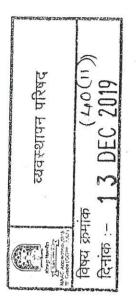
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पुण्यश्लोक अहिल्यादेवी होळकर सोलापूर विद्यापीठ व स्किल फॅक्टरी लर्निंग प्रायव्हेट लिमिटेड, पुणे या कंपनी बरोबर १) Certificate Course in Cyber Security २) Diploma in Digital Ethical Hacking ३) Advanced Diploma in Network Penetration Testing या तीन अभ्यासक्रमाचा MoU (सामंजस्य करार) करण्याची बाब फेर विचारार्थ.

(टिपणी: प्रस्तुत विद्यापीठात कौशल्य विकास केंद्रांतर्गत स्किल फॅक्टरी लर्निंग प्रायव्हेट लिमिटेड, पुणे यांनी १) Certificate Course in Cyber Security २) Diploma in Digital Ethical Hacking ३) Advanced Diploma in Network Penetration Testing हे तीन अभ्यासक्रम Online द्वारे संगणकशास्त्र संकुलात सुरू करण्याबाबतचा Syllabus सह प्रस्ताव सादर केलेले आहेत. विद्यापीठ बाहेरील संस्था बरोबर MoU (सामंजस्य करार) करण्याबाबतचे नियम ठरविण्यात आले आहेत. त्यानुसार स्किल फॅक्टरी लर्निंग प्रायव्हेट लिमिटेड, पुणे यांनी ३ अभ्यासक्रमाबातचा प्रस्ताव व Syllabus दिलेले आहेत. १) Certificate Course in Cyber Security २) Diploma in Digital Ethical Hacking ३) Advanced Diploma in Network Penetration Testing या तीन अभ्यासक्रमाचा MoU (सामंजस्य करार) करणे बाबतचा आयत्या वेळेचा विषय क्र.११ (१७) अन्वये दि.१९ सप्टेंबर, २०१९ च्या व्यवस्थापन परिषेदच्या विचारार्थ सादर करण्यात आला होता. त्या विषयावर व्यवस्थापन परिषदेच्या ठरावानुसार संबंधित विषय विद्या परिषेदच्या बैठकीत सादर कर्रण्यात यावा असे सर्वानुमते ठरले आहे.

सबब, पुण्यश्लोक अहिल्यादेवी होळकर सोलापूर विद्यापीठ व स्किल फॅक्टरी लर्निंग प्रायव्हेट लिमिटेड, पुणे या कंपनी बरोबर १) Certificate Course in Cyber Security २) Diploma in Digital Ethical Hacking ३) Advanced Diploma in Network Penetration Testing या तीन अभ्यासक्रमाचा MoU (सामंजस्य करार) करण्याची बाब फेर विचारार्थ).

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ठरावः





# Punyashlok Ahilyadevi Holkar Solapur University Solapur

Ordinance for Short term Course

Certificate in Cyber Security

Under

The Skill Development Center

In Association with Department of Computer Science

And

Skills Factory Learning Pvt. Ltd., Pune



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1. <u>About Solapur:</u> SOLAPUR is one of the important districts of Maharashtra State of India. It is in the southern part of Maharashtra. The district consists of eleven Talukas. The headquarter of North Solapur and South Solapur Taluka is Solapur city. The famous religious places like Pandharpur and Akkalkot are in Solapur district. The Bhagwant Mandir of Barshi is well known. Sant Damaji of Mangalwedha is also one of the important personalities of the district.

Solapur has its own history. Once it was known as Textile Capital. It was also known as the Labour city in olden days. In present day, Solapur has the Handloom and power loom factory Solapur Cotton Industry engaged in production of Chadar, Towel and handloom product. Solapur is transport hub connecting Maharashtra, Karnataka and Andhra Pradesh. It is well connected by Road and Rail to major districts and cities. The National Highways 9, 13 and 211 pass through Solapur city.

2. About Punyashlok Ahilyadevi Holkar Solapur University: Punyashlok Ahilyadevi Holkar Solapur University was established on 1st August 2004 and was inaugurated on 03-08-2004 by the then Governor of Maharashtra. The formation of The university at Solapur was a long cherished desire of the people of this region. Earlier, to the formation of University, Solapur had a P.G. Centre of Shivaji University, Kolhapur for over two decades. The Centre for P.G. Studies had three postgraduate science departments and 7 postgraduate courses conducted in the P.G. departments. With this sound background Punyashlok Ahilyadevi Holkar Solapur University was established to cater the needs of over the 60,000 student community.

The university is poised for an ambitious growth. The University is now a hub of various academic activities. A good number of Engineering, Agricultural, Architectural, Medical and Traditional institutions of national fame are located in and around the city. Solapur district is home to religious saints of various languages, since the district is at a triple junction of the linguistic states of Telangana, Karnataka and Maharashtra. Therefore, Solapur is secular, multilingual and metropolitan to its core. This backdrop makes the University stands for transcendent principles and embodying noble mission. It is a small team yet progressive and forward-looking. Perched on a plateau, the Punyashlok Ahilyadevi Holkar Solapur University is a citadel of higher learning. Recently the Punyashlok Ahilyadevi Holkar Solapur University has introduced the concept of school system and has decided to bring its various departments under the umbrella of seven schools, viz. 1) School of Chemical Sciences 2) School of Computational Sciences 3) School of Earth Sciences 4) School of Physical Sciences 5) School of Social Sciences 6) School of Commerce and Management 7) School of Languages 8) School of Technology. To cater the need of academic information the University has a full-fledged library housed in the premises measuring nearly 400 sq. meters.

In thirteen academic years, the University has the delight of various distinctions. Student and staff have completed their academic commitment. It is a landmark to state that the university has successfully conducted its examinations and has declared results in record time. Student's Welfare department has conducted successfully its council elections, youth festivals and insurance scheme etc. Further, students have bagged medals at state and national youth festivals and sports events. The Varsity has strong NSS and NCC units. Teachers and Students have a great zeal in academic activities. They have participated in national and international seminars and presented research findings. Punyashlok Ahilyadevi Holkar Solapur University has formulated quality improvement guidelines for Ph.D. in the State of Maharashtra.



- 3. Skill Development Center: Punyashlok Ahilyadevi Holkar Solapur University has Skill Development Center, which runs 62 skill based courses in its affiliated colleges and recently started 7 skill based courses in its own campus. The focus of the Skill Development Center is to offer short term skill enhancement courses to different sectors of the society. The skill based courses are mainly in the areas of engineering sectors like electrical, mechanical, IT, etc., health care, handloom and textile, commerce and management, personality development, agriculture, tourism, yoga and culture.
- 4. About Skills Learning Factory Pvt. Ltd., Pune: Skills Factory Learning Pvt. Ltd. is a dedicated training, teaching and educational research organization having expertise in the delivery of specialized training programs in Digital Security, Network Security Information Security, Cyber Security, Wellness and Health. Skills Factory along with its incubator Intelligent Quotient System Pvt. Ltd., has been actively involved in formal teaching and training of cyber security through its 14 odd courses which covers a wide range of cyber security domain, for many years. Skills Factory Learning has assisted students, professionals, corporate and Government organizations in skill acquisition, employment enhancement, entrepreneurship development and professional self-development thereby contributing directly to the enhancement of safety and security of the nation as well as contributing economically through skill enhanced and better employment opportunities. Skills Factory Learning Pvt. Ltd. has also identified Wellness and Health for skill imbibing and employment/entrepreneurship promotion and has developed a number of certification courses with Research Institute of Health Sciences and Management (RIHSM).

#### 5. About the course:

**Brief Job Description**: This job role is responsible for assisting in preparation of cyber security related documents and initiate cyber security awareness campaigns within the organization and with associates. The main duties consist of assisting superiors in the preparation of security policy documents, preparing training material for security awareness campaigns, coordinating with departments in matters of security issues and assisting superiors in the conduct of security testing.

**Personal Attributes**: This job may require the individual to work independently in the collection of data and make decisions for his/her own area of work. The individual should have a high level of documentation drafting capability, passion for information security and attention for detail, should be ethical, compliance and result- oriented, should also be able to demonstrate interpersonal skills, along with willingness to undertake desk-based job with long working hours.

#### 6. Aim & Objectives of the Course:

- Demonstrate an understanding of cyber defense and attack methods.
- Demonstrate an understanding of how traditional intelligence methods and procedures are applied to the cyber security domain.
- Comprehend and appreciate the legal and ethical environment impacting individuals as well as business organizations and have an understanding of the ethical implications of IT legal decisions.
- Improve cyber security skills and expand citizen sensitization and awareness.
- Reinforce prevention, detection, reaction, analysis, recovery and response skills to cope with cyber intrusion, cyber delinquency and cyber terrorism.



• Provide an avenue for the learner to obtain assistance for and to resolve issues related to cyber security, cyber safety and data privacy at least of a basic level

#### 7. Title of the course:

Certificate in Cyber Security

#### 8. Abbreviation of the Course:

CCS

#### 9. Academic year in which course is to be initiated

Academic year	Open to	Examination
2019-20	All Students	End of academic year

#### 10. Eligibility criteria for admission to the course:

12th OR Equivalent.

#### 11. Structure of the course (course duration):

#### 3 Months (75hours)

Modules	Modules Mandatory / Optional	
IT-ITES/BPM Industry – An Introduction	Optional	2
IT Services – An Introduction	Optional	2
Introduction to Cyber Security	Mandatory	2
Latest Technological Trends	Mandatory	2
Basics of Networking	Mandatory	5
Virtualization and installation of OS on virtual Box.	Mandatory	5
Passwords	Mandatory	5
Web browser security	Mandatory	5
Firewall And UTM	Mandatory	. 1
Physical Security Closed circuit television cameras (CCTV)	Mandatory	1
Mobile Security	Mandatory	2
Email Security	Mandatory	4



Malware	Mandatory	4
Cryptography	Mandatory	5
Wireless Security	Mandatory	2
Ethical Hacking	Mandatory	5
Google Hacking	Mandatory	1
Virtualization and Cloud Computing	Mandatory	2
Cloud Computing	Mandatory	2
Cyber Crime and Cyber Laws	Mandatory	2
Cyber laws (Information Technology Act 2000 & 2008)	Mandatory	2
ISO 27001	Mandatory	2
IP based communication: (VOIP)	Mandatory	2
Protection of information Assets, Planning and implementation of BC/DR	Mandatory	2
Make reports based on test results and make enhancements to existing security solutions	Mandatory	2
Manage your work to meet requirements	Mandatory	2
Work effectively with colleagues	Mandatory	2
Maintain a healthy, safe and secure working environment	Mandatory	2
Total		75

**12.** <u>Fee Structure:</u> The tuition fees and laboratory fees and other fees must be paid at the time of admission to the course. Students can opt for any one of the three learning modes. The course fees are as follows.

1. Blended Learning: Rs. 3,500=00 +GST

OR

2. Classroom Learning: Rs.5500=00 + GST

OR

3. **Self-paced Learning (Distance Mode)**: Rs. 2,499=00 + GST (Includes Kit) *Kit contains* 

Registration.

Examination Voucher.

DVD 1 consists of text book, Lab manual and concise guide.

Audio Video Lectures.

 $\ensuremath{\mathsf{DVD}}\xspace 2$  consists of Tools and Experimental cases for solving.



#### 13. Teaching scheme of the course (mode of teaching and learning):

Online, Blended and Classroom mode

#### 14. Examination system:

On successful completion of examination, students will be awarded Certificate in Cyber Security by the University and Skills Factory Learning Private Limited jointly. The examination pattern for this Course is as follows:

Code	Title	e Type Distribution of marks				Credits
			Internal	Univ.	Total	
CCS	Certificate in Cyber Security	Theory and Practical	50	100	150	5

<u>Mandatory Internal and External Evaluation</u>: The course evaluation has two components: Internal assessment for 50 marks containing assignment/oral/viva/internal test, etc and the External examination will online mode for 100 marks.

#### 15. Procedure for conducting External and Internal assessment:

**Blended Learning:** Offline assignment submission and online examination as per University rules and schedule.

**Self-paced Learning:** Offline assignment submission and online examination as per University rules and schedule.

**Classroom Learning:** Offline assignment submission and online examination as per University rules and schedule

#### 16. Standard of passing:

- Passing or failure in this examination will not affect the regular academic examinations.
- Students will be awarded grades as mentioned in item 12.
- Failure in any of the heads of the examination will not entail detention. Students will be allowed to carry forward and reappear in case of failure.
- The examination will be conducted for all modules at the end of the course.
- Criteria for assessment will be created by Skills Factory Learning Pvt Ltd (SFLPL). Each performance criterion@ (PC) will be assigned Theory and Skill based Practical marks proportional to its importance in the module.
- The assessment will be conducted online through Skills Factory Learning Pvt Ltd (SFLPL)
- Format of questions will include a variety of styles suitable to the Performance Criteria (PC) being tested such as multiple choice questions, fill in the blanks, situational judgment, simulation.
- To pass this course, the student should gain minimum 70%.



<sup>®</sup>Performance Criteria are statements that together specify the standard of performance required when carrying out an exam task.

#### 17. Rules for re-appearing in the examination

- A re-examination will be held after one month from the date of declaration of result.
- Re-examination fees will be charged at Rs. 1000+ GST

#### 18. Award of grades and credit allocation:

Marks	Grade
90 and above	A+·
80 to 89	A
70 and 79	В
51 and 69	С
50 and less	D

## External (Online) evaluation comprises of the aforesaid modules on the basis of following components:

Module	Examination Pattern	Type of questions (pl change font)	Marks	
Module 3	Online Examination	Objective questions, MCQs	5	10
			5	
Module 4 & 5	Online Examination	Objective questions, MCQs	10	20
		*	10	
Module 6, 7 & 8	Online Examination	Objective questions, MCQs	15	30
			15	
Module 9, 10, 11, 12 & 13	Online Examination	Objective questions, MCQs	10	20
			10	



Module 14, 15, 16, 17 & 18	Online Examination	Objective questions	10	20
		Objective questions	10	
Total				

#### 19. Basis for allocation of marks:

Course-related skill-based practical work will be entirely based on the skills to be developed in the students. It may include the topics as has been prescribed in the syllabi of every module.

#### Internal Assessment: 50 marks. (Minimum 35 marks for passing)

Practical components may be based on laboratory work, on job industrial training, project, and group discussion, presentation etc. unless otherwise clearly specified in the syllabi of the modules.

#### University Examination (External Evaluation): 100 marks (Minimum 70 marks for passing)

For passing the student must score a minimum of 70 % each in both internal and external exam.

#### The advanced diploma in Network Penetration Testing course is divided into 5 credits:

Module No.	Name of Module	No. of Credit	No. of Hours	No. of Marks
	IT-ITES/BPM Industry – An Introduction			
Module 1, 2 & 3	IT Services – An Introduction	One Credit	15 Hours	20
	Introduction to cyber security			
	Passwords, Firewall	e e		
Module 4 & 5	Physical Security. Mobile Security	One Credit	15 Hours	20
	Email Security			
Module 6, 7 & 8	Cryptography	One Credit	20 Hours	20
	Wireless Security			
Module 9, 10, 11, 12	Ethical Hacking	One Credit	15 Hours	20



& 13	Virtualization and Cloud computing			
	Cyber Crimes & Cyber Laws			
6	ISO 27001			
н	IPbased Communication (VOIP)			
	Protection of information Assets, Planning and implementation of BC/DR			
Module 14, 15, 16, 17 & 18	Make reports based on test results and make enhancements to existing security solutions	One Credit	10 Hours	20
	Manage your work to meet requirements			
	Work effectively with colleagues			
	Maintain a healthy, safe and secure working environment			



# **Syllabus**

# For

Certificate in Cyber Security



### 20. Model Syllabus for Certificate in Cyber Security:

Sl. No.	Module Name	Topics	Objective	Theory	Practical
1	IT-ITES/BPM Industry – An Introduction		Explain relevance of the IT- ITeS industry State the various sub-sectors in the IT-ITeS sector Explain the relevance of IT services sector A General Overview of the ITBPM Industry The organizations within IT-BPM Industry The sub-sectors within the IT BPM Industry	2 Hrs	NA
2	IT Services – An Introduction		State the various occupations and tracks in the IT-ITeS sector General Overview of IT Services Sub-Sector Profile of the IT Services Sub-Sector Key Trends in the IT Services Sub-Sector Roles in the IT Services Sub-Sector	2 Hrs	NA
3	Introduction to Cyber Security	Defining cyber security  Need for cyber security.(case studies)  Statistics  Layered approach to cyber security  Defining cyber security	The objective of this chapter is to understand the concept of cyber security along with its need in day to day life.  Layered-security approach is about maintaining appropriate security measures and procedures at five different levels within your IT environment.	2 Hrs	NA
	Latest Technological Trends	Introduction to IoT	By including IoT and BYOD student will get an insight into the latest technological	2 Hrs	NA



		How the Internet of Things (IoT) Is Changing the Cyber security Landscape?	advancement in cyber security as well as in technology. Also the student will understand the role of cyber security in pointing out threats.		
		Threats and Countermeasures of IoT and BYOD	threats.		
		Cyber security concerns and solution in Smart City & Home Automation	d.		
	Basics of Networking	GET MAC,NCPA.CPL, cmd line	To get familiarize with an OS and its basic settings, file	2 Hrs	3 Hrs
		Obtaining IP address from DHCP Server	management in OS. To learn difference between Linux and Windows OS		
		IP address: types and classes			
		IPV4 and IPV6 address			
		Sharing Files and Folders			
	Virtualization and installation of OS on virtual Box.	Introduction to virtualization.	To get introduced to virtual application system and the sequence of booting file.	2 Hrs	3 Hrs
		Installation of virtual box	To learn basic concepts of networking,		
		Installation of OS.			
4	Passwords	Understanding password	This chapter will give some idea of passwords and its importance	2 Hrs	3 Hrs
	2	Types of passwords.	in security policy		



	BIOS password			
	System password			
	Administrator password.			
	User password.	1		
	Passwords storage – windows and Linux			8
	Types of password attacks			
Web browser security	Understanding web browsers.	This chapter will give complete understanding of web browsers.	2 Hrs	3 Hrs
	Security features of web browsers.	This will explain security settings and features of different web browsers which will be very		
	Internet Explorer	useful for users to secure his web browsing activities.		
	Google Chrome		-	
	Firefox Mozilla			
	Opera			
Firewall And UTM	Understanding the Firewall	This chapter covers the firewall as a security measure and its	1 Hrs	NA
	Understanding Unified Threats	types.Different firewall techniques which are useful for data protection. One can select		
	Use of Firewall and UTM	the technique as per own requirement. UTM is single hardware platform blended with		
	Advantages and Disadvantages of UTM	layers of threat protection.		



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5	Physical Security	Understanding physical security	The objective of this chapter is to understand physical security and	1 Hrs	NA
		Need for physical security	its need. For application of physical security we are going to study		
		Physical security equipment's	some security equipment's like CCTV cameras and biometrics system.		
			This will help to implement physical		
	Closed circuit television cameras (CCTV)	Analogue cameras	security in any organization.		
		Digital cameras			
		Biometrics			
		Fingerprint			
	7	Iris		* *	
		Retina			
		Face			
		Security tokens			=
		Smart card	· ·		
				~	
7	Mobile Security	Different Mobile platforms.	This chapter covers different mobile platforms. Different	1 Hrs	1 Hrs
		Mobile security features.	applications used for mobile security.  How to create mobile hotspots.		
		Applications of mobile security	•		
		Different security options in mobile like encryption etc.	8	14	



		Case studies.			
6	Email Security	What is E-mail?	This chapter covers details of electronic mail.	2 Hrs	2 Hrs
		Understanding how Email works.	How E-mail works and its types. E-mail Tracing includes how to		
		Types of Email.	identify fake mail through Email header analysis. Email security includes how to		
		Email Security	secure emails by setting spam filters, by using encryption etc.		
		Set up spam filters			
		Preventing Phishing			
		Use encryption.			
		Keep your computer updated		16	
	Malware	Understanding Malwares	In this topic students will be able	2 Hrs	2 Hrs
		Different types of Malwares like viruses, Worms, Trojans, Adwares, Spywares,	to understand different types of malwares. This chapter includes very important area that how to secure yourself from Malwares?		
		Ransomware Rootkits, and Keyloggers etc.			
		Securing system from malware		Annual Property Trap	
			* ,		
7	Cryptography	Understanding cryptography	Students will learn to identify different types of malware &	2 Hrs	3 Hrs
		Goals of cryptography	understand how to secure the system against each malware		
		Cryptographic methods			



	a a	Rotation			
		Substitution		lu.	
		Mono-alphabetic substitution			
		Poly-alphabetic substitution		7.00	
		Transposition			
		Types of cryptography			
		Symmetric key cryptography			
		Asymmetric key cryptography			
		Use of Hash function in cryptography		(4)	
		Digital Signature in cryptography			
8	Wireless Security	Concept of Wireless Networks	Students will learn security parameters for 802.11 protocol	1 Hrs	1 Hrs
		Security Features of Wi-Fi			
		Wireless Encryption Protocols			
		1. WEP	·		
		2. WPA			
		3. WPA2			
		Wireless Attacks and Countermeasures		·	



9	Ethical Hacking	Concept of Ethical Hacking	The objective of this topic is to differentiate between ethical	2 Hrs	3 Hrs
	Ethical hacking process  Reconnaissance	Ethical hacking process	hacking and illegal hacking. Using ethical hacking techniques to understand vulnerabilities in		
		♠ Reconnaissance	platforms like web or system.		
	3	1. Active reconnaissance			
		2. Passive reconnaissance			
	2	Scanning	, 8 Bet 5		
		1. Port scanning			
		2. Network scanning	<i>y</i> 4		
		3. Vulnerability scanning			
		Gaining Access			
		Maintaining Access	on.		
		Covering Tracks			
		Google hacking techniques.	Google hacking involves using To learn how to use Google		
		Anonymity with Caches	advanced special operators.		
	Using Google as a prox Server	Using Google as a proxy Server			
e Ande fil out the state of the		Directory listings			
10	Virtualization and Cloud Computing	Basic Concept of Virtualization	Virtualization is latest technology. With knowledge of	1 Hrs	1 Hrs



		T	Transaction to the second seco	T	
		Types of Virtualization	Virtualization, one physical server can be made to act as many virtual servers. It offers a		
		Benefits	range of benefits, which is reducing the number of physical		
		Data Centre Virtualization	servers an organization needs.		
	20	Desktop Virtualization			
		Virtualizing Enterprise Application	er g		
		Network Virtualization			
		Server Virtualization			
# #		Load Balancing with Virtualization			
	Cl. 1C	D. C. W C. L L			
	Cloud Computing	Definition of cloud  Cloud Architecture	To understand how cloud works and how it can used to deliver various services.		
		Advantages of cloud	*		
		Risks involved in cloud computing.			
	-	Cloud Storage			
		Cloud Services			
		Software As Service (SAS)			
		Platform As Service (PAS)	w <sup>*</sup>		
85		Infrastructure As A Service	×		
		Public Cloud Environment			



11	Cyber Crime and Cyber Laws	Defining cyber-crime	This chapter will educate the Give a comprehensive	2 Hrs	NA
		Types of cyber-crimes	understanding of different categories of cybercrime, how they can be identified and		
		Password related crimes	Precautions required therein. Safety measures to be adopted for online banking.		
		Email related crimes			
		Desktop related crimes			
		Social networking sites related crimes			
		Website related crimes			
		Network related crimes.			
		Social engineering related crimes			
		Categories of Cyber Crime			
		Individual			
		Property			
		Government			
	-	Online Banking			
		Online banking frauds			
		Safety tips for online banking			



	Cyber laws (Information Technology Act 2000 & 2008)	Understanding cyber law	This chapter will enable students to match different sections of the IT act to various kinds of cybercrimes and the penalties of such	2 Hrs	NA
		Evolution of cyber law in India.	crimes.		
		Jurisdiction of IT Act			
		Penalties under IT Act.			
	-	Difference between civil law and criminal law.			
		Offences under IT Actsome sections.			
5 12		Section 43, Section 65, Section 66, Section 67,			
		Section 72, Section 69, Section 79.		-	
15.		Intellectual Property Rights (IPR).			
12	ISO 27001	Introduction to ISO 27001	The student learns how to establish and implement a	2 Hrs	NA
		General requirements for ISO standardization.	specified predetermined security management system.		
		Methodological requirements			
		Security control requirements.			
		Different corporate policies.			
		Implementation and establishment of ISMS		•	
13	IP based communication: (VOIP)	Introduction	This topic will enable the student to understand the application and function of VOIP for fast,	1 Hrs	1 Hrs



		Working of VOIP	reliable and secure Internet communication.		
		Requirements and Availability			
		Service Limitation			
		Threat or Risk			
		Countermeasures			
		Media gateway control			
		Protocol			
		SIP (Session Initiation Protocol)			
14	information Assets, Planning and implementation of BC/DR	Defining Disaster.	This chapter will enable students to understand what constitutes a disaster and what steps are needed to recover from the disaster. It also educates student	2 Hrs	NA
		Types of Disaster.	on the steps required to ensure business continuity despite disasters and how to prepare for		
		Consequences of Disaster	contingencies.		
		Disaster recovery.			
		Elements of BC			
		Planning of BC			5
		Benefits of BCP and DRP			
		BCP Process Steps	2		
		Development of Business Continuity Plan			



15	Make reports based on test results and make enhancements to existing security solutions	52 F	Understanding scope of work and working within limits of authority Work and work environment Maintaining Confidentiality	2 Hrs	NA
16	Manage your work to meet requirements		Understanding scope of work and working within limits of authority Work and work environment Maintaining Confidentiality	2 Hrs	NA
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17	Work effectively with colleagues		Effective Communication Working Effectively	2 Hrs	NA
18	Maintain a healthy, safe and secure working environment		Need for Health Safety at Work Analyst's Role Emergency Situations Skills for maintaining Health and Safety at Work	2 Hrs	NA

#### 21. Course Outcome:

- Increased protection of networks and data from unauthorized access. Reduction in number of attack incidents
- Effective implementation of methods and procedures in gathering intelligence leading to applying the right security controls.
- Comprehensive coverage of legal aspects through awareness programs in creating Cyber Security conscious users, well-informed on the legal consequences of not implementing cyber security measures.
- Comprehensive coverage of legal aspects through awareness programs in creating Cyber Security conscious users, well-informed on the legal consequences of not implementing cyber security measures.
- Participants motivated to implement security measures. Implementation of cyber security risk management policies in order to adequately protect an organization's critical information and assets.
- Formulation and updating of short and long-term organizational cyber security strategies and policies.
- Development of knowledge of cyber security tools, techniques and technologies. Development of an understanding of risk assessment and management methods related to cyber security and national critical infrastructure.
- Work effectively with colleagues.
- Maintain a healthy, safe and secure working environment.
- Provide data/information in standard formats.
- Lievelop knowledge, skills and competence.





#### Academic, Network and Implementation Partner

Deepesh Shah, Director

Skills Factory Learning Pvt. Ltd.

Venkateshwara House, 1st Floor, Office #3, Opp. Kalinga Hotel,

Near Sharada Center, Off Karve Road, Pune - 411004 (India)

Direct-+91- 9823032353 | Board 020- 25464656 | deepesh@skills-factory.com