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Model Curriculum

QP Name: Offset Print Operator

QP Code: MES/N2504

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

Media & Entertainment Skills Council, 522-524, DLF Tower-A, Jasola, New Delhi - 110025

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Training Parameters

Sector	Media and Entertainment
Sub-Sector	Print
Occupation	Printing
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	7322.2100
Minimum Educational Qualification and Experience	<p>Class XII Pass with one year of relevant experience OR NSQF Level-3 Certification as Offset printer one year of relevant experience OR Class Xth and ITI with one year of relevant experience Minimum job entry Age 18 Years</p>
Pre-Requisite License or Training	Assistant Offset Operator/Printer -Not necessary
Minimum Job Entry Age	18 years
Last Reviewed On	05/05/2021
Next Review Date	04/05/2025
NSQC Approval Date	30/12/2021
QP Version	1.0
Model Curriculum Creation Date	25/4/2020
Model Curriculum Valid Up to Date	04/05/2025
Model Curriculum Version	1.0
Minimum Duration of the Course	450 Hours
Maximum Duration of the Course	450 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 should have acquired the listed knowledge and skills.

- Interpreting the production requirement
- Preparation and offset printing
- Maintenance and quality constraints
- Maintain workplace health and safety

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
MES/N2510 Interpreting the production requirement NOS Version No. 1.0 NSQF Level 4	30:00	70:00			100:00
Analyse requirements of production	15:00	35:00			50:00
Planning the process	15:00	35:00			50:00
MES/N2509 Preparation and offset printing NOS Version No. 1.0 NSQF Level 4	48:00	102:00			150:00
Ensuring material and checking the machine.	20:00	22:00			42:00
Setting the machine for printing	13:00	48:00			61:00
Printing with quality standards.	15:00	32:00			47:00
MES/N2508 Maintenance and quality constraints NOS Version No. 1.0 NSQF Level 4	30:00	70:00			100:00
Checking the printed sheet and ensuring the quality.	30:00	70:00			100:00
MES/N0104 Maintain workplace health and safety NOS Version No. 1.0 NSQF Level 4	25:00	25:00			50:00
Analysing the health, safety and security risks	06:00	06:00			12:00

prevalent in the workplace					
knowing the people responsible for health and safety and the resources available	07:00	07:00			14:00
identifying and reporting risks	07:00	07:00			14:00
complying with procedures in the event of an emergency	05:00	05:00			10:00
Total Duration	130:00	270:00	50:00		450:00

Module Details

Module 1: Interpreting the production requirement

Mapped to MES/N0341

Terminal Outcomes:

- Analyse requirements of production
- Planning the process

Duration: 30:00	Duration: 70:00
Theory – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:
<ul style="list-style-type: none"> • Explain the use of Offset printing machine (Size, No.of units, & othersystem) • Describe the job specification from the job card • Explain the print quantity & proof. 	<ul style="list-style-type: none"> • Carry out checking of paper, ink and plates. • Demonstrate how to check layout and imposition. • Check the job docket for proof and color scheme • Check the paper, ink, proof and plates. • Check the end print result and its process. • Show how to Check the Ph & conductivity of dampening solution.
Classroom Aids:	
LCD Projector, laptop/computer with internet, white board, Flip Chart, Markers	
Tools, Equipment and Other Requirements	
<ul style="list-style-type: none"> • Laptop/Computer with internet • Printing Machine / Equipments • Diary • Pen • First Aid Kit: Band aids, ice pack, Neosporin, rubber gloves, gauze, tape, butterfly closures, hand wipes, gauze pads, burn cream and tweezers • The blanket approach sheet • Sample size • Gathering informatio 	

Module 2: Preparation and offset printing

Mapped to MES/N0342

Terminal Outcomes:

- Ensuring material and checking the machine.
- Setting the machine for printing
- Printing with quality standards.

Duration: 48:00	Duration: 102:30
Theory – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:
<ul style="list-style-type: none"> • Check the type of paper and its gsm. • ensuring the plates according to the job specification • Explain types of ink used for printing. • Describe how to set the flow of ink and place the plates in their respective unit. • Describe how to set the feeding unit according to the paper. • Explain how to set the flow of dampening solution. • Check if plate & blanket is properly mounted. • Explain inking unit, dampening unit & printing unit. • Check errors in printing by measuring the density and set the printing unit again for proper registration, ensure the density of ink and rectify the print errors. • Print the mentioned quantity and direct the team member to place it in the drying area for drying time. • Guide the team member to remove the plates and clean it and apply the 	<ul style="list-style-type: none"> • Demonstrate how to set the various parts of feeding unit according to the types of paper. • Show how to set the flow of ink according to the image on the plate. • Show how to mount the plate and blanket. • Demonstrate how to set the printing unit and the gripper.

gumbraic if it is to be reused.	
Classroom Aids:	
LCD Projector, laptop/computer with internet, white board, Flip Chart, Markers	
Tools, Equipment and Other Requirements	
<ul style="list-style-type: none"> • Laptop/Computer with internet • Printing Machine / Equipments • Diary • Pen • First Aid Kit: Band aids, ice pack, Neosporin, rubber gloves, gauze, tape, butterfly closures, hand wipes, gauze pads, burn cream and tweezers • The blanket approach sheet • Sample size • ☑ Gathering information 	

Module Details

Module 3: Maintenance and quality improvement

Mapped to MES/N0343

Terminal Outcomes:

- Checking the printed sheet and ensuring the quality.

Duration: 30:00	Duration: 70:00
Theory – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:
<ul style="list-style-type: none"> • Explain how to measure the density of the printed sheet complying with the standards. • Describe the process to check the color gamut as per the sample or proof. • Guarantee that the resolution/ dpi are according to the sample or proof. • Describe the setting of inking rollers. • Explain how to change the damaged blanket from the blanket cylinder. • Explain the basic things to be done after printing to ensure the life of machine. • 	<ul style="list-style-type: none"> • Show how to resolve the errors in printing. • Demonstrate the operation of densitometer. • Perform Ink roller settings • Demonstrate blanket change and its setting. • Identify and resolve printing errors. • Perform daily maintenance as per company standards. • Monitor and lead the team and perform preventive maintenance and maintain the maintenance history book of the machine. • Guide the subordinates in printing, quality and maintenance.

Classroom Aids:	
LCD Projector, laptop/computer with internet, white board, Flip Chart, Markers	
Tools, Equipment and Other Requirements	
<ul style="list-style-type: none">• Laptop/Computer with internet• Printing Machine / Equipments• Diary• Pen• First Aid Kit: Band aids, ice pack, Neosporin, rubber gloves, gauze, tape, butterfly closures, hand wipes, gauze pads, burn cream and tweezers• The blanket approach sheet• Sample size• ☑ Gathering information	

Module 4: Maintain workplace health and safety

Mapped to MES/N0104

Terminal Outcomes:

- Explain the health, safety and security risks prevalent in the workplace
- Know the people responsible for health and safety and the resources available
- identify and report risks
- comply with procedures in the event of an emergency

Duration: 25:00	Duration: 25:00
Theory – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:
<ul style="list-style-type: none"> • Comply with the organisation’s current health, safety and security policies and procedures • Recall the safe working practices pertaining to own occupation • Recall the government norms and policies relating to health and safety including emergency procedures for illness, accidents, fires or others which may involve evacuation of the premises <ul style="list-style-type: none"> • Ensure own personal health and safety, and that of others in the workplace through precautionary measures.] • Report any hazards outside the individual’s authority to the relevant person in line with organisational procedures and warn other people who may be affected • Follow organisation’s emergency procedures for accidents, fires or any other natural calamity in case of a hazard • Identify and correct risks like illness, accidents, fires or any other natural calamity safely and within the limits of individual’s authority. 	<ul style="list-style-type: none"> • Identify the different types of health and safety hazards in a workplace • Practice safe working practices for own job role • Perform evacuation procedures and other arrangements for handling risks • Perform the reporting of hazard • Identify and document potential risks like sitting postures while using the computer, eye fatigue and other hazards in the workplace. • Participate in organization health and safety knowledge sessions and drills • Identify the people responsible for health and safety in the workplace, including those to contact in case of an emergency <ul style="list-style-type: none"> • Identify security signals e.g. fire alarms and places such as staircases, fire warden stations, first aid and medical rooms • Identify aspects of your workplace that could cause potential risk to own and others health and safety • Identify and recommend opportunities for improving health, safety, and security to the designated person •

Classroom Aids:	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
Health and Safety Signs and policy	

Mandatory Duration: 35:00	Recommended Duration: 35:00
Module Name: On-the-Job Training	
Location: On Site	
Terminal Outcomes:	
After the successful completion of On-the-Job Training the participant will be able to :	
<ul style="list-style-type: none"> • Carry out checking of paper, ink and plates. • Demonstrate how to check layout and imposition. • Demonstrate how to set the various parts of feeding unit according to the types of paper. • Show how to set the flow of ink according to the image on the plate. • Show how to mount the plate and blanket. • Demonstrate how to set the printing unit and the gripper. • Show how to resolve the errors in printing. • Demonstrate the operation of densitometer. • Perform Ink roller settings • Demonstrate blanket change and its setting. 	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI from any other polytechnic/ reputed institute in the core subject	Relevant trade	2	Assistant Offset Operator/Printer	NA		
OR						
Diploma from any other polytechnic/ reputed institute in the core subject	Offset Printing	3	Assistant Offset Operator/Printer	NA		

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: "Offset Print Operator" mapped to QP: "MES/Q0341", version 1.0. Minimum accepted score as per SSC guidelines is 80%.	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q2601, v1.0 Trainer" with the scoring of a minimum of 80%.

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Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Class Xth Appeared.	NA	5	Offset printing	NA	-	-
OR						
Diploma/ ITI	Offset printing	4	Offset printing	NA	-	-

Assessor Certification	
Domain Certification	Platform Certification
<p>Certified for Job Role: "Offset Print Operator" mapped to QP: "MES/Q0341", version 1.0. Minimum accepted score as per SSC guidelines is 80%.</p>	<p>Recommended that the Assessor is certified for the Job Role: "Assessor", mapped to the Qualification Pack: "MEP/Q2701, v1.0 Assessor" with the scoring of a minimum 80%.</p>

Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

Assessment system Overview:-

Assessment will be carried out by MESC affiliated assessment partners. Based on the results of assessment, MESC certifies the learners. Candidates have to pass online theoretical assessment which is approved by MESC. The assessment will have both theory and practical components in 30:70 ratio. While theory assessment is summative and an online written exam; practical will involve demonstrations of applications and presentations of procedures and other components. Practical assessment will also be summative in nature.

Testing Environment:-

Training partner has to share the batch start date and end date, number of trainees and the job role. Assessment is fixed for a day after the end date of training. It could be next day or later. Assessment will be conducted at the training venue. Question bank of theory and practical will be prepared by assessment agency and approved by MESC. From this set of questions, assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on theoretical knowledge of the subject. The theory and practical assessments will be carried out on same day. If there are candidates in large number, more assessors and venue will be organized on same day of the assessment.

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
Theory	Summative	Written Examination	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks	Presentation
Viva	Summative	Questioning and Probing	Mock interview on topics

Assessment Quality Assurance framework

Only certified assessor can be assigned for conducting assessment. Provision of 100 % video recording with clear audio to be maintained and the same is to be submitted to MESC. The training partner will intimate the time of arrival of the assessor and time of leaving the venue.

Methods of Validation:-

Unless the trainee is registered, the person cannot undergo assessment. To further ensure that the person registered is the person appearing for assessment, id verification will be carried out. Aadhar card number is required of registering the candidate for training. This will form the basis of further

verification during the assessment. Assessor conducts the assessment in accordance with the assessment guidelines and question bank as per the job role. The assessor carries tablet with the loaded questions. This tablet is geotagged and so it is monitored to check their arrival and completion of assessment. Video of the practical session is prepared and submitted to MESC. Random spot checks/audit is conducted by MESC assigned persons to check the quality of assessment. Assessment agency will be responsible to put details in SIP. MESC will also validate the data and result received from the assessment agency.

Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by MESC assessment team. After upload, only MESC can access this data. MESC approves the results within a week and uploads it.