



QUALIFICATION FILE

Assistant Robotics Technician (Introduction)

☒ 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: 3

Submitted By:

Electronics Sector Skill Council of India (ESSCI)

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Table of Contents

Section 1: Basic Details	3
Section 2: Module Summary	5
NOS/s of Qualifications	5
Mandatory NOS/s:	5
Elective NOS/s:	5
Optional NOS/s:	6
Assessment - Minimum Qualifying Percentage	6
Section 3: Training Related	6
Section 4: Assessment Related	7
Section 5: Evidence of the need for the Qualification	7
Section 6: Annexure & Supporting Documents Check List	8
Annexure: Evidence of Level	8
Annexure: Tools and Equipment (Lab Set-Up)	10
Annexure: Industry Validations Summary	12
Annexure: Training & Employment Details	12
Annexure: Blended Learning	14
Annexure: Detailed Assessment Criteria	14
Annexure: Assessment Strategy	19
Annexure: Acronym and Glossary	20

Section 1: Basic Details

1.	Qualification Name	Assistant Robotics Technician (Introduction)													
2.	Sector/s	Electronics													
3.	Type of Qualification: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i>	Qualification Name of existing/previous version:												
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>	NA													
5.	National Qualification Register (NQR) Code & Version <i>(Will be issued after NSQC approval)</i>	QG-03-EH-01992-2024-V1-ESSC	6. NCrF/NSQF Level: 3												
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	An Assistant Robotics Technician (Introduction) carries out the setup for Testing of small-scale robotics systems followed by its Inspection for desired and rated functionality, while ensuring adherence to standard working practices. The role of the individual is to understand the various parts of a small-scale robotic systems such as robotics arms and rovers used for various applications, testing and learning how to control them. This job role would help them be ready for a job in the small-scale robotics systems industry assisting senior robotics technicians.													
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <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>10th or equivalent</td> <td>1 year Relevant Experience</td> </tr> <tr> <td>2</td> <td>9th</td> <td>1 year relevant experience</td> </tr> <tr> <td>3</td> <td>8th</td> <td>2 years Relevant Experience</td> </tr> </tbody> </table> b. Age: 18 years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	10th or equivalent	1 year Relevant Experience	2	9th	1 year relevant experience	3	8th	2 years Relevant Experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)													
1	10th or equivalent	1 year Relevant Experience													
2	9th	1 year relevant experience													
3	8th	2 years Relevant Experience													
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	14	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable):</i> I												

12.	Any Licensing requirements for Undertaking Training on This Qualification (<i>wherever applicable</i>)	NA																						
13.	Training Duration by Modes of Training Delivery (<i>Specify Total Duration as per selected training delivery modes and as per requirement of the qualification</i>)	<input type="checkbox"/> Offline <input type="checkbox"/> Online <input checked="" type="checkbox"/> Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>00:00</td> <td>210:00</td> <td>90:00</td> <td>00:00</td> <td>420:00</td> </tr> <tr> <td>Online</td> <td>120:00</td> <td>00:00</td> <td>00:00</td> <td>00:00</td> <td></td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	00:00	210:00	90:00	00:00	420:00	Online	120:00	00:00	00:00	00:00	
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Classroom (offline)	00:00	210:00	90:00	00:00	420:00																			
Online	120:00	00:00	00:00	00:00																				
14.	Aligned to NCO/ISCO Code/s (<i>if no code is available mention the same</i>)	NCO-2015/3139.1400																						
15.	Progression path after attaining the qualification (<i>Please show Professional and Academic progression</i>)	Robotics Technician																						
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	NA																						
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	No gender sensitization																						
20.	Are Greening/ Environment Sustainability Aspects Covered (<i>Specify the NOS/Module which covers it</i>)	<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 (<i>In case of CS or MS, provide details of both Lead AB & Supporting ABs</i>)	Name: Dr. Abhilasha Gaur Email: ceo@essc-india.org Website: https://www.essc-india.org/ Contact No.: 011 – 8447738501																						
23.	Final Approval Date by NSQC: 31/01/2024	24. Validity Duration: 3 Years			25. Next Review Date: 31/01/2027																			

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/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Carry out setup of small-scale robotics system	ELE/N3174 & V1.0	Core	3	5	21	69	60	00	150	40	60	00	00	100	40
2.	Testing of small-scale robotics system	ELE/N3175 & V1.0	Core	3	6	60	90	30	00	180	40	60	00	00	100	40
3.	Communicate and coordinate effectively with others	ELE/N9972 & V2.0	Non-core	3	1	15	15	00	00	30	35	65	00	00	100	10
4.	Employability Skills (60 hours)	DGT/VSQ/N0102 & V1.0	Non-core	3	2	24	36	00	00	60	20	30	00	00	50	10
Duration (in Hours) / Total Marks						120	210	90	00	420	95	135	10	10	250	100

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
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: 50 % (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 NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	BE/ BTech (Electrical/ Mechanical/ Electronics) with 1 year industrial and 1 year training experience in the Robotics field Or Diploma/ITI (Electrical/ Mechanical/ Electronics) with 2 years industrial and 1 year training experience in the Robotics field Or Certified in relevant CITS Trade
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	BE/ BTech (Electrical/ Mechanical/ Electronics) with 2 years industrial and 2 years training experience in the Robotics field Or Diploma (Electrical/ Mechanical/ Electronics) with 3 years industrial and 2 years training experience in the Robotics field
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/ Mechanical/ Electronics) with 2 years industrial and 2 years assessment experience in Robotics Or Diploma/ITI (Electrical/ Mechanical/ Electronics) with 3 years industrial and 2 years assessment experience in Robotics Or Certified in relevant CITS Trade
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	NA
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	NA
4.	Assessment Mode (Specify the assessment mode)	Blended
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): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided:
5.	Estimated nos. of persons to be trained and employed: 1000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: In progress If "No", why:

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 <i>(Mandatory)</i>	<i>Attached</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Attached</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Attached</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Attached</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	<i>Filled</i>
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<i>Filled</i>
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	<i>Attached</i>
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Attached</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	<i>Attached</i>
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Attached</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	
12.	Any other document you wish to submit:	

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	Demands a wide range of specialised technical skill, clarity of knowledge and practice in broad range of activity involving standard and non-standard practices. <ul style="list-style-type: none"> Carry out setup of small-scale robotics system Testing of small-scale robotics system 	Assistant Robotics Technician (Introduction) carries out the setup for testing of a robotics systems followed by its testing for desired and rated functionality, while ensuring adherence to standard working practices.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual and theoretical knowledge in broad contexts within a field of work or study.	Their key role would be to assist Robotics Automations Technician to setup the robotics platform for automation and also	3

	<ul style="list-style-type: none"> The individuals in this job setups the platform for manufacture and test of robotics system of varying sizes that are used in various applications such as industrial pick and place, manufacturing line robotics etc. 	<p>help setup the testbed for the Lead to test.</p> <p>Hence Level 3</p>	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.</p> <ul style="list-style-type: none"> 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 respecting others, etc 	Hence Level 3	3
Broad Learning Outcomes/Core Skill	<ul style="list-style-type: none"> Understanding testing of robotics 	Hence Level 3	3
Responsibility	<ul style="list-style-type: none"> To assist the Robotics Automation Technician and prepare Testbed 	Hence Level 3	3

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specifications	Quantity for specified Batch size (30 Candidates)
1	Soldering Station	<ul style="list-style-type: none"> • Power: 50 W • Input Voltage: 220 V AC 50Hz • Output Voltage: 24 V AC • Heating Element: Ceramic • Temperature Range: 200-480°C • Tip to Ground Resistance: < 2 Ω • Tip to Ground Potential: < 2mV • Cable Length: 0.5-1m 	2 nos
2	Screwdriver Set	<ul style="list-style-type: none"> • 100 percent brand new 32-piece precision screwdriver kit set • Jackly jk 6032-a 32-piece mini precision screwdriver set with case w/ tweezer, handle and torx, hex bits etc. Jk6032-a • Ideal for accessing fasteners in tight areas, Non-slip studded handle, Non-slip tough shaft ensures greater comfort and convenience • All in one compact pocket-sized case for easy carry • For repairing laptops, mobile devices, and other precision items like wristwatches and eyeglasses 	6 set
3	Pliers Kit	<ul style="list-style-type: none"> • Item Dimensions LxWxH: 50 x 50 x 50 Millimeters • Handle Material: Alloy Steel • Grip Type: Ergonomic 	6 sets
4	Tweezers Kit	<ul style="list-style-type: none"> • Material: Alloy Steel • Colour: Black • Item Dimensions LxWxH: 35 x 59 x 168 Millimeters • Style: Powder Coated 	6 sets
5	Wire Strippers	<ul style="list-style-type: none"> • Wire Gauge screw in slot holds stripping die to proper size for repeated jobs and prevent nipped wire • H-1 FEET L-1/2 FEET W-200 GM Fast cutting action with black oxide finish • Sharp cutting edges for all industrial uses. • Strips and cuts wire 12-24 gauge 	6 Nos
6	Glue Gun	<ul style="list-style-type: none"> • Suitable for paper and crafts purposes only • Glue gun will not heat up enough to melt glue in AC • Compatible glue stick thickness: 11 mm • Take 5 to 8 minutes to heat 	2 Nos

7	Digital Multimeter	<ul style="list-style-type: none"> • Display: 3 ½ digit liquid crystal display (LCD) with a maximum reading of 1999. • Polarity: Automatic, (-)negative polarity indication • Zero adjustment: Automatic • Overrange indication: Highest digit of(1) or (-1) is displayed at MSD Low battery:“ ” is displayed when the battery voltage drops below the operating voltage • Measurement rate: 3 measurements per second, nominal. • Operating conditions: 0°C to + 50°C at < 75% RH • Storage conditions: -20°C to + 60°C, 0-80% RH with battery removed. • Accuracy: Accuracy specifications at 23 ± 5°C, less than 75% RH. • Power Supply: Single, standard 9-volt battery, Eveready 216 or equivalent. • Battery life (typical): 200 hours 	2 Nos
8	Robotic Arm Kit with Joystick Mode and App Based Programming Mode	<ul style="list-style-type: none"> • Do-It-Yourself Robotic Arm Kit with minimum 4 DOF • Android Application Controlled for programming degrees of freedom • Programmable Robotic Motion with Multiple Repetitions • Manual Joystick Mode for practice • Controller board: Arduino based • 5V-2A Power requirement • Bluetooth 2.0 and USB connectivity to the device • Unique pairing of device and smartphone • App based joystick control 	6 Nos
9	Line Following Rover with Multicolor Line Detection	<ul style="list-style-type: none"> • Do-It-Yourself Robotic Car Kit • Multiple Colour Line Following • Rechargeable Battery Support • Controller board: Arduino based • Bluetooth 2.0 and USB connectivity to the device • Android Application Controlled • Colour choice selection in the app before following 	6 Nos

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

Annexure: Industry Validations Summary

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

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	LIVING THOUGHTS PRIVATE LIMITED	Mr. Santosh Kumar Mishra	CEO	LIVING THOUGHTS PRIVATE LIMITED Address: PLOT NO.185, SECOND FLOOR, BLOCK-C PHASE-1, NARAINA INDUSTRIAL AREA, DELHI New Delhi DL 110028 IN. Website: www/livingthoughts.io	7349185566	santosh@livingthoughts.io	
2	Sakar Robotics Private Limited	Mr. Karan Patil	Managing Director & CEO	Sakar Robotics Private Limited FL NO 4 CHIKHALI PLNO 143, SEC 16 MANAS RESI PCNTDA, Bhosari, Pune, Maharashtra 411039 www.sakarrobotics.com	9665695555	karan@sakarrobotics.com	
3	SAF SETU 100 India Pvt. Ltd.	Mr. Sumit Aggarwal	Managing Director	410, 4 th Floor, Sundaram Building, RDC Rajnagar, Ghaziabad, 201002	9953535425	s.aggarwal@setu100.com	
4	STEMROBO Technologies Pvt. Ltd.	Mr. Abhinav Gupta	COO	B-32, Block – B, Sector – 63, Noida, 201301, UP, INDIA	7905087639	abhinav.gupta@stemrobo.com	

Annexure: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates	Women	People with Disability
	Estimated Training # Total	Estimated Training # Women	Estimated Training # PwD
1	200	NA	NA

2	400	NA	NA
3	400	NA	NA

Data to be provided year-wise for next 3 years

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

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:

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 Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	<input checked="" type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	<ul style="list-style-type: none"> Books/ e-books Presentations Reference Material Audio / Video Modules 	30:70
2	<input checked="" type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	<ul style="list-style-type: none"> Self-Learning Videos Broadcasts Mobile Learning Curated Digital content 	30:70
3	<input checked="" type="checkbox"/> Showing Practical Demonstrations to the learners	<ul style="list-style-type: none"> Video Content E-Resource library AR/ VR/ XR 	30:70
4	<input checked="" type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	<ul style="list-style-type: none"> Training tools (tools list attached) Video Play Presentations 	30:70
5	<input checked="" type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	<ul style="list-style-type: none"> Online Question Bank Mobile Quick test app MCQ based tests 	30:70
6	<input checked="" type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	<ul style="list-style-type: none"> Assessment engine for Essays Up-loadable file examinations Mock test sessions 	30:70
7	<input checked="" type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	<ul style="list-style-type: none"> Online tests Offline assessments 	30:70

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
ELE/N3174 – Carry out setup of small-scale robotics system	<i>Understanding the components, operational basics of a Small-scale Robotics system</i>	20	30	-	-

	PC1. Identify different parts of a small-scale robotics system	4	8	-	-
	PC2. Knowing basic operations of a small-scale robotics system such as Robotics Arms and rovers and rational of parts used	4	8	-	-
	PC3. Understand the purpose of each component used in a small -scale Robotics system	6	8	-	-
	PC4. Understand the fitting mechanisms and right tools needed for the fitting/assembly	6	6	-	-
	<i>Understanding basic motion principles of a robotics system through a fundamental mobile control application</i>	20	30	-	-
	PC5. Understand the purpose of the different parts of a small-scale robotics system	8	8	-	-
	PC6. Understand concept of degrees of freedom of a small-scale robotics system	6	8	-	-
	PC7. Understand concepts of motion control of a small-scale robotics systems	4	8	-	-
	PC8. Understand sensor interfacing with a small-scale robotics system	2	6	-	-
	Total Marks	40	60	-	-
ELE/N3175: Testing of small-scale robotics system	<i>Performing Checks and Repair</i>	20	40		
	PC1. Inspect the functional components of a robotics system thoroughly by connecting to an external power source, using multi meters and other tools etc.	4	10	-	-
	PC2. Testing the robotics components as per desirable industry practices as per drawings	8	20	-	-
	PC3. Pre-test that the small-scale robotics systems is working desirably as per the rated norms/specifications	8	10	-	-
	<i>Reporting to superior</i>	20	20	-	-
	PC4. Inform on the workload and completion status	4	6	-	-
	PC5. Report work status through proper documentation as per organisational standards	8	4	-	-
	PC6. Intimate the problems unresolved during assembly, with reason	4	6	-	-
	PC7. Prepare the feedback form on customer installation with respect to the product deployment	4	4	-	-
	Total Marks	40	60	-	-
ELE/N9972: Communicate and coordinate effectively with others	<i>Communicate effectively with supervisor and colleagues</i>	27	51	-	-
	PC1. communicate potential hazards of a particular location	4	7	-	-
	PC2. comply with organisation's policies and procedures for working with colleagues	4	7	-	-

	PC3. maintain personal hygiene and professional appearance	4	7	-	-
	PC4. seek clarification on the information provided by supervisor, if needed	4	8	-	-
	PC5. respect the personal and professional space of colleagues and superiors	3	8	-	-
	PC6. report work completed as per the schedule to superior and inform of any deviations or anomalies	4	7	-	-
	PC7. analyse and act on feedback received from supervisor	4	7	-	-
	Respect gender and ability differences	8	14	-	-
	PC8. work depicting proper behaviour towards all genders and people with disability	4	7	-	-
	PC9. identify acts of discrimination and sexual harassment and report to concerned authorities	4	7	-	-
	Total Marks	35	65	-	-
	<i>Introduction to Employability Skills</i>	1	1	-	-
DGT/VSQ/N0102 - Employability Skills (60 hours)	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	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 respecting others, etc.	-	-	-	-
	PC4. follow environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
	PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
	PC6. practice the 21st Century Skills such as Self- Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-

	<i>Basic English Skills</i>	2	3	-	-
	PC7. use basic English for everyday conversation in different contexts, in person 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	-	-	-	-
	<i>Career Development & Goal Setting</i>	1	2	-	-
	PC10. understand the difference between job and career	-	-	-	-
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
	<i>Communication Skills</i>	2	2	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
	PC13. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	2	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
	PC16. select financial institutions, products and services as per requirement	-	-	-	-
	PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
	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	-	-	-	-
	<i>Essential Digital Skills</i>	3	4	-	-

PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /Online methods as per requirement	-	-	-	-

	PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	Total Marks	20	30	-	-
	Grand Total	95	135	10	10

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 SDMS/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:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- 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.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME verified by the other subject Matter Experts
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified & trainer must be ToT Certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

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
 - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
 - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
- Surprise visit to the assessment location
 - Random audit of the batch
 - Random audit of any candidate
6. Method for assessment documentation, archiving, and access
- Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
 - Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

On the Job:

1. Each module will be assessed separately.
2. The candidate must score 50% 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
 - Answer Sheets of Question Banks
 - Assessing the Log Book entries of Trainees at Employer location
 - Employer Performance Feedback.
4. Assessment of each Module will ensure that the candidate is able to:
 - Understand the theoretical concept
 - Work effectively at the workplace

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