

Appendix 'A'

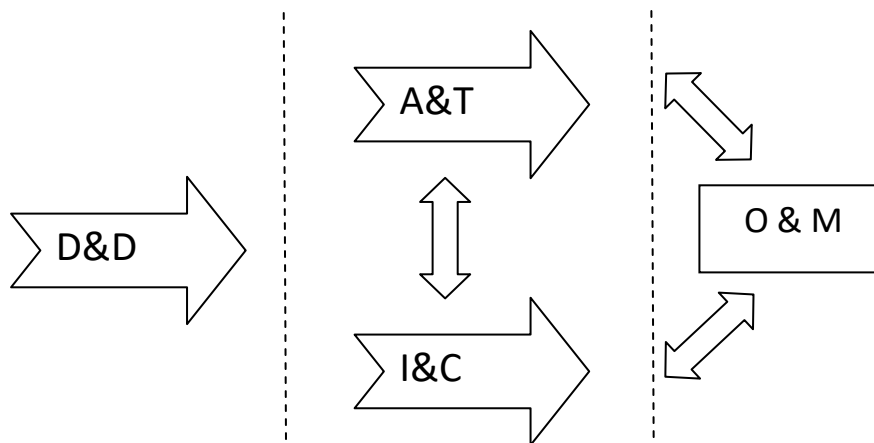
Job Roles in Instrumentation & Automation Sub-sector

With NSQF Level and Career Progression path

Note 1: Vertical progression is shown in the OM chart and also in the Job Roles table below.

For horizontal progression, the following guidance may be used:

For a given skill set, transfer across OEM, SI, EU segments may be feasible at the same level in the following direction:



Note 2:

- It is generally possible to move from Design and Development roles to Assembly & Testing as well as Installation and Commissioning roles or Operation and Maintenance. However, the reverse move is generally difficult owing to special skills needed for D&D jobs.
- It is generally feasible to move between A&T, I&C and O&M roles at the same levels.

Statistics (No of Job Roles at each NSQF level)	
Level 3	21
Level 4	76
Level 5	49
Level 6	8
Level 7	10
Level 8	7

Total	171
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Color Codes:

Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
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Sl.	Job Role	Sub-sector	Occupation	Entry Level (Y/N)	NSQF Level	Vertical Progression to	At Level
1	Technician/Jr Technician - Fire Alarm Cabling	Automation	I&C	Y	3	Technician - Fire Alarm Cabling	4
2	Jr/Asstt/Trainee Engineer - Automation Solutions	Automation	A&T	Y	5	Engineer - Automation Solution	6
3	Jr/Asstt/Trainee Engineer - Building Automation	Automation	I&C	Y	5	Engineer - Building Automation	6
4	Technician/Jr Technician - Intercom Cabling	Automation	I&C	Y	3	Technician - Intercom Cabling	4
5	Technician/Jr Technician - Structured Cabling	Automation	I&C	Y	3	Technician - Structured Cabling	4
6	Operator - AHU	Automation	I&C	Y	4	Sr Operator - AHU / Supervisor (AHU)	5
7	Technician/Jr Technician - Video/CCTV Cabling	Automation	I&C	Y	3	Technician - Video/CCTV Cabling	4
8	Operator - DCS System	Automation	I&C	Y	4	Sr Operator - DCS System	5
9	Operator - Escalator	Automation	I&C	Y	4	Sr Operator/Supervisor - Escalator	5
10	Technician / Jr Technician - CCTV installation & Commissioning	Automation	I&C	Y	3	Technician - CCTV installation & Commissioning	4
11	Technician / Junior Technician - Power Cabling	Automation	I&C	Y	3	Technician - Power Cabling	4
12	Programmer - Automation (PLC/HMI/Drive)	Automation	I&C	N	5	Sr Programmer Automation (PLC/HMI/Drive) /Supervisor	6
13	Repair Technician - Automated Access & attendance Systems	Automation	I&C	N	4	Sr Repair Technician/ Supervisor - Automated Access & attendance Systems	5
14	Repair Technician - Automated Climate control	Automation	I&C	N	4	Repair Technician - Automated Climate control	5
15	Repair Technician - Automated Fire detection & control systems	Automation	I&C	N	4	Sr Repair Technician - Automated Fire detection & control systems /Supervisor	5

16	Repair Technician - Automated Lighting control	Automation	R&M	N	4	Sr Repair Technician - Automated Lighting control /Supervisor	5
17	Repair Technician - CCTV Equipment	Automation	R&M	N	4	Sr Repair Technician - CCTV Equipment	5
18	Repair Technician - HMI	Automation	R&M	N	4	Sr HMI Repair Technician /Supervisor	5
19	SCADA - Repair & Maintenance	Automation	R&M	N	4	Sr SCADA - Repair & Maintenance/ Supervisor	5
20	SCADA Operator	Automation	I&C, O&M	Y	4	Sr SCADA Operator /Supervisor	5
21	SCADA Programmer	Automation	I&C	Y	4	Sr SCADA Programmer /Supervisor	5
22	SCADA Supervisor	Automation	I&C	N	5	Sr SCADA Supervisor	6
23	SCADA Technician - Installation & Commissioning	Automation	I&C	Y	4	Sr SCADA Technician - Installation & Commissioning /Supervisor	5
24	SCADA Trouble Shooter	Automation	I&C	N	4	Sr SCADA Trouble Shooter /Supervisor	5
25	Supervisor - Automated Solar Water Pumping	Automation	I&C	N	5	Sr Supervisor - Automated Solar Water Pumping	6
26	Supervisor - AHU	Automation	I&C	N	5	Sr Supervisor - AHU	6
27	Supervisor - Automated Lighting control	Automation	I&C	N	5	Sr Supervisor - Automated Lighting control	6
28	Supervisor - Automation Assembly & Test	Automation	A&T	N	5	Sr Supervisor - Automation Assembly & Test	6
29	Supervisor - Automation Quality Assurance	Automation	A&T	N	5	SR Supervisor Automation Quality Assurance	6
30	Supervisor - Installation & Commissioning - Automated Solar Water Pumping	Automation	I&C	N	5	Sr Supervisor - Installation & Commissioning - Automated Solar Water Pumping /Supervisor	6
31	Technician - Automated Solar Water Pumping Maintenance & Repair	Automation	R&M	Y	4	Sr Technician - Automated Solar Water Pumping Maintenance & Repair /Supervisor - Automated Solar Water Pumping Maintenance & Repair	5
32	Technician - Automation Installation & Commissioning (PLC/HMI/Drive)	Automation	I&C	Y	4	Sr Technician - Automation Installation & Commissioning (PLC/HMI/Drive)	5
33	Technician - Automation Maintenance & Repair (PLC/HMI/Drive)	Automation	R&M	N	4	Sr Technician - Automation Maintenance & Repair (PLC/HMI/Drive)	5
34	Technician - Diesel Generator Installation & Commissioning	Automation	I&C	Y	4	Sr Technician - Diesel Generator Installation & Commissioning / Supervisor	5

35	Technician - Diesel Generator Repair and Maintenance	Automation	I&C	N	4	Sr Technician - Diesel Generator Repair and Maintenance / Supervisor	5
36	Technician - Installation & Commissioning (Automated Lighting control)	Automation	I&C	Y	4	Sr Technician - Installation & Commissioning (Automated Lighting control)	5
37	Technician - Installation & Commissioning - Automated Solar Water Pumping	Automation	I&C	Y	4	Sr Technician - Installation & Commissioning - Automated Solar Water Pumping /Supervisor	5
38	Technician - Installation & Commissioning - Escalator	Automation	I&C	Y	4	Sr Technician - Installation & Commissioning - Escalator /Supervisor Escalator Installation & Commissioning	5
39	Technician - Installation & Commissioning (Automated Access & Attendance Systems)	Automation	I&C	Y	4	Technician - Installation & Commissioning (Automated Access & Attendance Systems)	5
40	Technician - Installation & Commissioning (Automated Climate control)	Automation	I&C	Y	4	Sr Installation & Commissioning Technician (Automated Climate control) /Supervisor	5
41	Technician - Installation & Commissioning (Automated Fire detection & control systems)	Automation	I&C	Y	4	Sr Technician - Installation & Commissioning (Automated Fire detection & control systems) installation & Commissioning & repair /Supervisor	5
42	Technician - Lift Installation & Commissioning	Automation	I&C	Y	4	Sr Technician - Lift Installation & Commissioning / Supervisor -Lift Installation & Commissioning	5
43	Technician - Lift Repair and Maintenance	Automation	R&M	N	4	Sr Technician - Lift Repair and Maintenance /Supervisor Lift Repair and Maintenance	5
44	Technician - PLC Repair	Automation	R&M	N	4	Sr Technician - PLC Repair	5
45	Technician - Repair & Maintenance - VFD	Automation	R&M	N	4	Sr Technician - Repair & Maintenance - VFD	5
46	Technician - Repair & Maintenance -Escalator	Automation	R&M	N	4	Sr Technician - Repair & Maintenance -Escalator	5
47	Troubleshooter - Automation (PLC/HMI/Drive)	Automation	I&C	N	5	Sr Troubleshooter - Automation (PLC/HMI/Drive)	6
48	Operator - CCTV system	Automation,SURV	O&M	Y	4	Sr Operator/Supervisor - CCTV system	5
49	Operator - Building Automation Control Panel	Automation,SURV	O&M EU	Y	3	Sr Operator - Building Automation Control Panel	4
50	Operator - Wireless Devices	Automation,SURV	O&M EU	Y	3	Sr Operator - Wireless Devices	4
51	Technician/Jr Technician - Data Cabling	Automation,SURV	I&C	Y	3	Technician - Data Cabling	4
52	Technician/Jr Technician - Module Assembly & Wiring	Automation,SURV	A&T OEM	Y	3	Technician - Module Assembly & Wiring	4

53	Repair Technician - Advanced Surveillance Equipment	Automation,SURV	R&M	N	4	Sr Repair Technician/ Supervisor - Advanced Surveillance Equipment	5
54	Supervisor - Building automation	Automation,SURV	A&T SI	N	5	Sr Supervisor - Building automation	6
55	Supervisor - CCTV Installation & Commissioning	Automation,SURV	I&C	N	5	Sr Supervisor - CCTV Installation & Commissioning	6
56	Technician - Cabling (multi skill)	Automation,SURV	A&T SI, I&C	Y	4	Sr Technician - Cabling (multi skill)	4
57	Technician (Building automation - multi skill)	Automation,SURV	A&T SI, I&C	Y	4	Sr Technician/ Supervisor (Building automation - multi skill)	5
58	Jr Calibration Engineer / Scientist	I&A	D&D, A&T, CAL SP	Y	5	Calibration Engineer / Sr Scientist	6
59	Calibration Supervisor	I&A	Calibration	N	5	Sr Calibration Supervisor	6
60	Calibration Technician (Control & safety valves)	I&A	Calibration	Y	4	Sr Calibration Technician (Control & safety valves)	5
61	Calibration Technician (Dimensions)	I&A	Calibration	Y	4	Sr Calibration Technician (Dimensions)	5
62	Calibration Technician (Electrical parameters)	I&A	Calibration	Y	4	Sr Calibration Technician (Electrical parameters)	5
63	Calibration Technician (Electro-technical instruments)	I&A	Calibration	Y	4	Sr Calibration Technician (Electro-technical instruments)	5
64	Calibration Technician (Mechanical Instruments)	I&A	Calibration	Y	4	SR Calibration Technician (Mechanical Instruments)	5
65	Calibration Technician (Multi Skill)	I&A	Calibration	Y	4	Sr Calibration Technician (Multi Skill) / Calibration Supervisor	5
66	Calibration Technician (Thermal Instruments)	I&A	Calibration	Y	4	Sr Calibration Technician (Thermal Instruments)	5
67	Calibration Technicians (Analyser systems)	I&A	Calibration	Y	4	Sr Calibration Technicians (Analyser systems)	5
68	Calibration Technicians (Gas Sensors/Chemical Sensors)	I&A	Calibration	Y	4	Sr Calibration Technicians (Gas Sensors/Chemical Sensors)	5
69	Calibration Technicians (Pressure/Level/Flow)	I&A	Calibration	Y	4	Sr Calibration Technicians (Pressure/Level/Flow)	5
70	Customer Support Specialist/ Executive	I&A	Tech Sup	N	5	Sr Customer Support Specialist/Executive	6
71	Jr/Asstt/Trainee Engineer - Customer Support	I&A	Tech Sup	Y	5	Engineer - Customer Support	6
72	Jr/Asstt/Trainee Engineer - Instrumentation	I&A	O&M, I&C, R&M	Y	5	Engineer - Instrumentation	6
73	Jr/Asstt/Trainee Engineer - Waste Management	I&A	A&T	Y	5	Engineer - Waste Management	6

74	Jr/Asstt/Trainee Engineer / Specialist - Pre-Sales/ Tendering/ Technical Support	I&A	S&M	Y	5	Engineer / Specialist - Pre-Sales/ Tendering/ Technical Support	6
75	Foreman / Supervisor - Instrumentation	I&A	O&M	N	5	Sr Foreman / Supervisor - Instrumentation	6
76	Manager - Marketing	I&A	S&M	N	7	Sr Manager - Marketing	8
77	Manager - Vendor Development	I&A	Purchase	N	7	Sr Manager - Vendor Development	8
78	Officer - Procurement (Technical)	I&A	Purchase	Y	5	Sr Officer - Procurement (Technical)	6
79	Pre Sales Executive	I&A	S&M	Y	4	Sr Pre-Sales Executive	5
80	Rework Supervisor	I&A	A&T	N	5	Sr Rework Supervisor	6
81	Rework Technician	I&A	A&T	N	4	Sr Rework Technician	5
82	Rework Tester	I&A	A&T	N	4	Sr Rework Tester	5
83	Robotics Supervisor	I&A	A&T	N	5	Sr Robotics Supervisor	6
84	Robotics Technician	I&A	A&T	Y	4	Sr Robotics Technician	5
85	Salvage Technician	I&A	A&T	Y	4	Sr Salvage Technician	5
86	Engineer - Pre-Sales/ Tendering/ Technical Support	I&A	S&M	N	6	Sr Engineer/ Manager - Pre-Sales/ Tendering/ Technical Support	7
87	Supervisor - Instrument / Control Panel Assembly & Testing	I&A	A&T	N	5	Sr Supervisor - Instrument / Control Panel Assembly & Testing	6
88	Supervisor - Instrument / Control Panel Quality Assurance	I&A	A&T	N	5	Sr Supervisor - Instrument / Control Panel Quality Assurance	6
89	Technical Sales Assistant	I&A	S&M	N	4	Sr Technical Sales Executive	5
90	Technical Sales Asstt. Manager	I&A	S&M	Y	6	Technical Sales Manager	7
91	Technical Sales Manager	I&A	S&M	N	7	Sr Technical Sales Manager	8
92	Technical Support Manager	I&A	Tech Sup	N	7	Sr Technical Support Manager	8
93	Specialist/Executive/ Engineer - Technical Support	I&A	Tech Sup	N	6	Sr Specialist/Executive/ Engineer - Technical Support	7
94	Junior Technician - Instrumentation (Process Control)	I&A	O&M	Y	3	Technician - Instrumentation (Process Control)	4

95	Junior Technician / Helper - Instrument / Control Panel Assembly	I&A	A&T	Y	3	Technician - Instrument / Control Panel Assembly	4
96	Pre-Sales Assistant / Jr Pre-Sales Executive	I&A	S&M	Y	3	Pre-Sales Assistant / Pre-Sales Executive	5
97	Technical Support Assistant	I&A	Tech Sup	Y	3	Technical Support Executive	5
98	Technician - Impulse Line Instrument Fabrication & Installation	I&A	I&C	Y	4	Sr Technician - Impulse Line Instrument Fabrication & Installation	5
99	Technician - Installation & Commissioning (Analyser systems)	I&A	I&C	N	4	Sr Technician - Installation & Commissioning (Analyser systems) /Supervisor	5
100	Technician - Installation & Commissioning (Hazardous Environment/Intrinsic Safety)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Hazardous Environment/Intrinsic Safety) /Supervisor	5
101	Technician - Installation & Commissioning (Hydraulic)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Hydraulic) /Supervisor	5
102	Technician - Installation & Commissioning (Multi skill - specify)	I&A	I&C	N	5	Sr Technician - Installation & Commissioning (Multi skill - specify) /Supervisor	6
103	Technician - Installation & Commissioning (NC Machines)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (NC Machines) /Supervisor	5
104	Technician - Installation & Commissioning (Pneumatic)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Pneumatic) /Supervisor	5
105	Technician - Installation & Commissioning (Pressure Level/Flow)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Pressure Level/Flow) /Supervisor	5
106	Technician - Installation & Commissioning (Process Control)	I&A	I&C	N	5	Sr Technician - Installation & Commissioning (Process Control) /Supervisor	6
107	Technician - Installation & Commissioning (Robotic)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Robotic) /Supervisor	5
108	Technician - Installation & Commissioning (Thermal)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Thermal) /Supervisor	5
109	Technician - Installation & Commissioning (Vacuum)	I&A	I&C	Y	4	Sr Technician - Installation & Commissioning (Vacuum) /Supervisor	5
110	Technician - Instrument / Control Panel Assembly	I&A	A&T	Y	4	Sr Technician - Instrument Control Panel Assembly /Supervisor -Instrument Control Panel Assembly	5
111	Technician - Instrument / Control Panel Testing	I&A	A&T	Y	4	Sr Technician - Instrument / Control Panel Testing	5

112	Technician - Instrumentation (Control Valves)	I&A	O&M	N	4	Sr Technician - Instrumentation (Control Valves)	5
113	Technician - Instrumentation, (One or more skills: Thermal, Electro-Technical, Mechanical, Pressure/Level/Flow)	I&A	O&M	N	4	Senior Technician - Instrumentation, (Thermal, Electro-Technical, Mechanical, Pressure/Level/Flow)	5
114	Technician - Instrumentation, (Analyser systems)	I&A	O&M	N	4	Senior Technician - Instrumentation, (Analyser systems)	5
115	Technician - Instrumentation, (Hazardous Environment/ Intrinsic Safety)	I&A	O&M	N	4	Sr Technician - Instrumentation, (Hazardous Environment/Intrinsic Safety)	5
116	Technician - Instrumentation, (Mechatronic/ Robotic)	I&A	O&M	Y	4	Sr Technician - Instrumentation, (Mechatronic/Robotic)	5
117	Technician - Instrumentation, (One or more skills: Pneumatic/ Hydraulic/ Vacuum)	I&A	O&M	Y	4	Senior Technician - Instrumentation, (Pneumatic/Hydraulic/Vacuum)	5
118	Architect - Embedded Instrumentation	I&A,SURV	D&D OEM	N	6	Sr Architect - Embedded Instrumentation	7
119	Engineer - Design (Instrumentation/ Automation/ Surveillance Systems)	I&A,SURV	D&D	Y	6	Sr Engineer - Design (Instrumentation/ Automation/ Surveillance Systems)	7
120	Engineer - Firmware Design & Programming	I&A,SURV	D&D	Y	6	Sr Engineer - Firmware Design & Programming	7
121	Jr/Asstt/Trainee Engineer - Packaging	I&A,SURV	D&D	Y	5	Engineer - Packaging	6
122	Jr/Asstt/Trainee Engineer - Prototyping	I&A,SURV	D&D	Y	5	Engineer - Prototyping	6
123	Jr/Asstt/Trainee Engineer - Software Development	I&A,SURV	D&D	Y	5	Engineer - Software	6
124	Jr/Asstt/Trainee Engineer - Testing / Automated Testing	I&A,SURV	D&D	Y	5	Engineer - Testing / Automated Testing	6
125	Jr/Asstt/Trainee Engineer - UI & Ergonomics	I&A,SURV	D&D	Y	5	Engineer - UI & Ergonomics	6
126	Jr/Asstt/Trainee Engineer - Vendor Development	I&A,SURV	D&D	Y	5	Engineer - Vendor Development	6
127	Jr/Asstt/Trainee Engineer - Embedded Instrumentation	I&A,SURV	D&D, A&T	Y	5	Engineer - Embedded Instrumentation/ Architect - Embedded Instrumentation	6
128	Jr/Asstt/Trainee Engineer - Environmental Test / Life Test	I&A,SURV	D&D, A&T	Y	5	Engineer - Environmental Test / Life Test	6
129	Jr/Asstt/Trainee Engineer - Installation & Commissioning	I&A,SURV	I&C, SI	Y	5	Engineer - Installation & Commissioning	6
130	Jr/Asstt/Trainee Engineer - Mechatronics	I&A,SURV	A&T, I&C, R&M	Y	5	Engineer - Mechatronics	6
131	Jr/Asstt/Trainee Engineer - Robotics	I&A,SURV	A&T	Y	5	Engineer - Robotics	6

132	Jr/Asstt/Trainee Engineer - Technical Procurement / Vendor Development	I&A,SURV	Purchase	Y	5	Engineer - Technical Procurement / Vendor Development	6
133	Jr/Asstt/Trainee Engineer - Test / QA	I&A,SURV	A&T OEM, SI	Y	5	Engineer - Test / QA	6
134	Manager - Assembly Line	I&A,SURV	A&T	N	7	Sr Manager - Assembly Line	8
135	Manager - Hardware/Firmware	I&A,SURV	D&D, A&T OEM, SI	N	7	Sr Manager - Hardware/Firmware	8
136	Manager - Purchase	I&A,SURV	Purchase	N	7	Sr Manager - Purchase	8
137	Operator - Automated PCB Assembly	I&A,SURV	A&T	Y	4	Sr Operator - Automated PCB Assembly	5
138	Programmer - Firmware / Software	I&A,SURV	A&T OEM, SI	Y	4	Sr Programmer - Firmware / Software	5
139	Software Designer	I&A,SURV	D&D	Y	6	Sr Software Designer	7
140	Software Developer	I&A,SURV	D&D, A&T OEM, SI	Y	5	Sr Software Developer	6
141	Manager - Software	I&A,SURV	A&T	N	7	Sr Manager - Software	8
142	Software Programmer	I&A,SURV	A&T OEM	Y	4	Sr Software Programmer - Surveillance	5
143	Software Tester	I&A,SURV	D&D	Y	5	Sr Software Tester	6
144	Supervisor - Assembly Line	I&A,SURV	A&T	N	5	Sr Supervisor - Assembly Line	6
145	Supervisor - Environmental Test / Life Test	I&A,SURV	D&D, A&T	N	5	Sr Supervisor - Environmental Test / Life Test	6
146	Supervisor - Installation & Commissioning	I&A,SURV	I&C	N	5	Sr Installation & Commissioning Supervisor	6
147	Supervisor - Mechatronics	I&A,SURV	A&T	N	5	Sr Supervisor - Mechatronics	6
148	Supervisor - QA Assembly & Testing	I&A,SURV	A&T	N	5	Sr Supervisor - QA Assembly & Testing	6
149	Systems Engineer	I&A,SURV	D&D	Y	6	Sr Systems Engineer	7
150	Technician/Jr Technician - Module Test	I&A,SURV	A&T OEM	Y	3	Technician - Module Test	4
151	Technician/Jr Technician - PCB & Module Test	I&A,SURV	D&D, A&T	Y	3	Technician - PCB & Module Test	4
152	Technician/Jr Technician - PCB / Module Assembly	I&A,SURV	D&D, A&T	Y	3	Technician - PCB / Module Assembly	4
153	Technician/Jr Technician - PCB Soldering	I&A,SURV	A&T	Y	3	Technician - PCB Soldering	4

154	Technician/Jr Technician - Product / System Assembly	I&A,SURV	A&T OEM, SI	Y	3	Technician - Product / System Assembly	4
155	Technician/Jr Technician - Product / System Test	I&A,SURV	A&T OEM, SI	Y	3	Technician - Product / System Test	4
156	Technician - Environmental Test / Life Test	I&A,SURV	D&D, A&T	N	4	Sr Technician / Supervisor - Environmental Test / Life Test	5
157	Technician - Mechatronics	I&A,SURV	A&T	Y	4	Sr Technician - Mechatronics	5
158	Technician - PCB Test	I&A,SURV	A&T	Y	4	Sr Technician - PCB Test	5
159	Technician - QA Assembly & Testing	I&A,SURV	A&T	N	4	Sr Technician - QA Assembly & Testing	5
160	Tester - Embedded System	I&A,SURV	D&D, A&T	N	5	Sr Tester - Embedded System	6
161	Tester - Firmware / Software	I&A,SURV	A&T OEM, SI	Y	4	Sr Tester - Firmware / Software	5
162	Manager - Development / R&D	I&A,SURV	D&D	N	7	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	8
163	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Development / R&D	9
164	Manager - Documentation	I&A,SURV	D&D, A&T	N	7	Sr Manager - Documentation	8
165	Sr Manager/ Asstt. General Manager/ AVP - Manufacturing/ Production	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Manufacturing/ Production	9
166	Sr Manager/ Asstt. General Manager/ AVP - Engineering	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Engineering	9
167	Sr Manager/ Asstt. General Manager/ AVP - Materials Management	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Materials Management	9
168	Sr Manager/ Asstt. General Manager/ AVP - Marketing	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Marketing	9
169	Sr Manager/ Asstt. General Manager/ AVP - Quality Assurance	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Quality Assurance	9
170	Sr Manager/ Asstt. General Manager/ AVP - Customer Support	I&A,SURV	D&D, A&T, Purchase,	N	8	Director / GM/ VP - Customer Support	9

			S&M				
171	Customer Support Assistant	I&A,SURV,COMM	Tech Sup	Y	3	Customer Support Executive	4

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Appendix 'B'

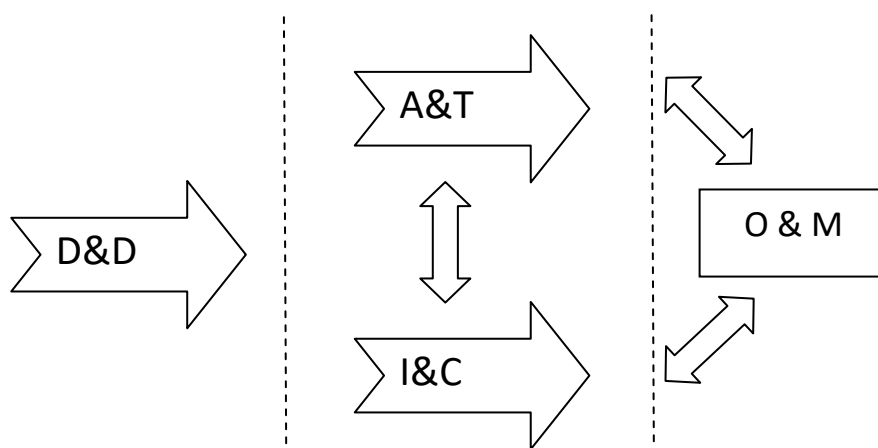
Job Roles in Surveillance Sub-sector

With NSQF Level and Career Progression path

Note 1: Vertical progression is shown in OM chart as well as in the table below.

For horizontal progression, the following guidance may be used:

For a given skill set, transfer across OEM, SI, EU may be feasible at the same level in the following direction:



Note 2:

- It is generally possible to move from Design and Development roles to Assembly & Testing as well as Installation and Commissioning roles or Operation and Maintenance. However, the reverse move is generally difficult owing to special skills needed for D&D jobs.
- It is generally feasible to move between A&T, I&C and O&M roles at the same levels.

Statistics (No of Job Roles at each NSQF level)	
Level 3	11
Level 4	12
Level 5	23
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Level 7	6
Level 8	6
Total	63

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Color Codes:

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Sl.	Job Role	Sub-sector	Occupation	Entry Level (Y/N)	NSQF Level	Vertical Progression to	At Level
1	Architect - Embedded Instrumentation	I&A,SURV	D&D OEM	N	6	Sr Architect - Embedded Instrumentation	7
2	Engineer - Design (Instrumentation/ Automation/ Surveillance Systems)	I&A,SURV	D&D	Y	6	Sr Engineer - Design (Instrumentation/ Automation/ Surveillance Systems)	7
3	Engineer - Firmware Design & Programming	I&A,SURV	D&D	Y	6	Sr Engineer - Firmware Design & Programming	7
4	Jr/Asstt/Trainee Engineer - Packaging	I&A,SURV	D&D	Y	5	Engineer - Packaging	6
5	Jr/Asstt/Trainee Engineer - Prototyping	I&A,SURV	D&D	Y	5	Engineer - Prototyping	6
6	Jr/Asstt/Trainee Engineer - Software Development	I&A,SURV	D&D	Y	5	Engineer - Software	6
7	Jr/Asstt/Trainee Engineer - Testing / Automated Testing	I&A,SURV	D&D	Y	5	Engineer - Testing / Automated Testing	6
8	Jr/Asstt/Trainee Engineer - UI & Ergonomics	I&A,SURV	D&D	Y	5	Engineer - UI & Ergonomics	6
9	Jr/Asstt/Trainee Engineer - Vendor Development	I&A,SURV	D&D	Y	5	Engineer - Vendor Development	6
10	Jr/Asstt/Trainee Engineer - Embedded Instrumentation	I&A,SURV	D&D, A&T	Y	5	Engineer - Embedded Instrumentation/ Architect - Embedded Instrumentation	6
11	Jr/Asstt/Trainee Engineer - Environmental Test / Life Test	I&A,SURV	D&D, A&T	Y	5	Engineer - Environmental Test / Life Test	6
12	Jr/Asstt/Trainee Engineer - Installation & Commissioning	I&A,SURV	I&C, SI	Y	5	Engineer - Installation & Commissioning	6
13	Jr/Asstt/Trainee Engineer - Mechatronics	I&A,SURV	A&T, I&C, R&M	Y	5	Engineer - Mechatronics	6
14	Jr/Asstt/Trainee Engineer - Robotics	I&A,SURV	A&T	Y	5	Engineer - Robotics	6

15	Jr/Asstt/Trainee Engineer - Technical Procurement / Vendor Development	I&A,SURV	Purchase	Y	5	Engineer - Technical Procurement / Vendor Development	6
16	Jr/Asstt/Trainee Engineer - Test / QA	I&A,SURV	A&T OEM, SI	Y	5	Engineer - Test / QA	6
17	Manager - Assembly Line	I&A,SURV	A&T	N	7	Sr Manager - Assembly Line	8
18	Manager - Development / R&D	I&A,SURV	D&D	N	7	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	8
19	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Development / R&D	9
20	Manager - Documentation	I&A,SURV	D&D, A&T	N	7	Sr Manager - Documentation	8
21	Manager - Hardware/Firmware	I&A,SURV	D&D, A&T OEM, SI	N	7	Sr Manager - Hardware/Firmware	8
22	Manager - Purchase	I&A,SURV	Purchase	N	7	Sr Manager - Purchase	8
23	Operator - Automated PCB Assembly	I&A,SURV	A&T	Y	4	Sr Operator - Automated PCB Assembly	5
24	Operator - CCTV system	Automation,SURV	O&M	Y	4	Sr Operator/Supervisor - CCTV system	5
25	Operator - Building Automation Control Panel	Automation,SURV	O&M EU	Y	3	Sr Operator - Building Automation Control Panel	4
26	Operator - Wireless Devices	Automation,SURV	O&M EU	Y	3	Sr Operator - Wireless Devices	4
27	Technician/Jr Technician - Data Cabling	Automation,SURV	I&C	Y	3	Technician - Data Cabling	4
28	Programmer - Firmware / Software	I&A,SURV	A&T OEM, SI	Y	4	Sr Programmer - Firmware / Software	5
29	Technician/Jr Technician - Module Assembly & Wiring	Automation,SURV	A&T OEM	Y	3	Technician - Module Assembly & Wiring	4
30	Repair Technician - Advanced Surveillance Equipment	Automation,SURV	R&M	N	4	Sr Repair Technician/ Supervisor - Advanced Surveillance Equipment	5
31	Software Designer	I&A,SURV	D&D	Y	6	Sr Software Designer	7

32	Software Developer	I&A,SURV	D&D, A&T OEM, SI	Y	5	Sr Software Developer	6
33	Manager - Software	I&A,SURV	A&T	N	7	Sr Manager - Software	8
34	Software Programmer	I&A,SURV	A&T OEM	Y	4	Sr Software Programmer - Surveillance	5
35	Software Tester	I&A,SURV	D&D	Y	5	Sr Software Tester	6
36	Supervisor - Assembly Line	I&A,SURV	A&T	N	5	Sr Supervisor - Assembly Line	6
37	Supervisor - Building automation	Automation, SURV	A&T SI	N	5	Sr Supervisor - Building automation	6
38	Supervisor - CCTV Installation & Commissioning	Automation, SURV	I&C	N	5	Sr Supervisor - CCTV Installation & Commissioning	6
39	Supervisor - Environmental Test / Life Test	I&A,SURV	D&D, A&T	N	5	Sr Supervisor - Environmental Test / Life Test	6
40	Supervisor - Installation & Commissioning	I&A,SURV	I&C	N	5	Sr Installation & Commissioning Supervisor	6
41	Supervisor - Mechatronics	I&A,SURV	A&T	N	5	Sr Supervisor - Mechatronics	6
42	Supervisor - QA Assembly & Testing	I&A,SURV	A&T	N	5	Sr Supervisor - QA Assembly & Testing	6
43	Systems Engineer	I&A,SURV	D&D	Y	6	Sr Systems Engineer	7
44	Technician/Jr Technician - Module Test	I&A,SURV	A&T OEM	Y	3	Technician - Module Test	4
45	Technician/Jr Technician - PCB & Module Test	I&A,SURV	D&D, A&T	Y	3	Technician - PCB & Module Test	4
46	Technician/Jr Technician - PCB / Module Assembly	I&A,SURV	D&D, A&T	Y	3	Technician - PCB / Module Assembly	4
47	Technician/Jr Technician - PCB Soldering	I&A,SURV	A&T	Y	3	Technician - PCB Soldering	4
48	Technician/Jr Technician - Product / System Assembly	I&A,SURV	A&T OEM, SI	Y	3	Technician - Product / System Assembly	4
49	Technician/Jr Technician - Product / System Test	I&A,SURV	A&T OEM, SI	Y	3	Technician - Product / System Test	4
50	Customer Support Assistant	I&A,SURV,CO MM	Tech Sup	Y	3	Customer Support Executive	4
51	Technician - Cabling (multi skill)	Automation,S URV	A&T SI, I&C	Y	4	Sr Technician - Cabling (multi skill)	4

52	Technician - Environmental Test / Life Test	I&A,SURV	D&D, A&T	N	4	Sr Technician / Supervisor - Environmental Test / Life Test	5
53	Technician - Mechatronics	I&A,SURV	A&T	Y	4	Sr Technician - Mechatronics	5
54	Technician - PCB Test	I&A,SURV	A&T	Y	4	Sr Technician - PCB Test	5
55	Technician - QA Assembly & Testing	I&A,SURV	A&T	N	4	Sr Technician - QA Assembly & Testing	5
56	Technician (Building automation - multi skill)	Automation, SURV	A&T SI, I&C	Y	4	Sr Technician/ Supervisor (Building automation - multi skill)	5
57	Tester - Embedded System	I&A,SURV	D&D, A&T	N	5	Sr Tester - Embedded System	6
58	Tester - Firmware / Software	I&A,SURV	A&T OEM, SI	Y	4	Sr Tester - Firmware / Software	5
59	Sr Manager/ Asstt. General Manager/ AVP - Manufacturing/ Production	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Manufacturing/ Production	9
60	Sr Manager/ Asstt. General Manager/ AVP - Engineering	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Engineering	9
61	Sr Manager/ Asstt. General Manager/ AVP - Materials Management	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Materials Management	9
62	Sr Manager/ Asstt. General Manager/ AVP - Marketing	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Marketing	9
63	Sr Manager/ Asstt. General Manager/ AVP - Quality Assurance	I&A,SURV	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Quality Assurance	9

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Appendix 'C'

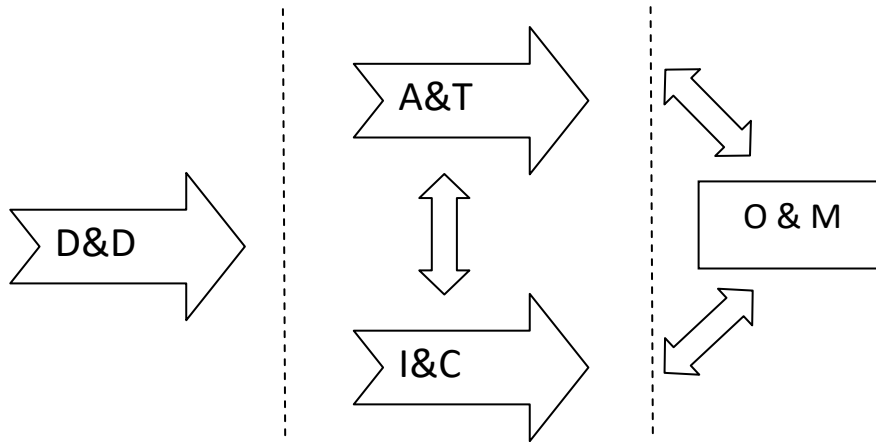
Job Roles in Communication Sub-sector

With NSQF Level and Career Progression path

Note 1: Vertical progression is shown in OM chart as well as in the table below.

For horizontal progression, the following guidance may be used:

For a given skill set, transfer across OEM, SI, EU may be feasible at the same level in the following direction:



Note 2:

- It is generally possible to move from Design and Development roles to Assembly & Testing as well as Installation and Commissioning roles or Operation and Maintenance. However, the reverse move is generally difficult owing to special skills needed for D&D jobs.
- It is generally feasible to move between A&T, I&C and O&M roles at the same levels.

Statistics (No of Job Roles at each NSQF level)	
Level 3	10
Level 4	19
Level 5	2
Level 6	8
Level 7	10
Level 8	7
Total	56

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Color Codes:

Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
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Sl.	Job Role	Sub-sector	Occupation	Entry Level (Y/N)	NSQF Level	Vertical Progression to	At Level
1	Architect - Embedded Instrumentation	I&A,SURV	D&D OEM	N	6	Sr Architect - Embedded Instrumentation	7
2	Engineer - Design & Development	I&A,SURV,COMM	D&D	Y	6	Sr Engineer - Design (Instrumentation/ Automation/ Surveillance Systems)	7
3	Engineer - Firmware Design & Programming	I&A,SURV,COMM	D&D	Y	6	Sr Engineer - Firmware Design & Programming	7
4	Manager - Assembly Line	I&A,SURV,COMM	A&T	N	7	Sr Manager - Assembly Line	8
5	Manager - Development / R&D	I&A,SURV,COMM	D&D	N	7	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	8
6	Sr Manager/ Asstt. General Manager/ AVP - Development / R&D	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Development / R&D	9
7	Manager - Documentation	I&A,SURV,COMM	D&D, A&T	N	7	Sr Manager - Documentation	8
8	Manager - Hardware/Firmware	I&A,SURV,COMM	D&D, A&T OEM, SI	N	7	Sr Manager - Hardware/Firmware	8
9	Manager - Marketing	I&A,SURV,COMM	S&M	N	7	Sr Manager - Marketing	8
10	Manager - Purchase	I&A,SURV,COMM	Purchase	N	7	Sr Manager - Purchase	8
11	Manager - Vendor Development	I&A,SURV,COMM	Purchase	N	7	Sr Manager - Vendor Development	8
12	Technician/Jr Technician - Installation & Commissioning - TV Distribution Receiving System	COMM	I&C	Y	3	Technician - Installation & Commissioning - TV Distribution Receiving System	4
13	Technician/Jr Technician - Installation &	COMM	I&C	Y	3	Technician - Installation & Commissioning, GPS	4

	Commissioning, GPS system					system	
14	Repair Technician - Community radio	COMM	Repair	N	4	Sr Repair Technician - Community radio	5
15	Repair Technician - GPS system	COMM	Repair	N	4	Sr Repair Technician - GPS system	5
16	Technician/Jr Technician - Installation & Commissioning, Headend	COMM	I&C	Y	3	Technician - Installation & Commissioning, Headend	4
17	Technician/Jr Technician - Installation & Commissioning, Radio Station	COMM	I&C	Y	3	Technician - Installation & Commissioning, Radio Station	4
18	Repair Technician - TV Distribution Receiving System	COMM	Repair	N	4	Sr Repair Technician - TV Distribution Receiving System	5
19	Repair Technician - Video & Audio Conferencing	COMM	Repair	N	4	Sr Repair Technician - Video & Audio Conferencing	5
20	Technician/Jr Technician - Installation & Commissioning, Radio Station Studio	COMM	I&C	Y	3	Technician - Installation & Commissioning, Radio Station Studio	4
21	Repair Technician - Virtual classroom	COMM	Repair	N	4	Sr Repair Technician - Virtual classroom	5
22	Technician/Jr Technician - Installation & Commissioning, TV Distribution Platform	COMM	I&C	Y	3	Technician - Installation & Commissioning, TV Distribution Platform	4
23	Technician/Jr Technician - Installation & Commissioning, Video & Audio Conferencing	COMM	I&C	Y	3	Technician - Installation & Commissioning, Video & Audio Conferencing	4
24	Software Designer	I&A,SURV,COMM	D&D	Y	6	Sr Software Designer	7
25	Manager - Software	I&A,SURV,COMM	A&T	N	7	Sr Manager - Software	8
26	Engineer - Pre-Sales/ Tendering/ Technical Support	I&A,SURV,COMM	S&M	N	6	Sr Engineer/ Manager - Pre-Sales/ Tendering/ Technical Support	7
27	Supervisor - Installation & Commissioning, Radio Station	COMM	I&C	N	5	Sr Supervisor - Installation & Commissioning, Radio Station	6
28	Supervisor - Installation & Commissioning,	COMM	I&C	N	5	Sr Supervisor - Installation & Commissioning, Radio	6

	Radio Station Studio					Station Studio	
29	Systems Engineer	I&A,SURV,COMM	D&D	Y	6	Sr Systems Engineer	7
30	Technical Sales Asstt. Manager	I&A,SURV,COMM	S&M	Y	6	Technical Sales Manager	7
31	Technical Sales Manager	I&A,SURV,COMM	S&M	N	7	Sr Technical Sales Manager	8
32	Technician/Jr Technician - Installation & Commissioning, Virtual classroom	COMM	I&C	Y	3	Technician - Installation & Commissioning, Virtual classroom	4
33	Technical Support Manager	I&A,SURV,COMM	Tech Sup	N	7	Sr Technical Support Manager	8
34	Specialist/Executive/ Engineer - Technical Support	I&A,SURV,COMM	Tech Sup	N	6	Sr Specialist/Executive/ Engineer - Technical Support	7
35	Technician/Jr Technician - Installation & Commissioning, Community radio	COMM	I&C	Y	3	Technician - Installation & Commissioning, Community radio	4
36	Customer Support Assistant	I&A,SURV,COMM	Tech Sup	Y	3	Customer Support Executive	4
37	Technician - Maintenance, Headend	COMM	Maintenance	N	4	Sr Technician - Maintenance, Headend	5
38	Technician - Maintenance, Radio Station	COMM	Maintenance	N	4	Sr Technician - Maintenance, Radio Station	5
39	Technician - Maintenance, TV Channel	COMM	Maintenance	N	4	Sr Technician - Maintenance, TV Channel	5
40	Technician - Maintenance, TV Distribution Platform	COMM	Maintenance	N	4	Sr Technician - Maintenance, TV Distribution Platform	5
41	Technician - Operation, Community radio	COMM	Operation	Y	4	Sr Technician - Operation, Community radio	5
42	Technician - Operation, Headend	COMM	Operation	Y	4	Sr Technician - Operation, Headend	5
43	Technician - Operation, Radio Station	COMM	Operation	Y	4	Sr Technician - Operation, Radio Station	5
44	Technician - Operation, Radio Station Studio	COMM	Operation	Y	4	Sr Technician - Operation, Radio Station Studio	5
45	Technician - Operation, Radio Station Transmitter	COMM	Operation	Y	4	Sr Technician - Operation, Radio Station Transmitter	5

46	Technician - Operation, TV Channel	COMM	Operation	Y	4	Sr Technician - Operation, TV Channel	5
47	Technician - Operation, TV Distribution Platform	COMM	Operation	Y	4	Sr Technician - Operation, TV Distribution Platform	5
48	Technician - Operation, TV Distribution Receiving System	COMM	Operation	Y	4	Sr Technician - Operation, TV Distribution Receiving System	5
49	Technician - Operation, Video & Audio Conferencing	COMM	Operation	Y	4	Sr Technician - Operation, Video & Audio Conferencing	5
50	Technician - Operation, Virtual classroom	COMM	Operation	Y	4	Sr Technician - Operation, Virtual classroom	5
51	Sr Manager/ Asstt. General Manager/ AVP - Manufacturing/ Production	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Manufacturing/ Production	9
52	Sr Manager/ Asstt. General Manager/ AVP - Engineering	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Engineering	9
53	Sr Manager/ Asstt. General Manager/ AVP - Materials Management	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Materials Management	9
54	Sr Manager/ Asstt. General Manager/ AVP - Marketing	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Marketing	9
55	Sr Manager/ Asstt. General Manager/ AVP - Quality Assurance	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Quality Assurance	9
56	Sr Manager/ Asstt. General Manager/ AVP - Customer Support	I&A,SURV,COMM	D&D, A&T, Purchase, S&M	N	8	Director / GM/ VP - Customer Support	9

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Appendix 'D'

NSQF Level 3 Job Role - All Sub-sectors (86)

Color Codes:

Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
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Sl. No.	Job Role	Sub-sector	Occupation	Entry Level (Y/N)	NSQF Level	Vertical Progression to	Level
1	Customer Support Assistant	I&A, SURV, COMM	Tech Sup	Y	3	Customer Support Executive	4
2	Junior Technician - Instrumentation (Process Control)	I&A	O&M	Y	3	Technician - Instrumentation (Process Control)	4
3	Junior Technician / Helper - Instrument / Control Panel Assembly	I&A	A&T	Y	3	Technician - Instrument / Control Panel Assembly	4
4	Operator - Building Automation Control Panel	Automation, SURV	O&M EU	Y	3	Sr Operator - Building Automation Control Panel	4
5	Operator - Fire Alarm Control Panel	SURV	O&M EU	Y	3	Sr Operator - Fire Alarm Control Panel	4
6	Operator - High Security Vehicles	SURV	I&C SI	Y	3	Sr Operator - High Security Vehicles System	4

	System						
7	Operator - Surveillance System Control Panel	SURV	O&M EU	Y	3	Sr Operator - Surveillance System Control Panel	4
8	Operator - Wireless Devices	Automation, SURV	O&M EU	Y	3	Sr Operator - Wireless Devices	4
9	Pre-Sales Assistant / Jr Pre-Sales Executive	I&A	S&M	Y	3	Pre-Sales Assistant / Pre-Sales Executive	5
10	Programmer - ID CARD/Badge	SURV	I&C SI	Y	3	Sr Programmer - ID CARD/Badge	4
11	Repair Jr Technician - Biometric devices	SURV	R&M SI/OEM	Y	3	Repair Technician - Biometric devices	4
12	Repair Jr Technician - CCTV & Recorders	SURV	R&M SI/OEM	Y	3	Repair Technician - CCTV & Recorders	4
13	Repair Jr Technician - Intrusion alarms	SURV	R&M SI/OEM	Y	3	Repair Technician - Intrusion alarms	4
14	Repair Jr Technician - Mobile DVR	SURV	R&M SI/OEM	Y	3	Repair Technician - Mobile DVR	4
15	Repair Jr Technician - Video Door Phones	SURV	R&M SI/OEM	Y	3	Repair Technician - Video Door Phones	4
16	Site Supervisor - Electronically Controlled Access gate/	SURV	I&C SI	Y	3	Sr Site Supervisor - Electronically Controlled Access gate/system	4

	system						
17	Site visit Technician - Surveillance	SURV	S&M SI	Y	3	Sr Site visit Technician - Surveillance	4
18	Technical Support Assistant	I&A	Tech Sup	Y	3	Technical Support Executive	5
19	Technician - Facility/ Plant Operation & Maintenance	SURV	O&M EU	Y	3	Sr Technician - Facility/ Plant Operation & Maintenance	4
20	Technician/Jr Technician - Data Cabling	SURV	A&T SI	Y	3	Technician - Data Cabling	4
21	Technician/Jr Technician - Data Cabling	Automation, SURV	I&C	Y	3	Technician - Data Cabling	4
22	Technician/Jr Technician - Fire Alarm Cabling	Automation	I&C	Y	3	Technician - Fire Alarm Cabling	4
23	Technician/Jr Technician - Intercom Cabling	Automation	I&C	Y	3	Technician - Intercom Cabling	4
24	Technician/Jr Technician - Online support	SURV	S&M SI	Y	3	Technician - Online support	4
25	Technician/Jr Technician - Structured Cabling	SURV	A&T SI	Y	3	Technician - Structured Cabling	4
26	Technician/Jr Technician - Structured	Automation	I&C	Y	3	Technician - Structured Cabling	4

	Cabling						
27	Technician/Jr Technician - Video/CCTV Cabling	SURV	A&T SI	Y	3	Technician - Video/CCTV Cabling	4
28	Technician/Jr Technician - Video/CCTV Cabling	Automation	I&C	Y	3	Technician - Video/CCTV Cabling	4
29	Technician/Jr Technician - Fire Alarm Cabling	SURV	A&T SI	Y	3	Technician - Fire Alarm Cabling	4
30	Technician/Jr Technician - Intercom Cabling	SURV	A&T SI	Y	3	Technician - Intercom Cabling	4
31	Technician/Jr Technician - Power Cabling	SURV	A&T SI	Y	3	Technician - Power Cabling	4
32	Technician/Jr Technician - Installation & Commissioning - TV Distribution Receiving System	COMM	I&C	Y	3	Technician - Installation & Commissioning - TV Distribution Receiving System	4
33	Technician/Jr Technician - Installation & Commissioning (Audio system)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Audio system)	4
34	Technician/Jr Technician - Installation & Commission	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (CCTV & Recorders)	4

	ing (CCTV & Recorders)						
35	Technician/Jr Technician - Installation & Commissioning (Electronic lockers)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Electronic lockers)	4
36	Technician/Jr Technician - Installation & Commissioning (Electronically Controlled Access gates/systems)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Electronically Controlled Access gates/systems)	4
37	Technician/Jr Technician - Installation & Commissioning (Fire Alarm Devices)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Fire Alarm Devices)	4
38	Technician/Jr Technician - Installation & Commissioning (ID Card, Badge Reader)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (ID Card, Badge Reader)	4
39	Technician/Jr Technician - Installation & Commissioning (Intrusion alarms)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Intrusion alarms)	4

40	Technician/Jr Technician - Installation & Commissioning (Mobile DVR)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Mobile DVR)	4
41	Technician/Jr Technician - Installation & Commissioning (Time & attendance System solutions)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Time & attendance System solutions)	4
42	Technician/Jr Technician - Installation & Commissioning (Video Door Phone)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Video Door Phone)	4
43	Technician/Jr Technician - Installation & Commissioning (Advanced Surveillance Equipment)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Advanced Surveillance Equipment)	4
44	Technician/Jr Technician - Installation & Commissioning (Audio system)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Audio system)	4
45	Technician/Jr Technician - Installation & Commissioning (Biometric)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Biometric devices)	4

	devices)						
46	Technician/Jr Technician - Installation & Commissioning (Building Automation Control Panel)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Building Automation Control Panel)	4
47	Technician/Jr Technician - Installation & Commissioning (CCTV & Recorders)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (CCTV & Recorders)	4
48	Technician/Jr Technician - Installation & Commissioning (Electronically Controlled Access gates/systems)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Electronically Controlled Access gates/systems)	4
49	Technician/Jr Technician - Installation & Commissioning (Fire Alarm devices)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Fire Alarm devices)	4
50	Technician/Jr Technician - Installation & Commissioning (Intrusion alarms)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Intrusion alarms)	4

51	Technician/Jr Technician - Installation & Commissioning (Metal Detectors)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Metal Detectors)	4
52	Technician/Jr Technician - Installation & Commissioning (Time & attendance System solutions)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Time & attendance System solutions)	4
53	Technician/Jr Technician - Installation & Commissioning (Video Door Phone)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Video Door Phone)	4
54	Technician/Jr Technician - Installation & Commissioning (Wireless devices)	SURV	I&C SI	Y	3	Technician - Installation & Commissioning (Wireless devices)	4
55	Technician/Jr Technician - Installation & Commissioning, GPS system	COMM	I&C	Y	3	Technician - Installation & Commissioning, GPS system	4
56	Technician/Jr Technician - Installation & Commissioning, Headend	COMM	I&C	Y	3	Technician - Installation & Commissioning, Headend	4

57	Technician/Jr Technician - Installation & Commissioning, Radio Station	COMM	I&C	Y	3	Technician - Installation & Commissioning, Radio Station	4
58	Technician/Jr Technician - Installation & Commissioning, Radio Station Studio	COMM	I&C	Y	3	Technician - Installation & Commissioning, Radio Station Studio	4
59	Technician/Jr Technician - Installation & Commissioning, TV Distribution Platform	COMM	I&C	Y	3	Technician - Installation & Commissioning, TV Distribution Platform	4
60	Technician/Jr Technician - Installation & Commissioning, Video & Audio Conferencing	COMM	I&C	Y	3	Technician - Installation & Commissioning, Video & Audio Conferencing	4
61	Technician/Jr Technician - Installation & Commissioning, Virtual classroom	COMM	I&C	Y	3	Technician - Installation & Commissioning, Virtual classroom	4
62	Technician/Jr Technician - Installation & Commissioning, Community	COMM	I&C	Y	3	Technician - Installation & Commissioning, Community radio	4

	radio						
63	Technician/Jr Technician - Installation & Communication (Perimeter Security)	SURV	I&C SI	Y	3	Technician - Installation & Communication (Perimeter Security)	4
64	Technician/Jr Technician - Module Assembly & Wiring	Automation, SURV	A&T OEM	Y	3	Technician - Module Assembly & Wiring	4
65	Technician/Jr Technician - Module Test	I&A, SURV	A&T OEM	Y	3	Technician - Module Test	4
66	Technician/Jr Technician - Night vision Testing	SURV	A&T OEM	Y	3	Technician - Night vision Testing	4
67	Technician/Jr Technician - PCB & Module Test	I&A, SURV	D&D, A&T	Y	3	Technician - PCB & Module Test	4
68	Technician/Jr Technician - PCB / Module Assembly	I&A, SURV	D&D, A&T	Y	3	Technician - PCB / Module Assembly	4
69	Technician/Jr Technician - PCB Soldering	I&A, SURV	A&T	Y	3	Technician - PCB Soldering	4
70	Technician/Jr Technician - Presales (Surveillance)	SURV	S&M SI	Y	3	Technician - Presales (Surveillance)	4

71	Technician/Jr Technician - Product / System Assembly	I&A, SURV	A&T OEM, SI	Y	3	Technician - Product / System Assembly	4
72	Technician/Jr Technician - Product / System Test	I&A, SURV	A&T OEM, SI	Y	3	Technician - Product / System Test	4
73	Technician/Jr Technician - Repair & Maintenance (Bio Metric Solution)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Bio Metric Solution)	4
74	Technician/Jr Technician - Repair & Maintenance (CCTV & Recorders)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (CCTV & Recorders)	4
75	Technician/Jr Technician - Repair & Maintenance (Electronic lockers)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Electronic lockers)	4
76	Technician/Jr Technician - Repair & Maintenance (Fire alarm systems)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Fire alarm systems)	4
77	Technician/Jr Technician - Repair & Maintenance (ID Card/Badge Reader)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (ID Card/Badge Reader)	4
78	Technician/Jr Technician - Repair &	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Intrusion Alarms)	4

	Maintenance (Intrusion Alarms)						
79	Technician/Jr Technician - Repair & Maintenance (Metal Detectors)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Metal Detectors)	4
80	Technician/Jr Technician - Repair & Maintenance (Perimeter Security)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Perimeter Security)	4
81	Technician/Jr Technician - Repair & Maintenance (Time & attendance System solutions)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Time & attendance System solutions)	4
82	Technician/Jr Technician - Repair & Maintenance (Time & Attendance systems)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Time & Attendance systems)	4
83	Technician/Jr Technician - Repair & Maintenance (Video Door Phones)	SURV	R&M SI/OEM	Y	3	Technician - Repair & Maintenance (Video Door Phones)	4
84	Technician / Jr Technician - CCTV installation & Commission	Automation	I&C	Y	3	Technician - CCTV installation & Commissioning	4

	ing						
8 5	Technician / Jr Technician - Inspection (Surveillance)	SURV	A&T OEM	Y	3	Technician - Inspection (Surveillance)	4
8 6	Technician / Junior Technician - Power Cabling	Automati on	I&C	Y	3	Technician - Power Cabling	4