











# **Model Curriculum**

**QP Name: Gym Equipment Service Technician** 

(Junior)

QP Code: SPF/Q8104

QP Version: 1.0

**NSQF Level: 3** 

**Model Curriculum Version: 1.0** 

Sports, Physical Education, Fitness and Leisure Sector Skill Council 207, DLF Tower, Galleria Mall, Mayur Vihar Extension, Delhi E: Priya.dwivedi@sportsskills.in







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## **Training Parameters**

Sector	Sports
Sub-Sector	Sports Manufacturing
Occupation	Gym Equipment Service Technician (Junior)
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3122.5200
Minimum Educational Qualification and Experience	OR 9th Grade pass with 1 years of relevant experience OR 8th Grade pass with 2 years of relevant experience OR
Pre-Requisite License or Training	5th Grade pass with 5 years of relevant experience  NA
Minimum Job Entry Age	18 years
Last Reviewed On	23/06/2023
Next Review Date	23/06/2026
NSQC Approval Date	23/06/2023
QP Version	1.0
Model Curriculum Creation Date	23/06/2023
Model Curriculum Valid Up to Date	23/06/2026
Model Curriculum Version	1.0
Minimum Duration of the Course	300 Hours
Maximum Duration of the Course	300 Hours







## **Program Overview**

This section summarizes the end objectives of the program along with its duration.

#### **Training Outcomes**

At the end of the program, the learner will be able to:

- Assess gym equipment for maintenance need
- Perform basic repairs to non-electric gym equipment
- Instal gym equipment
- Work effectively with others
- Maintain hygiene and sanitation

#### **Compulsory Modules**

The table lists the modules, their duration and mode of delivery.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
SPF/N8109: Identify equipment maintenance and repair requirements NOS Version No. 1.0 NSQF Level: 3	30:00	50:00	25:00	00:00	105:00
(Bridge Module)  Module 1: Introduction to the job role of gym equipment service technician (Junior)	05:00	10:00	00:00	00:00	15:00
Module 2: Assess gym equipment for maintenance and repair need	25:00	40:00	25:00	00:00	90:00
SPF/N8110: Assemble, maintain, and repair gym equipment NOS Version No. 1.0 NSQF Level: 3	20:00	80:00	35:00	00:00	135:00
Module 3: Perform assembly, maintenance, and repair of gym equipment	20:00	80:00	35:00	00:00	135:00







SPF/N1169 – Improve workplace resource usage NOS Version No. 1.0 NSQF Level: 3	10:00	20:00	00:00	00:00	30:00
Module 4: Build an environmental friendly workplace	10:00	20:00	00:00	00:00	30:00
DGT/VSQ/N0101- Employability skills (30 Hours) NOS Version No. 1.0 NSQF Level: 2	15:00	15:00	00:00	00:00	30:00
Module 5: Employability skills	15:00	15:00	00:00	00:00	30:00
<b>Total Duration</b>	75:00	165:00	60:00	00:00	300:00







## **Module Details**

Module 1: Introduction to the job role of gym equipment service technician (Junior)

Bridge Module

#### **Terminal Outcomes:**

• Describe the role and career opportunities of a gym equipment service technician (Junior)

<b>Duration</b> : <i>05:00</i>	<b>Duration</b> : 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>State the role and responsibilities of a gym equipment service technician (Junior).</li> <li>Explain the difference between gym equipment maintenance, assembly, and repair.</li> </ul>	Create a career progression chart of a gym equipment service technician (Junior).
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart pap	per, clipboards
Tools, Equipment, and Other Requirements	
NA	







## Module 2: Assess gym equipment for maintenance and repair need *Mapped to SPF/N8109, v1.0*

#### **Terminal Outcomes:**

- Check gym equipment and identify maintenance need
- Check gym equipment and identify repair need
- Maintain hygiene and sanitation at workplace

Duration: 25:00	<b>Duration</b> : 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Discuss the ways to perform detailed analysis of gym equipment</li> <li>Explain the ways to assess maintenance need of gym equipment</li> <li>Explain the ways to assess repair need of gym equipment</li> <li>Recall the factors affecting the performance of gym equipment</li> <li>Explain the factor affecting the lifespan of gym equipment</li> <li>Discuss how non-suage of equipment (downtime) affects the performance of the equipment</li> <li>Discuss the importance of following manufacturers guidelines while using gym equipment</li> <li>Recall the types of cardio equipment</li> <li>Recall the types of weight training equipment</li> <li>Name the different components of a treadmill</li> <li>Discuss the difference between guarantee and warranty of gym equipment</li> <li>Discuss the ways to claim the warranty of faulty equipment</li> <li>Explain the ways to ensure hygiene and sanitation at workplace</li> </ul>	<ul> <li>Use gym equipment maintenance checklist</li> <li>Use maintenance and repair history card to analyse the gaps, if, any in delay of proper maintenance</li> <li>Identify visible indicators of wear and tear of the equipment</li> <li>Demonstrate the steps to be followed while assessing the maintenance need of the gym equipment</li> <li>Examine handlebars, pedals, pedal straps, seats of gym equipment</li> <li>Examine if there are any cuts, tears or fraying to the treadmill belts</li> <li>Examine belts tension in treadmill</li> <li>Demonstrate the process of isolating broken down, faulty equipment</li> <li>Demonstrate the process of storing spare equipment for future use</li> <li>Update maintenance card</li> <li>Document repair need</li> </ul>

#### **Classroom Aids:**

Laptop, whiteboard, marker, projector, chart paper, clipboards, height & weight chart

#### **Too, Equipment and Other Requirements**

Wrench (all sizes), screwdriver – set, hammer (wooden, rubber, steel), allen key set, crank puller, bottom bracket puller, retaining ring pliers, t-bar, pedal crank arm removal tool with handle, gym cable wire rope cutters, low viscosity adhesive, power jog motor clamp tool, heavy duty knife blades, hot melt glue gun, bolt extractor set, hacksaw blades, wire brush, needle files, pin punch set, engineers scriber, telescopic grease gun, long handled gym cable crimping tool, machine oil, lubricant, cleaning cloth, petroleum jelly, silicone spray, graphite (dry lubricant), protective eye googles, anti-shock/ anti-cut gloves, tool box, first-aid box







## Module 3: Perform assembly, maintenance and repair of gym equipment *Mapped to SPF/N8110, v1.0*

#### **Terminal Outcomes:**

- Assemble and install gym equipment
- Perform routine equipment maintenance and repair
- Work effectively with others

Dura	ation: 20:00	Duration: 80:00
The	ory – Key Learning Outcomes	Practical – Key Learning Outcomes
• F aa • F iii • E e e e e e e e e e e e e e e e e e e	explain the difference between assembly, installation and repair of equipment and explain manufacturer's instruction on assembly of gym equipment and explain manufacturer's instruction on installation of gym equipment explain drive — clutch, v-belts, chains of gym equipment and assembly and installation of gym equipment and assembly and installation of gym equipment dentify the components of treadmill, S-drive areadmill, and climb-mill dentify the components of cardio bikes, alliptical/ ascent, stepper, rower, etc. and attachments of cable and installation weight machines are perfect tensions of pulleys in weight machines are perfect tensions of pulleys in weight machines are perfect tensions of pulleys in weight machines are perfect tensions of inclusive workforce.	<ul> <li>Identify correct tools used for maintenance and repair of gym equipment</li> <li>Assemble and install treadmill S-drive treadmill, and climb-mill following manufacturer's instruction</li> <li>Assemble and install treadmill cardio bikes, elliptical/ ascent, stepper, rower following manufacturer's instruction</li> <li>Assemble and install cable motion weight machines following manufacturer's instruction</li> <li>Correct the tension and alignment of running belt</li> <li>Correct hardware tightness of connecting joint areas</li> <li>Demonstrate ways to clean touch screen consoles using microfiber cloth</li> <li>Demonstrate correct procedure to clean vacuum motor cover, including the fan on the bottom, under and around the unit</li> <li>Demonstrate how to confirm the safety features of (control zone, frame IR sensor and proximity sensor)</li> <li>Lubricate running belts/ deck, joints, seat guides, etc.</li> <li>Adjust stability and levels of cardio equipment</li> <li>Adjust stability, levels and tightness of stepper and rower machines</li> <li>Adjust tensions of cable motion weight machines</li> <li>Change damaged or worn out pulleys</li> <li>replace worn and non-functioning snap hook links, S-hooks and C-hooks</li> <li>Adjust improper alignment of weight stack and pin</li> <li>Report and document maintenance and repair tasks of each equipment</li> </ul>

#### **Classroom Aids:**

Laptop, whiteboard, marker, projector, chart paper, clipboards

#### **Tools, Equipment and Other Requirements**

Wrench (all sizes), screwdriver – set, hammer (wooden, rubber, steel), allen key set, crank puller, bottom bracket puller, retaining ring pliers, t-bar, pedal crank arm removal tool with handle, gym







cable wire rope cutters, low viscosity adhesive, power jog motor clamp tool, heavy duty knife blades, hot melt glue gun, bolt extractor set, hacksaw blades, wire brush, needle files, pin punch set, engineers scriber, telescopic grease gun, long handled gym cable crimping tool, machine oil, lubricant, cleaning cloth, petroleum jelly, silicone spray, graphite (dry lubricant), protective eye googles, anti-shock/ anti-cut gloves, tool box, first-aid box







# Module 4: Build an environmentally sustainable workplace *Mapped to SPF/N1169, v1.0*

#### **Terminal Outcomes:**

- Identify effective waste management techniques in the workplace
- Ways to make the workplace environmentally sustainable

Duration: 10:00	Duration: 20:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul> <li>Recognize the environment-friendly materials available to replace conventional materials.</li> <li>Discuss ways of disposing non-recyclable waste appropriately.</li> <li>Explain common sources of pollution and ways to minimize them.</li> </ul>	<ul> <li>Prepare statutory documents relevant to safety and hygiene.</li> <li>Demonstrate the methods of disposing non-recyclable waste.</li> <li>Report malfunctioning. (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment.</li> </ul>
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart pag	
<b>Tools, Equipment and Other Requirement</b>	S
Gloves, safety goggles, ladder	







#### Module 5: Employability Skills Mapped to DGT/VSQ/N0101

#### **Terminal Outcomes:**

- Understand Employability skills along with communication skills and constitutional values
- Able to set a goal and create a career plan, along with knowledge financial and legal knowledge

<b>Duration</b> : <i>15:00</i>	<b>Duration</b> : <i>15:00</i>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul> <li>Discuss the Employability Skills required for jobs in various industries.</li> <li>Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen</li> <li>Describe the role of digital technology in today's life</li> <li>Explain entrepreneurship and opportunities available</li> <li>Identify different types of customers and their needs</li> <li>Explain skills required to become a 21st century professional</li> <li>Teach to read and write basic English</li> <li>Explain effective communication skills</li> <li>Teach basic financial and legal</li> </ul>	<ul> <li>Create a career plan</li> <li>Implement Self-awareness, time management, critical thinking, problem solving</li> <li>Create sample word documents, excel sheets and presentations using basic features, utilize virtual collaboration tools to work effectively wherever necessary</li> <li>Implement communication skills while handling different customers</li> <li>Use appropriate basic English sentences/phrases while speaking.</li> <li>Differentiate between types of customers.</li> <li>Create a biodata.</li> <li>Use various sources to search and apply for jobs.</li> </ul>

#### **Classroom Aids:**

Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster

#### **Tools, Equipment and Other Requirements**

Computer (PC) with latest configurations, Computer Tables, Computer Chairs, UPS, Scanner cum Printer







#### **On-the-Job Training**

### Mapped to Gym equipment service technician (Junior)

Mandatory Duration: 60:00 Recommended Duration: 00:00

## **Location: On-Site Terminal Outcomes**

- Assess gym equipment for maintenance need
- Perform basic repairs to non-electric gym equipment
- Instal gym equipment
- Work effectively with others
- Maintain hygiene and sanitation
- Work effectively with others







### **Annexure**

### **Trainer Requirements**

Trainer Prerequisites								
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks		
Qualification		Years	Specialization	Years	Specialization			
12 <sup>th</sup> Class	Gym Equipment Service Technician (Junior)	Minimum of 1 year	Must have worked as a Gym Equipment Service Technician (Junior)	Minimum of 1 year	Gym Equipment Service Technician (Junior)	All empanele Assessors would have to undergo "Train the Trainer" Program conducted by SPEFL SC fo each job role time to time		

Trainer Certification				
<b>Domain Certification</b>	Platform Certification			
Certified ToT for job role "Gym Equipment Service Technician (Junior)" mapped to QP; "SPF/Q8104, v1.0"  Minimum accepted score is 80%	Recommended that the trainer is certified for the Job-Role "Trainer" mapped to the QP: Master Trainer (VET and skills) MEP/Q2601, v2.0" Minimum accepted score is 80%			







### **Assessor Requirements**

Assessor Prerequisites							
Minimum Educational	_		elevant Industry xperience		Training/Assessment Experience		
Qualification		Years	Specialization	Years	Specialization		
12 <sup>th</sup> Class	Gym Equipment Service Technician (Junior)	Minimum of 2 year	Must have worked as a Gym Equipment Service Technician (Junior)	Minimum of 1 year	Gym Equipment Service Technician (Junior)	All empanelled Assessors would have to undergo "Train the Trainer" Program conducted by SPEFL SC for each job role time to time	

Assessor Certification		
<b>Domain Certification</b>	Platform Certification	
Certified ToA for job role "Gym Equipment Service Technician (Junior)" mapped to QP; "SPF/Q8104, v1.0"	Recommended that the assessor is certified for the Job-Role "Assessor" mapped to the QP:	
Minimum accepted score is 80%	Assessor (VET and skills) MEP/Q2701, v2.0" Minimum accepted score is 80%	







#### **Assessment Strategy**

#### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the SPEFL Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre as per assessment criteria below.
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
- 6. To pass the Qualification Pack assessment, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

#### Recommended Pass % aggregate for QP: 50

Each NOS in the Qualification Pack (QP) will be assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Performance Criteria in the NOS will be assigned marks for or practical based on relative importance, criticality of function and training infrastructure.

The following tools are proposed to be used for final assessment:

- Practical Assessment: This will comprise of a creation of mock environment in the skill lab
  which is equipped with all equipment's required for the qualification pack.
  Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc.
  will be ascertained by observation and will be marked in observation checklist. The product will
  be measured against the specified dimensions and standards to gauge the level of his skill
  achievements.
- 2. **Viva/Structured Interview:** This tool will be used to assess the conceptual understanding and the behavioural aspects as regards the job role and the specific task at hand. It will also include questions on safety, quality, environment, and equipment, etc.
- 3. **Written Test:** Under this test few key items which cannot be assessed practically will be assessed. The written assessment will comprise of:
  - i. True / False Statements
  - ii Multiple Choice Questions
  - iii Matching Type Questions.
  - iv Fill in the blanks







#### Accreditation of Assessing Body:

The SPEFL SC's Accreditation process is divided into two steps:

#### 1. Pre-accreditation process:

- Apply for Accreditation: Application form with desired documents in prescribed format to be sent.
- Document Compliance: to be done for ensuring the compliance and adherence of applied assessing body according to criteria laid down by SPEFL SC.
- Presentation on Quality Assurance: to be given by Assessing body highlighting the quality assurance process laid down by Assessing body at the process points.
- Once the assessing body clears the due diligence process, the accreditation is given along with terms and conditions.

#### 2. Post-accreditation process:

- Post accreditation, the accredited assessing bodies needs to fulfil following minimum eligibility criteria or requisites for implementation:
- All Empanelled Assessors would have to undergo "Train the Assessor" Program conducted by SPEFL SC for each job role time to time.
- Accredited Assessing Body would have to abide with requisite timelines, policies and regulations declared by SPEFL sector skill council.
- Accredited Assessing Body with times would have to contribute to expansion of the questionnaire.







### Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of a module.</b> A set of terminal outcomes help to achieve the training outcome.







### **Acronyms and Abbreviations**

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards