



QUALIFICATION FILE

Smart Electrician Level 4

- Short Term Training (STT) Long Term Training (LTT) Apprenticeship
 Upskilling Dual/Flexi Qualification For ToT For ToA
 General Multi-skill (MS) Cross Sectoral (CS) Future Skills OEM
 NCrF/NSQF Level: 4

Submitted By:

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Section 1: Basic Details

1	Qualification Name	Smart Electrician Level-4	
2	Sector/s	Construction	
3	Type of Qualification: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options ,OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved) NA</i>	Qualification Name of existing/previous version: Smart Electrician
4	a. OEM Name b. QualificationName <i>(Wherever applicable)</i>	NA	
5	National Qualification Register (NQR) Code &Version <i>(Will be issued after NSQC approval)</i>	QG-04-CO-00619-2023-V1-SVSU	6. NCrF/NSQF Level: 4
7	Award (Certificate/Diploma/Advance Diploma/ Any Other <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate	
8	Brief Description of the Qualification	Every industry wants an integrated electrician to fulfil their requirement, the SVSU also took feedback from industry, training institutions. Many organizations are looking for well-trained Electricians, technically trained staff.	
9	Eligibility Criteriafor Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience:	

		NSQF /NCFlevel at Entry/Equivalent Grade /years of Academic education	Minimum entry criteria for undergoing Short Term Training (STT) at the given level		Minimum Range of Notional hours of Short-Term Training/ STT(Theory + Practical + OJT) (Notional Hours for each- In Multiple of 30) subject to assessment	Credit Points earned
			Min Education/ Skilling required	Minimum Req Relevant experience		
	Level- 4	<ul style="list-style-type: none"> • 12th Grade Pass • Completed 2nd year of the 3-year diploma after 10 • Pursuing 2nd year of 3- year regular diploma after 10th • Pursuing 1st year of 2-year diploma after 12th • 10th grade pass with 2- year of any combination of NTC/CITS/NAC or equivalent • 8th pass plus 2-year NTC plus 1-year NAC plus 1-year CITS 	<ul style="list-style-type: none"> • 11th Grade pass • 10th Grade pass • Previous relevant Qualification of NSQF Level 3.5 • Previous relevant Qualification of NSQF Level 3 	No Experience required 1-year Relevant Experience 2- year Relevant Experience 1.5-year relevant experience 3-year relevant experience	156+234+120 = 510	30 hours = 1 credit
		c. Age: 18				
10	Credits Assigned to this Qualification, Subject to Assessment (as per	17(510 Hrs) As per NCRF document 1 credit is equivalent to 30 Hrs			11. Common Cost Norm Category (I/II/III) (wherever applicable): II	

	National Credit Framework(NCrF))						
12	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA					
13	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					
		Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)
		Classroom (offline)	156	234	120		510
		Online					
		(Refer Blended Learning Annexure for details)					
14	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	No code					
15	Progression path after attaining the qualification (Please show Professional and Academic progression)	Charge hand Electrician (NSQF Level: 4.5)					
16	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi					
17	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:					
18	Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", specify applicable type of Disability:					
19	How Participation of Women will be Encouraged	women are increasingly interested in electrical training and the industry is ready to welcome more skilled female electricians into the trade					

20	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
21	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
22	Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Shri Vishwakarma Skill University Email: Deepti.singh@svsu.ac.in Contact No.: 9953097983 Website: svsu.ac.in Parveen.sharma@svsu.ac.in , contact no- 8920691235	
23	Final Approval Date by NSQC: 23/06/23	24. Validity Duration: 3 years	25. Next Review Date 23/6/26

Section 2: Module Summary

NOS/s of Qualifications (In exceptional cases these could be described as components)

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/ModuleName	NOS/Module Code & Version (if applicable)	Core / Non-Core	NCrF /NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJ T - M an .	OJ T - R ec .	Total	Th.	Pr.	Proj.	Viva	Total	Weight ag (%) (if applica ble)
1.	Selection and practice of various tools, measuring devices & Fixtures in the workplace.	SVSU/E /N/4001	Core	4	2	24	36			60	40	60			100	
2.	Fixing, repairing & testing of LT wiring, cable laying & electrical distribution panel in work.	SVSU/E /N/4002	Core	4	2	24	36			60	40	60			100	
3.	Fixing, repairing & testing of LT 1-phase & 3-phase motor & starter in The workplace.	SVSU/E /N/4003	Core	4	3	36	54			90	40	60			100	

4.	Assemble, fix, fault detection & repair of Home Automation	SVSU/E/N/4004	Core	4	3	36	54			90	40	60			100	
5.	Health, safety & environment practice in the workplace.	SVSU/E/N/4005	Core	4	1	12	18			30	40	60			100	
6.	On the Job Training	N/A	core	4	4			120		120				50	50	
7.	Employability Skills	DGT/VSQ/N0102, V1	Non-core	4	2	24	36			60	20	30			50	
	Duration (in Hours) / TotalMarks					156	234	120		510	220	330		50	600	

Elective NOS/s:

S.No	NOS/Module Name	NOS/Module Code & Version <i>(if applicable)</i>	Core/Non-Core	NCrF/N SQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						T h.	P r.	OJ T-Ma n.	OJ T-Re c.	Tot al	T h.	P r.	Pr oj.	Vi va	Tot al	Weight age (%) <i>(if applicable)</i>
1.																
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

S.No	NOS/Module Name	NOS/Module Code & Version <i>(if applicable)</i>	Core/Non-Core	NCrF/N SQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						T h.	P r.	OJ T-Ma n.	OJ T-Re c.	Tot al	T h.	P r.	Pr oj.	Vi va	Tot al	Weight age (%) <i>(if applicable)</i>
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 60 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: _____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	BE/ BTech (Electrical/ Electronics) with 2 year industrial and 1 year training experience in Electrical/ Electronics and automation sector. Or Diploma/ITI (Electrical/ Electronics) with 3 years industrial and 1-year training experience in Electrical/Electronics and automation Or Certified in relevant CITS Trade with experience in Automation sector.
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	BE/ BTech (Electrical/ Electronics) with 2 years industrial and 2 year training experience in Electrical/Electronics and automation sector Or Diploma (Electrical/ Mechanical/ Electronics) with 3 years industrial and 2 years training experience in Electrical and automation sector
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	BE/ BTech (Electrical/ Electronics) with 1 year industrial and 1 year training experience in Electrical/Electronics and automation sector. Or Diploma/ITI (Electrical/ Electronics) with 3 years industrial and 1-year training experience in Electrical/Electronics and automation Or Certified in relevant CITS Trade with experience in Automation sector.
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Expert in Electrical Engineering with more than 5 years of experience
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Expert in Electrical Engineering with more than 5 years of experience
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): https://workforce-central.org/wp-content/uploads/2017/08/wfc_2016constructionindust.pdf
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): https://workforce-central.org/wp-content/uploads/2017/08/wfc_2016constructionindust.pdf https://www.meity.gov.in/writereaddata/files/Electronics_IT_Hardware_NSDC_Report_1732011%20%281%29.pdf https://solutions.borderstates.com/the-electrician-shortage/
3.	Government /Industry initiatives/ requirement (Yes/No): yes
4.	Number of Industry validation provided: 30
5.	Estimated nos. of persons to be trained and employed: 30 per semester
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrF/NSQF level justification based on NCrF level/NSQF descriptors (Mandatory)	Yes
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Yes
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Yes
4.	Annexure: Assessment Strategy (Mandatory)	Yes
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is “Blended Learning”)	NA
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	NA
7.	Annexure: Acronym and Glossary (Optional)	NA
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Yes
9.	Supporting Document: Career Progression (Mandatory - Public view)	Yes
10.	Supporting Document: Occupational Map (Mandatory)	Yes
11.	Supporting Document: Assessment SOP (Mandatory)	Yes
12.	Any other document you wish to submit:	Comparison between Qualification Line of concurrence

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/Process	Working environment should be familiar, use of appropriate tools required.	Able to demonstrate practical skills	4
Professional and Technical Skills/ Expertise/ Professional Knowledge	principle of single phase/ three phase motor/ starters, generator, transformer, sensors, under low voltage connections. The knowledge enables to optimize resources, materials and tools along with carrying out installation and maintenance electrical equipment's and wirings which require skill to minimize the work	The job holder is responsible for outcome of own work and provide assistance as required. The job holder is expected to demonstrate practical skills of repetitive activities like installation /maintenance of electrical cables, panels, workplace equipment at sites Installation, connection and testing of single/three phase .motors/starters, generators.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Communication is required oral/written, basic knowledge of social, political and environment.	Application of sensors and communicate clearly with co-workers at workplace	4
Broad Learning Outcomes/Core Skill	<ul style="list-style-type: none"> • Understand general safety procedures and Know about the waste disposal management systems. • Able to the draw single-line diagrams of various electrical wiring circuits. • Able to identify and repair the faults. • Able to communicate home automation. 		4
Responsibility	Responsible for own work and provide assistance.		4

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	Hand tools	Pliers. Screw driver, crimping tool, wire stripper, neon tester	20
	Power tools	Drill machine, cutting machine, chasing machine,	
	Measuring tools	Measuring tape, spirit level, marking tool	
	Measuring instruments	Ammeter, voltmeter, wattmeter, ohmmeter, digital multimeter, megger, clamp meter	
	Materials and fixture	Distribution boards, sockets, switches, tungsten lamp, halogen lamps, wall sockets, MCB, ELCB	
	Safety equipment's	Helmet, face shield, safety goggles, safety shoes, safety belt, insulated rubber gloves, ear plugs, particle mask, reflective jackets, safety message boards, fire extinguishers, sand buckets.	
	Consumables items	Single phase electrical cables of standard wire gauges, conduits,/ casings,,pvc insulation	
	Electrical machine	Single phase motor/ three phase motor, DOL starter, Star delta starter, connecting cable	
	Electronic material	Resister, capacitor, inductor, transistor, diode, connecting wire, relay, power source, battery, sensor, led kit.	

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. 25 Chairs, 1 set of chairs and table, 2 workstation tables, and 2 Almirah
2. 1 computer, 1 projector.
3. Safety and Instruction chart and frame. Safety equipment and items.

Annexure: Industry Validations Summary

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

S. No	OrganizationName	RepresentativeName	Designation	ContactAddress	Contact Phone No	E-mailID	LinkedIn Profile (if available)
1	EAST WEST AUTOMATION TECHNOLOGY PVT. LTD	AJAY KUMAR MISHRA	ASSTT MANAGER	SECTOR-18 SURUGRAM	9718285654	ajay.mishra@ewindia.com	
2	THERMOS TECH SENSOR PRIVATE LIMITED	PRAVEEN KUMAR	DIRECTOR	PRITHLA, PALWAL	9873474760	sales@thermotechsensors.com	
3	DESIGN FORUM K-L31 KRISHNA PARK EXTN	AR RAJESH	LNCHARGE/HOD	TITAK NAGAR NEW DELHI-110018	987 1 131238	dfdesignforum@gmail.com	
4	M/S ENVEA INDIA PVT LTD	MR. RAHUL	HOD	D16, TURBHE, NAVI MUMBAI	9050023891	rahulchauhauinst@gmail.com	
5	PREETI ENGINEERING	RAVINDER TANWAR	MD	PRITHLA, PALWAL	9213757537	Times.ravi@gmail.com	
6	NATH INDUSTRIES	DEEPAK BISHT	MANAGER	PALI ROAD, NIT FARIDABAD			
7	ROOP AUTOMOTIVES LTD	PREMPAL SINGH	MANAGER	19, ROZKA NEO INDUSTRIAL AREA, SOHNA	9992010074	Prempal.singh@roopauto.com	
8	SAM INSTRUMENTS PVT LTD	PRAVEEN KUMAR	DIRECTOR	PRITHLA, PALWAL	9818131210	Sales.saminstruments@gmail.com	
9	CLEAR POINT INSTRUMENTATION PVT LTD	RAHUL KUMAR	SENIOR ENGINEER	PRITHLA, PALWAL	9034288676	Rkumar8676@gmail.com	
10	ENABLE TELECOM EQUIPMENT SOLUTIONS	MR. PRITHVI SINGH	CEO	SOHNA CHOWK, GURUGRAM	7065956501	prithvisingh@etes.in	
11	MOHATA BRIGHT STEELS PVT.LTD	MR. RAVI KUMA	DIRECTOR	DHATIR ROAD, DUDHALA, PALWAL	9992010074loom		
12	HSVP	JOIGNDER SINGH	SDE	SEC-12, FARIDABAD	9910033975		
13	M/S J.D.SONS STEELS PVT LTD	PARVEEN KUMAR	MANAGER	PRITHLA, PALWAL	8506050920		
14	M/S MAHAMAI ENGINEER	PAWAN KUMAR MALHOTRA	MANAGER	B-187, BHAGAT SINGH COLONY, BALLABGARH	9582323082		
15	PRECITECH IMPRESSION PVT LTD	RAJESH GAUR	MANAGER	DHATIR ROAD, DUDHALA, PALWAL	9810842402		
16	LOOM SOLAR PVT LTD	AAKASH BHARTI	SERVICE ENGINEER	FARIDABAD	9990922883		

17	PANTONE TEXTILE MILLS LTD	MR SURESH	MANAGER	DUDHOLA, PALWAL		
18	PROMPT ENTERPRISES PVT LTD	MR PREM	QUALITY MANAGER	DHATIR, PALWAL	9466856883	
19	DI-TECH ENGINEER PVT LTD	MR. DR. SHARMA	HR	70/22, VILLAGE-DUDHOLA, PALWAL	9813637070	Shalindersingh3840@gmail.com
20	YOGIJI TECHNOEQUIP PVT LTD	MR. AMAN BHARDWAJ	HR EXC	DUDHOLA, PALWAL	9013395667	amanbhardwaj@gmail.com
21	AUTOFIT PVT LTD	SANDEEP KUMAR	MANAGER	IMT MANASER	8155000566	
22	STARWIRE INDIA LIMITED	D.D SINGH	SR. MANAGER	CHHAINSA, FARIDABAD	9042391230	
23	VIMONI INDIA PVT. LTD	MR. SUNIL	MANAGER	PALWAL	93114060162	
24	BHAWANI METALLOY PVT LTD	MR. PAWAN KUMAR	MANAGER	DHATIR, PALWAL	8385095005	
25	TOYZONE IMPEX PVT LTD	MR. SINGH	GM	PALWAL	7310339608	
26	NAGINA SHOES PVT	MR. SHARMA	MANAGER	E-45(B) INDUSTRIAL, AREA, BHIWADI	7725919071	
27	ESSARR INDUSTRY	MR. SANJAY GUPTA	MANAGER	243-244, INDUSTRIAL AREA, PAUCHKULA	9216106623	
28	MEP SOLUTIONS INDIA	MR. MOHD NASHIM	PROJECT ENGINEER	D-2, NOOR NAGAR, OKKLA, NEW DELHI	9990228236	
29.	SHREE BALAJI TECH INDIA	MR. GOKUL	MANAGER	DHATIR PALWAL		
30	M/S GARG BUILDERS	MR. GARG	MANAGER	PALWAL	011-47354539	

Annexure: 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
2025	40	100%	16	100%	As per rule	100%
2026	40	100%	16	100%	As per rule	100%

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications: NA

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

- 1.
- 2.

Content availability for previous versions of qualifications:

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: English

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 Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	<input type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	
2	<input type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	
3	<input type="checkbox"/> Showing Practical Demonstrations to the learners	NA	
4	<input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	
5	<input type="checkbox"/> Tutorials/ Assignments/ Drill/Practice	NA	
6	<input type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations		
7	<input type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training		

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

NOS/Module Name	Assessment Criteria for Performance Criteria/ Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SVSU/E/N/4001 Selection and Selection and practice of various tools, measuring devices & Fixtures in the workplace.	PC1. selection of suitable power tools and hand tools for making & break electrical contacts as per requirement	4	6		
	PC2. Selection of suitable measuring devices to measure electrical units.	2	3		
	PC3. selection of suitable marking tools as per requirement.	2	3		
	PC4. selection of electrical devices such as relay, starters, and MCB as per current rating of wiring installation.	2	3		
	PC5. Selection of appropriate electrical & non-electrical fixture devices such as batten, conduit, Electrical socket, and switch as per wiring installation.	4	6		
	PC6. Selection of effective methods and standards set by the manufacturer while handling measuring tools & power tools.	4	6		
	PC7. The practice of power tools and hand tools after basic checks.	2	3		
	PC8. The practice of marking & measuring instruments to mark the size & measure dimension of conduits & wire as per site requirement.	4	6		
	PC9. The practice of power tools & hand tools for cutting & bending conduit and cables as per site requirement	4	6		
	PC10. The practice of splice tool as wirestripper by stripping insulation.	2	3		
	PC11. The practice of appropriate power tools and hand tools to connect couplings, thread conduit ends, and fabricate and secure conduit support brackets.	2	3		
	PC12. Practice appropriate diagnostic devices like earth tester, tong tester, multimeter, and digital ammeter to install and repair electrical connections.	4	6		
	PC13. Keep and maintain devices and tools after use.	2	3		
	PC14. standard practices, manufacturer's specifications, and guidelines for electrical/organization on safety norms while carrying out any electrical work.	2	3		

	TOTAL	40	60		
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NSQC APPROVED

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	PracticalMarks	ProjectMarks	Viva Marks
SVSU/E/N/4002 Fixing, repairing & testing of LT wiring, cable laying & electrical distribution panel in work.	PC1. select and use electrical material required at the workplace like flexible wire, conduit, casing capping, bulb holder, switch, socket, MCB, ELCB, RCCB and other fixing devices.	2	3		
	PC2. Draw & read single line diagram, schematic diagram, and wiring diagram of LT wiring.	2	3		
	PC3. Fixing of LT wiring with the help of appropriate hand tools and power tools.	2	3		
	PC4. Laying of conduit pipe through RCC slabs, beams, and walls as per guidelines given by senior.	2	3		
	PC5. Chasing of the brick wall surface.	1	1		
	PC6. Perform all types of wiring and cable joints.	1	1		
	PC7. Fixing of LT distribution board on the wall with the help of appropriate tools and fixtures.	1	1		
	PC8. Trace out short circuit/fault with the help of multimeter, tong tester	1	4		
	PC9. Repairing of fault by following safety guidelines with proper hand tools.	2	3		
	PC10. Testing of wiring with the help of series bulb with proper safety guidelines	1	1		
	PC11. Select and use proper tools for cable laying like a hammer, combinational plier, crimping tool, hex blade etc.	2	3		
	PC12. Preparation of laying the cable in the workplace.	2	3		
	PC13. Perform estimate and cost of house wiring with specifications and guidelines.	2	3		
	PC14. Termination of cables with the help of proper tools like Hexa blade and crimping tool with safety	2	3		

PC15. Fixing of cable in the LT panel at workplace.	1	1		
PC16 Perform continuity tests of the cable with the help of megger at work place.	2	3		
PC17. Perform proper earthing of cable and panel.	2	3		
PC18. Perform safety guidelines prior to fixing panel/ distribution boards.	2	3		
PC19. Before connecting the panel with power source ensure all connection must be tight with nut bolts.	2	3		
PC20. Ensure electrical panel should be placed in the wall/ under the wall, from safety point of view.	2	3		
PC21. Perform necessary labelling, securing near electrical panel.	1	1		
PC22. Follow instructions to installing earthing for panel boards.	2	3		
PC23. Ensure all earthing component connected properly.	2	3		
PC24. Check and ensure earthing should be proper & moisture should be checked time to time.	1	2		
TOTAL	40	60		

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SVSU/E/N/4003 Fixing, repairing & testing of LT 1-phase & 3-phase motor & starter in the workplace.	PC1. By following the safety guidelines Make the setup & control of three phase induction motor with the help of direct on- line starter (DOL).	4	6		
	PC2. Make a list of essential tools, consumable materials, electrical device, measuring devices, PPE for fixing single phase/three-phase motor/starter.	4	6		
	PC3. By following the safety guidelines make the setup & control of three phase induction motor with the help of star delta starter.	4	6		
	PC4. Change the rotation of the induction motor by changing the phase connection by following safety guidelines.	4	6		
	PC5. Perform short circuit test with the help of multimeter/megger by following all safety guidelines.	2	3		
	PC6. Perform open circuit test with the help of multimeter/megger by following all safety guidelines.	2	3		
	PC7. Install overload relay and test for proper working.	4	6		
	PC8. Fixing of various type of electrical safety device like type of fuse, overload relay, connector, MCCB, ELCB.	4	6		
	PC9. Fixing of RCCB, ELCB and MCCB for testing of leakage of electric current.	4	6		
	PC10. Perform termination and crimping of connecting cable with the help of hand tool and power tools.	2	3		
	PC11. Perform DG connection with main panel using appropriate hand tools and safety guidelines of the organization.	4	6		
	PC12. Carry out maintenance and testing of transformer timely with the help of their senior whenever required.				
	TOTAL		40	60	

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	TheoryMarks	PracticalMarks	ProjectMarks	Viva Marks
SVSU/E/N/4004: Assemble, fix, fault detection & repair of Home Automation.	PC1. Identify the type of electronic instruments, tools & consumable items.	4	6		
	PC2. Identify various type of cell(primary & secondary).	2	3		
	PC3. Perform testing of gravity/voltage of the battery with the help of necessary tools.	2	3		
	PC4. Perform soldering on components, lug and board with safety.	4	6		
	PC5.Study and Recognize active and passive components.	4	6		
	PC6. Make a half wave and full wave rectifier circuits and test with the help of multimeter.	4	6		
	PC7. Use of multimeter for measuring voltage, resistance, current and finding faults in Appliances.	4	6		
	PC8. PLC Programming with Ladder diagram.	4	6		
	PC9. Study basic programming based on microcontroller and microprocessor.	4	6		
	PC10. Study and understand sensors.	2	3		
	PC11. Make the contacts of LEDs terminals, protection circuits and testing of LED.	4	6		
	PC12. Communication protocols for Automation.	2	3		
	TOTAL	40	60		

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	TheoryMarks	PracticalMarks	ProjectMarks	Viva Marks
SVSU/E/N/4005: Health, safety & environment exercise in the workplace.	PC1. Recognize and report any risks available at the site to their senior officers.	2	3		
	PC2. follow safety guidelines in handling workplace materials.	2	3		
	PC3. Attend in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site.	4	6		
	PC4. Recognize Personal Protective Equipment's as per their requirements.	4	6		
	PC5. To practice Safe handling of hand tools, power tools, and other required materials.	2	3		
	PC6. Understand & make a checklist for electrical safety guidelines.	2	3		
	PC7. Understand safety tips when working with power tools, and power cords.	4	6		
	PC8. Understand & follow waste handling organizational guidelines.	2	3		
	PC9. Understand the use of red, yellow, and green trash bins.	2	3		
	PC10. Understand & Follow safetyguidelines in handling ladder.	2	3		
	PC11. The proper way of setting up & maintain Different Types of ladders.	2	3		
	PC12. Understand & Follow fire safety organization guidelines.	2	3		
	PC13. Select and use of fire extinguisher forthe particular fire.	2	3		
	PC14. follow t h e PASS method for fireextinguishing.	2	3		
	PC15. Follow recommended safe practices during first Aid as per organization guidelines.	2	3		
	PC16. Follow safe practices in situations like, burns, electric shock, bee sting, CPR,nose bleed,and heat stroke.	4	6		
	TOTAL	40	60		



NOS/ModuleName	Assessment	TheoryMarks	PracticalMarks	ProjectMarks	Viva Marks
Employabilityskill	Introduction to Employability Skills PC1. understand the significance of employability skills in meeting the currentjob market requirement and future ofwork. PC2. identify and explore learning and employability relevant portals	2	0		
	Constitutional values-Citizenship PC3. Recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. And personal values and ethics such as honesty, integrity, caring and respectingothers, etc. PC4. Follow environmentally sustainablepractices	2	0		
	Becoming a Professional in the 21stCentury PC5. Recognize the significance of 21st Century Skills for employment PC6. Practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. In personal and professional life	3	3		
	Becoming a Professional in the 21stCentury PC5. Recognize the significance of 21st Century Skills for employment PC6. Practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. In personal and professional life	3	3		
	Basic English Skills	2	4		

	PC7. Use basic English for everyday conversation in different contexts, inperson and over the telephone PC8. Read and understand routine information, notes, instructions, mails, letters etc. Written in English PC9. Write short messages, notes, letters, e-mails etc. In English				
	Career Development & Goal Setting PC10. Understand the difference between job and career. PC11. Prepare a career development plan with short- and long-term goals.	1	2		
	Communication Skills PC12. Follow verbal and non-verbal communication etiquette while communicating in professional and public settings PC13. Work collaboratively with others in a team	1	3		
	Diversity and Inclusion PC14. Communicate and behave appropriately with all genders and pwd PC15. Escalate any issues related to sexual harassment at workplace according to POSH Act	1	1		
	Financial and Legal Literacy PC16. Identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc. PC17. Carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook PC18. Identify common components of salary and compute income, expenses, taxes, investments etc. PC19. Identify relevant rights and laws and use legal aids to fight against legal exploitation	2	3		
	Essential Digital Skills PC20. Operate digital devices and use their features and applications securely and safely PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively use basic features of word processor, spreadsheets, and presentations. PC22. use basic features of word processor, spreadsheets, and presentations	2	6		
	Entrepreneurship	2	2		

	<p>PC23. Identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research</p> <p>PC24. Develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion</p> <p>PC25. Identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity</p>				
	<p>Customer Service</p> <p>PC26. Identify different types of customers and ways to communicate with them</p> <p>PC27. Identify and respond to customer requests and needs in a professional manner</p> <p>PC28. Follow appropriate hygiene and grooming standards</p>	1	2		
	<p>Getting ready for apprenticeship & Jobs</p> <p>PC29. Create a professional Curriculum vitae (Résumé)</p> <p>PC30. Search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. And job portals, respectively</p> <p>PC31. Apply to identified job opening using offline /online methods as per requirement</p> <p>PC32. Answer questions politely, with clarity and confidence, during recruitment and selection</p> <p>PC33. Identify apprenticeship opportunities and register for it as per guidelines and requirements</p>	1	4		
	Total	20	30	-	-
OJT (On Job Training)	Total	-	30	-	20
	Grand Total- 600	220	360		20

Annexure: 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.

Mention the detailed assessment strategy in the provided template.

<1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. 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.

3. Assessment Quality Assurance levels/Framework:

- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified & trainer must be ToT Certified

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding

5. Method of verification or validation:

- Surprise visit to the assessment location

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored

On the Job:

1. Each module (which covers the job profile of Automotive Service Assistant Technician) will be assessed separately.
2. The candidate must score 60% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
4. Assessment of each Module will ensure that the candidate is able to:
 - Effective engagement with the customers
 - Understand the working of various tools and equipment

Annexure: Acronym and Glossary

Acronym

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

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.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf