



## QUALIFICATION FILE

### Cyber Security and Social Media Analyst

Short Term Training (STT)  Long Term Training (LT)  Apprenticeship  
 Upskilling  Dual/Flexi Qualification  For ToT  For ToA

General  Multi-skill (MS)  Cross Sectoral (CS)  Future Skills  OEM  
NCrF/NSQF Level: 5

Submitted By:

National Institute of Electronics and Information Technology (NIELIT)  
NIELIT Bhawan,  
Plot No. 3, PSP Pocket, Sector-8,  
Dwarka, New Delhi-110077,  
Phone: - 91-11-2530 8300  
e-mail: - [contact@nielit.gov.in](mailto:contact@nielit.gov.in)

## Table of Contents

Section 1: Basic Details .....	3
Section 2: Module Summary .....	6
Section 3: Training Related .....	8
Section 4: Assessment Related .....	9
Section 5: Evidence of the need for the Qualification .....	10
Section 6: Annexure & Supporting Documents Check List .....	10
Annexure-I: Evidence of Level .....	11
Annexure-II: Tools and Equipment (Lab Set-Up) .....	12
Annexure-III: Industry Validations Summary .....	13
Annexure-IV: Training & Employment Details .....	13
Annexure-V: Blended Learning .....	14
Annexure-VI: Detailed Assessment Criteria .....	14
Annexure-VII: Assessment Strategy .....	16
Annexure-IX: Acronym and Glossary .....	17

## Section 1: Basic Details

1. Qualification Name	<b>Cyber Security and Social Media Analyst</b>													
2. Sector/s	<b>IT-ITeS</b>													
3. Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: 2022/ITES/NIELIT/06010	Qualification Name of existing/previous version: Cyber Security and Social Media Analyst												
4. a. OEM Name b. Qualification Name (Wherever applicable)	-													
5. National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-05-IT-03510-2025-V2-NIELIT	6. NCrF/NSQF Level: 5												
7. Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exists also & provide details in annexure)	Certificate													
8. Brief Description of the Qualification	The <b>Cyber Security and Social Media Analyst</b> qualification is designed to equip learners with essential skills in operating systems, networking, cyber security, cyber forensics, and social media analytics. The course provides hands-on training in configuring secure networks, managing firewalls, detecting and mitigating cyber threats, and analyzing social media data using modern tools. It also introduces learners to AI/ML concepts, server administration, and the use of disruptive technologies like cloud computing. The qualification prepares candidates for diverse roles in cyber security and digital communication, making them industry-ready professionals capable of protecting digital assets and managing online reputations.													
9. Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	<p>a. <b>Entry Qualification &amp; Relevant Experience:</b></p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2nd year of B. Tech in CS/IT/ Electronics/ Allied fields of IT and Electronics</td> <td>No Experience required</td> </tr> <tr> <td>2</td> <td>2nd year of BCA/B.Sc in CS/IT/ Electronics/ Allied fields of IT and Electronics</td> <td>No Experience required</td> </tr> <tr> <td>3</td> <td>3 Year Diploma in CS/IT/ Electronics/ Allied fields of IT and Electronics after class 10th</td> <td>1 year relevant experience</td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	2nd year of B. Tech in CS/IT/ Electronics/ Allied fields of IT and Electronics	No Experience required	2	2nd year of BCA/B.Sc in CS/IT/ Electronics/ Allied fields of IT and Electronics	No Experience required	3	3 Year Diploma in CS/IT/ Electronics/ Allied fields of IT and Electronics after class 10th	1 year relevant experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)												
1	2nd year of B. Tech in CS/IT/ Electronics/ Allied fields of IT and Electronics	No Experience required												
2	2nd year of BCA/B.Sc in CS/IT/ Electronics/ Allied fields of IT and Electronics	No Experience required												
3	3 Year Diploma in CS/IT/ Electronics/ Allied fields of IT and Electronics after class 10th	1 year relevant experience												

			4	Previous relevant Qualification of NSQF Level 4.5	1.5-year relevant experience													
			5	Previous relevant qualification of NSQF Level 4	3-year relevant experience													
10.	<b>Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))</b>	18 Credits			<b>11. Common Cost Norm Category (I/II/III) (wherever applicable): Category-II</b>													
12.	<b>Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)</b>	The open source resources can be used.																
13.	<b>Training Duration by Modes of Training Delivery (Specify <i>Total Duration</i> as per selected training delivery modes and as per requirement of the qualification)</b>	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Training Delivery Modes</th> <th style="text-align: center;">Theory (Hours)</th> <th style="text-align: center;">Practical (Hours)</th> <th style="text-align: center;">OJT Mandatory (Hours)</th> <th style="text-align: center;">ES Mandatory (Hours)</th> <th style="text-align: center;">Total (Hours)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Classroom (offline)</td> <td style="text-align: center;">180</td> <td style="text-align: center;">240</td> <td style="text-align: center;">60</td> <td style="text-align: center;">60</td> <td style="text-align: center;">540</td> </tr> </tbody> </table>					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	ES Mandatory (Hours)	Total (Hours)	Classroom (offline)	180	240	60	60	540
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	ES Mandatory (Hours)	Total (Hours)													
Classroom (offline)	180	240	60	60	540													
14.	<b>Aligned to NCO/ISCO Code/s (if no code is available mention the same)</b>	NCO-2015/3114.0801, 3114.0802, 2523.0200, 2511.0100, 2523.0100, 3513.0200																
15.	<b>Progression path after attaining the qualification (Please show Professional and Academic progression)</b>	<b>In Academic</b> Will be able to work as trainer in various Academic Institutes.  <b>Professional</b> Cyber Security for Cloud Infrastructure																
16.	<b>Other Indian languages in which the Qualification &amp; Model Curriculum are being submitted</b>	Qualification file available in English & Hindi Language.																
17.	<b>Is similar Qualification(s) available on NQR-if yes, justification for this qualification</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>URLs of similar Qualifications:</b>																
18.	<b>Is the Job Role Amenable to Persons with Disability</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <ul style="list-style-type: none"> <li>a. <i>Locomotor Disability</i> <ul style="list-style-type: none"> <li>i. <i>Leprosy Cured Person</i></li> <li>ii. <i>Dwarfism</i></li> <li>iii. <i>Muscular Dystrophy</i></li> <li>iv. <i>Acid Attack Victims</i></li> </ul> </li>   <li>b. <i>Visual Impairment</i> <ul style="list-style-type: none"> <li>i. <i>Low Vision</i></li> </ul> </li> </ul>																

19. <b>How Participation of Women will be Encouraged</b>	Participation of Women Candidates will be ensured as per Existing government norms. Exclusive batches for women would be run for the proposed course. Sponsorship of women batches from IT for masses scheme /other schemes launched by government from time to time.	
20. <b>Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. <b>Is Qualification Suitable to be Offered in Schools/Colleges</b>	<b>Schools</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Colleges</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
22. <b>Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB &amp; Supporting ABs)</b>	<b>Name:</b> Dr. Kalyan Baital <b>Email:</b> kbaital@nielit.gov.in <b>Contact No.:</b> +91 33 2414 6054, M: 9073304897 <b>Website:</b> <a href="https://nielit.gov.in/">https://nielit.gov.in/</a>	
23. <b>Final Approval Date by NSQC: 18.02.2025</b>	<b>24. Validity Duration: 3 Years</b>	<b>25. Next Review Date: 18.02.2028</b>

## Section 2: Module Summary

## NOS/s of Qualifications

*(In exceptional cases these could be described as components)*

1. Operating System Basics.
2. Computer Network
3. Cyber Security
4. Cyber Forensic
5. Perception Management
6. Artificial Intelligence/Machine Learning & Disruptive Technologies

## Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

*Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project.*

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/N SQF Level	Credit s as per NCrF	Training Duration (Hours)					Assessment Marks				
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Total	Weightage (%) (if applicable)
1.	NOS1: Operating System Basics	NOS Code: NIE/ITS/N0907 Version: 1.0	Core	5	1	14	16	-	-	30	14	5	-	19	4
2.	NOS2: Computer Network	NOS Code: NIE/ITS/N0908 Version: 1.0	Core	5	4	50	70	-	-	120	50	23	-	73	14
3.	NOS 3: Cyber Security	NOS Code: NIE/ITS/N0909 Version: 1.0	Core	5	3	36	54	-	-	90	36	17	-	53	11
4.	NOS 4: Cyber Forensics	NOS Code: NIE/ITS/N0910 Version: 1.0	Core	5	1	20	10	-	-	30	25	5	-	30	6

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/N SQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks				
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Total	Weightage (%) (if applicable)
5.	<i>NOS5: Perception Management</i>	NOS Code: NIE/ITS/N0911 Version: 1.0	Core	5	4	50	70	-	-	120	62	31	-	93	19
6.	NOS6: Artificial Intelligence/Machine Learning and Disruptive Technologies	NOS Code: NIE/ITS/N0912 Version: 1.0	Core	5	1	10	20	-	-	30	13	9	-	22	4
7.	<i>NOS7: Employability Skills</i>	NOS Code: DGT/VSQ/N0102 Version: 1.0	Non-Core	5	2	-	-	-	-	60	-	-	-	50	10
8.	<i>NOS8: Project/OJT</i>	NOS Code: NIE/ITS/N0913 Version: 1.0	Non-Core	5	2	-	-	60	-	60	-	-	60	60	12
9.	Major Project/ Dissertation	c	Non-Core	5	-	-	-	-	-	-	-	-	100	100	20
<b>Duration (in Hours)/Total Marks</b>				<b>5</b>	<b>18</b>	<b>180</b>	<b>240</b>	<b>60</b>	<b>-</b>	<b>540</b>	<b>200</b>	<b>90</b>	<b>160</b>	<b>500</b>	<b>100</b>

Assessment Components	NOS Included	Duration (in mins)	Marks
Theory 1: Paper-1	NOS 1, NOS 2, NOS 3	90	100
Theory 2: Paper-2	NOS 4, NOS 5, NOS 6	90	100
Practical	NOS 1, NOS 2, NOS 3, NOS 4, NOS 5, NOS 6	180	90
Internal Assessment	NOS 7	-	50
OJT/Project	NOS 8	-	60
Major Project/ Dissertation	NOS 1 to NOS 6	-	100
<b>Total:</b>			<b>500</b>

\* Along with the report on OJT, an additional dissertation has to be submitted by the trainee.

#### Assessment - Minimum Qualifying Percentage

**\*\*\*Assessment strategy shall be as per NIELIT Norms prevailing at times.**

**Minimum Pass Percentage – The pass percentage is 50% in each assessment component (as mentioned in the above table) with the aggregate pass percentage be 50%.**

#### Section 3: Training Related

1.	<b>Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b>	B.Tech or Equivalent as per NCrF in Computer Science/IT related field with 3 years hands on experience in a reputed institute or organization as a trainer. Or MCA with minimum 3 years hands on experience in a reputed IT Firm as a trainer Or Attained NSQF Level-5 in Network Domain with minimum 3 years hands on experience in a reputed IT Firm as a trainer Or NIELIT A- Level Qualified with minimum 3 years hands on experience in the relevant field in a reputed Organization.
----	---	--

2.	<b>Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b>	B.Tech in Computer Science/IT related field with minimum 5 years hands on experience in a reputed IT Firm as a trainer Or MCA with minimum 5 years hands on experience in a reputed IT Firm as a trainer Or Attained NSQF Level-5 in Network Domain with minimum 5 years hands on experience in a reputed IT Firm as a trainer Or NIELIT A- Level Qualified with minimum 5 years hands on experience in the relevant field in a reputed Organization.
3.	<b>Tools and Equipment Required for Training</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Details available in Annexure-II
4.	<b>In Case of Revised Qualification, Details of Any Upskilling Required for Trainer</b>	NA

#### Section 4: Assessment Related

1.	<b>Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>	B.Tech or Equivalent as per NCrF + 5 years relevant experience
2.	<b>Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>	The assessor carries out theory online assessments through the remote proctoring methodology. Theory examination would be conducted online and the paper comprise of MCQ. Conduct of assessment is through trained proctors. Once the test begins, remote proctors have full access to the candidate's video feeds and computer screens. Proctors authenticate the candidate based on registration details, pre-test image captured and I- card in possession of the candidate. Proctors can chat with candidates or give warnings to candidates. Proctors can also take screenshots, terminate a specific user's test session, or re-authenticate candidates based on video feeds.
3.	<b>Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>	An External Examiner/ Observer (Subject matter expert) are deployed including NIELIT scientific officers who are subject expert for evaluation of Practical examination/ internal assessment / Project/ Presentation/ assignment and Major Project (if applicable). Qualification is generally B.Tech
4.	<b>Assessment Mode (Specify the assessment mode)</b>	Online for Theory Online/ Offline/ Blended for other assessment components depending on the region where the assessment is conducted
5.	<b>Tools and Equipment Required for Assessment</b>	<input checked="" type="checkbox"/> Same as for training <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Details to be provided in Annexure-II)

## Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	<b>Latest Skill Gap Study (not older than 2 years) (Yes/No):</b> Yes
2.	<b>Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):</b> Yes
3.	<b>Government /Industry initiatives/ requirement (Yes/No):</b> Yes
4.	<b>Number of Industry validation provided:</b> 3
5.	<b>Estimated nos. of persons to be trained and employed:</b> 500.
6.	<b>Evidence of Concurrence/Consultation with Line Ministry/State Departments:</b> NIELIT is recognized as AB and AA under Government Category. NIELIT is an HRD arm of MeitY, therefore, the Line Ministry Concurrence is not required.

## Section 6: Annexure &amp; Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	<b>Annexure:</b> NCrF/NSQF level justification based on NCrF level/NSQF descriptors (Mandatory)	Available at Annexure-I: Evidence of Level
2.	<b>Annexure:</b> List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Available at Annexure-II: Tools and Equipment
3.	<b>Annexure:</b> Industry Validation	Available at Annexure-III: Industry Validation
4.	<b>Annexure:</b> Training & Employment Details	Available at Annexure-IV: Training Details
5.	<b>Annexure:</b> Blended Learning (Mandatory, in case selected Mode of delivery is Blended Learning)	Available at Annexure-V: Blended Learning
6.	<b>Annexure:</b> Detailed Assessment Criteria (Mandatory)	Available at Annexure-VI: Detailed Assessment Criteria
7.	<b>Annexure:</b> Assessment Strategy (Mandatory)	Available at Annexure-VII: Detailed Assessment Strategy
8.	<b>Annexure:</b> Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	NA
9.	<b>Annexure:</b> Acronym and Glossary (Optional)	Available at Annexure-VIII: Acronym and Glossary
10.	<b>Supporting Document:</b> Model Curriculum (Mandatory – Public view)	Available at Annexure-A: Model Curriculum
11.	<b>Supporting Document:</b> Assessment SOP (Mandatory)	Available at Annexure-C: Examination SoP

12.	Any other document you wish to submit:	Available at Annexure-B: Syllabus
-----	--	-----------------------------------

**Annexure-I: Evidence of Level**

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
<b>Professional Theoretical Knowledge/Process</b>	The candidate after acquiring wide range of theoretical & practical skills on the course are capable of providing technical support and able to configure, maintain, troubleshoot and secure network, IT infrastructure, computer systems, LAN, WAN connectivity. Candidate can also provide VPN solution, configure and maintain web service, handle Network management part also	Job that requires well developed skill, with clear choice of procedures in familiar context.	5
<b>Professional and Technical Skills/ Expertise/ Professional Knowledge</b>	Develop competency to use different software tools to configure, maintain, troubleshoot and secure network, IT infrastructure, and computer systems.	Knowledge of facts, principles, processes and general concepts, in a field of work or study.	5
<b>Employment Readiness &amp; Entrepreneurship Skills &amp; Mind-set/Professional Skill</b>	Acquire skill on Computer Network, Cyber Security and Perception Management with different software tools	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	5
<b>Broad Learning Outcomes/Core Skill</b>	Candidate after acquiring skills at this level are able to provide technical solutions in Computer Network, Cyber Security and Perception Management activities	Desired mathematical skill; understanding of social, political; and some skill of collecting and organizing information, communication.	5
<b>Responsibility</b>	Assess, predict, and articulate the influence and importance of Computer Network, Cyber Security and Perception Management within the human environment from social responsibility, sustainability and interdisciplinary perspectives	Responsibility for own work and learning and some responsibility for others works and learning.	5

## Annexure-II: Tools and Equipment (Lab Set-Up)

## List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Classroom	1 (30 Sq.m)	30
2	Student Chair	30	30
3	Student Table	30	30
4	Computer	Intel/AMD multi-core processor (Latest recommended), 16GB RAM, NIC, 1TB SSD/HDD	20 to 40 Machines
5	Licensed Software	OS (except Open source Linux version, Any reputed Antivirus Software)	Per Machine
6	CISCO Router	ISR 2900 series with valid smart net contract	03 Nos.
7	WAN Interface Cards & Cables	HWIC-2T WAN Interface cards, DTE V.35 cable, DCE V.35 Cable, Console Cables	03 Nos. each
8	CISCO Switches	Catalyst 2960, 24 ports	03 Nos.
9	Latest Wireless Router	-	03 Nos.
10	Packet Tracer software OR GNS3 software		20 to 40 Nos.
11	Internet connection	50 to 100 Mbps	-
12	Content creation softwares	Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Corel Draw	Per Machine License
13	Any Open source Windows/Linux based media forensic tools like SIFT, Sleuth Kit Autopsy, Oxygen forensic suite, DEFT Zero OR any		Per Machine
14	Kali Linux, Parrot, Metasploitable framework, CentOS, VirtualBox, VMWare (Open Source/Licensed as applicable)		Per Machine

## Classroom Aids

The aids required to conduct sessions in the classroom are:

1. LCD Projector
2. Pin-up Board
3. White Board

### Annexure-III: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1	Programmers Point	Smt. Bela Rani Saha	Proprietor	Ujan Abhoynagar, Manipuripara, Agartala, Tripura(West), Pin-799005	0381-3561096	programmerspoint.help@g mail.com
2	Software World	-	Founder	Ujan Abhoynagar, Manipuripara, Agartala, Tripura(West)	0381-7963527	www.softwareworld.co.in
3	Buannel Studio Pvt Ltd	Lalrinzuala	Chief Executive Officer	Zuangtui, Aizawl, Mizoram – 796017	8732856261	pslalrinzual@gmail.com

### Annexure-IV: Training & Employment Details

#### Training and Employment Projections:

Year	Estimated Training # of Total Candidates	Estimated training # of Women	Estimated training # of People with Disability
2025-26	100	50	10
2026-27	200	70	15
2027-28	200	70	15

Data to be provided year-wise for next 3 years.

### Annexure-V: Blended Learning

#### Blended Learning Estimated Ratio & Recommended Tools: NA

### Annexure-VI: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

<b>NOS/Module Name</b>	<b>Assessment Criteria for Performance Criteria/Learning Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Assignment/ Internal Marks</b>
NOS1: Operating System Basics NOS Code: NIE/ITS/N0907	<ul style="list-style-type: none"> <li>• Demonstrate installation of Windows and Linux OS</li> <li>• Explain the booting process and interaction with hardware</li> <li>• Use basic file management and system commands in Linux</li> <li>• Configure and manage basic OS services for users</li> </ul>	14	5	-	-
NOS2: Computer Network NOS Code: NIE/ITS/N0908	<ul style="list-style-type: none"> <li>• Explain network types, topologies, and models (OSI, TCP/IP)</li> <li>• Assign IPv4 and IPv6 addresses using FLSM/VLSM</li> <li>• Configure static, dynamic (RIP, OSPF, EIGRP), and advanced routing</li> <li>• Configure switches, VLANs, STP, DTP, trunk/access ports</li> <li>• Configure standard and extended ACLs to control traffic</li> <li>• Configure static, dynamic, and PAT with verification</li> <li>• Set up and troubleshoot PPP, HDLC, Frame Relay</li> <li>• Implement port-security, configure SNMP and logging</li> <li>• Implement VPN tunnels and configure NTP synchronization</li> </ul>	50	23	-	-
NOS 3: Cyber Security NOS Code: NIE/ITS/N0909	<ul style="list-style-type: none"> <li>• Explain concepts and techniques to ensure data security</li> <li>• Set up a Linux-based proxy server and firewall rules</li> <li>• Implement ACLs for service control</li> <li>• Explain encryption algorithms and demonstrate usage</li> <li>• Describe common cyber-attacks like DoS/DDoS and mitigation techniques</li> </ul>	36	17	-	-

	<ul style="list-style-type: none"> <li>• Demonstrate system hardening and protective measures</li> </ul>				
NOS 4: Cyber Forensics NOS Code: NIE/ITS/N0910	<ul style="list-style-type: none"> <li>• Explain basic provisions of Indian Cyber Law</li> <li>• Describe live, disk, memory, internet, and network forensics</li> <li>• Identify and list potential sources of digital evidence</li> <li>• Demonstrate acquisition and analysis using basic tools</li> </ul>	25	5	-	-
NOS5: Perception Management NOS Code: NIE/ITS/N0911	<ul style="list-style-type: none"> <li>• Explain perceptual process, errors, and warfare</li> <li>• Create, customize snippets; demonstrate optimization</li> <li>• Demonstrate use of tools to track and analyze social data</li> <li>• Use software for opinion mining, categorize sentiments</li> <li>• Represent social networks graphically and interpret results</li> <li>• Perform basic editing on images, audio, and video</li> </ul>	62	31	-	-
NOS6: Artificial Intelligence/Machine Learning and Disruptive Technologies NOS Code: NIE/ITS/N0912	<ul style="list-style-type: none"> <li>• Implement a basic AI/ML script using Python</li> <li>• Perform basic Linux and Windows server administration</li> <li>• Explain Big Data and Cloud Computing concepts and impact</li> </ul>	13	9	-	-
NOS7: Employability Skills NOS Code: DGT/VSQ/N0102	Employability Skills	-	-	-	50
NOS8: OJT/Project NOS Code: NIE/ITS/N0913	Participants will be able show their skills and creativity by creating a Working Model or Project.	-	-	60	-
*Major Project/ Dissertation	-	-	-	100	-
<b>Grand Total: 500</b>		<b>200</b>	<b>90</b>	<b>160</b>	<b>50</b>

### Annexure-VII: Assessment Strategy

Assessment of the qualification evaluates candidates to ascertain that they can integrate knowledge, skills and values for carrying out relevant tasks as per the defined learning outcomes and assessment criteria.

The underlying principle of assessment is fairness and transparency. The evidence of the outcomes and assessment criteria. Competence acquired by the candidate can be obtained by conducting Theory (Online), Practical assessment, Internal assessment, Project/Presentation/ Assignment, Major Project. The emphasis is on the practical demonstration of skills & knowledge gained by the candidate through the training. Each OUTCOME is assessed & marked separately. A candidate is required to pass all OUTCOMES individually based on the passing criteria.

#### **About Examination Pattern:**

1. The question papers for the theory and practical exams are set by the Examination wing (assessor) of NIELIT HQS.
2. The assessor assigns roll number.
3. The assessor carries out theory online assessments through remote proctoring methodology. Theory examination would be conducted online and the paper comprise of MCQ. Conduct of assessment are through trained proctors. Once the test begins, remote proctors have full access to candidate's video feeds and computer screens. Proctors authenticate the candidate based on registration details, pre-test image captured and I- card in possession of the candidate. Proctors can chat with candidates or give warnings to candidates. Proctors can also take screenshots, terminate a specific user's test session, or re-authenticate candidates based on video feeds.
4. An External Examiner/ Observer may be deployed including NIELIT officials for evaluation of Practical examination/ internal assessment / Project/ Presentation/. Major Project (if applicable) would be evaluated preferably by external/ subject expert including NIELIT officials.
5. Pass percentage would be 50% marks in each component.
6. Candidates may apply for re-examination within the validity of registration (only in the assessment component in which the candidate failed).
7. For re-examination prescribed examination fee is required to be paid by the candidate only for the assessment component in which the candidate wants to reappear.
8. There would be no exemption for any paper/module for candidates having similar qualifications or skills.
9. The examination will be conducted in English language only.

Quality assurance activities: A pool of questions is created by a subject matter expert and moderated by other SME. Test rules are set beforehand. Random set of questions which are according to syllabus appears which may differ from candidate to candidate. Confidentiality and impartiality are maintained during all the examination and evaluation processes.

### Annexure-VIII: Acronym and Glossary

#### Acronym

<b>Acronym</b>	<b>Description</b>
<b>AA</b>	Assessment Agency
<b>AB</b>	Awarding Body
<b>ISCO</b>	International Standard Classification of Occupations
<b>NCO</b>	National Classification of Occupations
<b>NCrF</b>	National Credit Framework
<b>NOS</b>	National Occupational Standard(s)
<b>NQR</b>	National Qualification Register
<b>NSQF</b>	National Skills Qualifications Framework
<b>OJT</b>	On the Job Training

#### Glossary

<b>Term</b>	<b>Description</b>
<b>National Occupational Standards (NOS)</b>	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
<b>Qualification</b>	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
<b>Qualification File</b>	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
<b>Sector</b>	A grouping of professional activities on the basis of their main economic function, product, service or technology.
<b>Long Term Training</b>	Long-term skilling means any vocational training program undertaken for a year and above. <a href="https://ncvet.gov.in/sites/default/files/NCVET.pdf">https://ncvet.gov.in/sites/default/files/NCVET.pdf</a>