



## QUALIFICATION FILE

### Data Analysis Assistant

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: 3

Submitted By:

National Institute of Electronics and Information Technology

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## Section 1: Basic Details

1. Qualification Name	Data Analysis Assistant													
2. Sector/s	IT-ITeS													
3. Type of Qualification: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: NA	Qualification Name of existing/previous version: NA												
4. a. OEM Name b. Qualification Name (Wherever applicable)	-													
5. National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-03-IT-00347-2023-V1-NIELIT	6. NCrF/NSQF Level: 3												
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 Data Analyst Assistant Qualification is meant to inculcate the basic skills of data handling, processing and visualization. The trained learner will be able to view data in summary and aggregated form, he/she would able to formulate equation for prediction.													
9. Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	<p><b>a. 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>Grade 10<sup>th</sup> Pass</td> <td>NA</td> </tr> <tr> <td>2.</td> <td>Grade 8<sup>th</sup> Pass with two year of (NTC/ NAC) after 8th Grade 8 pass and pursuing continuous schooling in regular school with vocational subject</td> <td>NA</td> </tr> <tr> <td>3.</td> <td>8th grade pass</td> <td>2 year relevant experience</td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	Grade 10 <sup>th</sup> Pass	NA	2.	Grade 8 <sup>th</sup> Pass with two year of (NTC/ NAC) after 8th Grade 8 pass and pursuing continuous schooling in regular school with vocational subject	NA	3.	8th grade pass	2 year relevant experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)												
1.	Grade 10 <sup>th</sup> Pass	NA												
2.	Grade 8 <sup>th</sup> Pass with two year of (NTC/ NAC) after 8th Grade 8 pass and pursuing continuous schooling in regular school with vocational subject	NA												
3.	8th grade pass	2 year relevant experience												
10. Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	10 Credits	11. Common Cost Norm Category (I/II/III) (wherever applicable): <b>Category-II</b>												

12.	<b>Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)</b>	NA												
13.	<b>Training Duration by Modes of Training Delivery</b> <i>(Specify <b>Total Duration</b> as per selected training delivery modes and as per requirement of the qualification)</i>	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandator y (Hours)</th> <th>ES (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>90</td> <td>150</td> <td>30</td> <td>30</td> <td>300</td> </tr> </tbody> </table> <p><i>The mode of delivery shall be based on the regional demand and can be offered in any of the above modes mentioned.</i></p> <p>(Refer Blended Learning Annexure-V for details)</p>	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandator y (Hours)	ES (Hours)	Total (Hours)	Classroom (offline)	90	150	30	30	300
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandator y (Hours)	ES (Hours)	Total (Hours)									
Classroom (offline)	90	150	30	30	300									
14.	<b>Aligned to NCO/ISCO Code/s (if no code is available mention the same)</b>	NCO Code- 2015/2511.0105												
15.	<b>Progression path after attaining the qualification</b> <i>(Please show Professional and Academic progression)</i>	<p><b>Academic:</b> <b>Horizontal:</b> Level 3 Course in Cloud Computing: None</p> <p><b>Vertical:</b> Level 4: Data analyst Associate Level 4.5: Junior data analyst Level 5: Certified Data Analyst Level 6: Post Graduate Program in Data Engineering</p> <p><b>Professional:</b> Junior Data Analyst-&gt; Database Administrator -&gt;Data analyst-&gt; Data Engineer-&gt; Data Architect-&gt;Data Scientist-&gt;</p>												
16.	<b>Other Indian languages in which the Qualification &amp; Model Curriculum are being submitted</b>	Qualification File available in English and Hindi Languages.												
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 URLs of similar Qualifications:												
18.	<b>Is the Job Role Amenable to Persons with Disability</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "Yes", specify applicable type of Disability: a. Locomotor Disability												

		<ul style="list-style-type: none"> <li>i. Leprosy Cured Person</li> <li>ii. Dwarfism</li> <li>iii. Muscular Dystrophy</li> <li>iv. Acid Attack Victims</li> </ul> <p>b. Visual Impairment</p> <ul style="list-style-type: none"> <li>i. Low Vision</li> </ul>
19.	<b>How Participation of Women will be Encouraged</b>	Participation by women can be ensured as per Government norms. Time to time exclusive batches for women would be run for the proposed courses. Funding is available for women participation under other schemes launched by Government from time to time.
20.	<b>Are Greening/ Environment Sustainability Aspects Covered</b> ( <i>Specify the NOS/Module which covers it</i> )	<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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Colleges</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
22.	<b>Name and Contact Details of Submitting / Awarding Body SPOC</b> <i>(In case of CS or MS, provide details of both Lead AB &amp; Supporting ABs)</i>	<b>Name:</b> Meenu Dhir <b>Email:</b> meenudhir@nielit.gov.in <b>Contact No.:</b> 9779131848 <b>Website:</b> nielit.gov.in
23.	<b>Final Approval Date by NSQC:</b> 29.03.2023	<b>24. Validity Duration:</b> 3 years <b>25. Next Review Date:</b> 29.03.2026

## Section 2: Module Summary

### Mandatory NOS/s of Qualifications

1. Perform basic calculation using spreadsheet
2. Manage structured data
3. Analyst data using spreadsheet tool
4. Manage data in Open source tool
5. Visualize data graphically
6. Implementation of use cases of Data Analytics

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 /NSQF Level	Credits as per NCrF	Training Duration (Hours)			Assessment Mark			
						Th.	Pr.	Total	Th.	Pr.	Total	Weightage (%) (if applicable)
1.	NOS 1: Perform basic calculation using spreadsheet	NIE/ITS/N14041	Core	3	1	10	20	30	25	11	36	10.28
2.	NOS 2: Manage structured data	NIE/ITS/N14042	Core	3	1	10	20	30	25	11	36	10.28
3.	NOS 3: Analyze data using spreadsheet tool	NIE/ITS/N14043	Core	3	2	30	30	60	50	22	72	20.57
4.	NOS 4: Manage data in Open source tool	NIE/ITS/N14044	Core	3	1	10	20	30	25	11	36	10.28
5.	NOS 5: Visualize	NIE/ITS/N14045	Core	3	2	20	40	60	50	22	72	20.57

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF /NSQF Level	Credits as per NCrF	Training Duration (Hours)			Assessment Mark			
						Th.	Pr.	Total	Th.	Pr.	Total	Weightage (%) (if applicable)
	data graphically											
6.	NOS 6: Implementation of use cases of Data Analytics	NIE/ITS/N14046	Core	3	1	10	20	30	25	13	38	10.85
<b>Sub-total</b>						90	150	240	200	90	290	82.83
7.	Employability Skills	DGT/VSQ/N0101	Non-Core	3	1	30			30			8.57
8.	OJT	N/A	Non-Core	3	1	30			30			8.57
<b>Duration (in Hours) / Total Marks</b>						10	<b>300</b>			<b>350</b>		

Assessment Components	NOS Included	Duration (in mins)	Marks
Theory 1: Data Analytics Assistant Paper-1	NOS 1-NOS 3	90	100
Theory 2: Data Analytics Assistant Paper-2	NOS 4- NOS6	90	100
Practical: Data Analytics Assistant	NOS 1-NOS 6	180	90
Internal Assessment	Employability Skills	-	30
Project	OJT/ Project	-	30
<b>Total Marks</b>			<b>350</b>

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

### Assessment - Minimum Qualifying Percentage

**Minimum Pass Percentage – Aggregate at qualification level: 50 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)**

#### Section 3: Training Related

1.	<b>Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b>	BCA/A-level/Diploma in CS/IT/ allied area with 1 year of Experience in training.
2.	<b>Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b>	MCA/B level/B.Tech in CS/IT/EC/EE/ allied areas with an experience of 2 years in training
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>	MCA/B level/B.Tech in CS/IT/EC/EE/ allied areas with an experience of 2 years in training
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</b>	An External Examiner/ Observer (Subject matter expert) are deployed including NIELIT scientific officers who are subject expert for evaluation of Practical examination/ internal

	<b>and experience in relevant sector (in years) (as per NCVET guidelines)</b>	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

### 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 Available in Annexure-B : Evidence of Need
2.	<b>Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):</b> Yes Available in Annexure-B : Evidence of Need
3.	<b>Government /Industry initiatives/ requirement (Yes/No):</b> Yes Available in Annexure-B : Evidence of Need
4.	<b>Number of Industry validation provided:</b> 3
5.	<b>Estimated nos. of persons to be trained and employed:</b> 500 candidates will be trained in a year.
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 & 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 <i>(Mandatory)</i>	<b>Available at Annexure-I: Evidence of Level</b>
2.	<b>Annexure:</b> List of tools and equipment relevant for qualification <i>(Mandatory, except in case of the online course)</i>	<b>Available at Annexure-II: Tools and Equipment</b>
3.	<b>Annexure:</b> Detail Assessment Criteria	<b>Available at Annexure-VI: Detail Assessment Criteria</b>
4.	<b>Supporting Document:</b> Assessment Strategy <i>(Mandatory)</i>	<b>Available at Annexure-VII: Detailed Assessment Strategy</b>
5.	<b>Annexure:</b> Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	<b>Available at Annexure-V: Blended Learning</b>
6.	<b>Annexure:</b> Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<b>NA</b>
7.	<b>Supporting Document:</b> Career Progression <i>(Mandatory – Public view)</i>	<b>Available at Annexure-VIII: Career Progression</b>
8.	<b>Supporting Document:</b> Occupational Map <i>(Mandatory)</i>	<b>Available at Annexure-IX: Occupational Map</b>
9.	<b>Supporting Document:</b> Glossary and Acronym	<b>Available at Annexure-X: Glossary and Acronym</b>
10.	<b>Supporting Document:</b> Model Curriculum <i>(Mandatory – Public view)</i>	<b>Available at Annexure-A: Model Curriculum</b>
11.	<b>Supporting Document:</b> Assessment SOP <i>(Mandatory)</i>	<b>Available at Annexure-C: Examination SoP</b>
12.	<b>Any other document you wish to submit:</b>	<b>NA</b>

## 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
Professional Theoretical Knowledge/Process	<ol style="list-style-type: none"> <li>1. Gaining Knowledge how to Perform basic calculation using spreadsheet</li> <li>2. Understanding how to Manage structured data</li> <li>3. The candidate will be able to analyze data using spreadsheet tool</li> <li>4. The candidate will be able to Manage data in Open source tool</li> <li>5. The candidate will be able to Visualize data graphically</li> <li>6. The candidate will Implement the use cases of Data Analytics</li> </ol>	<ol style="list-style-type: none"> <li>1. Possesses specialized operational knowledge and understanding of the work.</li> <li>2. Have complete knowledge of the concept of time required for delivery; and Quality for a range of issues</li> </ol>	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	<ol style="list-style-type: none"> <li>1. The candidate will be able to understand the basic concepts of spreadsheet.</li> <li>2. They will be thorough to understand what structured data is and how to manage it.</li> <li>3. The visualization tool will give insight to the data graphically.</li> <li>4. The project will help to get the better understanding of the concepts laid above.</li> </ol>	<ol style="list-style-type: none"> <li>1. Possesses specialized professional and technical skills; displays clarity of professional knowledge and technical skills in a broad range of activities/ tasks.</li> <li>2. Have knowledge of collecting and interpreting the available information, drawing conclusions &amp; communicating the same</li> </ol>	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<ol style="list-style-type: none"> <li>1. Introduction to Employability Skills</li> <li>2. Career Development &amp; Goal Setting</li> <li>3. Becoming a Professional in the 21st Century</li> <li>4. Constitutional values - Citizenship</li> <li>5. Basic English Skills</li> <li>6. Communication Skills</li> <li>7. Essential Digital Skills</li> <li>8. Financial and Legal Literacy</li> <li>9. Customer Service</li> </ol>	<p>Can explain Entrepreneurial Mindset and describe the importance of it in the context of opportunity curation for future jobs.</p> <ol style="list-style-type: none"> <li>1. Can comfortably use most of the basic software with proficiency.</li> <li>2. Have the ability to relate to the 5 pillars of Social Emotional Skills and describe the similarities between SES and</li> </ol>	3

	10. Entrepreneurship 11. Diversity & Inclusion 12. Getting Ready for Apprenticeship & Jobs	Emotional Intelligence.	
<b>Broad Learning Outcomes/Core Skill</b>	1. Implement Basic of Spreadsheets Solutions. 2. Creating Virtualization using Tableau 3. Realization of Projects in Big Data Domains	1. Students are able to use, create, and configure virtualization solutions. 2. Have knowledge of the Cloud computing Project Cycle and apply Cloud Computing technology to improve solutions.	3
<b>Responsibility</b>		Takes complete responsibility for delivery and quality of own	3

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

**Batch Size: 30**

<b>S. No.</b>	<b>Tool / Equipment Name</b>	<b>Specification</b>	<b>Quantity for specified Batch size</b>
1	Classroom	1 (30 Sq.m)	30
2	Student Chair	30	30
3	Student Table	30	30
4	Desktop computers with accessories	32 GB RAM with Camera, Headphone and Windows,	30
5	Desk jet printer	1 Nos.	A4
6	Server	Xeron Processor dual core processor with 128 gb ram and 4 TB Hardisk	1

#### **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.	ThinkNext Technologies	Mr Munish Mittal	Director	ThinkNEXT Technologies Private Limited S.C.F 113, Sector 65, Mohali, Punjab 160062	9815994197	thinknextmunish@gmail.com
2.	Jan Samridhi Dumka	Gobind nath Maji	Secretary	Mahesh munda road, Nuthan dih near sido kanhu model school, Nuthan Dih nala, Jamtara, Jharkhand- 815355	8789620133	gobind107@gmail.com
3	United Computer	Subhasis Choudhury	Chief Executive	Chotonilpur (Pirtala), P.O. Sripally, Burdwan-713103	9641820965	<u>united-computer97@rediffmail.com</u>

### Annexure-IV: Training & Employment Details

#### Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2023	1000	100	200	100	10	2
2024	1000	100	200	100	10	2
2025	1000	100	200	100	10	2

Data to be provided year-wise for next 3 years

#### Annexure V: Blended Learning

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

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline: Online Ratio
1	Theory/ Lectures - Imparting theoretical and conceptual knowledge	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	60:40
2	Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	60:40
3	Showing Practical Demonstrations to the learners	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	60:40
4	Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	100:0
5	Tutorials/ Assignments/ Drill/ Practice	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	50:50

6	Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NIELIT Remote Proctored Software	Online: 100% Theory Offline: 100% Practical
7	On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	Simulated Platform	Either 100% online on virtual environment Or 100% offline in the Industry.

#### **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>
NOS 1: Perform basic calculation using spreadsheet	Features of Spreadsheet Creating and saving worksheet and workbook Layouts, text formats, alignment Basic functions and formulas, sorting Graphs	25	11
NOS 2: Manage structured data	Introduction to database, advantages of DBMS, Concept of keys: candidate key, primary key, alternate key, Foreign key, Fundamental integrity rules: entity integrity, referential integrity. Entity-relationship model .ER-diagram, SQL, Knowledge Discovery in Databases, Data Mining, Data warehouse. Migrating data from source to data warehouse, cleaning, aggregation operations. Knowledge Discovery in Databases, Data Mining, Data warehouse. Migrating data from source to data warehouse, cleaning, aggregation operations.	25	11
NOS 3: Analyze data using spreadsheet tool	Data, table & formatting Conditional formatting Advanced charting Pivot Table Data Validation	50	22

	Filtering What if analysis, Role of Math and Statistical techniques in Data Science, Probability and Statistics, Regression analysis, Descriptive statistics, Linear Regression		
NOS 4: Manage data in Open source tool	Introduction to Virtual Machine, creating and configuring Virtual Machine, Linux History, Benefits of Linux, Different Flavors of Linux, Introducing Ubuntu, Installing Ubuntu: Starting Up, Logging in, Exploring the Desktop, Ubuntu Basics, Browsing the File System, Understanding File System Concept, Managing Files, Real and Virtual Files, Mounting, File Searches, File Size, File Space Viewing Text Files, Using a Command Line Text Editor, Creating Files, Searching through Files, Comparing Text Files, Copying, Moving, Managing Files.	25	11
NOS 5 : Visualize data graphically	Introduction Tableau , Connecting to Excel, CSV Text Files, Connecting to Databases, Analyzing, Formatting, Sorting and charts	50	22
NOS 6: Implementation of use cases of Data Analytics	Demonstration of Project	25	13
Employability Skills			30
OJT			30
<b>Total</b>			<b>350</b>

#### **Annexure-VII: Detail Assessment Strategy**

1. 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.
2. 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.
10. 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: Career Progression****Academic:****Horizontal:**

Level 3 Course in Cloud Computing: None

**Vertical:**

Level 4: Data analyst Associate

Level 4.5: Junior data analyst

Level 5: Certified Data Analyst

Level 6: Post Graduate Program in Data Engineering

**Professional:**

Junior Data Analyst-> Database Administrator

->Data analyst-> Data Engineer->

Data Architect->Data Scientist->

**Annexure-IX: Occupational Map**

Data Analyst Assistant	Data Analyst Associate	Junior Data Analyst	Senior Data Analyst
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**Annexure-X: Acronym and Glossary****Acronym**

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	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

Term	Description
<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>