

QUALIFICATION FILE – Standalone NOS

AI in RPA

☒ Horizontal/Generic ☒ Vertical/Specialization

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

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

NCrF/NSQF Level: 5

Submitted By:

IT-ITeS Sector Skills Council NASSCOM (SSC NASSCOM)

Plot No. – 7, 8, 9 & 10

Sector – 126, Noida, Uttar Pradesh - 201303

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Section 1: Basic Details

1.	NOS	AI in RPA																
2.	Sector/s	IT/ITeS																
3.	Type of Qualification ☒ New ☐ Revised	NQR Code & version of the existing /previous qualification: <i>(change to previous, once approved)</i>	Qualification Name of the existing/previous version: <i>(previous, once approved)</i> AI in RPA															
4.	National Qualification Register (NQR) Code & Version <i>(Will be issued after NSQC approval.)</i>	NG-05-IT-03791-2025-V1-NASSCOM and V1	5. NCrF/NSQF Level: 5															
6.	Brief Description of the Standalone NOS	This NOS describes Artificial intelligence, and its impact on RPA.																
7.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: **Relevant experience in job roles related to RPA/Computer Science/IT The relevant experience would include work, internship and apprenticeship after completing relevant educational qualifications. *PG/UG/Degree/Diploma in (Engg./Science) <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>Completed 2nd year of 3-year/ 4-year UG*</td> <td>-</td> </tr> <tr> <td>2</td> <td>Pursuing 2nd year of 3- year/ 4-year UG**</td> <td></td> </tr> <tr> <td>3</td> <td>Completed 3Y UG Diploma after 10th*</td> <td>1.5 Years of relevant experience**</td> </tr> <tr> <td>4</td> <td>Previous Relevant qualification of NSQF level 4</td> <td>3 Years of relevant experience**</td> </tr> </tbody> </table> b. Age: NA		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Completed 2 nd year of 3-year/ 4-year UG*	-	2	Pursuing 2nd year of 3- year/ 4-year UG**		3	Completed 3Y UG Diploma after 10th*	1.5 Years of relevant experience**	4	Previous Relevant qualification of NSQF level 4	3 Years of relevant experience**
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8.	Credits Assigned to this NOS-Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	2 Credit	9. Common Cost Norm Category (I/II/III) (wherever applicable): II																		
10.	Any Licensing Requirements for Undertaking Training on This Qualification (wherever applicable)	Completion of RPA Foundation (NSQF Level 4.5) is mandatory to pursue this course.																			
11.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☐ Offline Only ☐ Online Only ☒ Blended <table border="1"> <thead> <tr> <th>Training Delivery Mode</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>OJT (Hours)</th><th>Total (Hours)</th></tr> </thead> <tbody> <tr> <td>Classroom (offline)</td><td>22</td><td>38</td><td>00</td><td>60</td></tr> <tr> <td>Online</td><td>22</td><td>38</td><td>00</td><td>60</td></tr> </tbody> </table> (Refer Blended Learning Annexure for details)					Training Delivery Mode	Theory (Hours)	Practical (Hours)	OJT (Hours)	Total (Hours)	Classroom (offline)	22	38	00	60	Online	22	38	00	60
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Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age																
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13.	Is the NOS Amenable to Persons with Disability	☒ Yes ☐ No If “Yes”, specify applicable type of Disability: Visual, Hearing or Speech impairment, Locomotor Disability																			
14.	Progression Path After Attaining the Qualification, wherever applicable (Please show Professional and Academic progression)	NA																			
15.	How will the participation of women be encouraged?	The Program is gender neutral although to increase women's participation, organizations are keeping aside few seats to encourage female candidates.																			
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Once approved the qualification will be available in Hindi or other Indian Languages.																			
17.	Is similar NOS available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																			

18.	Name and Contact Details Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Namrata Kapur Email: Standards@nasscom.in Contact No.: 0120-4990111 Website: https://nasscom.in	
19.	Final Approval Date by NSQC: TBD	20. Validity Duration: 36 Months	21. Next Review Date: TBD

Section 2: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & training experience: 2 years of industry experience in RPA. The industry experience would include work, internship, and apprenticeships undertaken after regular graduation. Certification: "Trainer" mapped to the Qualification Pack "MEP/Q2601" Minimum accepted score is 80% aggregate
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & training experience: 4 years of industry experience in RPA. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: "Master Trainer" mapped to the Qualification Pack "MEP/Q2602" Minimum accepted score is 90% aggregate.
3.	Tools and Equipment Required for the Training	☒ Yes ☐ No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised NOS, details of Any Upskilling Required for Trainer	NA

Section 3: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science)
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		Industry & Training Experience: 2 years of industry experience in RPA. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Assessor” mapped to the Qualification Pack “MEP/Q2701” Minimum accepted score is 80% aggregate.
2.	Proctor’s Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines), (wherever applicable)</i>	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & Training Experience: 2 years of industry experience in RPA. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Assessor” mapped to the Qualification Pack “MEP/Q2701” Minimum accepted score is 80% aggregate.
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & Training Experience: 4 years of industry experience in RPA. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Lead Assessor” mapped to the Qualification Pack “MEP/Q2702” Minimum accepted score is 90% aggregate.
4.	Assessment Mode <i>(Specify the assessment mode)</i>	The assessment will consist of a blend of hands-on practical evaluations, and online proctored scenario-based multiple-choice questions ensuring a thorough evaluation of the individual's proficiency in learning outcomes, practical understanding, and real-world application of concepts.
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)

Section 4: Evidence of the Need for Standalone NOS

Provide Annexure/Supporting documents name.

1.	Government /Industry initiatives/ requirement (Yes/No): Industry initiative
2.	Number of Industry validation provided:21
3.	Estimated number of people to be trained: 500

	As per the Gartner report for UiPath ,RPA will stay in the technology market although the technology will be tremendously upgraded by the application of AI and other technologies (https://www.uipath.com/resources/automation-analyst-reports/gartner-magic-quadrant-robotic-process-automation). The AI will be used in the form of AI agents striking up the orchestration in the bot development (Ai & Automation trends)
4.	Evidence of Concurrence/Consultation with Line/State Departments (In case of regulated sectors): (Yes/No): Applied (under process) If “No”, why:

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>	Evidence of Level
2.	Annexure: List of tools and equipment relevant for NOS <i>(Mandatory, except in case of online course)</i>	Tools and Equipment (lab set-up)
3.	Annexure: Performance and Assessment Criteria <i>(Mandatory)</i>	Performance Criteria Details
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	Assessment Strategy
5.	Annexure: Blended Learning <i>(Mandatory, in case the selected Mode of delivery is Blended Learning)</i>	NA
6.	Annexure: Acronym and Glossary <i>(Optional)</i>	Acronym and Glossary
7.	Annexure/Supporting Document: Standalone NOS- Performance Criteria Details Annexure/Document with PC-wise detailing as per NOS format (Mandatory- Public view)	AI in RPA
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	MC_AI in RPA

Annexure: 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	Professional Knowledge: Strong understanding of RPA principles, its different types, and its applications across various industries is crucial. This includes knowledge of the RPA lifecycle, feasibility analysis for RPA projects, and the design workflow for RPA solutions. Practical experience with at least one RPA tool (UiPath, Automation Anywhere, Blue Prism, etc.) is also implied. The curriculum expects some foundational knowledge of software development principles and practices. While specific languages aren't explicitly stated, the practical exercises require working with an RPA tool (often involving scripting or integration with other systems), demonstrating a need for fundamental	This NOS requires a strong foundation in RPA tools and technologies, the ability to design and build RPA bots, and integrate them with other systems. The theoretical knowledge of automation design principles, workflow management, and best practices is essential. This NOS focuses on building and integrating AI/ML models into RPA workflows. This requires a strong understanding of machine learning algorithms, NLP, and other AI techniques. This NOS involves analyzing business processes, identifying automation opportunities, designing high-level automation architectures, and ensuring the efficient and scalable implementation of RPA solutions.	5

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
	programming concepts and problem-solving skills. Learners should be able to design, build, test, and deploy functional RPA bots. This requires hands-on experience and familiarity with the selected RPA platform's capabilities. The curriculum touches on aspects of bot deployment, centralized administrative tools, and best practices for post-deployment maintenance. This implies a basic understanding of IT operations within an automation context. Experience with data extraction, manipulation, and handling is essential for effectively integrating AI models with RPA. The curriculum touches upon this implicitly throughout the modules. Theoretical Knowledge: Learners need a foundational understanding of AI concepts, including machine learning (supervised, unsupervised, reinforcement learning), deep learning, and natural language processing (NLP). Knowledge of AI model types, training methods, and integration techniques is vital. A basic understanding of different machine learning algorithms (e.g., linear regression,	The NOS focuses on quality assurance and testing of RPA and AI-enhanced solutions would need the practical experience developed in the curriculum, along with a strong understanding of testing methodologies. This role involves advising organizations on how to leverage RPA and AI to improve their business processes. It requires a broad understanding of both RPA and AI technologies, and their application to solve real-world problems	

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
	classification algorithms) and their applications is necessary. Familiarity with core NLP techniques, including tokenization, part-of-speech tagging, and named entity recognition, is required. Experience working with NLP libraries (like NLTK, SpaCy, Transformers) is highly recommended. The curriculum introduces cognitive automation, implying the need for theoretical knowledge of areas like computer vision, image recognition, and chatbot technologies. The curriculum mentions design patterns for integrating AI with RPA (SOA, event-driven architecture, microservices). A basic understanding of these patterns is beneficial for designing robust and scalable solutions. Awareness of data privacy regulations and best practices for securing sensitive data is essential, particularly given the context of RPA handling potentially confidential information.		
Professional and Technical Skills/ Expertise/ Professional Knowledge	Professional Skills: The ability to analyze business processes, identify areas suitable for automation, and design efficient solutions is crucial. This involves breaking down complex processes	Strong problem-solving abilities to design efficient automation workflows, project management skills to execute development projects, and documentation skills to create technical documentation for their bots.	5

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
	into smaller, manageable tasks. This is implicit throughout the curriculum, evident in process assessment and automation design modules. Working on projects, presenting findings, and collaborating with colleagues requires strong communication and teamwork skills. Creating technical documentation (process flows, bot designs, testing reports) is a necessary professional skill highlighted implicitly through the emphasis on documentation in multiple modules. The rapidly evolving nature of AI and RPA requires a commitment to continuous learning and adapting to new technologies and approaches. Technical Skills: Hands-on experience with at least one RPA platform (UiPath, Automation Anywhere, Blue Prism, etc.) is essential The curriculum emphasizes using Python for AI model integration. The ability to develop or use pre-trained AI/ML models (for tasks like NLP, image recognition, or machine learning predictions)	High proficiency in at least one RPA tool (UiPath, Automation Anywhere, etc.), API integration skills for connecting bots to various systems, data extraction and manipulation skills to handle data effectively within the bot, and testing and debugging skills to ensure bot quality. Analytical skills to understand business needs and translate them into AI solutions, problem-solving skills to handle challenges in model development and integration, and communication skills to collaborate with RPA developers. Strong programming skills (especially Python), expertise in developing and integrating AI/ML models (including NLP and computer vision), knowledge of relevant AI libraries (like TensorFlow, PyTorch, Scikit-learn, SpaCy), and experience with API integration. Excellent analytical and problem-solving skills to identify automation opportunities, strong communication skills to present findings and collaborate with stakeholders, and project management skills to oversee the automation projects.	

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
	and integrate them seamlessly into RPA workflows is critical. Knowledge of integrating RPA bots with external APIs (for example, interacting with cloud-based AI services or accessing data from different systems) is implied throughout the modules. The ability to extract and process data from various sources (e.g., databases, spreadsheets, documents using OCR) is essential for effective RPA development. Proficiency in testing and debugging RPA bots and AI models is crucial to ensure the quality and reliability of automation solutions. This is emphasized in multiple modules. The document mentions using collaboration tools like GitHub, implying familiarity with version control systems is desirable for larger projects and collaborative work.	A good understanding of RPA tools and technologies, some knowledge of AI/ML concepts to evaluate the feasibility of AI integration, and familiarity with different architectural patterns for integrating AI and RPA.	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	The curriculum implicitly prepares individuals for job seeking by providing them with the in-demand skills in the AI and RPA sector The curriculum's emphasis on practical projects and problem-solving directly supports the ability to identify problems and	The curriculum heavily emphasizes practical skills through hands-on exercises and projects (e.g., building bots, automating processes). This directly contributes to employment readiness by equipping learners with in-demand abilities.	5

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
	develop solutions. This is a cornerstone of entrepreneurial thinking. The field of AI and RPA is constantly evolving. A growth mindset—a belief that abilities and intelligence can be developed through dedication and hard work—is crucial for continuous learning and adaptation in this field.	The use of industry-standard RPA tools (UiPath, Automation Anywhere) ensures that graduates possess the skills needed for immediate employment in the RPA field. The curriculum fosters problem-solving skills by requiring learners to analyze processes, design automation solutions, and troubleshoot issues during bot development. These skills are crucial for entrepreneurial endeavors.	
Broad Learning Outcomes/Core Skill	Understanding of RPA and Automation: This includes knowledge of RPA principles, types of RPA, and how it differs from traditional automation. RPA Process Assessment: The ability to evaluate processes for automation suitability, including feasibility and complexity analysis. Automation Design: Proficiency in designing RPA solutions, including creating workflows and identifying automatable sub-tasks. Bot Building: The practical skill of building and testing functional RPA bots using	This outcome directly relies on several core skills: Bot Building, Bot Deployment and Control, and Problem-solving/Troubleshooting. A learner must possess these core skills to successfully deploy a functional bot. They need to be able to build a bot (Bot Building), know how to deploy it (Bot Deployment and Control) and resolve any errors that arise during the process (Troubleshooting).	5

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
	industry-standard tools (UiPath, Automation Anywhere, etc.). Bot Deployment and Control: Understanding and managing the deployment and ongoing maintenance of RPA bots. Integration of AI and RPA: Knowledge of integrating AI technologies (Machine Learning, Natural Language Processing) to enhance RPA capabilities. Problem-Solving and Troubleshooting: The ability to identify and solve issues during bot development, deployment, and maintenance.		
Responsibility	Build and maintain relationships with colleagues and other teams Adhere to the organization's code of conduct and inculcate a strong work ethic	This role demands working in a team and building and maintaining relationships with colleagues and other teams to deliver automation bots according to requirements. The individual working in this role is, therefore, expected to be responsible for his/her own contribution. In these scenarios, the individual might often be required to make decisions or apply balanced judgements to address different situations.	5

Annexure: Tools and Equipment (lab set-up)

List of Tools and Equipment

Batch Size:

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	RPA Software	OpenRPA, Ui path Community Edison (Offer Free version)	Installed/Access to each system
2	Programming Languages and & Libraries	Python TensorFlow library (Open-source ML framework developed by Google that can be used for creating complex models for automation tasks in areas like image recognition, natural language processing, and more)	Installed/Access to each system
3	Spreadsheet	Google Sheets	Installed/Access to each system
4	Flowchart tools	draw.io	Installed/Access to each system
5	Version control and Documentation Tools	Github	Installed/Access to each system

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Presentation software like MS ppt for presentation
2. White Board
3. White Board Marker
4. Projector
5. Laptop/Computer

Annexure: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Q Academy	Deepak Gour	Product and Academic Head	-	9893554394	deepak@qacademy.ca	https://ca.linkedin.com/in/deepak-gour-8853968
2	Freelance SME (Ex-3i Infotech)	Rishi Agrawal	Ex-SVP and Global Delivery Head – Automations, Applications and Analytics	-	7702191049	agrishi@gmail.com	https://www.linkedin.com/in/agrishi
3	Barq	Satheesh Sekar	Senior Decision Scientist	-	9444218513	satheeshk.sekar@gmail.com	https://www.linkedin.com/in/satheeshksekarak/?originalSubdomain=in
4	Data Switch	Thilak hariharasudhan A	Product Engineer	-	6393798750	thilakhariharan@gmail.com	https://www.linkedin.com/in/thilak-hariharasudhan-43a89b269/
5	Delta Electronics India	Kabilan R D	Project Manager	-	7010811080	kabilanrdurai@outlook.com	https://www.linkedin.com/in/kabilan-r-d-b09856122
6	Draup	MD Mahabub Alam	Software Architect	-	9731517171	mahabubalam@draup.com	https://www.linkedin.com/in/mdmahabubalam/?originalSubdomain=in
7	Engagely	Aniruthan.V	Senior software engineer	-	8098978284	Aniruthan.v@engagely.ai	https://www.linkedin.com/in/aniruthan-venkatavaradhan-79849b203/
8	Accolite Digital	Ayushmaan Pandey	Senior Software Engineer	-	8077386365	ayushmaan.pandey@accolitedigital.com	https://www.linkedin.com/in/ayushmaanpandey
9	Frontier airlines	Santhosh kumar S	Software Engineer DevOps L1	-	9655747400	santhoshselvaraj24031998@gmail.com	
10	IBM	Arpita Majumder	Tech Consultant	-	7894369677	Arpita.majumder@ibm.com	https://www.linkedin.com/in/arpita-majumder-85612a67/
11	Impekable Australia	sreepathi.D	Lead Market Research and Business Development	-	9655036999	sanjeevsree22@gmail.com	https://in.linkedin.com/in/sreepathid-3391273a
12	Infosys	Vivek Pilaniya	Program Manager	-	9718423687	vivek.pilania@infosys.com	https://www.linkedin.com/in/vivekpilania-iimc/?originalSubdomain=in
13	Intellibren	Kailash PD	Director	-	6374700185	kailash@intellibren.com	-

14	Kwalee	Ravi Chaudhary	Software Engineering consultant	-	8750108744	ravi.chaudhary@kwalee.com	https://www.linkedin.com/in/ravi-xo/
15	Mindshare (Inclusive Minds)	Pamindar Singh	Team Lead	-	8713901984	paminder.singh@themindshare.in	https://www.linkedin.com/in/paminder-singh-7990b8101/
16	Q Acadmey	Deepak Gour	Product and Academic Head	-	9893554394	deepak@qacademy.ca	https://ca.linkedin.com/in/deepak-gour-8853968
17	SAP	Archana Murali G Vijay Rashmi Mavinakere	Development Manager - Content for Robotic Process	-		a.murali@sap.com vijay.g@sap.com rashmi.mavinakere@sap.com	-
18	Skillsda	Sankar Vijyan Dr. R Thirukumar Kottaram Ramesh	Head R&D Director-Engg.	-	9500123029 9894801793	thiru@skillsda.com sv@skillsda.com ram@skillsda.com	https://www.linkedin.com/in/kottaram-v-ramesh/ https://in.linkedin.com/in/dr-thirukkumaran-raman-1435a1216
19	Volkswagen	Ranjithkumar. K	Sr.Test Analyst	-	8838107162	ranjikadri@gmail.com	https://in.linkedin.com/in/ranjithkumar-k-9b692a136
20	Wipro	Abdul Rahim	Senior Associate	-	7339471256	Abdul.rahims@wipro.com	
21	Upgrad	Samneesh Sharma	Sr Manager-project delivery	-	8679334000	shamneesh.sharma@upgrad.com	https://www.linkedin.com/in/shamneeshsharma1987/

Annexure: Training Details

Training Projections:

Year	Estimated Training # of Total Candidates	Estimated training # of Women	Estimated training # of People with Disability

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

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

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

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

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	NA	NA
2	☐ Imparting Soft Skills, Life Skills and Employability Skills /Mentorship to Learners	NA	NA
3	☐ Showing Practical Demonstrations to the learners	NA	NA
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	☐ Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	☐ On the Job Training (OJT)/ Project Work Internship/ Candidate Training	NA	NA

Annexure: Standalone NOS- Performance Criteria details

1. Description: This NOS describes Artificial intelligence and its impact on RPA.

2. Scope:

The scope covers the following:

- AI in RPA
- AI Agent development

3. Elements and Performance Criteria

AI in RPA

PC1. Learn about the AI capabilities that can be used in RPA, like handling unstructured data

PC2. Understand intelligent automation, i.e AI technologies to automate complex processes that require decision-making, learning, and adaptation

PC3. Assess different factors which are important to be considered while involving AI in RPA for example Task complexity, Data Structure, Scalability etc.

AI Agent Development

PC4. Understand about Agentic AI

PC5. Develop an AI Agent for a use case

PC6. Develop and train an AI Model

PC7. Integrate the RPA bot with AI Model using webhooks/APIs

PC8. Test the Agent

PC9. Deploy the AI agent in a suitable environment (cloud, on-premises, or edge devices) as per the use case

4. Knowledge and Understanding (KU):

KU1. RPA fundamentals and its applications.

KU2. Core AI concepts (Machine Learning, NLP).

KU3. RPA process assessment and automation design.

KU4. Industry-standard RPA tools (UiPath, Automation Anywhere, etc.).

KU5. AI techniques for RPA enhancement (NLP, ML models).

KU6. RPA bot building, testing, and deployment.

KU7. Integration of AI and RPA in automation workflows.

KU8. Except for handling and business continuity planning.

KU9. Problem-solving and troubleshooting skills.

KU10. Project management and software development practices.

5. Generic Skills (GS):

GS1. Analyzing situations, identifying problems, and developing effective solutions. This is crucial for designing and troubleshooting automation processes.

GS2. Breaking down complex processes, identifying patterns, and determining the feasibility of automation.

GS3. A general understanding of technology and the ability to learn new software and tools quickly

GS4. The ability to think logically and systematically to design efficient and effective automation workflows.

GS5. RPA requires meticulous attention to detail to ensure accuracy and avoid errors in process automation.

GS6. Effectively communicating technical information to both technical and non-technical audiences is necessary for collaboration and project management.

Annexure: 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
PC 1.	Learn about the AI capabilities that can be used in RPA, like handling unstructured data	2	4	-	-
PC 2.	Understand intelligent automation, i.e AI technologies to automate complex processes that require decision-making, learning, and adaptation	2	4	-	-
PC 3.	Assess different factors which are important to be considered while involving AI in RPA for example Task complexity, Data Structure, Scalability etc.	4	10	-	-
PC 4.	Understand about Agentic AI	5	10	-	-
PC 5.	Develop an AI Agent for a use case	5	11	-	-
PC 6.	Develop and train an AI Model	4	10	-	-
PC 7.	Integrate the RPA bot with AI Model using webhooks/APIs	4	9	-	-

PC 8.	Test the Agent	2	6	-	-
PC 9.	Deploy the AI agent in a suitable environment (cloud, on-premises, or edge devices) as per the use case	2	6	-	-
Total Marks		30	70	-	-

Annexure: Assessment Strategy

Assessment Process Overview

Batch Creation & Assessment Request:

Training Providers (TP) or Training Centers (TC), including any other authorized partner of Ministry/ Department create batches / push batches on the SIDH portal. Assessment requests are submitted through the SIDH portal or via email or other media as authorized from time to time. For NON-SIDH schemes, assessment requests are received electronically or through respective State Skill Mission portals. TP/TC initiates the assessment request through the InSDMS portal and processes the payment (where applicable).

Batch Alignment & Confirmation:

Upon payment confirmation, batches are assigned to the Assessment Agency based on factors like:

- Assessment readiness
- Availability of certified assessors for the specific job role
- Assessment capping to an assessment agency as prescribed from time to time for an AB An email communication / prescribed mode communication is sent to TP/TC for confirmation of the assessment date, with IT-ITeS SSC in the loop. Once confirmation is received, the Assessment Agency designates a TOA-certified assessor to conduct or facilitate the assessment.
- Batches are only formed when the Qualification is active.

Candidate Verification & Assessment Execution:

Candidate details are verified and documented at the beginning of the assessment by a certified assessor. A Quality Assurance (QA) mechanism is enforced, requiring an undertaking from the TC. Regular feedback is collected from TP/TC to ensure continuous improvement.

Evidence Collection & Validation:

Proctors or assessors capture date/time-stamped and geo-tagged photographs of the assessment location during the process. Attendance is also ensured offline. A PC-wise result analysis is conducted to refine assessment standards.

Monitoring & Compliance:

Batch monitoring follows established protocols, ensuring adherence to assessment guidelines. Sample based surprise visits are conducted at TC locations during both training and assessments to verify compliance. This structured approach ensures transparency, quality control, and validation throughout the assessment process.

Testing Environment:

- Check the Assessment location, date and time
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.

Assessment Quality Assurance levels/Framework:

IT-ITeS SSC nasscom is responsible for the development and periodic review of the question bank developed for a specific job role. We publish an openly accessible sample /model question paper on our website for all stakeholders. The quality of the Question Bank created by the assessment designer is validated by a Subject matter experts on the following parameters:

- Appropriateness of the Question Bank in terms of facts, data and information.
- Checks for grammar, spellings, scripting and formatting.
- The information provided should be specific enough to remove any ambiguity in answers/solutions to the question.
- Relevance – Assessing the topic well w.r.t. the job role.
- Check if the difficulty level of each question is as per the matrix.
- Check if the images used in the question are clear and relevant.
- All variables, symbols and abbreviations used must be declared.
- The correct answer option should be unique, and the options should not be overlapping

Annexure: 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
RPA	Robotic Process Automation
National Occupational Standards (NOS)	NOS defines the measurable performance outcomes required from an individual engaged in a particular task. They list 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.