

## Competency Standards for National Skill Certificate –5 in Penetration Testing in ICT Sector

### Course Structure

SL	Unit Code and Title		UoC Level	Nominal Duration (Hours)
<b>The Generic Competencies</b>				
<b>The Sector Specific Competencies</b>				
<b>The Occupation Specific Competencies</b>				
1	OUCyS014L5V1	Apply Python Programming	5	50
2	OUCyS005L5V1	Apply Mobile Application Security	5	40
3	OUCyS019L5V1	Apply Social Engineering	5	15
4	OUCyS006L5V1	Apply advance Web Application Security	5	50
5	OUCyS012L5V1	Apply Network security Assessment	5	40
6	OUCyS015L5V1	Apply Cyber Security Risk Assessment	5	35
7	OUCyS016L5V1	Interpret Cryptography	5	30
8	OUCyS021L5V1	Interpret IoT Concepts	5	20
9	OUCyS010L5V1	Perform Pen Testing	5	60
10	OUCyS0023L5V1	Interpret IT Security Auditing	5	30
<b>Total Nominal Learning Hours</b>				<b>370</b>

## The Occupation Specific Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OUCyS014L5V1	Apply Python Programming	<ol style="list-style-type: none"> <li>1. Interpret python programming structure</li> <li>2. Practice with sequential structure</li> <li>3. Practice with decisions making structure</li> <li>4. Practice with Loop structure</li> <li>5. Apply Functions and scripts</li> <li>6. Maintain Error Handling</li> </ol>	50
OUCyS005L5V1	Apply Mobile Application Security	<ol style="list-style-type: none"> <li>1. Interpret Mobile Application Security</li> <li>2. Perform Mobile application penetration testing</li> <li>3. Perform web application countermeasures</li> </ol>	40
OUCyS019L5V1	Apply Social Engineering	<ol style="list-style-type: none"> <li>1. Interpret the social engineering concepts</li> <li>2. Identify the social engineering threats</li> <li>3. Identify Social engineering tools</li> <li>4. Analyze the social engineering attacks</li> </ol>	15
OUCyS006L5V1	Apply advance Web Application Security	<ol style="list-style-type: none"> <li>1. Perform SQL injection</li> <li>2. Interpret Misconfiguration &amp; data expose</li> <li>3. Perform XSS &amp; CSRF</li> <li>4. Apply access control</li> </ol>	50
OUCyS012L5V1	Apply Network security Assessment	<ol style="list-style-type: none"> <li>1. Interpret Network security concepts.</li> <li>2. Implement Network Security</li> <li>3. Assess Network security</li> </ol>	40
OUCyS015L5V1	Apply Cyber Security Risk Assessment	<ol style="list-style-type: none"> <li>1. Interpret Cyber Security Risk Assessment</li> <li>2. Assess IT Risk</li> <li>3. Analyze Risk performance</li> <li>4. Prepare Risk Assessment Report</li> </ol>	35
OUCyS016L5V1	Interpret Cryptography	<ol style="list-style-type: none"> <li>1. Interpret Security Service goals</li> <li>2. Classify classic Encryption technique</li> <li>3. Categorize PKI component</li> <li>4. Interpret Digital Certification workflow</li> <li>5. Interpret cryptography algorithm</li> <li>6. Perform Steganography</li> </ol>	30

OUCyS021L5V1	Interpret IoT Concepts	<ol style="list-style-type: none"> <li>1. Interpret IOT concepts and IOT Standards</li> <li>2. Interpret IOT Applications</li> <li>3. Identify Challenges in IOT implementation</li> </ol>	20
OUCyS010L5V1	Perform Pen Testing	<ol style="list-style-type: none"> <li>1. Identify Penetration Testing Tools</li> <li>2. Perform Penetration Testing</li> <li>3. Prepare VAPT report</li> </ol>	60
OUCyS0023L5V1	Interpret IT Security Auditing	<ol style="list-style-type: none"> <li>1. Interpret IT Security Audit</li> <li>2. Interpret Auditing Information System</li> <li>3. Use of Information Systems Operations Maintenance and Service Management</li> <li>4. Interpreted Information Systems Acquisition, Development and Implementation</li> <li>5. Interpret the protection of information assets</li> <li>6. Apply the Governance and Management of IT audit</li> </ol>	30