

QUALIFICATION FILE–Standalone NOS

Informatica Cloud Essentials

☐ Horizontal/Generic ☐ Vertical/Specialization

☒ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

☐ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☒ Future Skills ☒ OEM

NCrF/NSQF Level: 5

Submitted By:

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Section 1: Basic Details

1.	NOS-Qualification Name	Informatica Cloud Essentials													
2.	Sector/s	IT-ITeS													
3.	Type of Qualification <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised	NQR Code & version of the existing /previous qualification: NA	Qualification Name of the existing/previous version: NA												
4.	National Qualification Register (NQR) Code & Version	NG-05-IT-01424-2023-V1-NIELIT	5. NCrF/NSQF Level: 5												
6.	Brief Description of the Standalone NOS	<p>The "Informatica Cloud Essentials" upskilling course is designed to empower participants with fundamental knowledge and practical skills in utilizing Informatica Cloud, a leading cloud data integration and management platform. This course provides a comprehensive understanding of the key features and capabilities of Informatica Cloud, covering essential topics such as data integration, data quality, and data governance. Participants will engage in hands-on exercises, gaining proficiency in designing and executing data integration workflows, managing data transformations, and ensuring data quality within a cloud environment. By the end of the course, learners will be equipped with the essential skills needed to leverage Informatica Cloud for effective and efficient data integration and management in cloud-based scenarios, contributing to their proficiency in the broader field of data analytics and business intelligence.</p>													
7.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	<p>a. Entry Qualification & Relevant Experience:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Relevant Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pursuing^ Final Year B.Tech in any branch of Engineering*</td> <td>NA</td> </tr> <tr> <td></td> <td>Or</td> <td></td> </tr> <tr> <td></td> <td>Pursuing^ Final Year MCA</td> <td></td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)	1	Pursuing^ Final Year B.Tech in any branch of Engineering*	NA		Or			Pursuing^ Final Year MCA	
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)													
1	Pursuing^ Final Year B.Tech in any branch of Engineering*	NA													
	Or														
	Pursuing^ Final Year MCA														

		<p>Or</p> <p>Pursuing^ Final Year B.Sc. in any branch of Sciences*</p> <p>Or</p> <p>Pursuing^ Final Year B.Sc. in IT/CS/Electronics/allied subjects</p> <p>*Students should have relevant knowledge of the Networking and programming concepts.</p> <p>#Students with the above entry requirements are eligible to take the course subject to clearing the written test comprising of Analytical Reasoning, Mathematics and English</p> <p>^Passout students in the above entry requirements are also eligible for the course.</p>									
	b. Age: No bar										
8.	Credits Assigned to this NOS-Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	3	9. Common Cost Norm Category (I/II/III) (wherever applicable): Category-II								
10.	Any Licensing Requirements for Undertaking Training on This Qualification (wherever applicable)	Not Applicable									
11.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended									
		<table border="1"> <thead> <tr> <th>Training Delivery Mode</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>40</td> <td>50</td> <td>90</td> </tr> </tbody> </table>		Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)	Classroom (offline)	40	50	90
Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)								
Classroom (offline)	40	50	90								
		The mode of delivery shall be based on the regional demand and can be offered in any of the above modes mentioned.									

12. Assessment Criteria	<table border="1" data-bbox="963 225 2069 331"> <thead> <tr> <th>Theory (Marks)</th><th>Practical (Marks)</th><th>Project (Marks)</th><th>Viva (Marks)</th><th>Total (Marks)</th><th>Passing %age</th></tr> </thead> <tbody> <tr> <td>100</td><td>0</td><td>0</td><td>0</td><td>100</td><td>50</td></tr> </tbody> </table> <p>The centralised online assessment is conducted by the Examination Wing, NIELIT Headquarters.</p>	Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age	100	0	0	0	100	50
Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age								
100	0	0	0	100	50								
13. Is the NOS Amenable to Persons with Disability	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If “Yes”, specify applicable type of Disability: <ul style="list-style-type: none"> a. Locomotor Disability: Leprosy Cured Person, Dwarfism, Muscular Dystrophy and Acid Attack Victims b. Visual Impairment: Low Vision 												
14. Progression Path After Attaining the Qualification, wherever applicable	Cloud Solutions Architect Cloud Developer Cloud Security Engineer Cloud Administrator Technical Support Engineer (Cloud)												
15. How will the participation of women be encouraged?	Participation by women can be ensured through Government Schemes. Occasionally, exclusive batches for women would be run for the proposed courses. Funding is available for women's participation under other schemes launched by the Government from time to time.												
16. Other Indian languages in which the Qualification & Model Curriculum are being submitted	Only English												
17. Is similar NOS available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
18. Name and Contact Details Submitting / Awarding Body SPOC <i>(In the case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	A. Name: SHRI NILADRI DAS Position in the organization: Scientist E Address: NIELIT Agartala Tel number(s): 8794028299												

		E-mail address: niladridas@nielit.gov.in B. Name: SHRI BINOY DAS Position in the organization: Senior Technical Officer Address: NIELIT Agartala Tel number(s): 8794822459 E-mail address: erbinoy@nielit.gov.in
19.	Final Approval Date by NSQC: 30/11/2023	20. Validity Duration: 3 years
		21. Next Review Date: 30/11/2026

Section 2: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech or Equivalent as per NCrf with 15+ years of experience
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech or Equivalent as per NCrf with 15+ years of experience
3.	Tools and Equipment Required for the Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available at Annexure-II
4.	In Case of Revised NOS, details of Any Upskilling Required for Trainer	Not Applicable

Section 3: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	B.Tech or Equivalent as per NCrf with 15+ years of experience
2.	Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines), (wherever applicable)</i>	The assessor carries out theory online assessments through the remote proctoring methodology. Theory examination would be conducted online and the paper comprises 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.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	External Examiners/ Observers (Subject matter experts) are deployed including NIELIT scientific officers who are subject experts for evaluation of Practical examination/ internal assessment / Project/ Presentation/ assignment and Major Project (if applicable). Qualification is generally B.Tech.
4.	Assessment Mode <i>(Specify the assessment mode)</i>	Centralized online examination will be conducted
5.	Tools and Equipment Required for Assessment	Same as for training <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Section 4: Evidence of the Need for the Standalone NOS

1.	Government /Industry initiatives/ requirement (Yes/No): Yes.
2.	Number of Industry validation provided: 4
3.	Estimated number of people to be trained: 1000 persons per year shall be trained.
4.	Evidence of Concurrence/Consultation with Line/State Departments (In case of regulated sectors): No NIELIT is recognised as AB and AA under the Government Category. NIELIT is the HRD arm of MeitY, Govt.

Section 5: Annexure & Supporting Documents Check List*Specify Annexure Name / Supporting document file name*

1.	Annexure: NCrF/NSQF level justification based on NCrF/NSQF descriptors <i>(Mandatory)</i>	<i>Available at Annexure-I: Evidence of Level</i>
2.	Annexure: List of tools and equipment relevant for NOS <i>(Mandatory, except in case of online course)</i>	<i>Available at Annexure-II: Tools and Equipment</i>
3.	Annexure: Industry Validation	<i>Available at Annexure-III: Industry Validation</i>
4.	Annexure: Training Details	<i>Available at Annexure-IV: Training Details</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case the selected Mode of delivery is Blended Learning)</i>	<i>Available at Annexure-V: Blended Learning</i>
6.	Annexure/Supporting Document: Standalone NOS- Performance Criteria Details Annexure/Document with PC-wise detailing as per NOS format (Mandatory- Public view)	<i>Available at Annexure-VI: Performance Criteria</i>
7.	Annexure: Performance and Assessment Criteria <i>(Mandatory)</i>	<i>Available at Annexure-VII: Detailed Assessment Criteria</i>
8.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Available at Annexure-VIII: Assessment Strategy</i>
9.	Annexure: Acronym and Glossary <i>(Optional)</i>	<i>Available at Annexure-IX: Acronym and Glossary</i>
10.	Supporting Document: Model Curriculum	<i>Available at Annexure-A: Model Curriculum</i>

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 Knowledge/Process Theoretical	Upon completion of the course, individuals are well-prepared for diverse roles in the cloud computing landscape. With a solid understanding of INFORMATICA, graduates can pursue roles such as Cloud Architect, responsible for designing and	An efficient Cloud Expert is needed to handle such cloud infrastructure like INFORMATICA.	5

	implementing cloud solutions, or Cloud Engineer, focusing on deploying and managing scalable and secure infrastructure. Those inclined towards development may opt for Cloud Developer positions, leveraging programming skills to create cloud-native applications. Cloud Security Engineers focus on safeguarding cloud resources. Data Engineers in the cloud specialize in managing and optimizing data storage and processing. Whether aiming for technical support, administration, or specialization in security and data, the acquired knowledge positions individuals for success in dynamic and in-demand roles within the evolving field of cloud computing.		
Professional and Technical Skills/ Expertise/ Professional Knowledge	The candidate will acquire a versatile skill set, enabling them to navigate the complexities of cloud computing, contribute to organizational success, and stay abreast of industry best practices and emerging technologies in the INFORMATICA ecosystems.	Individuals completing this qualification are likely to possess the expertise required for roles demanding advanced and specialized knowledge in the field of cloud computing.	5
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Professional skills collectively enable individuals to contribute effectively to organizations leveraging cloud technologies, adapt to changing industry demands, and excel in roles such as Cloud Architect, Engineer, Developer, or other specialized positions within the cloud computing domain.	Candidates will be learning effective communications which will make them smart in communicating with various companies and people.	5
Broad Learning Outcomes/Core Skill	Collectively prepare individuals to navigate the complexities of cloud computing, equipping them with the skills needed to contribute to organizational success and adapt to the evolving landscape of cloud technologies.	Candidate can perform well under supervision of team lead	5
Responsibility	Individuals may find themselves involved in strategic decision-making, hands-on implementation, or a combination of both, depending on their chosen career path within the cloud computing landscape.	Takes complete responsibility for delivery and quality of own work and output as also the subordinates. Shares responsibility for the group tasks.	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	Students Chair	30	30
3	Students Table	30	30
4	Desktop computer with accessories	GUI based Operating System, Informatica PowerCenter, Informatica Cloud, Virtualization Software	30
5	Deskjet printer	1 No.	Paper-A4

Classroom Aids for offline and blended mode of training:

The aids required to conduct sessions in the classroom are:

1. LCD Projector/Smart Board
2. Pin-up Board
3. WhiteBoard, Marker

Annexure III: Industry Validations/ Government Recognition Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1	Software World	Amrita Saha	Proprietor	Ujan Abhoynagar, Manipuripara, Agartala, Tripura(West)	7005261744	support@softwareworld.co.in
2	Bada Biplab Power Solution LLP	Iduli Debbarma	Designated Partner	Agartala West Tripura, Pin: 799003	9436740983	bbpsllp@gmail.com
3	Krishna Industrial Services	Debajit Dey	Proprietor	Badharghat Chowmuhani Agartala, Pin: 799003	9862770077	jbyacademy@gmail.com
4	JB Youth Computer Solution & Educational Society	Nishi Kanta Das	Project Coordinator	Badharghat Chowmuhani, Siddi Ashram, Agartala	9436740983	jbyacademy@gmail.com

Annexure IV : Training Details**Training Projections:**

Year	Estimated Training # of Total Candidates	Estimated training# of Women	Estimated training# of People with Disability
2023-24	1000	200	20
2024-25	1000	200	20
2025-26	1000	200	20

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

Annexure V: Blended Learning**Blended Learning Estimated Ratio & Recommended Tools:**

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:

S. No.	Select the Components of the NOS	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	NA	NA
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	PCs/Laptops	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 Online Examination	Online: 100% Theory
7	On the Job Training (OJT)/ Project Work Internship/ Candidate Training	NA	NA

Annexure VI : Standalone NOS- Performance Criteria details**1. Description:**

The upskilling course on Cloud Computing with INFORMATICA will be assessed based on their ability to deploy and manage cloud resources, implement security measures, optimize costs, and collaborate effectively in a team environment while staying informed about the latest updates in the rapidly evolving cloud technologies.

2. Scope:

The scope covers the following:

- Expand career opportunities by providing hands-on experience with leading cloud platforms.
- Gain proficiency in deploying and managing applications, enhancing their competitiveness in the evolving IT landscape.
- Equips professionals with sought-after skills for roles in cloud architecture, development, and administration.

3. Elements and Performance Criteria**• Overview of Informatica**

To be competent, the user/individual on the job must be able to:

PC1: Understanding of data warehouses, SQL, and Informatica Intelligent Cloud Services (IICS) to effectively design, manage, and monitor data integration solutions.

PC2: Proficiency in establishing data connections, creating IICS mappings, and designing taskflows to automate data transformation and orchestration processes.

• Advanced Concepts of Informatica

PC3: Demonstrate comprehensive knowledge of IICS architecture, runtime environments, data connections, transformations, mappings, taskflows, and replication strategies.

PC4: Exhibit proficiency in designing, developing, and executing data integration solutions using IICS, including variable management, dynamic linking, synchronization, and application integration.

4. Knowledge and Understanding (KU):

The individual on the job needs to know and understand:

- KU1. Providing a solid understanding of cloud computing principles and models.
- KU2. Exploring key services offered by Informatica.
- KU3. Covers fundamental principles, architectures, and best practices for deploying and managing applications in the cloud.
- KU4. Learning practical skills for utilizing Informatica services, fostering proficiency in cloud resource provisioning, scalability, and security.
- KU5. Equip learners with the knowledge needed to make informed decisions when leveraging cloud technologies for business solutions.

5. Generic Skills (GS):

User/individual on the job needs to know how to:

- GS1. Follow instructions, guidelines and procedures
- GS2. Listen effectively and communicate information accurately
- GS3. Apply formatting features to achieve the desired results

Annexure VII: Assessment Criteria

Detailed PC-wise assessment criteria and assessment marks for the NOS are as follows:

S. No.	Assessment Criteria for Performance Criteria	Theory Marks	Practical Marks	Project Marks	Viva Marks
Overview of Informatica	Overview of Data Warehouse and SQL, Introduction to IICS and its Components, Source Target Connections, IICS Mapping and Basic Transformation, IICS Mapping tasks, Taskflows and Monitoring	40	-	-	-

Advanced Concepts of Informatica	IICS Overview and Runtime environment, Connections, Advance Transformations, Mappings, Mapping tasks, Replication tasks ,Variables and parameters, Task flows, Dynamic linking, Synchronization tasks, Replication tasks, Overview of Application Integration (CAI Features and components)"	60	-	-	-
Total Marks		100	-	-	-

Annexure VIII: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

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) examination.

About Examination Pattern:

1. The question papers for the theory 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. Theory examination would be conducted online and the paper comprise of MCQ
4. Pass percentage would be 50% marks.
5. 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 IX : Acronym and Glossary**Acronym**

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework

Glossary

Term	Description
National Occupational Standards (NOS)	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.
Qualification	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
Qualification File	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.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.