







### **Model Curriculum**

# DAS Set-top Box Installer and Service Technician

**SECTOR: ELECTRONICS** 

**SUB-SECTOR: COMMUNICATION & BROADCASTING** 

OCCUPATION: AFTER SALES SERVICE

REF. ID: ELE/Q8102 VERSION 1.0

NSQF LEVEL: 4















### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

#### ELECTRONICS SECTOR SKILLS COUNCIL OF INDIA

for the

### MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/ Qualification Pack: 'DAS Set-top Box Installer and Service Technician)'

QP No. 'ELE/Q8102 NSQF Level 4'

Date of Issuance: December, 2015

Valid up to: March, 2016

 $*\ \textit{Valid up to the next review date of the Qualification Pack}$ 

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Authorised Signatory
(Electronics Sector Skills Council of India)









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# DAS Set-top Box Installer and Service Technician

### **CURRICULUM / SYLLABUS**

This program is aimed at training candidates for the job of a "DAS Set-top Box Installer and Service Technician", in the "Electronics" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	DAS Set-top Box Installer and Service Technician				
Qualification Pack Name & Reference ID.	DAS Set-top Box Installation and Service Technician(ELE/Q8102 <b>version 1.0</b> )				
Version No.	1.0 <b>Version Update Date</b> 07 – 12 – 2015				
Pre-requisites to Training	8th Pass* / 10th Pass / Diploma * with 2 years' work experience				
Training Outcomes	After completing this programme, participants will be able to:  Install the set top box Address the serviceable complaints Coordinate with technical team Behavioural skills Understanding of various components used in STB Basic Knowledge of Soldering Basic Knowledge of electro static devices Basic Knowledge of quality				









This course encompasses 3 out of 3 National Occupational Standards (NOS) of "DAS Set-top Box Installer and Service Technician" Qualification Pack issued by "Electronics Sector Skill Council of India".

Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
1	Welcome and Introduction  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 05:00  Corresponding NOS Code	<ul> <li>Getting to know each other</li> <li>Welcoming the participants</li> <li>To create awareness about the company and its core values.</li> <li>To create Pride in the brand value of Das</li> <li>Daily Life Video</li> <li>Introduction to DAS - Quiz</li> </ul>	Videos, PPT's, Laptop, Projector, Projector Screen, White Board, Marker, Duster, Attendance Sheet, Feedback Form, Internet
2	ELE/N8102  Role Clarity  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 05:00  Corresponding NOS Code ELE/N9951	<ul> <li>To provide an Overall understanding of the process (Service Model)</li> <li>To help the participants get role clarity and understand their daily activities.</li> <li>Work flow, Roles and Responsibilities</li> </ul>	NIL
3	Customer Service/Focus  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N8102	<ul> <li>To create an understanding of customer needs and ways in which they can ensure customer satisfaction.</li> <li>What does customer want?</li> <li>How to achieve customer satisfaction?</li> </ul>	Customer Application Form, Feedback Form, Packages Form Props depending on Activity,
4	Customer Focus  Theory Duration (hh:mm) 05:00	<ul> <li>To creating an understanding of customer needs and ways in which they can ensure customer satisfaction.</li> <li>Promptness</li> <li>To establish the importance of prompt resolution</li> </ul>	Videos, PPT's, Laptop, Projector, Projector Screen, White Board, Marker, Duster, Attendance Sheet, Feedback Form, Internet









Sr. No.	Module Key Learning Outcomes		<b>Equipment Required</b>
	Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N8102	<ul> <li>To establish the importance of visiting a subscribers personal space – Their Home.</li> <li>Respecting Personal Space</li> <li>To create an understanding of active listening skills</li> <li>Listening Skills</li> </ul>	
5	Handling Dissatisfied / Irate Customer  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N8102	<ul> <li>Understand the issue and provide resolution to issue faced by subscriber</li> <li>What are the customer expectations?</li> <li>Reasons for customer to get Irate?</li> <li>How to handle irate situation?</li> </ul>	Customer Application Form, Feedback Form, Packages Form Props depending on Activity, Videos, PPT's, Laptop, Projector, Projector Screen, White Board, Marker
6	Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N8101	<ul> <li>Understand the procedure followed in Installation of DAS</li> <li>Installation Video of DAS</li> </ul>	For Demo:  a. 1 Reflector Antenna b. RJ 6 cable c. Connectors d. Set up box (exclusive for DTH) e. Remote
7	Dish Assembly  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N811	<ul> <li>To explain and practise the assembling the different component of Dish assembly</li> <li>Reflector Dish Assembly</li> </ul>	For Demo:  a. 1 Reflector Antenna b. RJ 6 cable c. Connectors d. Set up box (exclusive for DTH) e. Remote
8	Mount Assembly	<ul> <li>To explain the mounting, LOS, Signal Peaking etc.</li> <li>Mount Assembly</li> </ul>	Videos, PPT's, Laptop, Projector, Projector Screen, White









Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Theory Duration (hh:mm) 05:00		Board, Marker
	Practical Duration (hh:mm) 10:00 Corresponding NOS Code ELE/N8101		
9	Theory Duration (hh:mm) 05:00	<ul> <li>Demonstrate and Practise connectorization</li> <li>Connectorization of cable with box and LNBF</li> </ul>	1. For cabling a. Cable Tiles, P clips b. Cable Preparation Tool 2 Others: a. Set up of a moving
	Practical Duration (hh:mm) 10:00  Corresponding NOS Code ELE/N8101		Wall(8.5'x1.25') b. Compression Tool c. Tape d. Compass 3 Cables (10 mtrs). Machine,RF Strength Meter
10	Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm)	<ul> <li>To gauge the adeptness of trainees in signal peaking using Sat finder,         Connectorisation tool and inclinometer</li> <li>Signal peaking with Sat finder</li> </ul>	Videos, PPT's, Laptop, Projector, Projector Screen, White Board, Marker
	10:00  Corresponding NOS  Code  ELE/N8101		
11	HD PVR Installation and VOD connection  Theory Duration (hh:mm) 05:00	<ul> <li>HD PVR installation</li> <li>To explain the difference between the boxes.</li> <li>To explain them the process of installing a HD/HD PVR box</li> </ul>	3. For Tracking a. Satellite Meter b. Service Cables c. Satellite Finder
	Practical Duration (hh:mm) 10:00		









Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Corresponding NOS		
	Code		
	ELE/N8101		
12	<b>HD PVR Installation and</b>	HD PVR Installation and VOD connection	7. Television with HDMI
	VOD connection		input & output & Basic
			Home Theatre
	<b>Theory Duration</b>		As mentioned in NOS:
	(hh:mm)		Multi meter, Hand tools like Tester,
	05:00		Spanner, Cutter, Angle
			finder,
	<b>Practical Duration</b>		Satellite Meter, Drilling
	(hh:mm)		
	10:00		
	Corresponding NOS		
	Code		
	ELE/N8101		
13	Trouble Shooting	Standard box o Common issues with STD	Tool Kit –
	3	boxes	a. Spanners -10,11, 12,
	<b>Theory Duration</b>	Trouble Shooting steps	13mm
	(hh:mm)	HD Box	b. Ring Spanners-
	05:00	Common issues with HD Box.	10,11,12,13mm
		Trouble shooting steps	c. Screw drivers- Plus Minus, Philips
	<b>Practical Duration</b>	HD PVR Box o Common issues with HD PVR	d. Drilling Machines-
	(hh:mm)	Box.  Trouble shooting steps	8mm,10,mm,12mm
	10:00	• Houble shooting steps	, , ,
	Corresponding NOS		
	Corresponding NOS Code		
	ELE/N8101		
14	DAS Packages	Understand different types of packages	Videos, PPT's, Laptop,
	DAS Fackages	provided by DAS	Projector,
	Theory Duration		Projector Screen, White
	(hh:mm)		Board,
	05:00		Marker
	<b>Practical Duration</b>		
	(hh:mm)		
	10:00		
	Corresponding NOS		
	Code NOS		
	ELE/N8101		
15	DAS Product	Understand different products of DAS	Videos, PPT's, Laptop,
	DASTIOUUCE	Standard, HD and HD PVR box and its	Projector,
	Theory Duration	features.	Projector Screen, White
	(hh:mm)	<ul> <li>VoDetc and its features</li> </ul>	Board,
	05:00		Marker
	Practical Duration		
	(hh:mm)		









Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
	10:00		
	Corresponding NOS Code ELE/N8101		
16	Demo of STD Box  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 10:00	<ul> <li>To create an understanding of the features to be covered in the Demo</li> <li>Provide demonstration of STD box to Subscriber post installation</li> </ul>	STD Box
	Corresponding NOS Code ELE/N8101		
17	Demo of HD / HD PVR box Theory Duration (hh:mm) 05:00	<ul> <li>To create an understanding of the features to be covered in the Demo</li> <li>Provide demonstration of HD/HD PVR box and VoD to Subscriber post installation</li> </ul>	HD / HD PVR box
	Practical Duration (hh:mm) 10:00  Corresponding NOS Code		
	ELE/N8101		
18	KAT & Certification  Theory Duration (hh:mm) 05:00	<ul> <li>To Assess the training outcome</li> <li>Assessment questions in MCQ, Fill in the blanks, Match the following, State true or false</li> </ul>	
	Practical Duration (hh:mm) 10:00		
	Corresponding NOS Code Bridge Module		









Sr. No.	Module	Key Learning Outcomes	<b>Equipment Required</b>
	<b>Total Duration</b>	Unique Equipment Required:	
		1. Set top box	
		2. Television	
		3. Drilling machine	
	Theory Dureties	4. Satelite Meter	
	Theory Duration	5 Angle Meter	
	(hh:mm)	6. Multi meter	
	90.00	7. Spanner	
		8. Lead tester, spanner, cutter	
		9. RF Strength Meter	
	Practical Duration	10. QAM meter	
	(hh:mm)		
	170.00		

**Grand Total Course Duration: 200 Hours 00 Minutes** 

This syllabus/ curriculum has been approved by Electronics Sector Skill Council









## Trainer Prerequisites for Job role: "DAS Set-top Box installer and Service Technician" mapped to Qualification Pack: "ELE/Q8102 version 1.0"

Sr. No.	Area	Details	
1	Job Description	Set top box technician is responsible for installing the set top box at client's site (households) and also addresses the first level complaints and servicing, they also co-ordinates with the technical team for activation of new connections.	
2	Personal Attributes	The individual must be willing to work in the field and travel through the day from one customer's premise to another. Punctuality, amenable behaviour, patience, good interpersonal relationship building, trustworthiness, integrity, and critical thinking are important attributes for this job  Diploma in Electronics with at least 1-2 years of experience in installation	
3	Minimum Educational Qualifications	Diploma in Electronics with at least 1-2 years of experience in installation and troubleshooting of Set Top Box and Digital Addressable System (DAS) systems. Should have excellent communication skills	
4a	Domain Certification	Certified for Job Role: "DAS Set-top Box Installer and Service Technician" mapped to QP: "ELE/Q8102 <b>version 1.0".</b> Minimum accepted score as per respective SSC guidelines.	
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: ""SSC/Q1402".	
5	Experience	1-2 years of experience in installation and troubleshooting of Set Top Box and Digital Addressable System (DAS) systems	









### **Annexure: Assessment Criteria**

Assessment Criteria for " DAS Set-top Box Installer and Service Technician"			
Job Role	DAS Set-top Box Installer and Service Technician		
<b>Qualification Pack</b>	ELE/Q8102 version 1.0		
Sector Skill Council	Electronics Sector Skills Council of India		

Sr.	Guidelines for Assessment			
No.				
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.			
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.			
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)			
4	Individual assessment agencies will create unique evaulations for skill practical for every student at each examination/training center based on this criteria			
5	To pass the Qualification Pack , every trainee should score a minimum of 70% in every NOS			
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.			









Sr. No.	NOS No.	NOS Name	Total Marks	Marks Allocation: Skills	Marks Allocation: Knowledge	Marks Allocation: Behavior
1	ELE/N 8101	Install and repair DAS set top box	100	60	40	
2	ELE/N 951	Interact with other employees	100	60	40	
3	ELE/N 8102	Comprehend customer's requirement	100	60	40	
	Total:		300	180	120	
	Percentage Weightage:			60%	40%	
	Minimum Pass% to qualify:			70%	70%	







### **Electronics Sector Skill Council of India**

422, Okhla Industrial Estate, Phase-III, New Delhi-110020