.pdf  
SQLSmack.pl  
Sql demo scripts  
Using Binary Search with SQL Injection.txt  
advanced\_sql\_injection.pdf  
forceSQL  
oat-binary-1.3.1.zip  
oracle\_password\_cracker  
phpBB 2.0.5 SQL Injection password disclosure Exploit.htm  
phpBB 2.0.6 search\_id sql injection MD5 Hash Remote Exploit.htm  
sqlat-src-1.0.0.tar  
sqlat-src-1.1.0.tar.gz  
sqlbf  
sqlbf-win-binary-1.0.0.zip  
sqlcrawl  
sqlexec  
sqlscan  
thcsql  
wpoison  
    1.DB-Generic  
    2.MSSQL  
    \*.sqlpat

### **Unit 3. Database Security-I Security and Privledges for MySQL Dababase**

### **Unit 4. Database Security-II Implementation of Security Policies**

## **Block 3: WEB Technology**

### **Unit 1. Introduction to WEB Architecture**

### **Unit 2. Client Site Scripts Java Script on Web Server like Apache**

### **Unit 3. Server Site Scripts PHP Server Side Script Implementation**

### **Unit 4. Attacks on WEB Application**

32 Bit IP Resolver  
Automatic-Printing-in-IE Vulnerability.htm  
Brute Force Attack Estimator.xls  
Form Bookmarklets.url  
Form Bookmarks.htm  
Generate Unicode Strings.htm  
Generate Xss Exploit  
HTTP File Stealing  
HelpMe2.pl  
IE Cache Extractor  
IEEN  
IISHACK.doc  
Running this page will crash IE.htm  
WinDNSSpooF  
hacking web servers  
http traffic monitor

ieflaw  
iehist-win32-0\_0\_1.zip  
jad  
lynx  
monkeyshell.tar.gz  
readme.htm  
sitedigger  
1.ASP-Audit  
2.Burpsuite  
3.CSRPTester  
4.Curl  
5.DirBuster  
4.Grabber  
5.Grendel scan  
6.Httpprint  
7.Httpprint\_GUI  
8.Lbd  
9.List-Urls  
10.Mini Mysqlator  
11.Nikto  
12.Paros Proxy  
13.Ratproxy  
14.Swfintruder  
15.W3AF  
16.Wapti  
17.Webshag  
18.Wfuzz  
Nessus Server  
Nessus

#### **Block 4: Internet Technology**

##### **Unit 1. Internet Architecture**

##### **Unit 2. Social Networking Sites Browsers like firefox, Opera, Crome**

##### **Unit 3. Advanced Searching Techniques google hacking methodologies**

##### **Unit 4. Latest trend in Internet Securities Virtuallization of Servers**

#### **Course 4: Policy, Standards and Laws–(4 Credits, Compulsory, Theory)**

##### **Block 1: Security Standards**

##### **Block 2: ISO Standards**

##### **Block 3: Cyber Laws**

##### **Block 4: Cyber Crimes and Regulation**

#### **2<sup>nd</sup> Semester**

#### **Course 5: Application and Business Security Developments– (4 Credits,**

##### **Block 1: Application Development Life Cycle**

## **Block 2: Secure Application Development-I**

## **Block 3: Secure Application Development -II**

## **Block 4: Application Testing and Ethical Hacking**

ManageEngine\_ApplicationsManager.exe

Nessus-3[1].2.1.1.exe

nsauditor\_setup.exe

Portscanners

PFSETUP1.EXE

PORTSCAN.EXE

SITESCAN.ZIP

nmap-3.55-SP2-win32.zip

nmapwin\_1.3.1.exe

sup3rsc4n.zip

ws\_ping\_pro.zip

### **Portscanning**

1.Autoscan

2.Nmap

3.propecia

4.UnicornScan

5.Zenmap

### **Service Fingerprinting**

1.Amap

2.Httpprint

3.Httpprint\_GUI

## **Course 6: BCP, DR Planning and Audit– (4 Credits, Compulsory, Theory and Practical)**

### **Block 1: Risk Analysis**

### **Block 2: Business Continuity**

### **Block 3: DR Strategies**

### **Block 4: BCM Program Management**

## **Course 7: Digital Forensics– (4 Credits, Compulsory, Theory and Practical)**

### **Block 1: Cyber Crime and Cyber Forensics**

### **Block 2: Digital Forensics**

#### **Unit 1. Digital Investigation**

#### **Unit 2. Data Acquisition and Information Gathering**

#### **Unit 3. Forensic Examination of Systems**

FTK-Forensic\_Toolkit-1.81.5.exe

EnCase Setup.exe

steller Data acquisition.exe

QuickRecoveryDemoLINUX.exe

#### **Unit 4. Forensic Examination of Network Devices**

### **Block 3: Mobile Forensics**

#### **Unit 1. Introduction to Mobile Forensics and Technologies**

## **Unit 2. Analysis of CDR's**

## **Unit 3. Application of SIM Card Reader's**

## **Unit 4. Forensic Examination of Mobile Devices**

AD\_Mobile phone examiner.zip  
MobileInspector.exe  
OPM\_Forensic\_Trial\_Setup.exe  
memory-card-data-recovery-demo.exe  
open folder.pps  
sim-card.exe

## **Block 4: Security Issues in Wireless Technologies**

### **Unit 1. Introduction to Wireless Technologies**

### **Unit 2. Wireless Devices**

### **Unit 3. Securing Wireless Network**

Wireless Security Tools.htm  
Elcomsoft Wireless Security Auditor 3.2.0.395  
LucidLink Home Office Edition 2.2  
PW0-200 - Wireless Security Professional (WSP) Practice Test Questions 1.0  
AirStop Wireless 2.4.3

### **Unit 4. Ethical Hacking- Wireless Security**

Airsnarf - A rogue AP setup utility.htm  
Airsnot  
Cqure AP  
NetStumblerInstaller.exe  
WEPCrack  
WiFiScanner-Linux  
Wireless Hacking Tools  
airopeek.exe  
airsnarf-0.2.tar.gz  
arppoisn  
kismet  
widzv1  
wlanexpert

### **Wireless Network Anaysis (Linux)**

Bluetooth  
1.Blueprint  
2.BlueSmash  
3.Btcsanner  
4.HCIDump  
5.Minicom  
6.obexFtp  
7.Ussp-Push

### **RFDI**

1.RFIDIOt Frosch  
\*.Brute Force Hitag2  
\*.Bruteforce Mifare  
\*.Calculate JCOP MIFARE Keys  
\*.Continues Delect Tag  
\*.**Copy ISO15693 TAG**  
\*.ePassport READ WRIE CLONE  
\*.Format MIFARE 1k Value Blocks



- \*.Identify LF TAG Type
- \*.JCOP Info
- \*.JCOP MIFARE READ WRITE
- \*.JCOP Set ATR historical Bytes
- \*.Read ACG Reader EEPROM
- \*.Read LF TAG
- \*.Read MIFARE
- \*.Read Tag
- \*.READ WRITE CLONE UNIQUE
- \*.RESET Q5 TAG
- \*.Select Tag
- \*.Set FDX-B ID
- \*.Test ACG LAHF
- 2.RFDIOt Frosh
  - \*.READ WRITE CLONE Unique
  - \*.Reset hitag2 Tag
  - \*.Set FDX-B ID
  - \*.Test Frosch Reader
- 3.RFIDIOt PCSC
  - \*.Bruteforce MIFARE
  - \*.Calculate JCOP MIFARE Keys
  - \*.Chip and info
  - \*.Continues Select TAG
  - \*.ePassport READ WRITE/CLONE
  - \*.Install ATR Historical byte applet to JCOP
  - \*.Install Mifare applet to JCOP
  - \*.install vonjeek epassport emulator to JCOP
  - \*.Install vonjeek ePassport emulator to Nokia
  - \*.JCOP Info
  - \*.JCOP Info
  - \*.JCOP MIFARE READ/WRITE
  - \*.JCPO Set ATR Historical Bytes
  - \*.Read MIFARE
  - \*.Read TAG
  - \*.Select TAG

## Wi-Fi

- 1.All
  - \*.Aircrack -ng
  - \*.Airmon-ng
  - \*.Airodump-ng
  - \*.AirSnarf
  - \*.ASLEAP
  - \*.Cowpatty
  - \*.Genpmk
  - \*.Kismet
  - \*.Mackchanger
  - \*.WEPbuster
- 2.Cracking
  - \*.Aircrack -ng
  - \*.Airmon-ng
  - \*.Airodump-ng
  - \*.AirSnarf
  - \*.ASLEAP
  - \*.Cowpatty
  - \*.Genpmk
  - \*.Kismet
  - \*.WEPbuster

**B) Advanced Certificate in Information Security (ACISE) (six month duration)  
(With an exit option of Certificate in Information Security (CISE) after successfully  
completion of first three courses of 12 Credits)**

**Course 1: Information Security– (4 Credits (1 Credit-Theory and 3 Credit-Practical),  
Compulsory)**

**Block 1: Overview of Information Security**

**Unit 1. Information Security Concepts (Testing Tools)**

**BFB Tester**

**CROSS (Codonomicon Robust Open Source Software**

**Gendrame**

Metasploit

Nessus (Sedulity OS EH Edition)

Niko

Wireshark (Sedulity OS EH Edition)

Oedipus

**Paros**

**Flaw Finder**

**Unit 2. User Habits**

Encryptor

Windows/ Linux Firewall

Security Settings as per Operating System

WonderCrypt

FileCrypto

Anti Virus

Setup of Wifi's

**Unit 3. Threats, Vulnerability and Malware**

Nuclear RAT V2.XX

SubSeven

Turkojan4.exe

etherflood.zip

iris.zip

networkview.exe

smac20\_setup.exe

snort-2.8.6.1.tar.gz

Snort\_2\_8\_6\_1\_Installer.exe

NetBus

Back Orifice

wireshark-win32-1.4.0.exe

Hydra (Sedulity OS EH Edition)

**Unit 4. Impact of Hardware and Software Protocols with Preventive Measures**

Metasploit

Nessus (Sedulity OS EH Edition)

Niko

Wireshark (Sedulity OS EH Edition)

Oedipus

**Block 2: Securing Desktop**

**Unit 1. Securing Desktop Concerns**

**Theory**

**Unit 2. Securing Files and Folders with Password**

AxCrypt

WinCry  
Folder Guard

### **Unit 3. User Restricted Data, Sharing of Files and Secure Downloading from Internet**

SFTP  
Kodak EasyShare  
Internet Download Manager softwares

### **Unit 4. Security Threats due to Software Piracy**

#### **Block 3: Securing Data**

##### **Unit 1. Securing, Backup and Restore Strategies for Data**

##### **Unit 2. Concepts of PC auditing**

SystemMechanic7Pro.exe  
WinAudit.exe  
Nessus (Sedulity OS EH Edition)  
Ratina

##### **Unit 3. Snapshot Utility**

systracer\_setup\_en.exe  
Virtualization

##### **Unit 4. Defragmentation**

Auslogics Disk Defrag  
Smart Defrag 1.5  
JK Defrag  
PageDefrag  
SpeeDefrag  
**Diskeeper**  
**OS Based Defragmentation**

#### **Block 4: Securing Connectivity**

##### **Unit 1. Secure Network Connectivity**

NovaBACKUP  
DT Utilities  
PC Backup  
Genie Backup Manager  
Acronis True Image  
NTI Backup Now  
Acronis Backup & Recovery Norton Ghost  
PowerBackup  
BullGuard Backup  
TurboBackup  
Nmap  
snort  
netcat  
Metasploit  
Kismet  
Nikto  
Ethercap  
GFI LanGaurd  
Super Scan  
Retina

##### **Unit 2. Firewalls**

firestarter-1.0.3.tar.gz

kerio-kwf-whql-6.7.1-6399-win32.exe  
kmyfirewall-1.1.1.tar.bz2  
NPF\_Retail(2).EXE  
zapSetup\_93\_037\_000\_en.exe  
snort  
Windows/ Linux Firewall  
Zone Alarm Pro  
Segate Personal Firewall

### **Unit 3. Encryption**

afe\_setup.exe  
ahtmllepp109\_setup.exe  
encryptmyfolder.exe  
glue.zip  
StegSpy2.1.zip  
stool.exe  
Microsoft Cryptography tools  
cert2spc.exe  
MakeCat.exe  
signer.dll.zip  
Stools  
Encryptor  
WonderCrypt

### **Unit 4. Using some secure protocols**

**Theory**

Implementation of https  
Implementation of smtps  
Implementation of Ssh

## **Course 2: Securing Internet Access—(4 Credits (1 Credit-Theory and 3 Credit-Practical), Compulsory)**

### **Block 1: Secure Browsing**

#### **Unit 1. Browsing History**

Pop-up History 0.0.3  
Private Browsing 1.2.9  
Attention Recorder 0.65  
WinSettings 8.1  
Trackless 1.03  
Squid  
logs  
firefox, chrome, mozilla

#### **Unit 2. Cookies, E-mail and Internet Applications**

65Advanced Stealth Email Redirector.zip  
aep.zip  
Email\_Spider\_Easy.zip  
empasrec.zip  
freesmtp.zip  
mailpv.zip  
MSN Explorer Password Recovery Software.exe  
Nucleus-MSN-Password.exe  
SECRET\_INSTALL.EXE  
smtpserver.exe  
Yahoo Messenger Archive Recovery Software.exe  
Portable Historian 1.4.4.0  
pidgin  
TeamViewer

Skype  
BitTorrent

### **Unit 3. Log Files, Plug-ins and Scripts**

Active LogView 2.09.1.7378  
XFile 2.021  
ksLogger 1.17  
logs

### **Unit 4. Protecting from Fake Websites**

Netcraft Toolbar  
GeoTrust TrustWatch  
TrustToolbar  
Clear Search Anti-Phishing  
BullGuard Internet Security (32-bit version)  
phishing protection from the browsers  
Thunderbird Security

## **Block 2: Internet Transaction Security**

### **Unit 1. Secure Protocols**

**https implementation**  
**smtps implementations**  
**ssh (secure shell)**

**Theory**

### **Unit 2. Privacy policies**

**IP tables**  
**Firewalls**  
**User Authentications**

**Theory**

### **Unit 3. How Identity Theft Works and its Prevention**

MySecurityVault PRO  
MyIdentityDefender Toolbar  
Identity Theft Protector  
TrustedID Identity Theft Protection  
Identity Theft Toolkit

**Theory**

### **Unit 4. Credit Card Fraud**

**Theory**

## **Block 3: Securing Web Services**

### **Unit 1. Security Challenges Specific to Web Services**

**webInject**

**Theory**

### **Unit 2. Web Application Security Testing**

32 Bit IP Resolver  
Automatic-Printing-in-IE Vulnerability.htm  
Brute Force Attack Estimator.xls  
Form Bookmarklets.url  
Form Bookmarks.htm  
Generate Unicode Strings.htm  
Generate Xss Exploit  
HTTP File Stealing  
HelpMe2.pl  
IE Cache Extractor  
IEEN

IISHACK.doc  
Running this page will crash IE.htm  
WinDNSSpoof  
hacking web servers  
http traffic monitor  
ieflaw  
iehist-win32-0\_0\_1.zip  
jad  
lynx  
monkeyshell.tar.gz  
readme.htm  
sitedigger  
Odysseus  
metaexploit  
Paros Proxy

### **Unit 3. Cyber Forensics, Digital Certificates and Digital Watermarking**

FTK-Forensic\_Toolkit-1.81.5.exe  
EnCase Setup.exe  
steller Data acquisition.exe  
QuickRecoveryDemoLINUX.exe

#### **Web Analysis**

- 1.ASP-Audit (Sedulity OS EH Edition)
- 2.Burpsuite (Sedulity OS EH Edition)
- 3.CSRPTester (Sedulity OS EH Edition)
- 4.Curl (Sedulity OS EH Edition)
- 5.DirBuster (Sedulity OS EH Edition)
- 4.Grabber
- 5.Grendel scan (Sedulity OS EH Edition)
- 6.Httpprint (Sedulity OS EH Edition)
- 7.Httpprint\_GUI (Sedulity OS EH Edition)
- 8.Lbd (Sedulity OS EH Edition)
- 9.List-Urls (Sedulity OS EH Edition)
- 10.Mini Mysqlator (Sedulity OS EH Edition)
- 11.Nikto (Sedulity OS EH Edition)
- 12.Paros Proxy (Sedulity OS EH Edition)
- 13.Ratproxy (Sedulity OS EH Edition)
- 14.Swfintruder (Sedulity OS EH Edition)
- 15.W3AF (Sedulity OS EH Edition)
- 16.Wapti (Sedulity OS EH Edition)
- 17.Webshag (Sedulity OS EH Edition)
- 18.Wfuzz
- 19.ZZuff (Sedulity OS EH Edition)
- 20.Webscarb Lite (Sedulity OS EH Edition)

Nessus Server (Sedulity OS EH Edition)  
Nessus (Sedulity OS EH Edition)

### **Unit 4. Threat Profile, Risk Analysis and Defence Against Threats**

ManageEngine\_ApplicationsManager.exe  
Nessus-3[1].2.1.1.exe  
nsauditor\_setup.exe

#### **Penetration**

- 1.Framework2-MsfCli
- 2.Framework2-MsfCnsole
- 3.Framework2-MsfUpdate
- 4.Framework3-MsfCli

- 5.Framework3-MsfConsole
- 6.Framework3-MsfUpdate
- 7.Framework3-Msfweb
- 8.Inguma
- 9.Update MiliwOrm

### **Framework Version 2**

- 1.Framework2-MsfCli
- 2.Framework2-MsfCnsole
- 3.Framework2-MsfUpdate

### **Framework Version3**

- 1.Framework3-MsfCli
- 2.Framework3-MsfConsole
- 3.Framework3-MsfUpdate
- 4.Framework3-Msfweb

miliwOrm Exploit Archive

Fast Track

Inguma

- 1.Nessus Server
- 2.ADMSnmp
- 3.ASP-Audit
- 4.Bed
- 5.braa
- 6.bunny
- 7.Burpsuite
- 8.Cisco Auditing Tool
- 9.Cisco Global Exploiter
- 10.Cisco OCS mass SScanner
- 11.Cisco passwd Scanner
- 12.Copy Router Config
- 13.CSRFTester
- 14.Curl
- 15.DirBuster
- 16.Grabber
- 17.Grendel Scan
- 18.Httpprint
- 19.httpprint\_GUI
- 20.JBroFuzz
- 21.Lbd
- 22.List-Urls
- 23.Merge Router Config
- 24.Metacoretex
- 25.Mini Mysqlator
- 26.Nessus
- 27.Nikto
- 28.Paros Proxy
- 29.Pblind
- 30.peach
- 31.Ratproxy
- 32.SMBClient.py
- 33.Snmp Enum
- 34.Spike
- 35.SQLbrute
- 36.SQLIX
- 37.SQLMap
- 38.SQL Ninja
- 39.swfintruder

- 40.Voiper
- 41.W3AF
- 42.Wapiti
- 43.Webscarab Lite
- 44.Webshag
- 45.Wfuzz
- 46.WSFuzzer
- 47.ZZuf

#### **Cisco**

- 1.Cisco Auditing Tool
- 2.Cisco Global Exploiter
- 3.Cisco OCS Mass Scanner
- 4.Copy Router Config
- 5.Merge Router Config

#### **Database**

- 1.DB-Generic
- 2.MSSQL

#### **Fuzzers**

- 1.Bed
- 2.bunny
- 3.JBroFuzz
- 4.Peach
- 5.Spike
- 6.Voiper
- 7.WSFuzzer
- 8.ZZuf

#### **SMB Analysis**

- 1.SMBClient.py

#### **SNMP Analysis**

- 1.ADMSnmp
- 2.braa
- 3.Snmp Enum

#### **Nessus Server**

### **Block 4: Securing during Mobility**

#### **Unit 1. Security in Wireless Environment**

**Theory**

#### **Unit 2. Wi-fi, Blue tooth, LAN**

- Airsnarf - A rogue AP setup utility.htm
- Airsnort
- Cquire AP
- NetStumblerInstaller.exe
- WEPCrack
- WiFiScanner-Linux
- Wireless Hacking Tools
- airopeek.exe
- airsnarf-0.2.tar.gz
- arppoisson
- kismet
- widzv1
- wlanexpert

#### **Wireless Network Analysis**

##### **Bluetooth**

- 1.Blueprint
- 2.BlueSmash
- 3.Btcsanner



- 4.HCIDump
- 5.Minicom
- 6.obexFtp
- 7.Ussp-Push

#### **Wi-Fi**

- 1.All
  - \*.Aircrack -ng (Sedulity OS EH Edition)
  - \*.Airmon-ng (Sedulity OS EH Edition)
  - \*.Airodump-ng (Sedulity OS EH Edition)
  - \*.AirSnarf (Sedulity OS EH Edition)
  - \*.ASLEAP (Sedulity OS EH Edition)
  - \*.Cowpatty (Sedulity OS EH Edition)
  - \*.Genpmk (Sedulity OS EH Edition)
  - \*.Kismet (Sedulity OS EH Edition)
  - \*.Mackchanger (Sedulity OS EH Edition)
  - \*.WEPbuster (Sedulity OS EH Edition)
- 2.Cracking
  - \*.Aircrack -ng (Sedulity OS EH Edition)
  - \*.Airmon-ng (Sedulity OS EH Edition)
  - \*.Airodump-ng (Sedulity OS EH Edition)
  - \*.AirSnarf (Sedulity OS EH Edition)
  - \*.ASLEAP (Sedulity OS EH Edition)
  - \*.Cowpatty (Sedulity OS EH Edition)
  - \*.Genpmk (Sedulity OS EH Edition)
  - \*.Kismet (Sedulity OS EH Edition)
  - \*.WEPbuster (Sedulity OS EH Edition)

#### **Unit 3. Digital Incident Response**

#### **Unit 4. Industry Perspective**

### **Course 3: Information Technology Security– (4 Credits-Theory, Compulsory)**

#### **Block 1: W3C Compliance**

<b>Unit 1. Introduction to W3C</b>	<b>Theory</b>
<b>Unit 2. Recommendations and certifications of W3C</b>	<b>Theory</b>
<b>Unit 3. W3C Standards and Practices</b>	<b>Theory</b>
<b>Unit 4. How do we Improve Internet Privacy using W3C</b> cynthia.exe	<b>Theory</b>

#### **Block 2: Introduction to ISO 27000**

<b>Unit 1. Need of Certification</b>	<b>Theory</b>
<b>Unit 2. ISO/IEC 27000 family of Information Security Management Systems (ISMS) standards</b>	<b>Theory</b>
<b>Unit 3. Cyber Security Standards</b>	<b>Theory</b>
<b>Unit 4. Employee perspective of ISO 27000</b>	<b>Theory</b>

#### **Block 3: Information Technology Act**

<b>Unit 1. Introduction to Information Technology Amendment Act 2008 (Unique ID (UID), Limitations of Information Technology Amendment Act 2008)</b>	<b>Theory</b>
<b>Unit 2. Legal Implications of Personal Security</b>	<b>Theory</b>
<b>Unit 3. Common Cyber Crimes and Government Laws and Rules in Information security</b>	<b>Theory</b>

**Course 4:- Server Security (6 Credits (1 Credit-Theory and 5 Credit-Practical), Compulsory)**

**Block 1: Email Security**

**Unit 1. Email Servers**

PostFix  
IceWarp Mail Server  
Courier mail server  
Eudora WorldMail Server  
Dovecot  
WebEasyMail  
Rockliffe  
IMail Server

**Unit 2. Email Forgery and Spamming**

65Advanced Stealth Email Redirector.zip  
aep.zip  
Email\_Spider\_Easy.zip  
empasrec.zip  
freesmtp.zip  
mailpv.zip  
SECRET\_INSTALL.EXE  
smtpserver.exe

**Unit 3. Password Attack Vectors**

Yahoo Messenger Archive Recovery Software.exe  
MSN Explorer Password Recovery Software.exe  
Nucleus-MSN-Password.exe

**Unit 4. Account Security**

**Theory**

**Block 2: Windows Security**

**Unit 1. Windows System Architecture**

**Theory**

**Unit 2. Windows System Security**

**Theory**

**Unit 3. Hacking Windows**

ADS Streaming Utility  
ADS Visual Detector\_DEMO  
ADS Visual Detector\_DEMO.zip  
Antispector  
auditpol.exe  
browselist.exe  
c2myazz  
Capture LM Manager Password  
cat.exe  
Change\_NT-2000\_Passwords  
cmdlog  
cp.exe  
Crash on Demand.exe  
dumpel.exe  
efsview.exe  
elsave  
EvidenceEliminator.exe  
foundstone\_tools  
FU\_Rootkit  
getadmin

HiddenFileDetectorSetup  
Hide Folders XP  
hk  
hydan-0.10.tar  
Invisible Folders.exe  
Invisible Secrets.exe  
john-16w  
kerbcrack  
lc4setup.exe  
lc5setup.exe  
legion  
Ins.exe  
makestrm.exe  
md5sum.exe  
Merge Streams  
nbname.cpp  
nbtdeputy  
NTFS and ADS.htm  
ntinfoscan.exe  
NTLM Authentication.ppt  
Nt\_rootkit0.40  
Offline NT Password Resetter  
psexec  
pwdump2  
pwdump3v2  
remoxec  
RightClickHide  
Rootkit Detector V0.3 for windows  
rootkithunter-1.00RC1.tar.gz  
samdump  
Security side-effects of Word fields.htm  
ShutDown.exe  
SMB Proxy  
smbgrinder

### **OS-Fingerprinting**

- 1.nmap (Sedulity OS EH Edition)
- 2.Autoscan (Sedulity OS EH Edition)
- 3.Nmap (Sedulity OS EH Edition)
- 4.onesixtyone (Sedulity OS EH Edition)
- 5.p0f (Sedulity OS EH Edition)
- 6.Protos (Sedulity OS EH Edition)
- 7.ssllscan (Sedulity OS EH Edition)
- 8.Xprobe2 (Sedulity OS EH Edition)
- 9.Zenmap (Sedulity OS EH Edition)

### **Password Attacks**

- 1.Password offline Attacks
  - \*.bkhive (Sedulity OS EH Edition)
  - \*.john (Sedulity OS EH Edition)
  - \*.samdump2 (Sedulity OS EH Edition)
  - \*.sqlpat (Sedulity OS EH Edition)
  - \*.wyd (Sedulity OS EH Edition)

## **Block 3: Linux Security**

### **Unit 1. Linux System Architecture**

### **Unit 2. Linux System Security**

**Theory**

**Unit 3. Hacking Linux**

7350nxt-v3.tar.gz  
9x\_cgi.zip  
ADM-spoof-NEW.tgz  
anonirc.c  
boscript-0\_2\_tar.tar  
bsd-rdist.c  
cctt-0.1.7.tar.gz  
cgiscan2.c  
cheops-0\_55\_tar.tar  
cold-1\_0\_10.tgz  
cops\_104\_tar.z  
crack5\_0\_tar.gz  
cracklib25\_small\_tar.z  
crontab\_backdoor.sh  
dipexploitlinux.c  
Distributed John.tgz  
dtk-0\_7.tar  
ethereal-0\_5\_0\_tar.tar  
fakebo-032.tgz  
Firebird 1.0.2 FreeBSD 4.7-RELEASE local root exploit.htm  
gammprog150.tgz  
hackunix.zip  
holelist.txt  
hping2\_v1.5.pdf  
HP-UX B11.11 -usr-bin-ct local format string Root Exploit.htm  
hunt-1\_0.tgz  
ibnc2\_0a.tar  
index.html  
install.txt  
Intel PXE Exploit in RedHat 8.txt  
inv.c  
ipbomb.c  
ipgrab-0\_6\_tar.tar  
ipsend2\_1a\_tar.tar  
ipspooof\_script.zip  
ircbnc.c  
jizz.c  
jizz.sh  
john-1.6.34.tar.gz  
john-1\_6\_tar.tar  
libpcap-0\_4\_tar.tar  
Linux 2.4.20 kernel decode\_fh Denial of Service Exploit.htm  
Linux Basic Commands.pdf  
Linux eXtremail 1.5.x Remote Format Strings Exploit.htm  
linux.txt  
logwatch-1\_5\_1\_tar.tar  
lrk4readme.txt  
mailbseq.c  
Mandrake Linux 8.2 -usr-mail local exploit (d86mail.pl).htm  
merlin\_tar.gz  
mflash.c  
modify\_ldt\_exploit.c  
mountexp.c  
nessus-unstable-120198.tgz  
nfsbug.c

nmap-2\_12.tar  
OpenBSD 2.x - 3.3 exec\_ibcs2\_coff\_prep\_zmagic() kernel Explo.htm  
OpenBSD ibcs2\_exec Kernel local Exploit.htm  
pppsetup.txt  
rdC-LPRng\_c.htm  
rdistexp.c  
redir-1\_1\_tar.tar  
SAdoor-20030805.tgz  
satan.zip  
secure\_delete-1\_8\_tar.tar  
sigurgexp.c  
Solaris runtime linker (ld.so.1) buffer overflow Exploit (SP.htm  
Solaris Sadmind Default Configuration Remote Root Exploit.htm  
spamshield-1\_40\_tar.gz  
spike.sh  
SuSE linux 9.0 YaST config Skript Local Exploit.htm  
tcptrace\_tar.gz  
thc-uht1.tgz  
trace\_shell.c  
traffic-vis-0\_22\_tar.tar  
ttywatcher-1\_0a\_tar.gz  
ttywatcher-1\_1beta1\_tar.gz  
unix.zip  
unix-pc.zip  
userdump.zip  
voodoo\_tar.gz  
wgate-bsd\_tar.tar  
WSD-dns.tgz  
xenon-r1.tar  
xtermoverflo\_exp.c

## **Block 4: Webserver Security**

### **Unit 1. Understanding Web Technologies**

**Theory**

### **Unit 2. Web Application Attacks**

32 Bit IP Resolver  
Automatic-Printing-in-IE Vulnerability.htm  
Brute Force Attack Estimator.xls  
Form Bookmarklets.url  
Form Bookmarks.htm  
Generate Unicode Strings.htm  
Generate Xss Exploit  
HTTP File Stealing  
HelpMe2.pl  
IE Cache Extractor  
IEEN  
IISHACK.doc  
Running this page will crash IE.htm  
WinDNSSpooF  
hacking web servers  
http traffic monitor  
ieflaw  
iehist-win32-0\_0\_1.zip  
jad  
lynx  
monkeyshell.tar.gz

readme.htm

sitedigger

### **Web Analysis**

- 1.ASP-Audit (Sedulity OS EH Edition)
  - 2.Burpsuite (Sedulity OS EH Edition)
  - 3.CSRPTester (Sedulity OS EH Edition)
  - 4.Curl (Sedulity OS EH Edition)
  - 5.DirBuster (Sedulity OS EH Edition)
  - 4.Grabber
  - 5.Grendel scan (Sedulity OS EH Edition)
  - 6.Httpprint (Sedulity OS EH Edition)
  - 7.Httpprint\_GUI (Sedulity OS EH Edition)
  - 8.Lbd (Sedulity OS EH Edition)
  - 9.List-Urls (Sedulity OS EH Edition)
  - 10.Mini Mysqlator (Sedulity OS EH Edition)
  - 11.Nikto (Sedulity OS EH Edition)
  - 12.Paros Proxy (Sedulity OS EH Edition)
  - 13.Ratproxy (Sedulity OS EH Edition)
  - 14.Swfintruder (Sedulity OS EH Edition)
  - 15.W3AF (Sedulity OS EH Edition)
  - 16.Wapti (Sedulity OS EH Edition)
  - 17.Webshag (Sedulity OS EH Edition)
  - 18.Wfuzz
  - 19.ZZuff (Sedulity OS EH Edition)
  - 20.Webscarb Lite (Sedulity OS EH Edition)
- Nessus Server (Sedulity OS EH Edition)  
Nessus (Sedulity OS EH Edition)

## **Block 5: Wireless Network Security**

### **Unit 1. Wireless Network Concepts**

**Theory**

### **Unit 2. Wireless Attacks**

Airsnarf - A rogue AP setup utility.htm

Airsnort

Cqure AP

NetStumblerInstaller.exe

WEPCrack

WiFiScanner-Linux

Wireless Hacking Tools

airopeek.exe

airsnarf-0.2.tar.gz

arppoisson

kismet

widzv1

wlanexpert

### **Wi-Fi**

- 1.All
  - \*.Aircrack -ng (Sedulity OS EH Edition)
  - \*.Airmon-ng (Sedulity OS EH Edition)
  - \*.Airodump-ng (Sedulity OS EH Edition)
  - \*.AirSnarf (Sedulity OS EH Edition)
  - \*.ASLEAP (Sedulity OS EH Edition)
  - \*.Cowpatty (Sedulity OS EH Edition)
  - \*.Genpmk (Sedulity OS EH Edition)
  - \*.Kismet (Sedulity OS EH Edition)
  - \*.Mackchanger (Sedulity OS EH Edition)

\*.WEPbuster (Sedulity OS EH Edition)

## 2. Cracking

\*.Aircrack-ng (Sedulity OS EH Edition)

\*.Airmmon-ng (Sedulity OS EH Edition)

\*.Airodump-ng (Sedulity OS EH Edition)

\*.AirSnarf (Sedulity OS EH Edition)

\*.ASLEAP (Sedulity OS EH Edition)

\*.Cowpatty (Sedulity OS EH Edition)

\*.Genpmk (Sedulity OS EH Edition)

\*.Kismet (Sedulity OS EH Edition)

\*.WEPbuster (Sedulity OS EH Edition)

### **Unit 3. Wireless Security Measures**

Elcomsoft Wireless Security Auditor 3.2.0.395

LucidLink Home Office Edition 2.2

PW0-200 - Wireless Security Professional (WSP) Practice Test Questions 1.0

AirStop Wireless 2.4.3

### **Block 6: Software Security**

#### **Unit 1. Recovering Software Codes**

3568\_ResHack.zip

adc-0.69.zip

boomerang-linux-alpha-0.3.tar.gz

boomerang-win32-alpha-0.3.1.zip

hw32v601.exe

idademo54.exe

PE.Explorer\_setup.exe

PE.Explorer\_setup.zip

spices.zip

spicesdc.zip

#### **Unit 2. Understanding Software Code**

**Theory**

#### **Unit 3. Developing Software Patches and Code**

FASM148.ZIP

fasmw148-090.zip

WDASM89.ZIP

3. The Institute is required to furnish the attached proforma for establishment as an IGNOU programme study centre.