Competency Standards for National Skill Certificate –4 in Penetration Testing (Cyber Security) in ICT Sector

Course Structure

SL	Unit Code and Title		UoC Level	Nominal Duration (Hours)
The Generic Competencies				**30**
1	GU002L2V1	Apply Occupational Safety and Health (OSH) practices in the workplace	1	15
2	GU005L3V1	Carry out workplace interaction in English	3	15
The Sector Specific Competencies				**70**
1	SUICT001L2V1	Operate a Personal Computer and Use Application programs	2	15
2	SUICT002L2V1	Operate office application software	2	25
3	SUICT003L3V1	Access Information using Internet and electronic mail	3	15
4	SUICT004L3V1	Comply to Ethical Standards in IT Workplace	3	15
The Occupation Specific Competencies				**260**
1	OUCyS001L4V!	Interpret Information Security Concepts	4	20
2	OUCyS013L4V!	Apply Programming Concepts	4	30
3	OUCyS002L4V!	Apply Operating Systems Administration Concepts	4	25
4	OUCyS003L4V!	Analyze malicious code	4	30
5	OUCyS004L4V!	Apply Web Application Security	4	50
6	OUCyS007L4V!	Apply the Techniques of Web services Hacking	4	25
7	OUCyS009L4V!	Apply Vulnerability Assessment	4	60
8	OUCyS008L4V!	Apply Information Security Systems Bypass	4	20
Total Nominal Learning Hours				**360**

Units & Elements at a glance

Generic Competencies

Code	Unit of Competency	Elements of Competency	Nominal Hours
GU002L2V1	Apply Occupational Safety and Health (OSH) Practices in the Workplace	1. Identify OSH policies and procedures 2. Follow OSH procedures 3. Report hazards and risks 4. Respond to emergencies 5. Maintain personal well-being	15
GU005L3V1	Carry out workplace interaction in English	1. Interpret workplace communication and etiquette 2. Read and Understand Workplace Documents 3. Participate in workplace meetings and discussions 4. Practice professional ethics at workplace	15

Sector Specific Competencies

Code	Unit of Competency	Elements of Competency	Nominal Hours
SUICT001L2V1	Operate a Personal Computer and Use Application programs	1. Start computer 2. Access basic system information 3. Work with files and folders 4. Use application programs 5. Print documents 6. Shut down computer	15
SUICT002L2V1	Operate office application software	1. Operate computer 2. Install application software 3. Use word processor to prepare/create documents 4. Use spreadsheet to create /prepare worksheets 5. Use presentation software to create / prepare presentation 6. Print a document	25
SUICT003L3V1	Access Information using Internet and electronic mail	1. Access resources from internet 2. Use and manage Electronic mail 3. Use audio/video tools for information transfer	15
SUICT004L3V1	Comply to Ethical Standards in IT Workplace	1. Uphold the requirements of clients 2. Deliver quality products and services 3. Maintain professionalism at workplace 4. Maintain workplace code of conduct.	15

The Occupation Specific Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OUCyS001L4V!	Interpret Information Security Concepts	1. Interpret Information Security System 2. Interpret Hacking Techniques 3. Identify types of Attacks 4. Categorize Security Threats & Control 5. Interpret Cyber Law	20
OUCyS013L4V!	Apply Programming Concepts	1. Interpret Programming Concepts 2. Use HTML and CSS 3. Use Power Shell 4. Apply Shell Scripts	30
OUCyS002L4V!	Apply Operating Systems Administration Concepts	1. Install Virtual machine 2. Install OS 3. Perform Hacking using hacking tool	25
OUCyS003L4V!	Analyze malicious code	1. Interpret Malicious Code 2. Identify malwares 3. Analyze Malicious Code using Tools 4. Countermeasures for Malware infections	30
OUCyS004L4V!	Apply Web Application Security	1. Interpret Web Application Security 2. Perform web application penetration testing 3. Perform web application countermeasures	50
OUCyS007L4V!	Apply the Techniques of Web services Hacking	1. Identify Web server Vulnerabilities 2. Analyze web application 3. Identify Web Application Threats & Attack 4. Apply Session Hijacking 5. Insufficient logging and monitoring	25
OUCyS009L4V!	Apply Vulnerability Assessment	1. Interpret vulnerability concept 2. Use Vulnerability Assessment tools 3. Prepare VA Report	60
OUCyS008L4V!	Apply Information Security Systems Bypass	1. Interpret Information Security Systems Bypass 2. Analyze Security Solutions to identify Vulnerabilities 3. Use Tools to Bypass the Security Solutions	20