

|  |
| --- |
| **Model Curriculum**  **QP Name:** **Machine Operator - Plastics Recycling (MO-PR)**  **NQR Code: QG-03.5-CP-04121-2025-V2-CIPET**  **QP Version: 2.0**  **NSQF Level: 3.5**  **Model Curriculum Version: 1.0**  **Sector: Chemicals & Petrochemicals (CPC)** |
| **Central Institute of Petrochemicals Engineering & Technology (CIPET)**  **Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India**  **CIPET Head office, T.V.K Industrial Estate, Guindy, Chennai – 600 032.** |

**Table of Contents**

[Training Parameters 1](#_heading=h.3n5mp3cvg7ma)

[Program Overview](#_heading=h.3n5mp3cvg7ma) 2

[Training Outcomes](#_heading=h.m4765ftcducv) 2

[Compulsory Modules](#_heading=h.kto7ubwvqqbd) 2

[Module Details](#_heading=h.qxqkrit4hlgt) 3

[Module1: Understand basic concept, job requirements and basics knowhow related to the plastics recycling process…………………………………………………………………………………………………………......](#_heading=h.io45a6jr0l8m)3

[Module2: Plastics Recycling related operations, monitor process parameters and troubleshoot the process](#_heading=h.tai4lhisu19) 4

Module 3: [To conduct quality check and inspection of contamination levels of the recycled resins with reference to approved product………………………………………………………………………………………………………..](#_heading=h.tiafkjjxuwhv)5

[Module4: Entrepreneurship in Plastics Recycling …………………………………………………………………..………](#_heading=h.grzqme579hs4)6

[Module5: Maintain basic health and safety practices at the workplace, 5S](#_heading=h.badz27clddti) 7

[Module6: CPC/N 0219 - Basics of MS Office / Office Open-source suite](#_heading=h.95rx9kxjpiq7) 8

[Module7: Employability Skills](#_heading=h.95rx9kxjpiq7) 9

[Module8: On-the-Job Training 1](#_heading=h.95rx9kxjpiq7)1

[Annexure 1](#_heading=h.6o87bs6tg333)2

[Trainer Requirements 1](#_heading=h.6o87bs6tg333)2

[Assessor Requirements 1](#_heading=h.xopwa5v40caq)3

[Assessment Strategy 1](#_heading=h.d6a0j4103p89)4

[References](#_heading=h.1k0dl1vwg1ju) 15

[Glossary](#_heading=h.yhzlxxt4ucel) 15

[Acronyms and Abbreviations](#_heading=h.9ipw9cnaj3m) 16

# Training Parameters

|  |  |
| --- | --- |
| **Sector** | Chemicals & Petrochemicals (CPC) |
| **Sub-Sector** | Petrochemicals |
| **Occupation** | Plastics Recycling Machine Operator |
| **Country** | India |
| **NSQF Level** | 3.5 |
| **Aligned to NCO/ISCO/ISIC Code** | NCO-2015/9611 |
| **Minimum Educational Qualiﬁcation and**  **Experience** | | **S. No.** | **Academic/Skill Qualification (with Specialization - if applicable)** | **Required Experience (with Specialization - if applicable)** | | | --- | --- | --- | --- | | 1 | 11th Grade pass | No Experience required | | 2 | 10th Grade pass | 1.5 year relevant experience | | 3 | 8th Grade pass | 4.5 years relevant experience | | 4 | Previous relevant NSQF Level 3 | with 1.5 years relevant experience | |
| **Pre-Requisite License or Training** |  |
| **Minimum Job Entry Age** | 18 Years |
| **Last Reviewed On** |  |
| **Next Review Date** |  |
| **NSQC Approval Date** |  |
| **QP Version** | 1 |
| **Model Curriculum Creation Date** |  |
| **Model Curriculum Valid upto Date** |  |
| **Model Curriculum Version** | 1.0 |
| **Minimum Duration of the Course** | 600 Hrs. |
| **Maximum Duration of the Course** | 600 Hrs. |

# 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 should have acquired the listed knowledge and skills.

* Understand the plastics recycling process and its importance.
* Familiarity with different types of plastics, their properties, and recycling methods.
* Knowledge of machine operations, safety protocols, and maintenance procedures.
* Understanding of quality control measures and standards for recycled plastics.
* Operate plastics recycling machines safely and efficiently.
* Perform routine maintenance tasks to ensure machine longevity.
* Monitor and control the recycling process to produce high-quality output.
* Troubleshoot common machine issues and perform basic repairs.

## Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NOS and Module Details** | **Theory Duration** | **Practical Duration** | **On-the-Job Training Duration (Mandatory)** | **On-the-Job Training Duration (Recommended)** | **Total Duration** |
| Module 1: CPC/N2911 -  Understand basic concepts, job requirements and basics knowhow related to the plastics recycling process. | 52:00 | 68:00 | 00:00 | 00:00 | 120:00 |
| Module 2: CPC/N 2921 -  Plastics Recycling related operations, monitor process parameters and troubleshoot the process | 60:00 | 120:00 | 00:00 | 00:00 | 180:00 |
| Module 3: CPC/N2922 - To conduct quality check and inspection of contamination levels of the recycled resins with reference to approved product. | 22:00 | 68:00 | 00:00 | 00:00 | 90:00 |
| Module 4: CPC/N2923 -Entrepreneurship in Plastics Recycling | 22:00 | 68:00 | 00:00 | 00:00 | 90:00 |
| Module 5: CPC/N0411 -Maintain basic health and safety practices at the workplace, 5S. | 12:00 | 18:00 | 00:00 | 00:00 | 30:00 |
| Module 6: CPC/N 0219 - Basics of MS Office / Office Open source suite | 12:00 | 18:00 | 00:00 | 00:00 | 30:00 |
| Module 7: DGT/VSQ/N0101 - Employability Skills | 30:00 | 00:00 | 00:00 | 00:00 | 30:00 |
| Module 8: On the Job Training (OJT) | 00:00 | 00:00 | 30:00 | 00:00 | 30:00 |
| **Total Duration** | **210:00** | **360:00** | **30:00** | **00:00** | **600:00** |

# Module Details

## Module 1: CPC/N2911-Understand basic concept, job requirements and basics knowhow related to the plastics recycling process.

### Mapped To:

#### Terminal Outcomes:

* + Understanding the work order and the process requirement from the supervisor
  + Arranging the required raw material and Dies for the process
  + Cleaning the equipment and the Dies

|  |  |
| --- | --- |
| **Duration**: *52:00 Hours* | **Duration**: *68:00 Hours* |
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| * Interact with the operator in order to understand the production schedule. * Check availability of the personal protective equipments (PPE) like Gloves, Goggles etc * Ensure that the required Plastics Waste material is procured from the store before starting the process * Identify the Die & Pelletizer etc. required for executing the required operation and ensure that the same is available for operation. * Collect the Die from the tool room, If Die is not available. * Install and bolt the Die and pelletizer etc. in place. * Ensure cleaning of the area around the apparatus for any oil, grease, combustible substances etc. so as to prevent any accident. * Ensure availability of the coolant and working of valves to circulate the coolant to cool and solidify * plastics filaments for pelletizing * Identify the various plastic wastes, fillers, bonding additives etc. required for executing the activity. * Refer the queries to the supervisor if they cannot be resolved by the operator. * Confirm self - understanding to the supervisor once the query is resolved so that all doubts & queries can be resolved before the actual process execution. | * Availability of consumables and plastics materials for production in sufficient quantity as per production plan/supervisor instructions. * Understand the does and don’ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by supervisors. * Understand the Die required for executing the required operation and ensure that the same is available for operation. * Clean of the other auxiliaries tools, (if any) before the initiation of the moulding and trimming process * Clean of the area around the apparatus for any oil, grease, combustible substances etc. so as to prevent any accident * Availability of the coolant and working of valves to circulate the coolant to cool and solidify plastic * Understand the raw material like plastics granules, fillers, bonding additives etc. required for executing the activity |
| **Classroom Aids:** | |
| Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster | |
| **Tools, Equipment and Other Requirements:** | |
| Steel rule 15 cm with metric Graduations, Measure Tape, Outside, inside spring calliper, Screwdriver 15 cm, Screwdriver set, D/E spanner set inch & mm, Allen key set inch & mm, Hand Hacksaw frame adjustable, Flat file second cut & smooth, Half round file second cut & smooth, Needle file rough & smooth, Micrometre 0-25 mm, Vernier calliper, Thickness gauge, Safety PPE’s like apron, gloves etc. | |

## Module 2: CPC/N 2921-Plastics Recycling related operations, monitor process parameters and troubleshoot the process

### Mapped To:

#### Terminal Outcomes:

* Checking the operations of the equipment
* Feeding the granules as per requirement
* Set up and operate the recycling plant.
* Perform visual inspection of the output products
* Achieve productivity, quality and safety standards as per company’s norms
* Report problems to supervisor

|  |  |
| --- | --- |
| **Duration**: *60:00 Hours* | **Duration**: *120:00 Hours* |
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| * Fix the desired Die to the recycling machine in order to achieve the desired operation as per the Work Instructions/ SOPs. * Make modifications in the process parameters (by selecting the right program from the machine control system) if required and ensure alignment with the prescribed standards as guided by the Operator. * Ensure that the grinded plastic waste is mixed with additives (if any) before being fed into the hopper. * Ensure that the dimensions of the output product (Pellets) are measured as per the process given in the Work Instructions/ SOP under guidance of operator * Feed the required operation code in the apparatus for heaters to melt the grinded plastic waste at the predefined temperature. * Enter recycling temperature, volume of plastic waste and weight settings in the machine as per data sheet. * Enter machine and process parameters such as pressure and time as per the data sheet. * Run the machine in Semi-Auto or Automatic mode of operation as guided by the operator. | * Setup and operation: Correctly fix the desired die to the recycling machine and operate it according to the work instructions/SOPs. * Process parameter modification: Modify process parameters (e.g., temperature, pressure, time) using the machine control system to meet prescribed standards. * Material preparation: Properly mix grinded plastic waste with additives (if required) before feeding it into the hopper. * Quality control: Measure the dimensions of the output product (pellets) according to the process outlined in the work instructions/SOPs. * Machine operation: Successfully feed the required operation code, enter recycling temperature, volume, weight, and machine/process parameters, and run the machine in semi-auto or automatic mode. * Adherence to standards: Align machine operation with prescribed standards, ensuring quality and safety. * Troubleshooting: Identify and address any issues that arise during the recycling process. * Efficient operation: Optimize machine operation to achieve efficient recycling of plastic waste. |
| **Classroom Aids:** | |
| Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function | |
| **Tools, Equipment and Other Requirements** | |
| Sorting & Separation Equipment for Plastic Waste Management System, Automatic Inline Washing & Size Reduction Machinery, Inline Single Screw Two Stage Extruder Cutter Compactor Plant with Water Die Face Cutter, Effluent Treatment Plant (ETP), Pyrolysis Plant, Organic based Fully Automatic Composting Machine, Automatic Hopper Loader, Hot air oven and Dryer, Scrap Grinder, Hot air blow Gun, Water cooling Tower, Agglomerators /Spin Drier/ Silo with Drier | |

## Module 3: To conduct quality check and inspection of contamination levels of the recycled resins with reference to approved product.

### Mapped to:

#### Terminal Outcomes:

* Inspecting the finished material
* keeping records of production and defects
* The role holder will interact with the maintenance team and material management team.

|  |  |
| --- | --- |
| **Duration**: *22:00 Hours* | **Duration**: *68:00 Hours* |
| **Theory–Key Learning Outcomes** | **Practical–Key Learning Outcomes** |
| * Compare color, surface properties, MFI, and melting point etc. with the given approved material. * Rectify minor defects like pellet size, colour variation etc. by control process parameters etc and informing operators. * Provide first and last output from each batch to the lab for quality check on its composition, properties etc. * Obtain clearance for the entire batch from the lab and submit the operator. | * Material Verification: Correctly compare the color, surface properties, Melt Flow Index (MFI), and melting point of recycled plastic materials with approved specifications. * Defect Rectification: Identify and rectify minor defects such as pellet size and color variation by adjusting process parameters and communicating with the operator. * Quality Control: Collect and submit first and last output samples from each batch to the laboratory for quality checks on composition and properties. * Batch Clearance: Obtain clearance for entire batches from the laboratory and submit to the operator, ensuring compliance with quality standards. * Process Optimization: Demonstrate understanding of process parameters and their impact on product quality, making adjustments as needed to optimize the recycling process. * Communication and Collaboration: Effectively communicate with laboratory personnel and operators to ensure smooth operation and quality control of the recycling process. * Quality Assurance: Apply quality assurance principles to ensure recycled plastic materials meet approved specifications and industry standards. |
| **Classroom Aids:** | |
| Charts, Models, Video presentation, Flipchart, Whiteboard/Smart Board, Marker, Duster | |
| **Tools, Equipment and Other Requirements** | |
| Sorting & Separation Equipment for Plastic Waste Management System, Automatic Inline Washing & Size Reduction Machinery, Inline Single Screw Two Stage Extruder Cutter Compactor Plant with Water Die Face Cutter, Effluent Treatment Plant (ETP), Pyrolysis Plant, Organic based Fully Automatic Composting Machine, Automatic Hopper Loader, Hot air oven and Dryer, Scrap Grinder, Hot air blow Gun, Water cooling Tower, Agglomerators /Spin Drier/ Silo With Drier | |

**Module 4: CPC/N 2923-Entrepreneurship in Plastics Recycling**

### Mapped To:

#### Terminal Outcomes:

* Comprehensive understanding of plastic waste management: Learners will have a thorough knowledge of various types of plastic waste, their sources, and the importance of recycling.
* Familiarity with recycling technologies and processes: Learners will understand the different recycling technologies and processes, including mechanical recycling, chemical recycling, and biological recycling.
* Knowledge of market trends and demand: Learners will be aware of market trends, demand, and prices of recycled plastics.

|  |  |
| --- | --- |
| **Duration**: *22:00 Hours* | **Duration**: *68:00 Hours* |
| **Theory–Key Learning Outcomes** | **Practical–Key Learning Outcomes** |
| * Planning and Budgeting with reference to various Plastic wastes for recycling. * Arrange for financial assistance from various quarters in the light of various schemes available in setup for Plastic Recycling. * Ascertain the prices of various inputs and products from the market. * Assess the influence of various quality parameters of products/pellets on the product pricing. * Establish cordial relations with various clients for the benefit of industry. * Extract critical market information that is otherwise not in the public domain. * Choose an appropriate buyer in a given situation of market parameters. * Ensure quality before & during the sale activity to ensure good returns. | * Financial Planning: Develop a comprehensive plan for budgeting and financial management in plastics recycling, considering various types of plastic waste. * Funding and Schemes: Identify and arrange financial assistance from various sources, leveraging government schemes and incentives for plastic recycling. * Market Research: Gather market data on input costs, product prices, and quality parameters to inform business decisions. * Quality Control: Assess the impact of quality parameters on product pricing and ensure high-quality products/pellets for market sale. * Client Relationship Management: Establish and maintain strong relationships with clients to benefit the industry and ensure repeat business. * Market Intelligence: Extract critical market information, including trends, competitor analysis, and market demand. * Buyer Selection: Choose the most suitable buyer based on market parameters, such as price, quality, and delivery requirements. * Quality Assurance: Ensure quality control measures are in place before and during sales activities to maximize returns and customer satisfaction. |
| **Class room Aids:** | |
| Charts,Models,Videopresentation,FlipChart,White-Board/SmartBoard,Marker,Duster | |
| **Tools, Equipment and Other Requirements** | |
|  | |

## Module 5: CPC/N0411-Maintain basic health and safety practices at the workplace, 5S.

### Mapped to:

#### Terminal Outcomes:

* Health and safety procedure.
* Fire safety procedure.
* Emergencies, rescue and first aid procedures.
* Ensure sorting, stream lining, storage and documentation, cleaning, standardization and sustenance across the plant premises of the organization.

|  |  |
| --- | --- |
| **Duration**: *12:00 Hours* | **Duration**: *18:00 Hours* |
| **Theory–Key Learning Outcomes** | **Practical–Key Learning Outcomes** |
| * Wear protective clothing/equipment for specific tasks and work conditions * Carry out safe working practices while dealing with hazards to ensure the safety of self and others. * Apply good housekeeping practices at all times * Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher * Carry out safe working practices while dealing with hazards to ensure the safety of self and others * Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher. | * Carry out safe working practices while dealing with hazards to ensure the safety of self and others. * Apply good housekeeping practices at all times * Use the various appropriate fire extinguishers on different types of fires correctly * Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher. * Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise, and Identify areas in the plant which are potentially Hazardous/ unhygienic in nature. * Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine. * Create awareness amongst other by sharing information on the identified risks. * Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions * Follow the technique of waste disposal and waste storage in the proper bins as per SOP * Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards. * Check that the items in the respective areas have been identified as broken or damaged. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions. |
| **Class room Aids:** | |
| Charts,Models,Videopresentation,FlipChart,White-Board/SmartBoard,Marker,Duster | |
| **Tools, Equipment and Other Requirements** | |
| Safety PPE’s like apron, gloves etc. | |

## Module 6: CPC/N 0219 - Basics of MS Office / Office Open source suite

### Mapped To:

#### Terminal Outcomes:

* Enter, update and maintain data in MS Office / Open Source office suite software.

|  |  |
| --- | --- |
| **Duration**: *12:00 Hours* | **Duration**: *18:00 Hours* |
| **Theory–Key Learning Outcomes** | **Practical–Key Learning Outcomes** |
| * Fill and process mandated forms for receiving, processing, or tracking data, enter data from source documents (such as trial report, process sheet etc.) into Computer applications having MS Office / Open source office suite software. * Scan source documents in accordance with specific instructions. * Maintain files of source documents or other information related to data entered. * Update database information to reflect most current source information | * Filling and processing mandated forms for receiving, processing, or tracking data enter data from source documents (such as trial report, process sheet etc.) into Computer applications having MS Office / Open source office suite software. * Scanning source documents in accordance with specific instructions. verify data entered with source documents, checks for compliance and corrects all typographical errors and missing or repeated data. * Maintain files of source documents or other information related to data entered. * update database information to reflect most current source information * Assist in the filing and storage of security and back up data files |
| **Classroom Aids:** | |
| Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster | |
| **Tools, Equipment and Other Requirements** | |
| Computer with MS Office / Open source office suite software, UPS, Table Chair etc. | |

### Module 7: Employability Skills

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mandatory Duration**: *30:00 Hours* | | | |  |
| **Location: Training Centre** | | | |  |
| **Sl. No.** | **Module Name** | **Key Learning Outcomes** | **Duration**  **(hours)** |
| 1. | Introduction to Employability Skills | * Discuss the importance of Employability Skills in meeting the job requirements. | 1 |
| 2. | Constitutional values - Citizenship | * Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. * Show how to practice different environmentally sustainable practices. | 1 |
| 3. | Becoming a Professional in the 21st Century | * Discuss 21st century skills. * Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations. | 1 |
| 4. | Basic English Skills | * Use appropriate basic English sentences/phrases while speaking. | 2 |
| 5. | Communication Skills | * Demonstrate how to communicate in a well -mannered way with others. * Demonstrate working with others in a team. | 4 |
| 6. | Diversity & Inclusion | * Show how to conduct oneself appropriately with all genders and PwD. * Discuss the significance of reporting sexual harassment issues in time. | 1 |  |
| 7. | Financial and Legal Literacy | * Discuss the significance of using financial products and services safely and securely. * Explain the importance of managing expenses, income, and savings. * Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws. | 4 |  |
| 8. | Essential Digital Skills | * Show how to operate digital devices and use the associated applications and features, safely and securely. * Discuss the significance of using the internet for browsing, accessing social media platforms, safely and securely. | 3 |  |
| 9. | Entrepreneurship | * Discuss the need for identifying opportunities for   potential business, sources for arranging money and potential legal and financial challenges. | 7 |  |
| 10. | Customer Service | * Differentiate between types of customers. * Explain the significance of identifying customer needs and addressing them. * Discuss the significance of maintaining hygiene and dressing appropriately. | 4 |  |
| 11 | Getting ready for apprenticeship & Jobs | * Create biodata. * Use various sources to search and apply for jobs. * Discuss the significance of dressing up neatly and maintaining hygiene for an interview. * Discuss how to search and register for apprenticeship opportunities. | 2 |  |

|  |  |  |
| --- | --- | --- |
| **LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS** | | |
| **S.No.** | **Name of the Equipment** | **Quantity** |
| 1. | Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed)  (all software should either be latest version or one/two version below) | As required |
| 2. | UPS | As required |
| 3. | Multi-function Printer | As required |
| 4. | Computer Tables | As required |
| 5. | Computer Chairs | As required |
| 6. | LCD Projector | As required |
| 7. | Whiteboard | As required |
| *Note: Above Tools & Equipment not required, if Computer LAB is available in the institute.* | | |

### Module 8: On-the-Job Training

### Mapped to:

|  |
| --- |
| **Mandatory Duration:** *30:00 Hours* |
| **Module Name: On-the-Job Training** |
| Location: On Site |
| **Terminal Outcomes**   * On-the-Job Training (OJT) is a hands-on learning method where participants acquire skills and knowledge while performing their job tasks. * Participants learn specific job-related skills that are directly applicable to their roles. * Industrial training often leads to participants becoming more effective and efficient in their learning. * Industrial training experience builds the confidence level of participants. * Training occurs in the actual work environment, reducing the need for induction training programs while joining in industry. * Interaction with industry captains or mentors during training strengthens learning teamwork and workplace relationships. * Trainees become familiar with the industrial tools, systems, and workflows quickly. * Participants encounter and address challenges in industry, developing critical thinking and adaptability. |

# Annexure

## Trainer Requirements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Trainer Prerequisites** | | | | | | | |
| **Minimum Educational Qualification** | **Specialization** | **Relevant Industry Experience** | | **Training Experience** | | | **Remarks** |
| ***Years*** | ***Specialization*** | ***Years*** | ***Specialization*** | |  |
| Diploma | Plastics / Polymer Engineering / Technology | 2 | Plastics Processing Industry | - | - | - | |
| B.E. / B.Tech. / M.Sc. | Plastics / Polymer Engineering / Science | - | - | - | - | - | |

|  |  |
| --- | --- |
| **Trainer Certification** | |
| **Domain Certification** | **Platform Certification** |
| Minimum Educational Qualification as above, additionally he/ she should have done a job role relevant skill training course from CIPET. | Recommended that the Trainer Should have done a job role relevant upskilling course from CIPET. |

## Assessor Requirements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessor Prerequisites** | | | | | | | |
| **Minimum Educational Qualification** | **Specialization** | **Relevant Industry Experience** | | | **Training/Assessment Experience** | | **Remarks** |
| ***Years*** | ***Specialization*** | | ***Years*** | ***Specialization*** |  |
| Diploma | Plastics / Polymer Engineering / Technology | 2 | Plastics Processing Industry | 3 | | Plastics / Polymer Engineering / Technology | - |
| B.E. / B.Tech. | Plastics / Polymer Engineering | 1 | Plastics Processing Industry | 1 | | Plastics / Polymer Engineering | - |

|  |  |
| --- | --- |
| **Assessor Certification** | |
| **Domain Certification** | **Platform Certification** |
| Minimum Educational Qualification as above, additionally he/ she should have done a job role relevant skill training course from CIPET. | Recommended that the Trainer Should have done a job role relevant upskilling course from CIPET. |

## 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 are assigned to Training Assessment Wing (TAW), CIPET HO for planning of assessment
* Training Centers request TAW for Assessment and Certification of Trainees
* TAW identifies suitable assessor and nominates the assessor to the respective Training Centre
* TAW monitors the assessment process
* Training Centers maintain necessary records

2. Testing Environment:

* Check the Assessment location, date and time
* If the batch size is more than 30, then there should be 02 Assessors in a day (or) 01 assessor in 2 days
* Check that the allotted time to the candidates to complete the Theory & Practical Assessment

3. Assessment Quality Assurance levels/Framework:

* Question bank / Question Paper is prepared by the Subject Matter Experts (SME) / Assessor
* Questions are mapped to the specified assessment criteria
* Certified Assessor & Trainer will be engaged in the process

4. Types of evidence or evidence-gathering protocol:

* Date / Time recorded for the reporting of the assessor from assessment location
* Assessment batch - Group Photo of Trainees along with Assessor

5. Method of verification or validation:

* Surprise visit to the assessment location
* Virtual meet with the Assessor / Trainees

6. Method for assessment documentation, archiving, and access

* Hard copies of the documents are stored, soft copies of assessment evidences are stored in email for future correspondence

**References**

**Glossary**

|  |  |
| --- | --- |
| Sector | Sector is a conglomeration of diﬀerent business operations  having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests. |
| Sub-sector | Sub-sector is derived from a further breakdown based on the characteristics and interests of its components. |
| Occupation | Occupation is a set of job roles, which perform a similar/ related set of functions in an industry. |
| National Occupational Standards (NOS) | NOS are occupational standards which apply uniquely in the Indian context. |
| Qualiﬁcations Pack (QP) | QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualification pack code. |

**Acronyms and Abbreviations**

|  |  |
| --- | --- |
| **NOS** | National Occupational Standard(s) |
| **NSQF** | National Skills Qualifications Framework |
| **QP** | Qualifications Pack |
| OJT | On-the-job Training |
| PwD | People with Disability PPE Personal Protective Equipment ES Employability Skills |
| PPE | Personal Protective Equipment |
| ES | Employability Skills |