



Electrical and Mechanical Services Industry
Manpower Survey Report
機電工程業 • 人力調查報告書

2025



2025 Manpower Survey Report

Electrical and Mechanical Services Industry

Electrical and Mechanical Services Training Board

Vocational Training Council

CONTENTS

	<u>Page</u>
Acknowledgement	1
1. Executive Summary	2
2. Introduction	32
Background	32
Objectives	32
Survey Coverage	33
3. Methodology	34
Sample Design	34
Questionnaire Design	34
Data Collection	34
Data Analysis	35
Manpower Projection Methodology	35
4. Survey Findings	36
A. Overview of the Electrical and Mechanical Services Industry	36
Manpower Situation	36
Full-time Employees	37
Full-time Vacancies	37
B. Electrical and Mechanical Engineering Sector	38
Full-time Employees	38
Full-time Vacancies	39
Trainees	40
Average Monthly Income	41

Preferred Level of Education	41
Preferred Years of Experience	42
Age Range of Full-time Employees	42
Average Retirement Age of Full-time Employees	42
Full-time Employees Left and Recruited	43
Recruitment Difficulties	44
Factors Useful to Attract New Entrants to the Industry	45
Employers' Views on Business Volume in the Next 12 Months	46
Expected Change in Number of Full-time Employees in the Next 12 Months	46
Training Requirements	47
Proportion of Manpower in Contracting and Servicing Work	48
C. Gas Sector	49
Full-time Employees	49
Full-time Vacancies	49
Trainees	51
Average Monthly Income	52
Preferred Level of Education	52
Preferred Years of Experience	53
Age Range of Full-time Employees	53
Average Retirement Age of Full-time Employees	53
Full-time Employees Left and Recruited	54
Recruitment Difficulties	55
Factors Useful to Attract New Entrants to the Industry	56

Employers' Views on Business Volume in the Next 12 Months	57
Expected Change in Number of Full-time Employees in the Next 12 Months	57
Training Requirements	58
D. Aircraft Maintenance Sector	59
Full-time Employees	59
Full-time Vacancies	60
Trainees	61
Average Monthly Income	61
Preferred Level of Education	62
Preferred Years of Experience	62
Age Range of Full-time Employees	63
Average Retirement Age of Full-time Employees	63
Full-time Employees Left and Recruited	64
Recruitment Difficulties	65
Factors Useful to Attract New Entrants to the Industry	66
Employers' Views on Business Volume in the Next 12 Months	67
Expected Change in Number of Full-time Employees in the Next 12 Months	67
Training Requirements	67
5. Manpower Analysis	69
Manpower Changes between 2021 and 2025	69
Business Outlook	85
Manpower Projection and Annual Additional Manpower Requirement	92
6. Recommendations	94

Appendix 1 - Membership of Electrical and Mechanical Services Training Board	102
Appendix 2 - Terms of Reference of Electrical and Mechanical Services Training Board	103
Appendix 3 - Membership of Working Party on Manpower Survey	104
Appendix 4 - Definition of Terms	105
Appendix 5 - Survey Documents	107
Appendix 6 - Quality Control Measures	151
Appendix 7 - Response Profile	152
Appendix 8 - Manpower Projection Methodology	153
Appendix 9 - Statistical Tables	154

Acknowledgement

The Electrical and Mechanical Services Training Board would like to express its gratitude to all respondents of the sampled companies for providing the information required by the survey.

1 Executive Summary

Background

1.1 The Electrical and Mechanical Services Training Board (Training Board) of the Vocational Training Council (VTC) conducted a manpower survey for the electrical and mechanical services industry from mid-October 2025 to end-January 2026, with the data reference date on 1 September 2025. This report presents the survey findings of the latest manpower situation of the industry and proposes recommendations on the manpower demand and training needs to different stakeholders of the industry, including the Government, employers, and education institutions by making reference to the business outlook.

Survey Coverage and Methodology

1.2 The survey covered around 12 824 companies in different sectors of the industry. By adopting the stratified random sampling method for selecting companies from the Central Register of Establishments of the Census and Statistics Department, and the inclusion of supplementary samples recommended by the Training Board, a total of 1 306 companies were selected for the survey.

1.3 A pack of survey documents was given to each sampled company. The selected companies were asked to complete a questionnaire, which comprised two parts. Part I collected quantitative manpower information by job levels and by principal jobs, and Part II collected supplementary information related to the industry's manpower situation. The respondents were asked to provide manpower information of their companies based on a list of principal jobs, which were defined by the Training Board with detailed job descriptions given for each job.

1.4 During the fieldwork period between mid-October 2025 and end-January 2026, enumerators assisted the respondents to complete the questionnaire through phone calls or on-site visits. The data collection and enumeration processes were closely monitored and data was verified to ensure quality and accuracy. Among the 684 valid sampled companies, 623 were successfully enumerated which contributed to an effective response rate of 91.1%¹.

Manpower Projection Methodology

1.5 The Training Board adopts the approach of Adaptive Filtering Method (AFM) for projecting the manpower trend of Electrical and Mechanical Services industry for the period

¹ Sampled companies which were relocated to unknown addresses, had unreachable responsible persons, had ceased operations, or without relevant technical staff, etc. at the time of survey were classified as invalid samples.

from 2026 to 2029. The method is compiled by taking into account the historical survey data. The details of methodology are shown in **Appendix 8**.

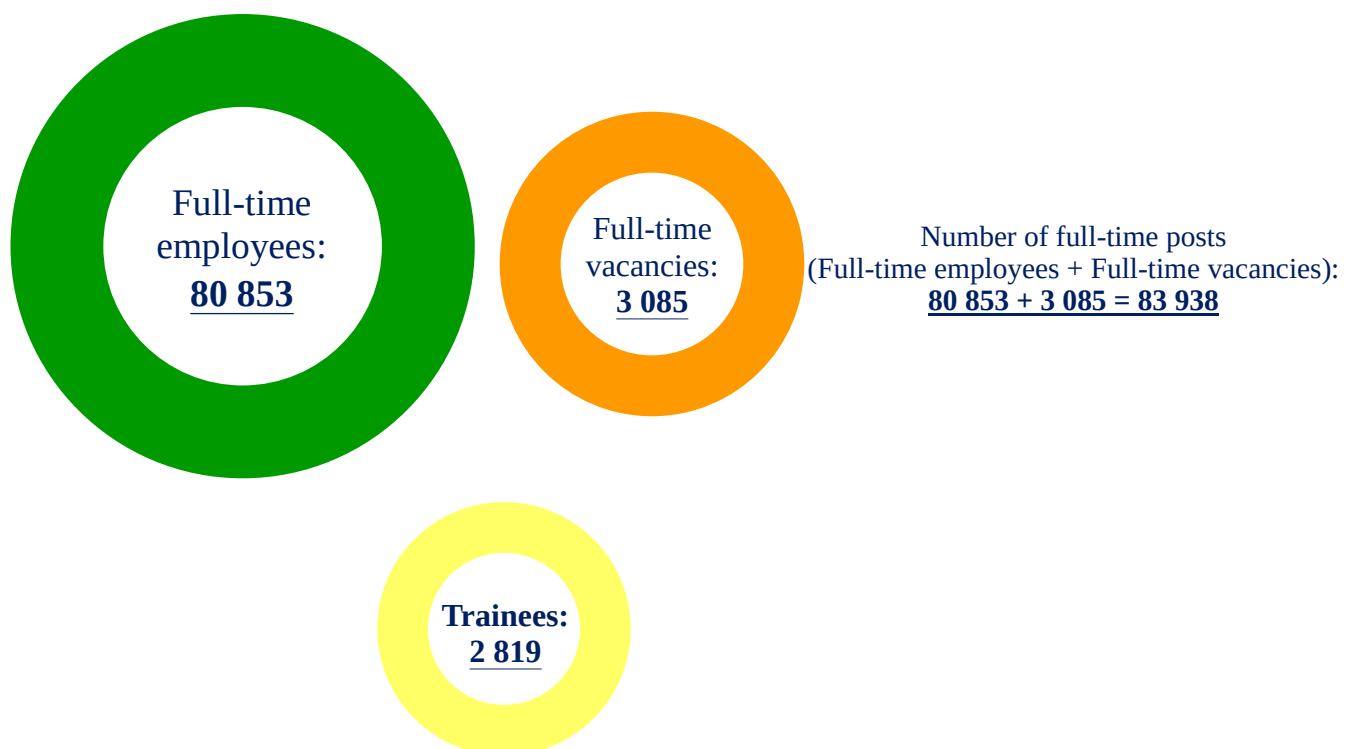
Findings

A. Overview of the Electrical and Mechanical Services Industry

Manpower Situation

1.6 As at 1 September 2025 (i.e. the reference date of the survey), there were 80 853 full-time employees and 3 085 full-time vacancies in the electrical and mechanical services industry. Aggregating the number of full-time employees and full-time vacancies, it was estimated that there were a total of 83 938 full-time posts. Moreover, there were 2 819 trainees found in the electrical and mechanical services industry. (*Chart 1.1*)

Chart 1.1 Overview of manpower situation



Note: "Full-time vacancies" refer to those unfilled, immediately available job openings for which the company is actively trying to recruit personnel as at survey reference date.

Full-time Employees

1.7 Among the 80 853 full-time employees in the electrical and mechanical services industry, 90.6% were engaged in the E&M engineering sector, 6.0% in the aircraft maintenance sector and 3.4% in the gas sector. Analysed by job level, 53.8% were employed at the tradesman/craftsman level, 26.1% at the technician level, and 16.2% at the professional/technologist level. (Charts 1.2 - 1.3)

Chart 1.2 Full-time employees by sector

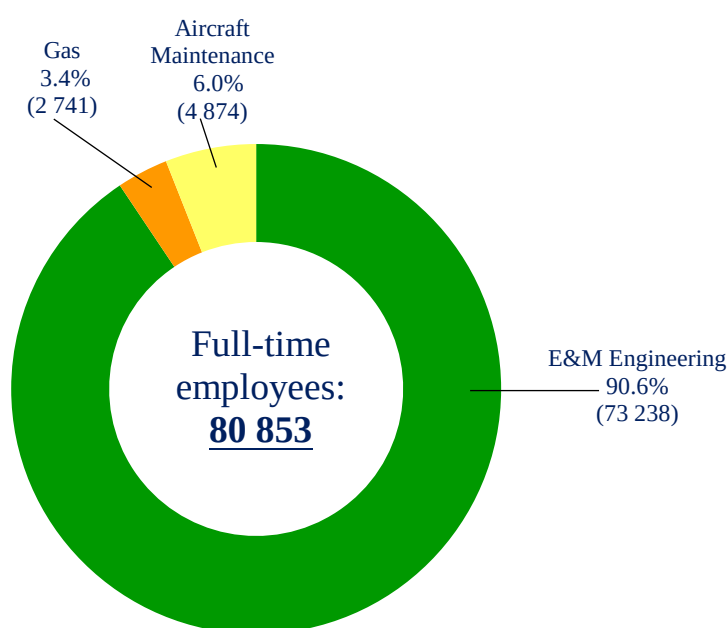
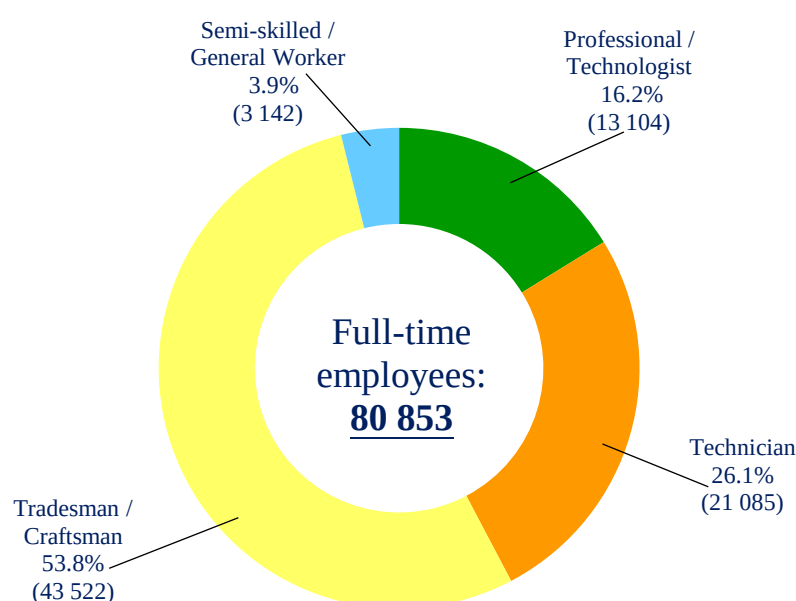


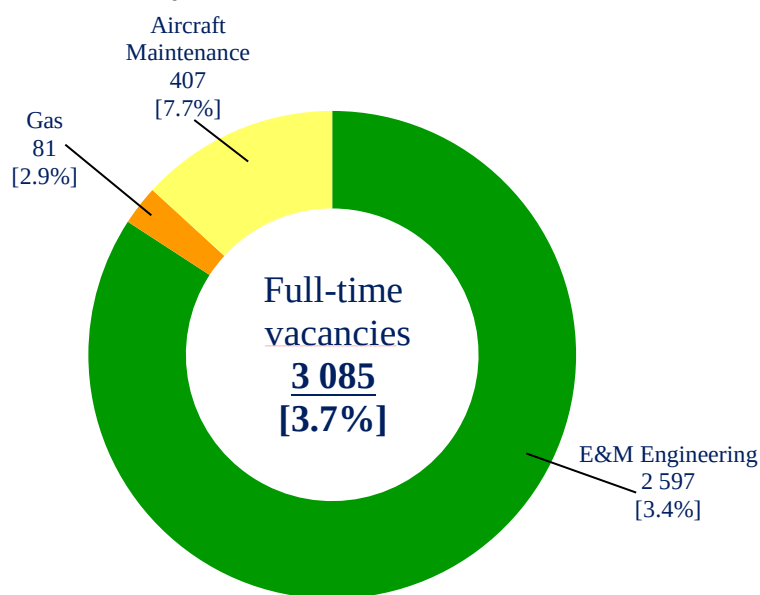
Chart 1.3 Full-time employees by job level



Full-time Vacancies

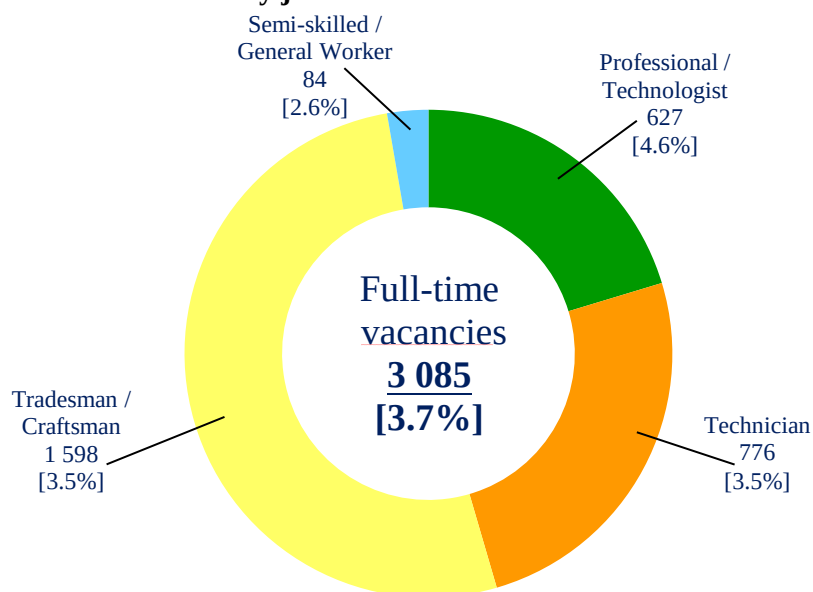
1.8 As at 1 September 2025, a total of 3 085 full-time vacancies were reported in the electrical and mechanical services industry, representing a vacancy rate of 3.7% (i.e. full-time vacancies as a percentage of the total number of full-time employees and full-time vacancies). Most of the vacancies were found in the E&M engineering sector (2 597 full-time vacancies) and were concentrated on the tradesman/craftsman level (1 598 full-time vacancies). (Charts 1.4 – 1.5)

Chart 1.4 Full-time vacancies by sector



Notes: Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$

Chart 1.5 Full-time vacancies by job level



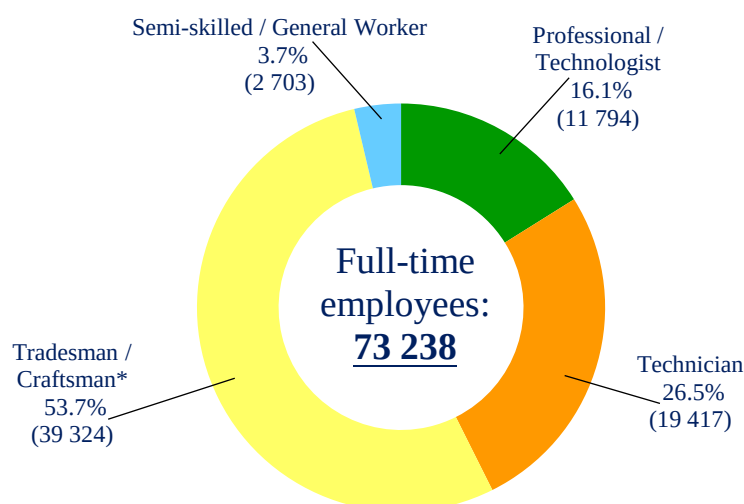
Notes: Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$

B. Electrical and Mechanical Engineering Sector

Full-time Employees

1.9 Among the 73 238 full-time employees in the E&M engineering sector, 53.7% were employed at the tradesman/craftsman level, followed by the technician level (26.5%) and the professional/technologist level (16.1%). (Chart 1.6)

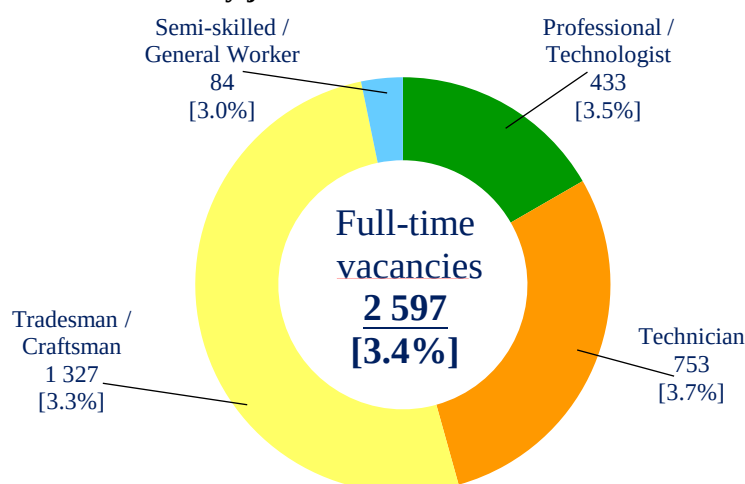
Chart 1.6 Full-time employees by job level



Full-time Vacancies

1.10 As at 1 September 2025, a total of 2 597 full-time vacancies were reported in the E&M engineering sector, representing a vacancy rate of 3.4%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (1 327 full-time vacancies), followed by the technician level (753 full-time vacancies) and the professional/technologist level (433 full-time vacancies). (Chart 1.7)

Chart 1.7 Full-time vacancies by job level



Notes: Figures in [] brackets indicate the **Vacancy rate** =
$$\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

Average Monthly Income

1.11 The average monthly income for full-time employees at the professional/technologist level in the E&M engineering sector is mainly in the range of \$35,001 - \$45,000 (33.1%) and \$45,001 - \$60,000 (28.7%), followed by \$25,001 - \$35,000 (52.0%) and \$35,001 - \$45,000 (27.1%) for the technician level, \$18,001 - \$25,000 (63.1%) and \$25,001 - \$35,000 (27.1%) for the tradesman/craftsman level and \$15,001 - \$18,000 (30.2%) and \$18,001 - \$25,000 (50.7%) for the semi-skilled/general worker level. (Table 1.1)

Table 1.1 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	12.3%	28.7%	33.1%	26.0%	0.0%	0.0%	0.0%	11 794
Technician	0.0%	3.0%	27.1%	52.0%	17.7%	0.2%	0.0%	19 417
Tradesman/craftsman	0.0%	*	3.5%	27.1%	63.1%	5.4%	0.9%	39 324
Semi-skilled/general worker	0.0%	0.0%	0.0%	2.7%	50.7%	30.2%	16.5%	2 703

 denotes prominent ranges of the monthly income in the respective job level.

Note: * < 0.05%

Preferred Level of Education

1.12 Virtually all of the full-time employees at the professional/technologist level in the E&M engineering sector were preferred to have a first degree or above qualification (98.8%). Most of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (50.6%) or sub-degree qualification (48.2%). On the other hand, most of the full-time employees at the tradesman/craftsman level were preferred to have a senior secondary qualification (54.3%) or diploma/certificate qualification (36.5%) while most of the full-time employees at the semi-skilled/general worker level were preferred to have a junior secondary qualification (64.8%). (Table 1.2)

Table 1.2 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	98.8%	1.2%	0.0%	0.0%	0.0%	11 794
Technician	0.6%	48.2%	50.6%	0.6%	0.0%	19 417
Tradesman/craftsman	0.0%	0.3%	36.5%	54.3%	8.9%	39 324
Semi-skilled/general worker	0.0%	0.0%	0.7%	34.5%	64.8%	2 703

 denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

1.13 The majority of the full-time employees at the professional/technologist level in the E&M engineering sector were preferred to have 6 years to less than 10 years of experience (62.5%). Most of the full-time employees at the technician level were preferred to have 3 years to less than 6 years of experience (48.2%) or 6 years to less than 10 years of experience (40.2%) while most of the full-time employees at the tradesman/craftsman level were preferred to have 1 year to less than 3 years of experience (41.2%) or 3 years to less than 6 years of experience (36.4%). Most of the full-time employees at the semi-skilled/general worker level were preferred to have less than 1 year of experience (58.7%). (Table 1.3)

Table 1.3 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	6.7%	62.5%	30.1%	0.7%	0.0%	0.0%	11 794
Technician	0.2%	40.2%	48.2%	10.7%	0.5%	0.1%	19 417
Tradesman/craftsman	0.4%	0.3%	36.4%	41.2%	15.9%	5.7%	39 324
Semi-skilled/general worker	0.4%	0.0%	4.6%	9.2%	58.7%	27.1%	2 703

 denotes prominent ranges of the preferred years of experience in the respective job level.

Turnover

1.14 In the E&M engineering sector, employers reported that there were 5 971 full-time employees left their companies in the past 12 months. The turnover rate (i.e. the number of full-time employees left as a percentage of the total number of full-time posts) was 7.9%. Analysed by job level, the tradesman/craftsman level registered the largest number of full-time employees left (3 289 full-time employees), followed by the technician level (1 169 full-time employees) and the professional/technologist level (1 095 full-time employees). On the other hand, the turnover rate was the highest at the semi-skilled/general worker level (15.0%). (Table 1.4)

Table 1.4 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	1 095	9.0%
Technician	1 169	5.8%
Tradesman/craftsman	3 289	8.1%
Semi-skilled/general worker	418	15.0%
Total	5 971	7.9%

* Turnover rate =
$$\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

Training Requirements

1.15 In the E&M engineering sector, “Safety Awareness” was the common training requirement for full-time employees at all job levels. In general, the training requirements for full-time employees at the professional/technologist level and the technician level spread across various project management related aspect, regulations aspect and safety aspect, while the training requirements for full-time employees at the tradesman/craftsman level tended to focus mainly on safety aspect. (Table 1.5)

Table 1.5 Major training requirements

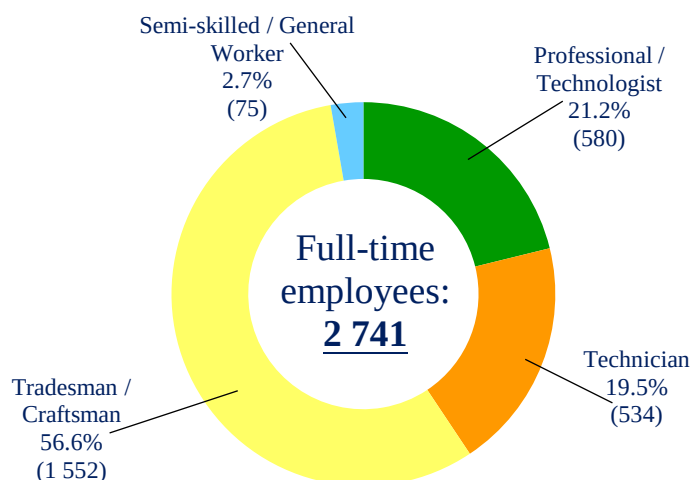
Job level Rank	Professional/Technologist	Technician	Tradesman/Craftsman
1	Project Management	Safety Awareness	
2	Safety Awareness	Project Management	Safety Audit/Assessment
3	Risk and Crisis Management	Relevant Trade’s Ordinances and Regulations	Safety/Risk Management
4	Relevant Trade’s Ordinances and Regulations	Occupational Safety and Health Ordinance	
5	Engineering-related ISO Standards	Safety Audit/Assessment	Construction Site Safety for Workers

C. Gas Sector

Full-time Employees

1.16 Among the 2 741 full-time employees in the gas sector, 56.6% were employed at the tradesman/craftsman level, 21.2% at the professional/technologist level and 19.5% at the technician level. (Chart 1.8)

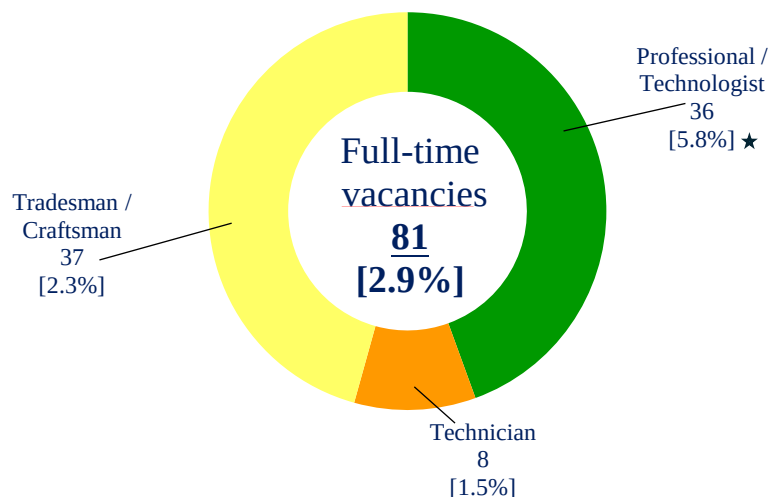
Chart 1.8 Full-time employees by job level



Full-time Vacancies

1.17 As at 1 September 2025, a total of 81 full-time vacancies were reported in the gas sector, representing a vacancy rate of 2.9%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (37 full-time vacancies) and the professional/technologist level (36 full-time vacancies). A higher vacancy rate was registered at the professional/technologist level (5.8%). (Chart 1.9)

Chart 1.9 Full-time vacancies by job level



Notes:

- (1) Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$
- (2) Figures marked with the symbol “★” refer to relatively higher vacancy rates than the overall rate.
- (3) No full-time vacancies for semi-skilled/general worker.

Average Monthly Income

1.18 The average monthly income for full-time employees at the professional/technologist level in the gas sector is mainly in the range of \$35,001 - \$45,000 (93.9%), followed by \$25,001 - \$35,000 (67.0%) and \$35,001 - \$45,000 (25.6%) for the technician level, \$18,001 - \$25,000 for the tradesman/craftsman level (80.2%) and \$15,001 - \$18,000 for the semi-skilled/general worker level (77.3%). (Table 1.6)

Table 1.6 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	0.0%	0.0%	93.9%	6.1%	0.0%	0.0%	0.0%	580
Technician	0.0%	0.0%	25.6%	67.0%	7.3%	0.0%	0.0%	534
Tradesman/craftsman	0.0%	0.0%	0.0%	2.5%	80.2%	16.0%	1.3%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	11.4%	77.3%	11.4%	75

 denotes prominent ranges of the monthly income in the respective job level.

Preferred Level of Education

1.19 The vast majority of the full-time employees at the professional/technologist level in the gas sector were preferred to have a sub-degree qualification (86.3%). The majority of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (61.1%). On the other hand, most of the full-time employees at the tradesman/craftsman level were preferred to have a diploma/certificate qualification (65.5%) while most of the full-time employees at the semi-skilled/general worker level were preferred to have a junior secondary qualification (73.3%). (Table 1.7)

Table 1.7 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	13.7%	86.3%	0.0%	0.0%	0.0%	580
Technician	0.0%	25.2%	61.1%	13.7%	0.0%	534
Tradesman/craftsman	0.0%	0.0%	65.5%	27.5%	7.0%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	26.7%	73.3%	75

 denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

1.20 The majority of the full-time employees at the professional/technologist level in the gas sector were preferred to have 6 years to less than 10 years of experience (96.3%). The majority of the full-time employees at both the technician level and the tradesman/craftsman level were preferred to have 1 year to less than 3 years of experience (71.0% and 68.8% respectively). The majority of the full-time employees at the semi-skilled/general worker level were preferred to have no experience (73.3%). (Table 1.8)

Table 1.8 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	0.2%	96.3%	3.5%	0.0%	0.0%	0.0%	580
Technician	0.4%	4.4%	24.3%	71.0%	0.0%	0.0%	534
Tradesman/craftsman	0.0%	0.1%	6.9%	68.8%	10.8%	13.4%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	16.0%	10.7%	73.3%	75

 denotes prominent ranges of the preferred years of experience in the respective job level.

Turnover

1.21 In the gas sector, employers reported that there were 293 full-time employees left their companies in the past 12 months. The turnover rate was 10.4%. Analysed by job level, the professional/technologist level registered the largest number of full-time employees left (185 full-time employees) and the highest turnover rate (30.0%). (Table 1.9)

Table 1.9 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	185	30.0%
Technician	63	11.6%
Tradesman/craftsman	45	2.8%
Semi-skilled/general worker	0	0.0%
Total	293	10.4%

* Turnover rate =
$$\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

Training Requirements

1.22 In the gas sector, “Safety Awareness”, “Safety Audit/Assessment” and “Safety/Risk Management” of safety aspect were the common training requirements for full-time employees at all job levels. In general, the training requirements for full-time employees at the professional/technologist level spread across various project management related aspect, regulations aspect and safety aspect, while the training requirements for full-time employees at the technician level and the tradesman/craftsman level tended to focus mainly on safety aspect. (Table 1.10)

Table 1.10 Major training requirements

Table 1.10 Major training requirements			
Job level Rank	Professional/Technologist	Technician	Tradesman/Craftsman
1	Project Management	Safety Awareness	
2	Safety Awareness	Safety/Risk Management	
3	Safety Audit/Assessment		
4	Safety/Risk Management	Use of Personal Protective Equipment	Occupational Safety and Health Ordinance
5	Relevant Trade's Ordinances and Regulations	Construction Site Safety for Workers	

Project Management related

Regulation

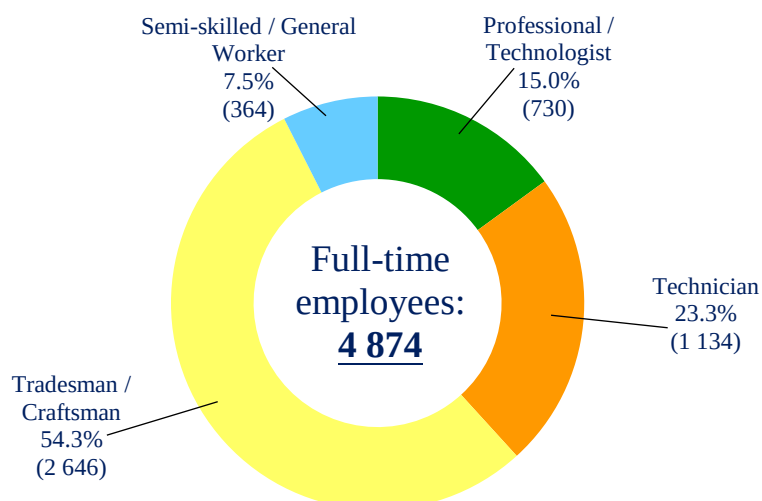
Safety

D. Aircraft Maintenance Sector

Full-time Employees

1.23 Among the 4 874 full-time employees in the aircraft maintenance sector, 54.3% were employed at the tradesman/craftsman level, 23.3% at the technician level and 15.0% at the professional/technologist level. (Chart 1.10)

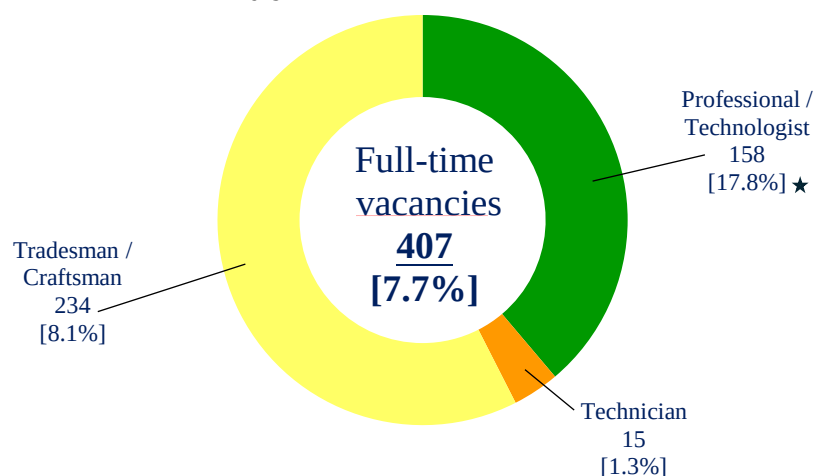
Chart 1.10 Full-time employees by job level



Full-time Vacancies

1.24 As at 1 September 2025, a total of 407 full-time vacancies were reported in the aircraft maintenance sector, representing a vacancy rate of 7.7%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (234 full-time vacancies) and the professional/technologist level (158 full-time vacancies). (Chart 1.11)

Chart 1.11 Full-time vacancies by job level



Notes:

- (1) Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$
- (2) Figures marked with the symbol “★” refer to relatively higher vacancy rates than the overall rate.
- (3) No full-time vacancies for semi-skilled/general worker

Average Monthly Income

1.25 The average monthly income for full-time employees at the professional/technologist level in the aircraft maintenance sector is mainly in the range of \$60,001 or above (99.0%), followed by \$45,001 - \$60,000 for the technician level (97.9%), \$25,001 - \$35,000 for the tradesman/craftsman level (100.0%) and \$15,001 - \$18,000 for the semi-skilled/general worker level (100.0%). (Table 1.11)

Table 1.11 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	730
Technician	0.0%	97.9%	0.2%	1.9%	0.0%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	364

 denotes prominent ranges of the monthly income in the respective job level.

Preferred Level of Education

1.26 All of the full-time employees at the professional/technologist level in the aircraft maintenance sector were preferred to have a first degree or above qualification (100.0%). The majority of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (80.5%), the tradesman/craftsman level were preferred to have a senior secondary qualification (100.0%) and the semi-skilled/general worker level were preferred to have a junior secondary qualification (99.4%). (Table 1.12)

Table 1.12 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	100.0%	0.0%	0.0%	0.0%	0.0%	730
Technician	0.0%	19.5%	80.5%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	100.0%	0.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.6%	99.4%	364

 denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

1.27 The majority of the full-time employees at both the professional/technologist level and the technician level in the aircraft maintenance sector were preferred to have 6 years to less than 10 years of experience (90.8% and 77.7% respectively). The majority of the full-time employees at the tradesman/craftsman level were preferred to have no experience (87.0%) while all the full-time employees at the semi-skilled/general worker level were preferred to have less than 1 year of experience (100.0%). (Table 1.13)

Table 1.13 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	0.0%	90.8%	9.2%	0.0%	0.0%	0.0%	730
Technician	0.0%	77.7%	22.3%	0.0%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	13.0%	0.0%	87.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	364

 denotes prominent ranges of the preferred years of experience in the respective job level.

Turnover

1.28 In the aircraft maintenance sector, employers reported that there were 398 full-time employees left their companies in the past 12 months. The turnover rate was 7.5%. Analysed by job level, the tradesman/craftsman level registered the largest number of full-time employees left (357 full-time employees) and the highest turnover rate (12.4%). (Table 1.14)

Table 1.14 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	29	3.3%
Technician	12	1.0%
Tradesman/craftsman	357	12.4%
Semi-skilled/general worker	0	0.0%
Total	398	7.5%

* Turnover rate =
$$\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

Training Requirements

1.29 In the aircraft maintenance sector, the training requirements for full-time employees at all job levels tended to focus on “Safety Awareness”, “Safety Audit/Assessment” and “Safety/Risk Management” of safety aspect, and “Occupational Safety and Health Ordinance” of regulations aspect. Besides, “Risk and Crisis Management” of project management related aspect was another training requirement for full-time employees at the professional/technologist level while “Use of Personal Protective Equipment” and “Construction Site Safety for Workers” of safety aspect, “Workflow Digitalisation and Use of Digital Tools” of technology applications aspect, and “English Writing, Reading and Reporting” of soft skills aspect were the common training requirements for full-time employees at the technician level and the tradesman/craftsman level. (Table 1.15)

Table 1.15 Major training requirements

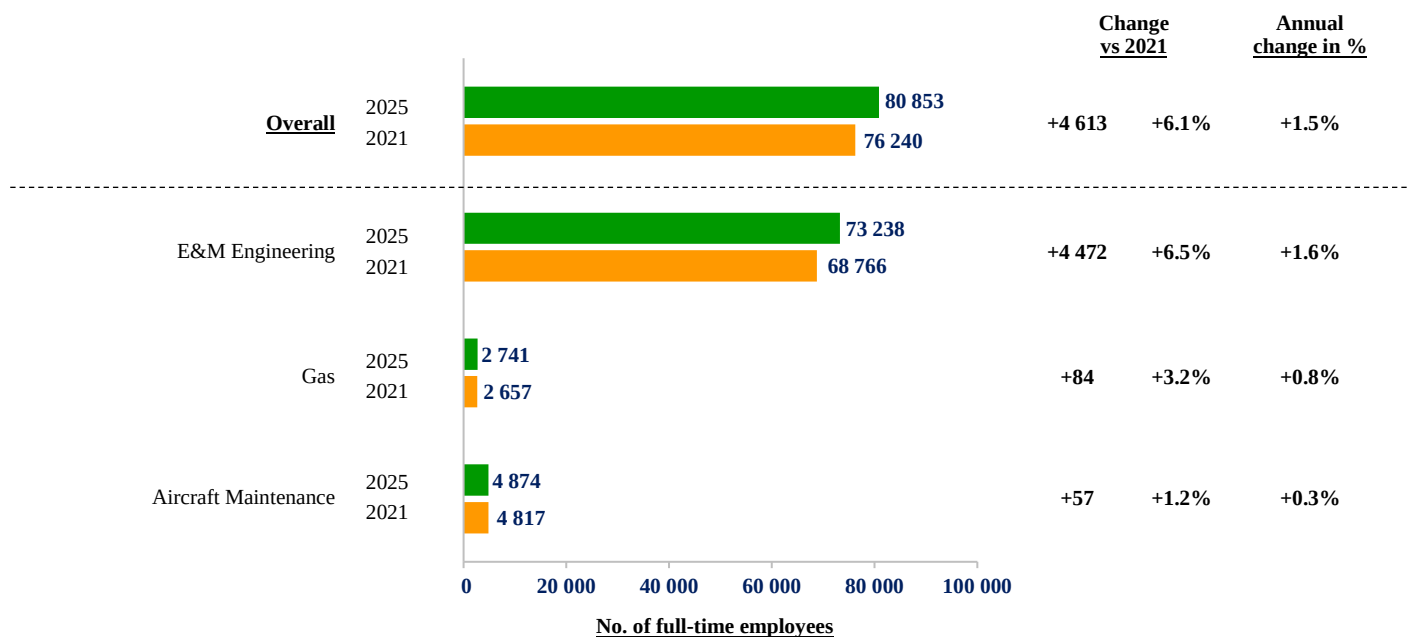
Common training areas across job levels: • Safety Awareness • Safety Audit/Assessment • Safety/Risk Management • Occupational Safety and Health Ordinance		
Professional/Technologist	Technician	Tradesman/Craftsman
Risk and Crisis Management	• Use of Personal Protective Equipment • Construction Site Safety for Workers • Workflow Digitalisation and Use of Digital Tools • English Writing, Reading and Reporting	

E. Manpower Changes between 2021 and 2025

E1. Overall Electrical and Mechanical Services Industry

1.30 In the electrical and mechanical services industry, the total number of full-time employees increased from 76 240 in 2021 to 80 853 in 2025 (+4 613 full-time employees; +6.1%). Analysed by sector, increase in manpower was mainly registered in the E&M engineering sector (+4 472 full-time employees; +6.5%). (Chart 1.12)

Chart 1.12 Change in full-time employees by sector



1.31 Analysed by job level, increases in manpower were mainly registered at the technician level (+2 457 full-time employees; +13.2%) and the professional/technologist level (+1 586 full-time employees; +13.8%). (Chart 1.13)

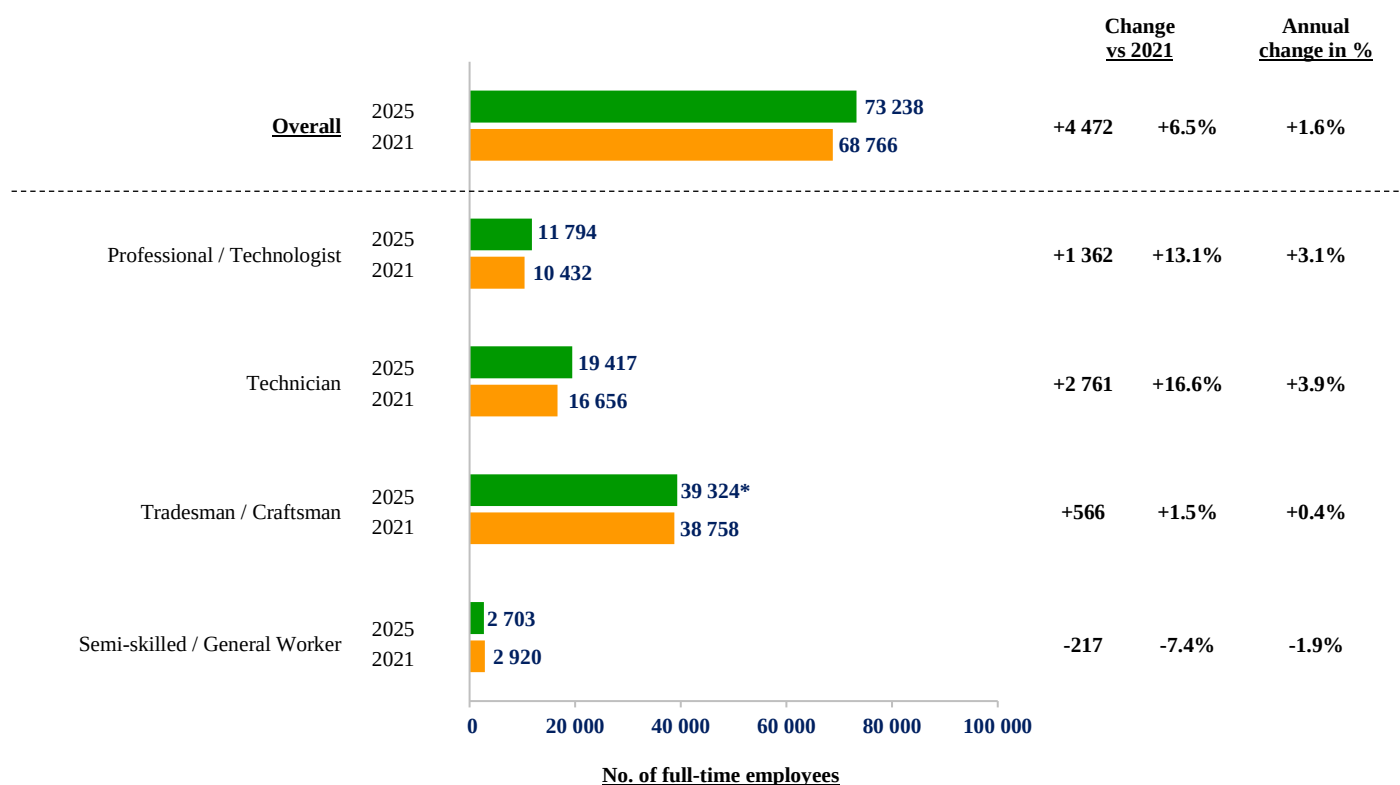
Chart 1.13 Change in full-time employees by job level



E2. Electrical and Mechanical Engineering Sector

1.32 The manpower of the E&M engineering sector exhibited an increase from 68 766 in 2021 to 73 238 in 2025 (+4 472 full-time employees; +6.5%), which is mainly attributed to the increase at the technician level (+2 761 full-time employees; +16.6%) and the professional/technologist level (+1 362 full-time employees; +13.1%). (Chart 1.14)

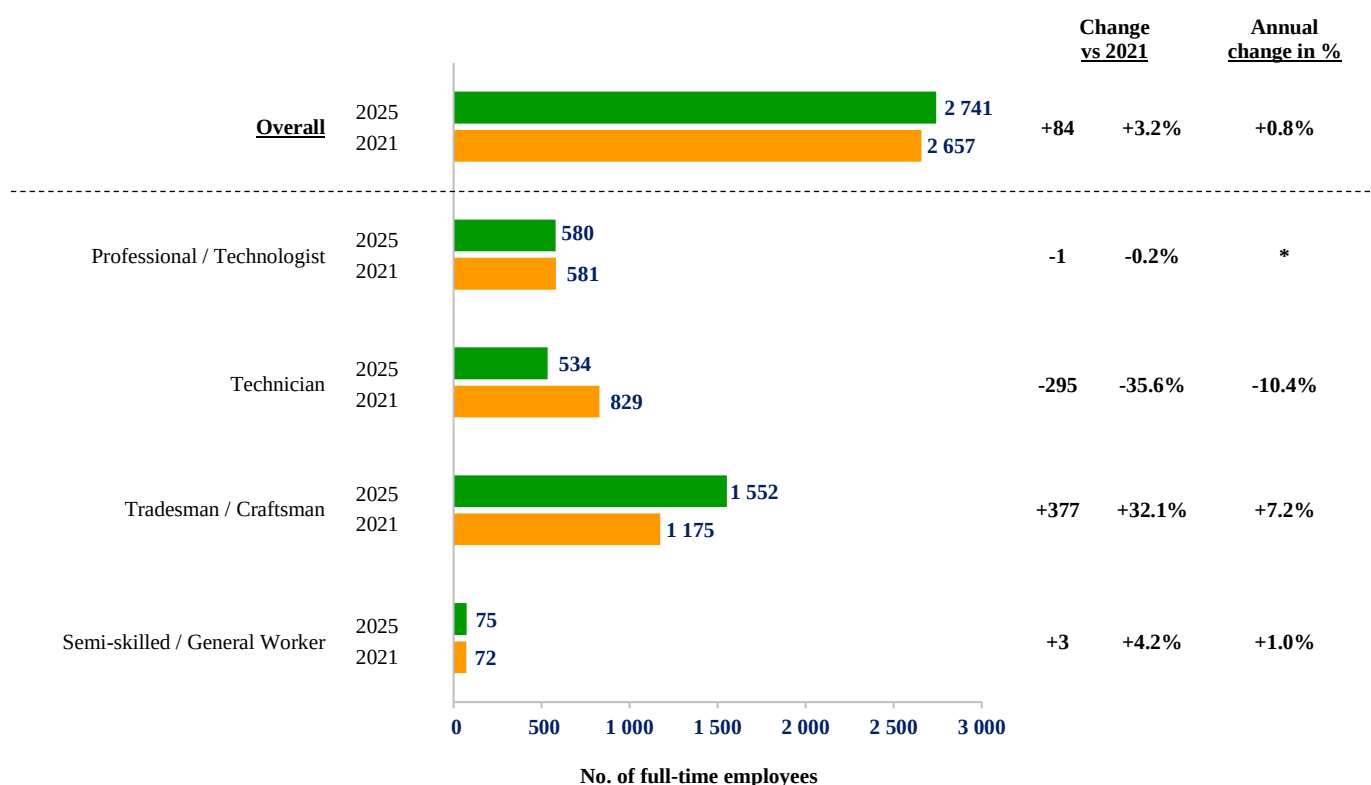
Chart 1.14 Change in full-time employees by job level



E3. Gas Sector

1.33 The manpower of the gas sector registered a slight increase from 2 657 in 2021 to 2 741 in 2025 (+84 full-time employees; +3.2%). Analysed by job level, an increase in manpower was recorded at the tradesman/craftsman level (+377 full-time employees; +32.1%) while a decrease in manpower was registered for the technician level (-295 full-time employees; -35.6%). (Chart 1.15)

Chart 1.15 Change in full-time employees by job level

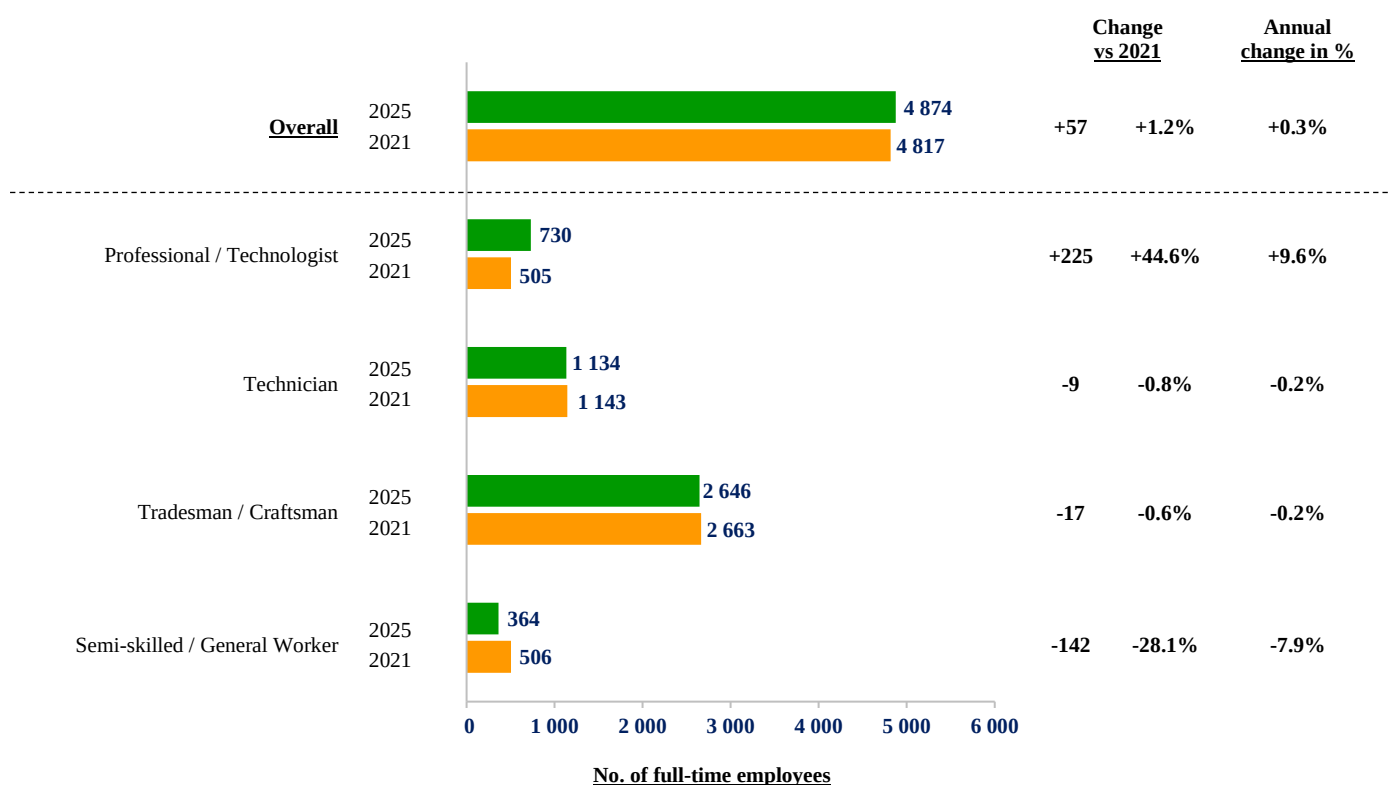


Note: * < 0.05%

E4. Aircraft Maintenance Sector

1.34 The manpower of the aircraft maintenance sector registered a slight increase from 4 817 in 2021 to 4 874 in 2025 (+57 full-time employees; +1.2%). Analysed by job level, an increase in manpower was recorded at the professional/technologist level (+225 full-time employees; +44.6%) while a decrease in manpower was registered for the semi-skilled/general worker level (-142 full-time employees; -28.1%). (Chart 1.16)

Chart 1.16 Change in full-time employees by job level



Business Outlook

Electrical and Mechanical Engineering Sector

1.35 Hong Kong has completed a series of mega projects in recent years, including the Kai Tak Sports Park, the Three-Runway System, and various new hospital developments. Following the completion of these landmark developments, the E&M engineering sector is shifting its focus to the new development projects of the Northern Metropolis and associated railway extensions. The industry is experiencing a transition in its manpower landscape.

1.36 At the same time, private developers have scaled back land acquisitions, resulting in a significant reduction in the construction of new residential buildings recent years. Nevertheless, the Government strives to maintain steady growth in capital works expenditure and continues to invest in land formation, infrastructure development, and the construction of community facilities. As announced in the 2026–27 Budget², the average annual capital works expenditure is estimated at approximately \$128 billion and is expected to remain at a similar level over the next four years.

1.37 Furthermore, the latest Construction Expenditure Forecast³ by the Construction Industry Council anticipates a steady increase in E&M works expenditure from 2025/26 to 2030/31. As more development projects commence and progress at an accelerated pace, demand for skilled and experienced E&M professionals and technical personnel is expected to increase accordingly.

Gas Sector

1.38 Overall gas consumption in Hong Kong remained stable in 2024 and 2025. Despite increased outbound travel of residents to Mainland, the Government's active promotion of tourism and the mega-event economy have boosted visitor numbers, thereby stimulating gas consumption in tourism-related industries such as hotels, theme parks, and commercial laundries. Looking ahead, the development of the Northern Metropolis is expected to accommodate a growing population, creating new potential demand for gas. However, some consumers are increasingly switching from liquefied petroleum (LP) gas to electricity due to convenience and cost considerations, while redevelopment projects have expanded access to town gas networks. This shift is prompting LP gas providers to reassess their business strategies.

² The 2026-27 Budget (27 February 2026) available at <https://www.budget.gov.hk/2026/chi/index.html>

³ Construction Expenditure Forecast (2025/26 to 2030/31) (April 2026) available at <https://www.cic.hk/en/research-and-data/expenditure-forecast?type=forecast-figures>

Aircraft Maintenance Sector

1.39 The aircraft maintenance sector has shown strong post-pandemic recovery since 2024. Increased passenger and cargo traffic has driven higher demand for maintenance, repair, and overhaul (MRO) services. The commissioning of the Three-Runway System has provided the expanded capacity to further strengthened Hong Kong's position as a major international aviation hub, creating new growth opportunities while also increasing manpower and operational requirements for the sector.

The Northern Metropolis

1.40 The 2026-27 Budget reaffirmed the pivotal role of the Northern Metropolis in driving Hong Kong's economic transformation and enhancing its competitiveness. Currently, four New Development Areas (NDAs), including Kwu Tung North/Fanling North, Hung Shui Kiu/Ha Tsuen, Yuen Long South, and the San Tin Technopole (including the Hong Kong–Shenzhen Innovation and Technology Park in the Loop), are under construction. The Transport Strategy Blueprint announced in 2026 outlines strategies and specific recommendations for the sustainable development of Hong Kong's transport system, including a series of local and cross-boundary railway projects, major road networks, and the Smart and Green Mass Transit System (SGMTS). The Northern Link Main Line and Spur Line are taken forward, with the target of commissioning the projects in 2034 or earlier. In addition, District Cooling System (DCS) projects in the Kwu Tung NDA, Tung Chung New Town Extension (East) and Hung Shui Kiu/Ha Tsuen NDA are under construction. Given the scale and phased development of these NDAs, sustained demand for experienced E&M professionals and skilled workers is expected over the coming decade.

Railway and Infrastructure

1.41 New projects such as Kwu Tung Station, Tung Chung Line Extension, Tuen Mun South Extension, Oyster Bay Station, and Hung Shui Kiu Station are also scheduled for completion from 2027 onwards. The railway scheme of the SGMTS in Kai Tak has been approved, with commissioning targeted for 2031. For the SGMTS in East Kowloon, the Government aims to award the contract in 2027, with commissioning planned for 2033. The existing railway network is being upgraded through the renewal of ageing infrastructure and the integration of advanced technologies such as digitalisation and automation.

Advanced Technology in the Industry

Building Information Modelling

1.42 Building Information Modelling (BIM) has become pivotal throughout the project lifecycle, enhancing design coordination, collaboration and visualisation. As BIM adoption increases, demand is growing for E&M professionals who possess both E&M technical expertise and BIM capabilities.

Modular Integrated Construction

1.43 To promote wider adoption of Modular Integrated Construction (MiC) in private developments, the Buildings Department introduced streamlined measures and guidelines in 2026 to help the industry comply with requirements under the Buildings Ordinance.

Multi-trade integrated Mechanical, Electrical, and Plumbing

1.44 The Multi-trade integrated Mechanical, Electrical, and Plumbing (MiMEP) is an advanced method that integrates building services through off-site prefabrication and modular installation, enhancing efficiency, quality, and safety while reducing project time and environmental impact. The Electrical and Mechanical Services Department has updated the relevant guidance notes on the compliance of these methods with the Electricity Ordinance, Gas Safety Ordinance and Energy Efficiency (Labelling of Products) Ordinance.

Emerging Digital and Smart Technologies

1.45 Beyond new construction methods, the industry is actively adopting emerging technologies for a wide range of applications, including Artificial Intelligence (AI)-driven analytics, Internet of Things (IoT)-enabled monitoring and data collection, RFID tracking, and robotic and drone inspections, etc. As a result, demand is rising for professionals with expertise in both E&M and I&T fields to support the development and deployment of these advanced technologies.

Policies and Measures

Electric Vehicles

1.46 The Government will continue to support the green transition of private cars through charging network expansion, maintenance training and battery recycling. Expanding the EV charging network remains a key priority. A public charging network with fast chargers as the backbone will be built, aiming to increase the number of fast chargers to 4,000 by 2030. The Government has also collaborated with tertiary institutions to promote the continuing education and training of EV technicians and maintenance personnel.

Hydrogen Vehicle

1.47 The Government is actively promoting hydrogen energy initiatives, including pilot trials of hydrogen-powered vehicles. The development of hydrogen energy will depend largely on continued government investment and its suitability for specific applications. Nevertheless, hydrogen-powered vehicles are expected to play a growing role in future transport, creating demand for specialised technical expertise.

Vocational Professionals Admission Scheme (VPAS)

1.48 The Government promulgated the VPAS in the Chief Executive's 2023 Policy Address, enabling non-local students enrolled in VPAS eligible VTC full-time Higher Diploma (HD) programmes to apply upon graduation to remain in Hong Kong for employment in the trades relevant to their programmes of study, leveraging their acquired expertise to contribute to crucial industries. In the 2024/25 academic year, the VPAS covers 27 eligible programmes in 5 trades, including the E&M Services trade, and the Aviation, Transport and Logistics trade.

Importation of Labour

1.49 To address the ongoing manpower shortage in the construction sector, the Government launched the Labour Importation Scheme for the Construction Sector (the Scheme) in 2023. This initiative allowed contractors involved in public sector construction projects valued at HK\$1 billion or more to apply for the importation of skilled and semi-skilled workers, as well as technicians.

Technical Professionals (TP)

1.50 The Government introduced a new channel under the General Employment Policy (GEP) and the Admission Scheme for Mainland Talents and Professionals (ASMTP) from 30

June 2025 to allow outside individuals to apply for entry into Hong Kong to join eight skilled trades facing acute manpower shortage. The TP List covers eight specified skilled trades, of which those relevant to the E&M services industry include electrical technicians, lift and escalator technicians, aircraft maintenance technicians and BIM coordinators.

Manpower Projection and Annual Training Requirements

1.51 The Annual Additional Manpower Requirement has taken into account the (i) projected manpower trend and (ii) wastage rate of the industry (i.e. percentage of employees leaving the industry permanently on annual basis). The estimated annual additional manpower requirement from 2026 to 2029 by respective sector is shown in Table 1.16 to 1.18 below.

Table 1.16 Estimated Annual Additional Manpower Requirement – E&M Engineering Sector

Job level	Estimated Annual Additional Manpower Requirement
Professional / Technologist	157
Technician	163
Tradesman / Craftsman	1,484

Table 1.17 Estimated Annual Additional Manpower Requirement – Gas Sector

Job level	Estimated Annual Additional Manpower Requirement
Professional / Technologist	20
Technician	17
Tradesman / Craftsman	52

Table 1.18 Estimated Annual Additional Manpower Requirement – Aircraft Maintenance Sector

Job level	Estimated Annual Additional Manpower Requirement
Professional / Technologist	8
Technician	10
Tradesman / Craftsman	47

Major Recommendations

1.52 Based on the survey findings and analysis of manpower changes, and taking into account factors such as business outlook, the employers' views on factors for attracting new entrants, and feedback from the Training Board, a list of recommendations on manpower development has been prepared for consideration by various stakeholders in the E&M services industry.

Government

Promoting a Favourable Perception of the Industry to Attract Young Talent

1.53 The perception of an industry significantly influences its attractiveness to young professionals. The Government is recommended to play a pivotal role in promoting the E&M services industry by highlighting its evolving working environment and conditions, thereby encouraging more young people to pursue careers in the sectors.

Accelerating Digital Capability

1.54 To assist the digitalisation of E&M equipment, the EMSD has built the Government-Wide IoT Network to support various smart applications for the improvement of public service quality. An E&M InnoPortal was launched to collect the service wishes of various government departments, public organisations, the E&M trades, and to invite the I&T sector to propose relevant I&T solutions for matching. It is recommended that these initiatives be further promoted and adopted across the E&M industry to enhance operational efficiency and foster innovation.

Strengthening the Promotion of Vocational and Professional Education and Training

1.55 It is recommended that the Government further strengthen the promotion of Vocational and Professional Education and Training (VPET) in response to the growing demand for skilled talent across various industries.

Continuing Support for Talent Development through Funding Schemes

1.56 To address evolving manpower needs and technological advancements, the Government could continue to enhance and promote existing support measures, while exploring new initiatives to attract talent, facilitate skills upgrading, support professional development and strengthen the industry's long-term talent pipeline.

Employers

Embracing Cutting-edge Digital Technologies and Advanced Construction Technologies

1.57 Advanced construction technologies, including BIM, MiMEP and MiC, have continued to evolve. The growing application of IoT, smart technologies and AI in E&M systems has also transformed project delivery, asset management and maintenance practices. Employers are encouraged to provide opportunities for employees to develop the knowledge and skills required to support the adoption and implementation of these technologies.

Prioritising Workplace Safety

1.58 Employers in the E&M services industry should prioritise workplace safety by implementing robust safety protocols, providing regular training and adopting advanced safety technologies.

Leveraging Government Funding Schemes for Talent Development

1.59 Employers are encouraged to invest in workforce development and leverage available government funding schemes to support their staff in continuous learning and skills upgrading. This can help enhance employees' competencies and adaptability, enabling the employers to build a capable workforce and maintain their competitiveness.

Nurturing Skilled Young Talent through Apprenticeship Training

1.60 Apprenticeship training plays an important role in developing skilled young talent and supporting long-term manpower needs of the E&M services industry. Employers are encouraged to actively recruit apprentices and participate in apprenticeship training schemes to develop talent and build a sustainable workforce.

Work-Study Degree Scheme for Building Services Engineering

1.61 Offering students a unique opportunity to study and work concurrently without having to pay tuition fees, while receiving a designated monthly salary and total work remuneration of up to HK\$500,000 throughout the four-year programme, employers are encouraged to support their promising young staff in participating in the Scheme.

Trade Tests for Electricians, Lift and Escalator Mechanics

1.62 Employers should encourage their non-registered workers in electrical installations and lift and escalator engineering to take the trade tests so that their tradesman/craftsman status can be formally recognised.

Educational Institutions

Equipping E&M Professionals with Cutting-edge Digital Technologies

1.63 Artificial intelligence (AI) and data analytics are increasingly applied to E&M systems to improve performance, energy efficiency and operational reliability through predictive and automated functions. Educational institutions should therefore strengthen their training programmes by increase coverage of the practical application of emerging technologies, such as IoT applications, digital system integration, AI-assisted operations and data-driven predictive maintenance.

Training Programmes for MiMEP

1.64 Educational institutions could consider providing MiMEP-related training programmes that offer all-round training covering multiple trades within the MiMEP framework, equipping students with comprehensive knowledge and skills not only in their own trade but also in other related trades. Particular emphasis could be placed on developing the skills and expertise required for the on-site installation and quality assurance of MiMEP systems.

Encouraging Interdisciplinary Student Project Collaboration

1.65 Employers are seeking graduates who can work effectively across disciplines and collaborate with professionals from different fields. To address this need, educational institutions are encouraged to provide more opportunities for interdisciplinary collaboration, particularly through industry-based student projects involving students from different disciplines.

Skilled Craftsmanship in the E&M Services Industry

1.66 Educational institutions are encouraged to maintain training programmes that cover both emerging technological competencies and foundational craftsmanship skills, ensuring that graduates are equipped with the practical expertise and digital skills required to thrive in a rapidly evolving industry.

Training Programmes for Admitted E&M Professionals

1.67 Educational institutions could consider offering tailored training programmes covering local regulations, safety requirements and industry practices to help admitted professionals and imported workers adapt to the local working environment and contribute effectively to the industry's development.

Continuing Promotion of Apprenticeship Recruitment

1.68 To address the rising demand for technicians and craftsmen in the E&M services industry, education institutions are encouraged to continue and strengthen the promotion of apprenticeship programmes.

2 Introduction

Background

2.1 The Electrical and Mechanical Services Training Board (Training Board) of the Vocational Training Council (VTC) is appointed by the Government of the Hong Kong Special Administrative Region (HKSAR) to analyse the manpower situation and training needs of the electrical and mechanical services industry. The Training Board comprises members nominated by major trade associations, trade unions, professional bodies, educational and training institutions and government departments. The Working Party of the Manpower Survey is formed by selected members of the Training Board. The membership and terms of reference of the Training Board, as well as the members in the Working Party are listed in **Appendices 1, 2 and 3**.

2.2 The manpower survey of the electrical and mechanical services industry is conducted every four years, followed by two periodic manpower updates supplemented with information collected from focus groups and desk research to better reflect the changing trends of the manpower situation. This manpower survey mainly focuses on the analysis of technical manpower, which refers to the personnel who are expected to apply the industrial knowledge and technical skills required to complete the work assigned.

2.3 Manpower data with respect to the survey reference date on 1 September 2025 was collected from mid-October 2025 to end-January 2026. This report presents the survey findings and analysis of the latest manpower situation in the electrical and mechanical services industry and proposes recommendations on manpower development to different stakeholders of the industry, including the Government, employers and education institutions by referring to the business outlook.

Objectives

- 2.4 The objectives of this manpower survey are:
- (a) To collect up-to-date manpower information by branches, job levels and principal jobs in the industry;
 - (b) To assess the technical manpower structure;
 - (c) To forecast the training requirements in the near future; and
 - (d) To recommend to the VTC and relevant stakeholders the talent development strategies to meet the manpower needs.

Survey Coverage

2.5 The survey covered the following sectors and branches in the electrical and mechanical services industry:

E&M Engineering Sector

- Contracting (E&M)
- Servicing (E&M)
- Sizeable companies with related services, related educational institutes and government bureau/departments (Supplementary Samples)

Gas Sector

- Gas Supply
- Gas Fitting, Installation and Maintenance
- Sizeable companies with related services, related educational institutes and government bureau/departments (Supplementary Samples)

Aircraft Maintenance Sector

- Aircraft Maintenance

3 Methodology

Sample Design

3.1 Based on the Hong Kong Standard Industrial Classification list from the Census and Statistics Department (C&SD) of the HKSAR Government, the survey covered around 12 824 companies in different sectors of the industry. By adopting the stratified random sampling method for selecting companies from the Central Register of Establishments of the Census and Statistics Department, and the inclusion of supplementary samples recommended by the Training Board, a total of 1 306 companies were selected for the survey.

Questionnaire Design

3.2 The questionnaire designed for the survey comprised two parts. Part I collected quantitative manpower information by job levels and by principal jobs, and Part II collected supplementary information related to the industry's manpower situation. The list of principal jobs was defined by the Training Board with detailed job descriptions given for each job, and was classified into different job levels as follows:

- (a) Professional/technologist
- (b) Technician
- (c) Tradesman/craftsman
- (d) Semi-skilled/general worker

3.3 While job titles adopted in the companies might vary with the descriptions of the principal jobs, respondents were asked to provide manpower information corresponding to the job descriptions and the skill levels of the principal jobs. The definition of terms and the survey documents, including a sample questionnaire, explanatory notes and job descriptions for the principal jobs are given in **Appendices 4 and 5**.

Data Collection

3.4 Data collection was carried out between mid-October 2025 and end-January 2026. A pack of survey documents was given to each sampled company. The respondents of the companies were asked to provide manpower information of their companies at the time of the survey with the reference date on 1 September 2025. During the fieldwork period, enumerators assisted the respondents to complete the questionnaire through phone calls or on-site visits.

3.5 Various measures were taken to ensure the quality of the data collection process. These included prior fieldwork preparation, thorough training of fieldwork staff, monitoring of the fieldwork execution, measures to increase the response rate, checking of the completed questionnaires, double data entry and validation and verification of the collected data. The list of quality control measures is shown in **Appendix 6**.

Data Analysis

3.6 Among the 684 valid sampled companies, 623 were successfully enumerated which contributed to an effective response rate of 91.1%⁴. Taking into account (a) the satisfactory response rate of the individual branches, (b) the satisfactory response rate from a majority of prominent and sizeable companies, and (c) the grossing-up of the sample results based on the statistically-grounded method, it could be concluded that the survey findings presented in this report contributed to a significant level of representativeness of the electrical and mechanical services industry. The response rate achieved for individual branches was also adequate to produce a meaningful breakdown by branch. The response profile is shown in **Appendix 7**.

Manpower Projection Methodology

3.7 The Training Board adopts the approach of Adaptive Filtering Method (AFM) for projecting the manpower trend of electrical and mechanical services industry for the period from 2026 to 2029. The method is compiled by taking into account the historical survey data. The details of methodology are shown in **Appendix 8**.

⁴ Sampled companies which were relocated to unknown addresses, had unreachable responsible persons, had ceased operations, or without relevant technical staff, etc. at the time of survey were classified as invalid samples.

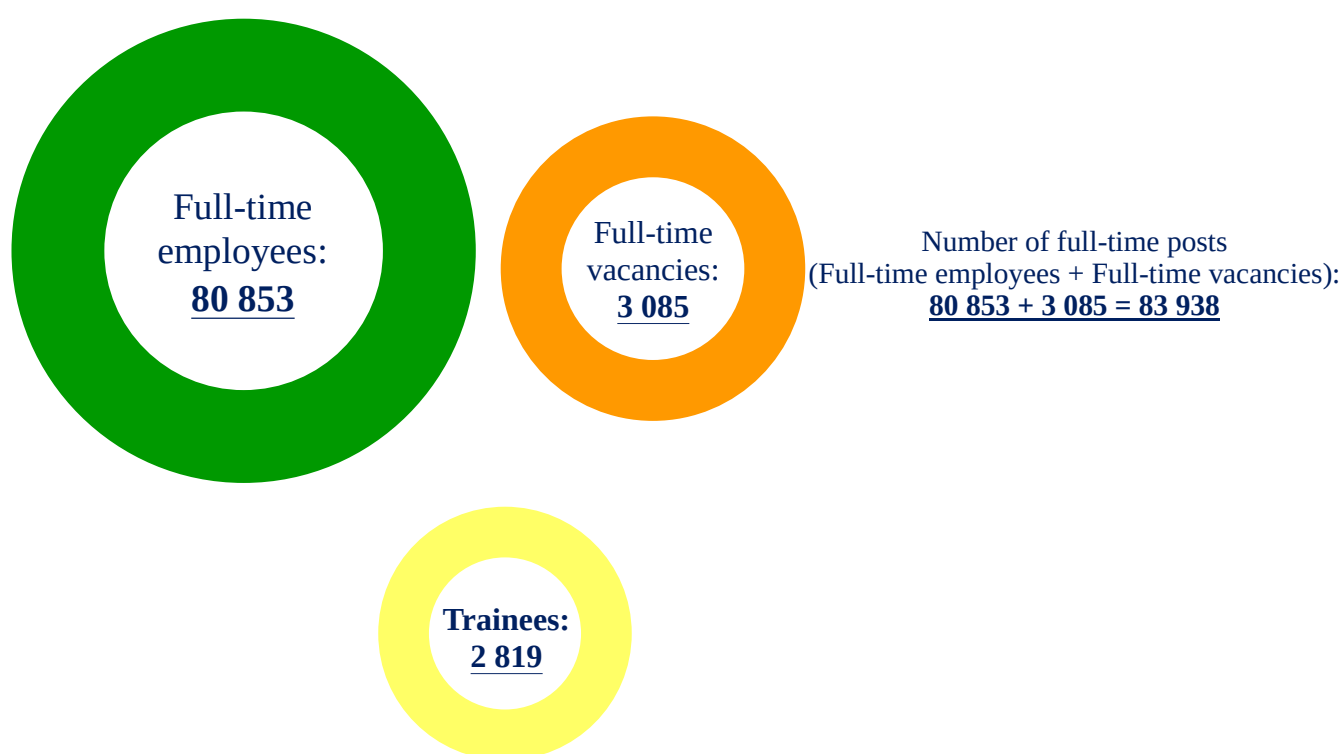
4 Survey Findings

A. Overview of the Electrical and Mechanical Services Industry

Manpower Situation

4.1 As at 1 September 2025, a total of 80 853 full-time employees were employed in the electrical and mechanical services industry and there was a total of 3 085 full-time vacancies. Aggregating the total number of full-time employees and full-time vacancies, it was estimated that there was a total of 83 938 full-time posts. Moreover, there were 2 819 trainees found in the electrical and mechanical services industry. (Chart 4.1)

Chart 4.1 Overview of manpower situation



Note: "Full-time vacancies" refer to those unfilled, immediately available job openings for which the company is actively trying to recruit personnel as at survey reference date.

Full-time Employees

4.2 Among the 80 853 full-time employees in the electrical and mechanical services industry, the vast majority of them were engaged in the E&M engineering sector (73 238 full-time employees or 90.6%). Much fewer were engaged in the aircraft maintenance sector (4 874 full-time employees or 6.0%) and gas sector (2 741 full-time employees or 3.4%). (Table 4.1)

4.3 Analysed by job level, over half of the full-time employees were employed at the tradesman/craftsman level (43 522 full-time employees or 53.8%), followed by the technician level (21 085 full-time employees or 26.1%) and the professional/technologist level (13 104 full-time employees or 16.2%). (Table 4.1)

Table 4.1 Full-time employees by sector by job level

Job Level	E&M Engineering	Gas	Aircraft Maintenance	Total
Professional/technologist	11 794 (16.1%)	580 (21.2%)	730 (15.0%)	13 104 (16.2%)
Technician	19 417 (26.5%)	534 (19.5%)	1 134 (23.3%)	21 085 (26.1%)
Tradesman/craftsman	39 324 (53.7%)	1 552 (56.6%)	2 646 (54.3%)	43 522 (53.8%)
Semi-skilled/general worker	2 703 (3.7%)	75 (2.7%)	364 (7.5%)	3 142 (3.9%)
Overall	73 238 [90.6%]	2 741 [3.4%]	4 874 [6.0%]	80 853

() indicates % of total no. of full-time employees by respective job level.

[] indicates % of total no. of full-time employees by respective sector.

Full-time Vacancies

4.4 As at 1 September 2025, a total of 3 085 full-time vacancies were reported in the electrical and mechanical services industry, representing a vacancy rate of 3.7% (i.e. full-time vacancies as a percentage of the total number of full-time employees and full-time vacancies). Most of the vacancies were found in the E&M engineering sector (2 597 full-time vacancies) and were concentrated on the tradesman/craftsman level (1 598 full-time vacancies). (Table 4.2)

Table 4.2 Full-time vacancies by sector by job level

Job Level	E&M Engineering	Gas	Aircraft Maintenance	Total
Professional/technologist	433 [3.5%]	36 [5.8%]	158 [17.8%]	627 [4.6%]
Technician	753 [3.7%]	8 [1.5%]	15 [1.3%]	776 [3.5%]
Tradesman/craftsman	1 327 [3.3%]	37 [2.3%]	234 [8.1%]	1 598 [3.5%]
Semi-skilled/general worker	84 [3.0%]	0 [0.0%]	0 [0.0%]	84 [2.6%]
Overall	2 597 [3.4%]	81 [2.9%]	407 [7.7%]	3 085 [3.7%]

Note: Figures in [] brackets indicate the **Vacancy rate** =

$$\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

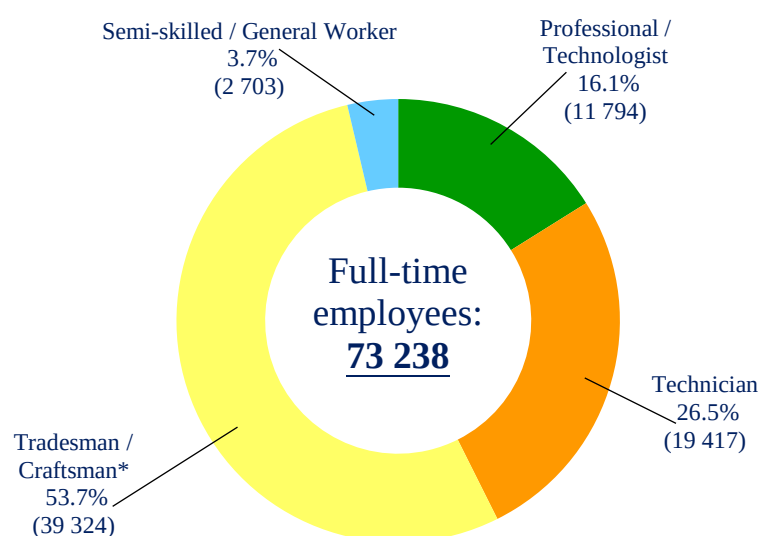
B. Electrical and Mechanical Engineering Sector

Full-time Employees

Number of Full-time Employees

4.5 Among the 73 238 full-time employees in the E&M engineering sector, over half were employed at the tradesman/craftsman level (39 324 full-time employees or 53.7%), followed by the technician level (19 417 full-time employees or 26.5%) and the professional/technologist level (11 794 full-time employees or 16.1%). (Chart 4.2)

Chart 4.2 Full-time employees by job level



Prominent Principal Jobs

4.6 As shown in Table 4.3, the most prominent principal job with most employees in the E&M engineering sector was “Electrician/Electrical Fitter” (10 198 full-time employees), followed by “Supervisor” (4 689 full-time employees), “Building Services Mechanic” (4 262 full-time employees) and “Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System)” (3 533 full-time employees). (Table 4.3)

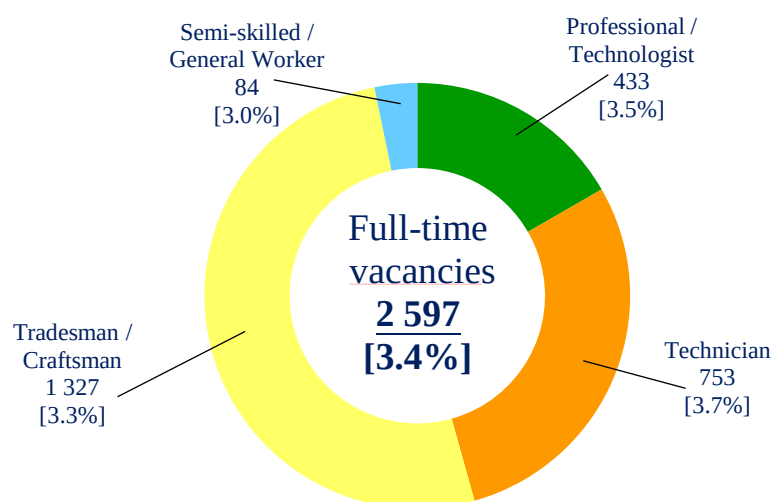
Table 4.3 Prominent principal jobs

Job level	Principal job	No. of full-time employees	% of total number of full-time employees
Professional / Technologist	◆ Electrical Engineer	2 656	3.6%
	◆ Building Services Engineer	2 084	2.8%
	◆ Engineering Manager (E&M Engineering-related)	2 019	2.8%
Technician	◆ Supervisor	4 689	6.4%
	◆ Electrical Engineering Technician	2 900	4.0%
	◆ Building Services Technician	1 931	2.6%
Tradesman / Craftsman	◆ Electrician/Electrical Fitter	10 198	13.9%
	◆ Building Services Mechanic	4 262	5.8%
	◆ Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System)	3 533	4.8%

Full-time Vacancies

Number of Full-time Vacancies

4.7 As at 1 September 2025, a total of 2 597 full-time vacancies were reported in the E&M engineering sector, representing a vacancy rate of 3.4%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (1 327 full-time vacancies), followed by the technician level (753 full-time vacancies) and the professional/technologist level (433 full-time vacancies). (Chart 4.3)

Chart 4.3 Full-time vacancies by job level

Notes: Figures in [] brackets indicate the **Vacancy rate** =

$$\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

Prominent Vacancies

4.8 As shown in Table 4.4, the prominent vacancies in the E&M engineering sector were “Mechanical Fitter/Machinist” (250 full-time vacancies), “Lift Mechanic” (246 full-time vacancies) and “Escalator Mechanic” (208 full-time vacancies). (Table 4.4)

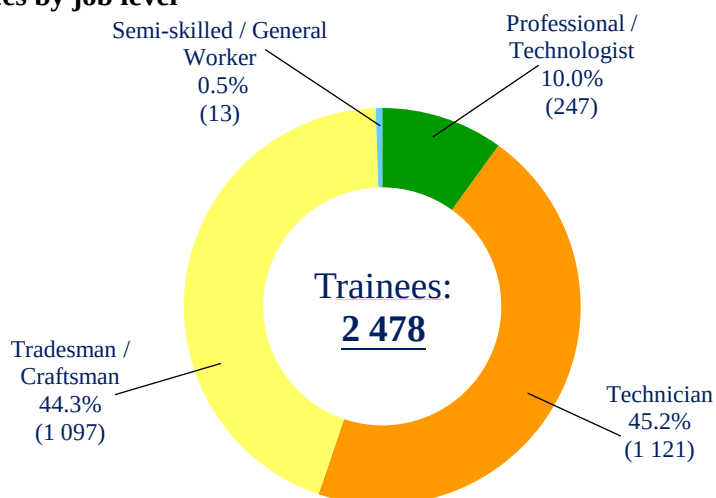
Table 4.4 Prominent vacancies

Job level	Principal job	No. of full-time vacancies	% of total number of full-time vacancies
Professional / Technologist	◆ Electrical Engineer	129	5.0%
	◆ Building Services Engineer	100	3.9%
	◆ Electronics Engineer	69	2.7%
Technician	◆ Mechanical Engineering Technician	151	5.8%
	◆ Electrical Engineering Technician	139	5.4%
	◆ Building Services Technician	106	4.1%
Tradesman / Craftsman	◆ Mechanical Fitter/Machinist	250	9.6%
	◆ Lift Mechanic	246	9.5%
	◆ Escalator Mechanic	208	8.0%

Trainees

4.9 As at 1 September 2025, a total of 2 478 trainees were employed in the E&M engineering sector, with 45.2% being employed at the technician level and 44.3% at the tradesman/craftsman level while 10.0% at the professional/technologist level. (Chart 4.4)

Chart 4.4 Trainees by job level



Average Monthly Income

4.10 The average monthly income for full-time employees at the professional/technologist level in the E&M engineering sector is mainly in the range of \$35,001 - \$45,000 (33.1%) and \$45,001 - \$60,000 (28.7%), followed by \$25,001 - \$35,000 (52.0%) and \$35,001 - \$45,000 (27.1%) for the technician level, \$18,001 - \$25,000 (63.1%) and \$25,001 - \$35,000 (27.1%) for the tradesman/craftsman level and \$15,001 - \$18,000 (30.2%) and \$18,001 - \$25,000 (50.7%) for the semi-skilled/general worker level. (Table 4.5)

Table 4.5 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	12.3%	28.7%	33.1%	26.0%	0.0%	0.0%	0.0%	11 794
Technician	0.0%	3.0%	27.1%	52.0%	17.7%	0.2%	0.0%	19 417
Tradesman/craftsman	0.0%	*	3.5%	27.1%	63.1%	5.4%	0.9%	39 324
Semi-skilled/general worker	0.0%	0.0%	0.0%	2.7%	50.7%	30.2%	16.5%	2 703

denotes prominent ranges of the monthly income in the respective job level.

Note: * < 0.05%

Preferred Level of Education

4.11 Virtually all of the full-time employees at the professional/technologist level in the E&M engineering sector were preferred to have a first degree or above qualification (98.8%). Most of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (50.6%) or sub-degree qualification (48.2%). On the other hand, most of the full-time employees at the tradesman/craftsman level were preferred to have a senior secondary qualification (54.3%) or diploma/certificate qualification (36.5%) while most of the full-time employees at the semi-skilled/general worker level were preferred to have a junior secondary qualification (64.8%). (Table 4.6)

Table 4.6 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	98.8%	1.2%	0.0%	0.0%	0.0%	11 794
Technician	0.6%	48.2%	50.6%	0.6%	0.0%	19 417
Tradesman/craftsman	0.0%	0.3%	36.5%	54.3%	8.9%	39 324
Semi-skilled/general worker	0.0%	0.0%	0.7%	34.5%	64.8%	2 703

denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

4.12 The majority of the full-time employees at the professional/technologist level in the E&M engineering sector were preferred to have 6 years to less than 10 years of experience (62.5%). Most of the full-time employees at the technician level were preferred to have 3 years to less than 6 years of experience (48.2%) or 6 years to less than 10 years of experience (40.2%) while most of the full-time employees at the tradesman/craftsman level were preferred to have 1 year to less than 3 years of experience (41.2%) or 3 years to less than 6 years of experience (36.4%). Most of the full-time employees at the semi-skilled/general worker level were preferred to have less than 1 year of experience (58.7%). (Table 4.7)

Table 4.7 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	6.7%	62.5%	30.1%	0.7%	0.0%	0.0%	11 794
Technician	0.2%	40.2%	48.2%	10.7%	0.5%	0.1%	19 417
Tradesman/craftsman	0.4%	0.3%	36.4%	41.2%	15.9%	5.7%	39 324
Semi-skilled/general worker	0.4%	0.0%	4.6%	9.2%	58.7%	27.1%	2 703

 denotes prominent ranges of the preferred years of experience in the respective job level.

Age Range of Full-time Employees

4.13 46.4% of full-time employees in the E&M engineering sector were aged 46 – 60 and 31.9% were aged 31 - 45. Relatively fewer were aged 30 or below (10.8%) and aged 61 or above (11.0%). (Table 4.8)

Table 4.8 Age range of full-time employees

	30 or below	31 – 45	46 – 60	61 or above	No. of full-time employees
Total	10.8%	31.9%	46.4%	11.0%	73 238

Note : Percentages are calculated on the basis of the total number of full-time employees

Average Retirement Age of Full-time Employees

4.14 The vast majority of the employers in the E&M engineering sector reported that the existing retirement age of full-time employees was 65 (84.4%). When asking the trend of retirement age in the future, a slightly lower proportion indicated the retirement age being 65 (76.5%) while a higher proportion expected the retirement age being over 65 (16.4%). (Table 4.9)

Table 4.9 Average retirement age of full-time employees

	Less than 65	65	Over 65	Unclassified	No. of companies
Existing retirement age	5.3%	84.4%	10.3%	NA	12 218
Expected retirement age in the future	5.4%	76.5%	16.4%	1.6%	12 218

Note : Percentages are calculated on the basis of the total number of companies

Full-time Employees Left and Recruited

4.15 In the E&M engineering sector, employers reported that there were 5 971 full-time employees left their companies in the past 12 months. The turnover rate (i.e. the number of full-time employees left as a percentage of the total number of full-time posts) was 7.9%. Analysed by job level, the tradesman/craftsman level registered the largest number of full-time employees left (3 289 full-time employees), followed by the technician level (1 169 full-time employees) and the professional/technologist level (1 095 full-time employees). On the other hand, the turnover rate was the highest at the semi-skilled/general worker level (15.0%). (Table 4.10)

Table 4.10 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	1 095	9.0%
Technician	1 169	5.8%
Tradesman/craftsman	3 289	8.1%
Semi-skilled/general worker	418	15.0%
Total	5 971	7.9%

* Turnover rate = $\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$

4.16 On the other hand, a total of 5 819 full-time employees were recruited in the past 12 months, with the majority being at the tradesman/craftsman level (2 506 new recruits), followed by the professional/technologist level (1 448 new recruits) and the technician level (1 349 new recruits). In general, most of the new recruits were recruited from those with experience in electrical and mechanical engineering (73.5%) while 13.0% were recruited from fresh graduates of related discipline. (Table 4.11)

Table 4.11 Staff recruited in the past 12 months by job level

Job level	Experience in electrical and mechanical engineering	Graduates of 2024 and 2025 from electrical and mechanical engineering programmes	Total number of new recruits
Professional/technologist	1 012 (69.9%)	227 (15.7%)	1 448
Technician	1 185 (87.8%)	76 (5.6%)	1 349
Tradesman/craftsman	1 873 (74.7%)	431 (17.2%)	2 506
Semi-skilled/general worker	206 (39.9%)	22 (4.3%)	516
Total	4 276 (73.5%)	756 (13.0%)	5 819

Note : () As a percentage of total no. of new recruits in respective job levels

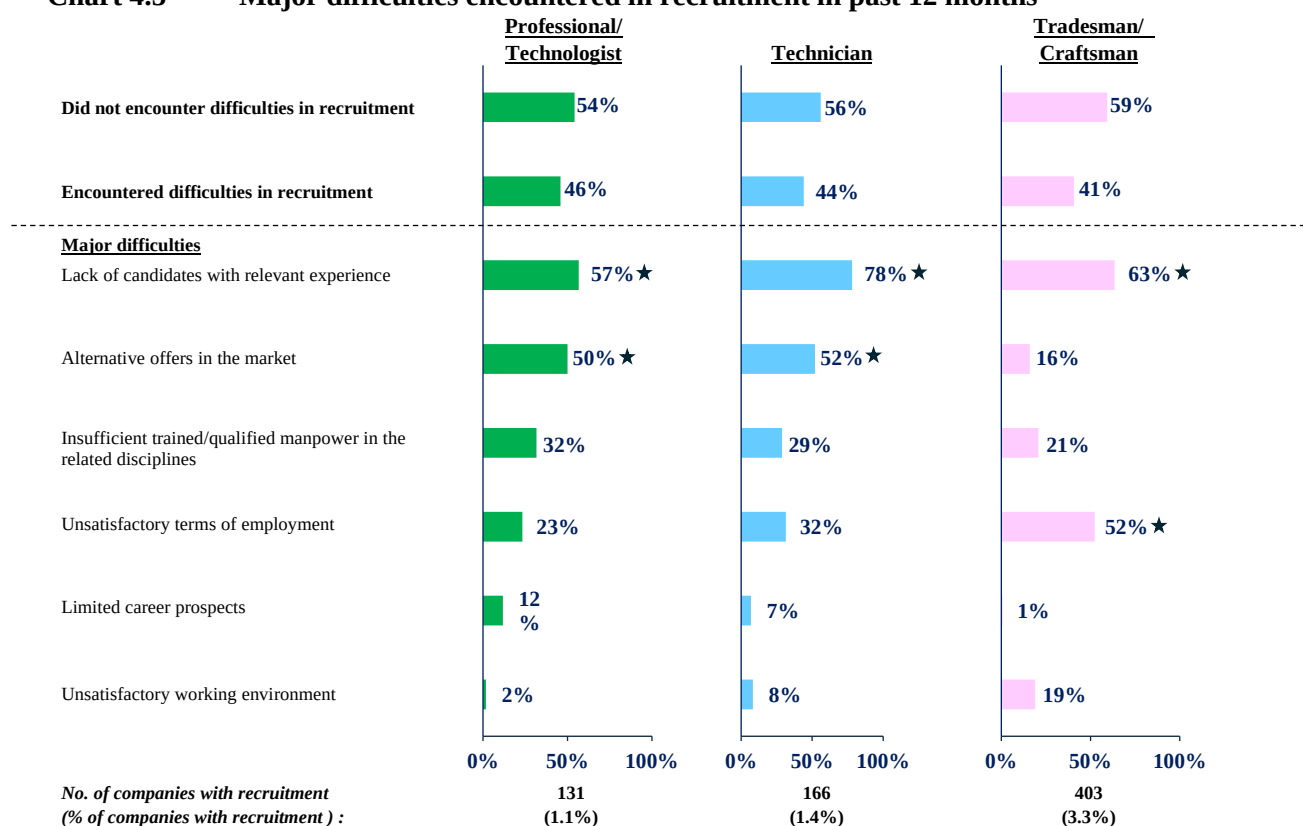
Recruitment Difficulties

4.17 In the E&M engineering sector, there were not many companies engaged in recruitment exercise in the past 12 months, with 3.3% recorded for full-time employees at the tradesman/craftsman level, 1.4% for full-time employees at the technician level and 1.1% for full-time employees at the professional/technologist level. (Chart 4.5)

4.18 Among those companies engaged in the recruitment exercises for full-time employees of the respective levels, over 40% of companies encountered recruitment difficulties in recruiting full-time employees at the professional/technologist level (46%), the technician level (44%) and the tradesman/craftsman level (41%). (Chart 4.5)

4.19 The recruitment difficulties encountered when recruiting full-time employees at the professional/technologist level and the technician level were mainly “lack of candidates with relevant experience” (57% and 78% respectively) and “alternative offers in the market” (50% and 52% respectively). The difficulties encountered for recruiting full-time employees at the tradesman/craftsman level were mainly “lack of candidates with relevant experience” (63%) and “unsatisfactory terms of employment” (52%). (Chart 4.5)

Chart 4.5 Major difficulties encountered in recruitment in past 12 months



Notes: (1) Percentages of difficulties in recruitment are calculated on the basis of companies having the recruitment difficulties in particular job level.

(2) Respondents are allowed to select more than one difficulty.

(3) Only major difficulties with larger percentage of mentions are shown above.

(4) Figures marked with the symbol “★” refer to major difficulties encountered at respective job level.

Factors Useful to Attract New Entrants to the Industry

4.20 Employers were asked to indicate the factors that are useful to attract new entrants to the industry. “Job security” (66.8%), “attractive remuneration package” (57.7%) and “compliance with safety regulations” (47.9%) were the top three factors considered useful to attract new entrants to the E&M engineering sector, followed by “Government subsidised training programmes leading to the relevant qualifications for new entrants” (39.5%), “clear career progression pathway” (35.5%) and “professional image of the industry” (35.2%). (Chart 4.6)

Chart 4.6 Factors useful to attract new entrants to the industry



Notes: 1) Percentage are calculated on the basis of total number of companies.
(2) Respondents are allowed to select top three factors.

Employers' Views on Business Volume in the Next 12 Months

4.21 In the survey, employers were asked about their views on the expected change in business volume of their companies in the next 12 months. About seven in ten (71.9%) of the companies in the E&M engineering sector expected the business volume to remain stable, while 5.3% to be worsen and 0.5% to be better for the coming year. (Table 4.12)

Table 4.12 Views on business volume in the next 12 months

	Better	Stable	Worsen	Uncertain	No. of companies
Total	0.5%	71.9%	5.3%	22.4%	12 218

Note : Percentages are calculated on the basis of the total number of companies

- 4.22 The major reasons for expecting worsen business volume cited included:
- Unsatisfactory economy and business environment lead to business drop/less E&M projects
 - Sole proprietor cannot take up many jobs because of old age/will retire soon

Expected Change in Number of Full-time Employees in the Next 12 Months

4.23 When asked to indicate the expected change in the number of full-time employees of their companies in the next 12 months, the vast majority (98.8%) expected the number of full-time employees to remain the same. 0.4% expected an increase in the number of full-time employees; whereas 0.8% expected a decrease. (Table 4.13)

Table 4.13 Views on number of full-time employees in the next 12 months

	Increase	Same	Decrease	No. of companies
Total	0.4%	98.8%	0.8%	12 218

Note : Percentages are calculated on the basis of the total number of companies

Training Requirements

4.24 In the E&M engineering sector, “Safety Awareness” was the common training requirement for full-time employees at all job levels. In general, the training requirements for full-time employees at the professional/technologist level and the technician level spread across various project management related aspect, regulations aspect and safety aspect, while the training requirements for full-time employees at the tradesman/craftsman level tended to focus mainly on safety aspect. (Table 4.14)

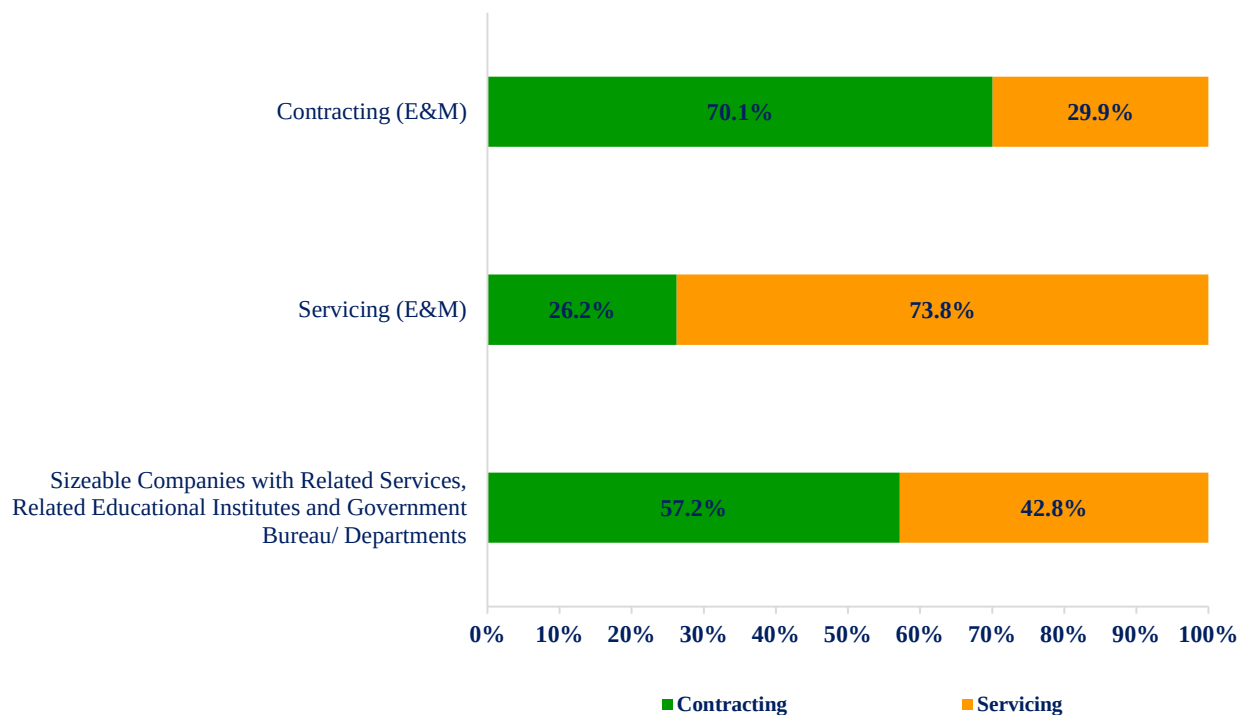
Table 4.14 Major training requirements

Job level Rank	Professional/Technologist	Technician	Tradesman/Craftsman
1	Project Management	Safety Awareness	
2	Safety Awareness	Project Management	Safety Audit/Assessment
3	Risk and Crisis Management	Relevant Trade’s Ordinances and Regulations	Safety/Risk Management
4	Relevant Trade’s Ordinances and Regulations	Occupational Safety and Health Ordinance	
5	Engineering-related ISO Standards	Safety Audit/Assessment	Construction Site Safety for Workers

Proportion of Manpower in Contracting and Servicing Work

4.25 In the E&M engineering sector, most companies in the contracting branch (70.1%) and sizeable companies with related services, related educational institutes and government bureau/departments branch (57.2%) had their manpower engaged in contracting work. On the contrary, most companies in the servicing branch (73.8%) had their manpower engaged in servicing work. (Chart 4.7)

Chart 4.7 Proportion of Contracting and Servicing Work



Notes:

1. As a percentage of total number of full-time employees by corresponding branch
2. For employees engaged in both contracting and servicing at the same time, their principal assignment of duties should be used for demarcation.

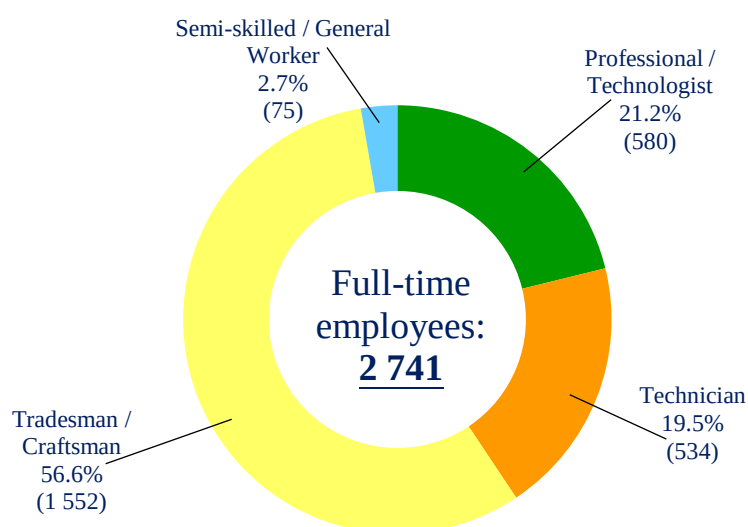
C. Gas Sector

Full-time Employees

Number of Full-time Employees

4.26 Among the 2 741 full-time employees in the gas sector, over half were employed at the tradesman/craftsman level (1 552 full-time employees or 56.6%), followed by the professional/technologist level (580 full-time employees or 21.2%) and the technician level (534 full-time employees or 19.5%). (Chart 4.8)

Chart 4.8 Full-time employees by job level



Prominent Principal Jobs

4.27 As shown in Table 4.15, the most prominent principal job with most employees in the gas sector was “Gas Utilisation Fitter (Domestic)” (859 full-time employees), followed by “Gas Distribution Fitter (Town Gas)” (390 full-time employees) and “Mechanical Engineer” (372 full-time employees). (Table 4.15)

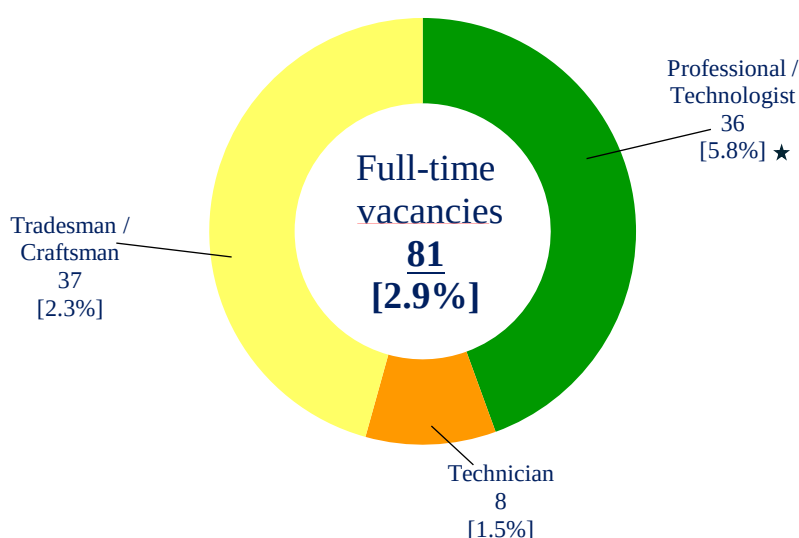
Table 4.15 Prominent principal jobs

Job level	Principal job	No. of full-time employees	% of total number of full-time employees
Professional / Technologist	◆ Mechanical Engineer	372	13.6%
	◆ Gas Engineer (Fuel Gas)	144	5.3%
	◆ Safety Officer	44	1.6%
Technician	◆ Gas Engineering Technician	243	8.9%
	◆ Supervisor	176	6.4%
	◆ Mechanical Engineering Technician	70	2.6%
Tradesman / Craftsman	◆ Gas Utilisation Fitter (Domestic)	859	31.3%
	◆ Gas Distribution Fitter (Town Gas)	390	14.2%
	◆ Gas Utilisation Fitter (Non-domestic)	221	8.1%

Full-time Vacancies

Number of Full-time Vacancies

4.28 As at 1 September 2025, a total of 81 full-time vacancies were reported in the gas sector, representing a vacancy rate of 2.9%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (37 full-time vacancies) and the professional/technologist level (36 full-time vacancies). (Chart 4.9)

Chart 4.9 Full-time vacancies by job level

Notes:

- (1) Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$
- (2) Figures marked with the symbol “★” refer to relatively higher vacancy rates than the overall rate
- (3) No full-time vacancies for semi-skilled/general worker.

Prominent Vacancies

4.29 As shown in Table 4.16, the most prominent vacancies with most employees in the gas sector was “Gas Utilisation Fitter (Domestic)” (24 full-time vacancies) and “Mechanical Engineer” (21 full-time vacancies), followed by “Gas Utilisation Fitter (Non-domestic)” (10 full-time vacancies). (Table 4.16)

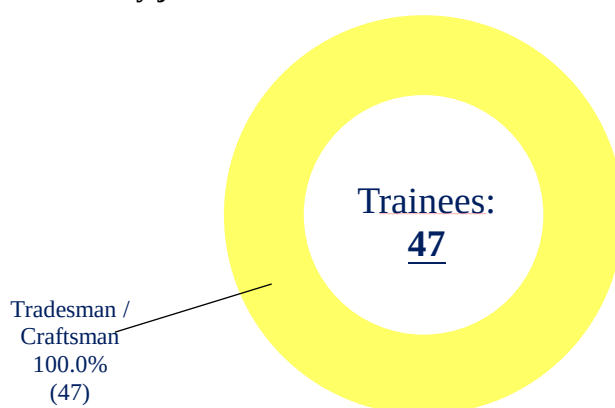
Table 4.16 Prominent vacancies

Job level	Principal job	No. of full-time vacancies	% of total number of full-time vacancies
Professional / Technologist	◆ Mechanical Engineer	21	25.9%
	◆ Gas Engineer (Fuel Gas)	8	9.9%
	◆ Electrical Engineer	4	4.9%
Technician	◆ Supervisor	4	4.9%
	◆ Gas Engineering Technician	2	2.5%
	◆ Mechanical Engineering Technician	2	2.5%
Tradesman / Craftsman	◆ Gas Utilisation Fitter (Domestic)	24	29.6%
	◆ Gas Utilisation Fitter (Non-domestic)	10	12.3%
	◆ Gas Distribution Fitter (Town Gas)	3	3.7%

Number of Trainees

4.30 As at 1 September 2025, a total of 47 trainees were employed in the gas sector, with all (100.0%) of them being employed at the tradesman/craftsman level. (Chart 4.10)

Chart 4.10 Trainees by job level



Average Monthly Income

4.31 The average monthly income for full-time employees at the professional/technologist level in the gas sector is mainly in the range of \$35,001 - \$45,000 (93.9%), followed by \$25,001 - \$35,000 (67.0%) and \$35,001 - \$45,000 (25.6%) for the technician level, \$18,001 - \$25,000 for the tradesman/craftsman level (80.2%) and \$15,001 - \$18,000 for the semi-skilled/general worker level (77.3%). (Table 4.17)

Table 4.17 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	0.0%	0.0%	93.9%	6.1%	0.0%	0.0%	0.0%	580
Technician	0.0%	0.0%	25.6%	67.0%	7.3%	0.0%	0.0%	534
Tradesman/craftsman	0.0%	0.0%	0.0%	2.5%	80.2%	16.0%	1.3%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	11.4%	77.3%	11.4%	75

denotes prominent ranges of the monthly income in the respective job level.

Preferred Level of Education

4.32 The vast majority of the full-time employees at the professional/technologist level in the gas sector were preferred to have a sub-degree qualification (86.3%). The majority of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (61.1%). On the other hand, most of the full-time employees at the tradesman/craftsman level were preferred to have a diploma/certificate qualification (65.5%) while most of the full-time employees at the semi-skilled/general worker level were preferred to have a junior secondary qualification (73.3%). (Table 4.18)

Table 4.18 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	13.7%	86.3%	0.0%	0.0%	0.0%	580
Technician	0.0%	25.2%	61.1%	13.7%	0.0%	534
Tradesman/craftsman	0.0%	0.0%	65.5%	27.5%	7.0%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	26.7%	73.3%	75

denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

4.33 The majority of the full-time employees at the professional/technologist level in the gas sector were preferred to have 6 years to less than 10 years of experience (96.3%). The majority of the full-time employees at both the technician level and the tradesman/craftsman level were preferred to have 1 year to less than 3 years of experience (71.0% and 68.8% respectively). The majority of the full-time employees at the semi-skilled/general worker level were preferred to have no experience (73.3%). (Table 4.19)

Table 4.19 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	0.2%	96.3%	3.5%	0.0%	0.0%	0.0%	580
Technician	0.4%	4.4%	24.3%	71.0%	0.0%	0.0%	534
Tradesman/craftsman	0.0%	0.1%	6.9%	68.8%	10.8%	13.4%	1 552
Semi-skilled/general worker	0.0%	0.0%	0.0%	16.0%	10.7%	73.3%	75

denotes prominent ranges of the preferred years of experience in the respective job level.

Age Range of Full-time Employees

4.34 45.6% of full-time employees in the gas sector were aged 46 – 60 and 34.9% were aged 31 - 45. Relatively fewer were aged 30 or below (9.7%) and aged 61 or above (9.8%). (Table 4.20)

Table 4.20 Age range of full-time employees

	30 or below	31 – 45	46 – 60	61 or above	No. of full-time employees
Total	9.7%	34.9%	45.6%	9.8%	2 741

Note : Percentages are calculated on the basis of the total number of full-time employees

Average Retirement Age of Full-time Employees

4.35 The vast majority of the employers in the gas sector reported that the existing retirement age of full-time employees was 65 (90.0%). When asking the trend of retirement age in the future, a slightly lower proportion expected the retirement age in the future being 65 (81.5%) with a higher proportion expecting the retirement age in the future being over 65 (10.0%). (Table 4.21)

Table 4.21 Average retirement age of full-time employees

	Less than 65	65	Over 65	Unclassified	No. of companies
Existing retirement age	8.5%	90.0%	1.4%	NA	241
Expected retirement age in the future	6.2%	81.5%	10.0%	2.4%	241

Note : Percentages are calculated on the basis of the total number of companies

Full-time Employees Left and Recruited

4.36 In the gas sector, employers reported that there were 293 full-time employees left their companies in the past 12 months. The turnover rate was 10.4%. Analysed by job level, the professional/technologist level registered the largest number of full-time employees left (185 full-time employees) and the highest turnover rate (30.0%). (Table 4.22)

Table 4.22 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	185	30.0%
Technician	63	11.6%
Tradesman/craftsman	45	2.8%
Semi-skilled/general worker	0	0.0%
Total	293	10.4%

* Turnover rate =
$$\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$$

4.37 On the other hand, a total of 294 full-time employees were recruited in the past 12 months, with the majority being at the professional/technologist level (150 new recruits). In general, more than half of the new recruits were recruited from those with experience in gas services engineering (56.8%) while 10.5% were recruited from fresh graduates of related discipline. (Table 4.23)

Table 4.23 Staff recruited in the past 12 months by job level

Job level	Experience in gas services engineering	Graduates of 2024 and 2025 from gas services engineering programmes	Total number of new recruits
Professional/technologist	80 (53.3%)	0 (0.0%)	150
Technician	44 (55.7%)	11 (13.9%)	79
Tradesman/craftsman	43 (66.2%)	20 (30.8%)	65
Semi-skilled/general worker	NA	NA	0
Total	167 (56.8%)	31 (10.5%)	294

Note : () As a percentage of total no. of new recruits in respective job levels

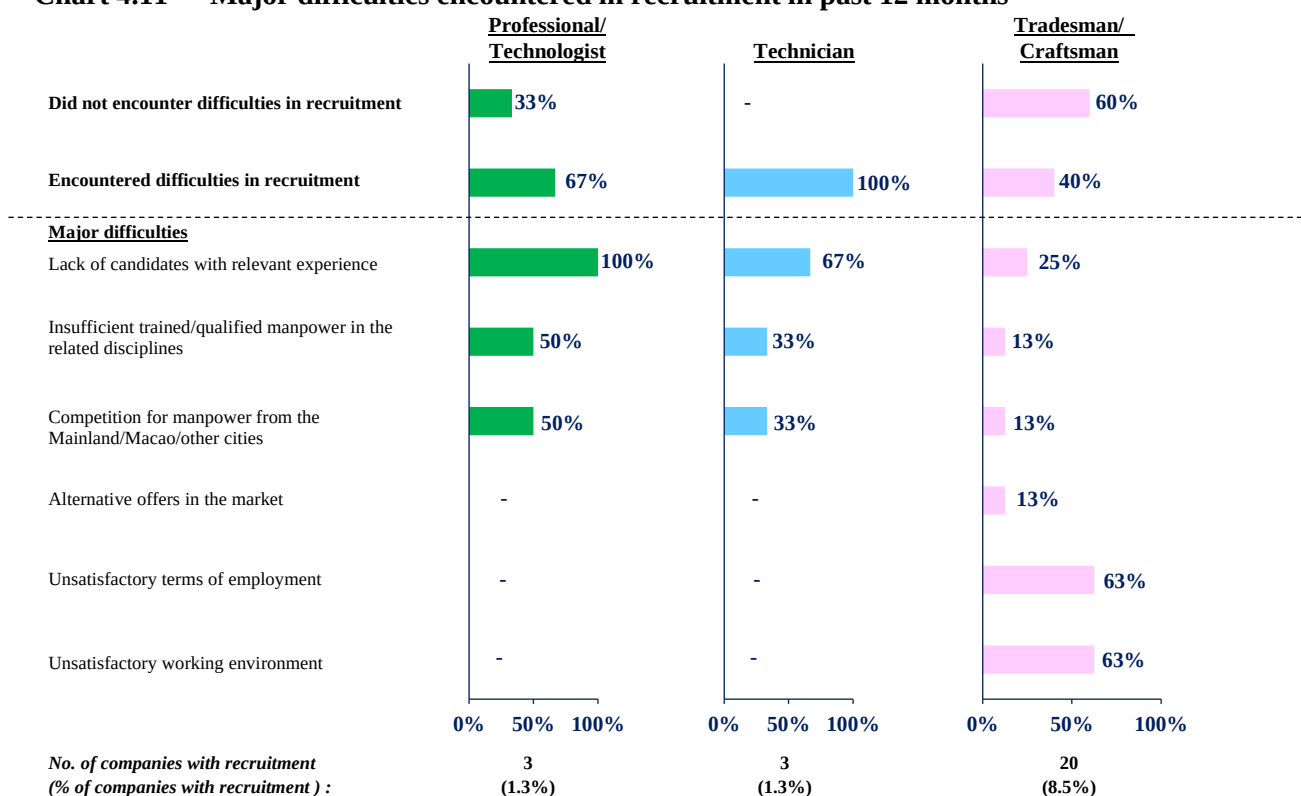
Recruitment Difficulties

4.38 In the gas sector, 8.5% of the companies engaged in recruitment exercise for full-time employees at the tradesman/craftsman level in the past 12 months. Relatively fewer engaged in recruitment exercise for full-time employees at the professional/technologist level (1.3%) and technician levels (1.3%) in the past 12 months. (Chart 4.11)

4.39 Among those companies engaged in the recruitment exercises for full-time employees of the respective levels, all (100%) companies encountered recruitment difficulties in recruiting full-time employees at the technician level. The corresponding percentages were 67% and 40% respectively for the professional/technologist level and the tradesman/craftsman level. (Chart 4.11)

4.40 The recruitment difficulties encountered when recruiting full-time employees at the professional/technologist level and the technician level were mainly “lack of candidates with relevant experience” (100% and 67% respectively), “insufficient trained/qualified manpower in the related disciplines” (50% and 33% respectively) and “competition for manpower from the Mainland/Macao/other cities” (50% and 33% respectively). The difficulties encountered for recruiting full-time employees at the tradesman/craftsman level were mainly “unsatisfactory terms of employment” (63%) and “unsatisfactory working environment” (63%). (Chart 4.11)

Chart 4.11 Major difficulties encountered in recruitment in past 12 months



Notes: (1) Percentages of difficulties in recruitment are calculated on the basis of companies having the recruitment difficulties in particular job level.

(2) Respondents are allowed to select more than one difficulty.

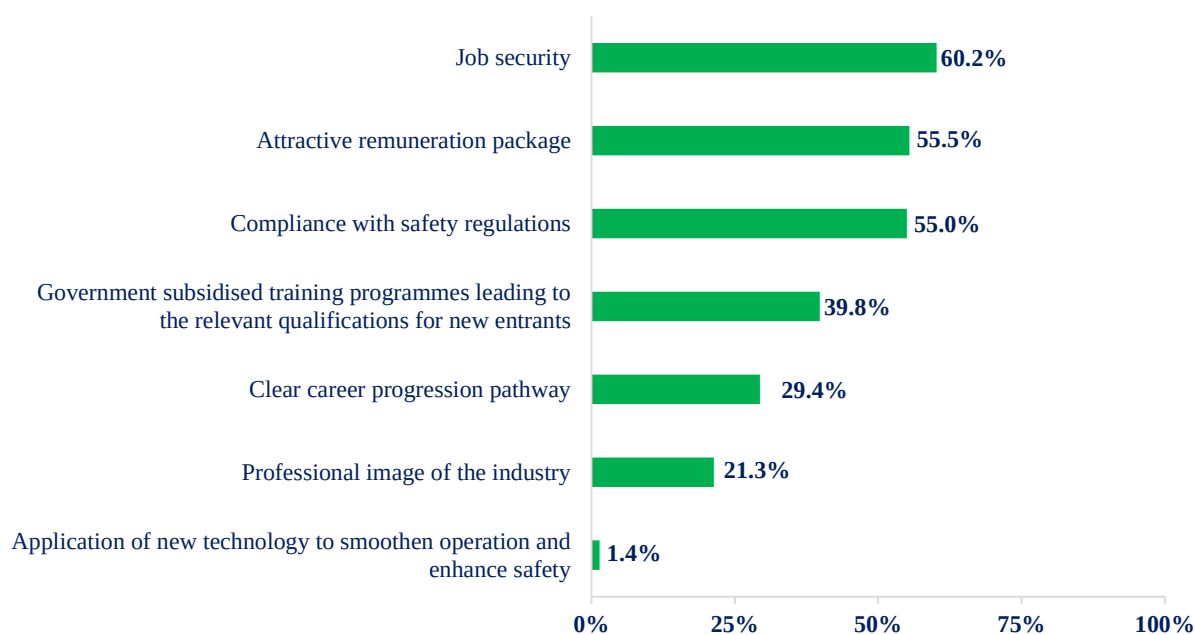
(3) Only major difficulties with larger percentage of mentions are shown above.

(4) The findings should be interpreted with caution due to the small number of sample observation.

Factors Useful to Attract New Entrants to the Industry

4.41 Employers were asked to indicate the factors that are useful to attract new entrants to the industry. “Job security” (60.2%), “attractive remuneration package” (55.5%) and “compliance with safety regulations” (55.0%) were the top three factors considered useful to attract new entrants to the gas sector, followed by “Government subsidised training programmes leading to the relevant qualifications for new entrants” (39.8%), “clear career progression pathway” (29.4%) and “professional image of the industry” (21.3%). (Chart 4.12)

Chart 4.12 Factors useful to attract new entrants to the industry



Notes: 1) Percentage are calculated on the basis of total number of companies.
(2) Respondents are allowed to select top three factors.

Employers' Views on Business Volume in the Next 12 Months

4.42 In the survey, employers were asked about their views on the expected change in business volume of their companies in the next 12 months. Slightly more than half (53.1%) of the companies in the gas sector expected the business volume to remain stable, while 12.3% to be worsen for the coming year. (Table 4.24)

Table 4.24 Views on business volume in the next 12 months

	Better	Stable	Worsen	Uncertain	No. of companies
Total	0.0%	53.1%	12.3%	34.6%	241

Note : Percentages are calculated on the basis of the total number of companies

- 4.43 The major reasons for expecting worsen business volume cited included:
- Unsatisfactory economy and business environment lead to business drop/less E&M projects
 - Intense market competition

Expected Change in Number of Full-time Employees in the Next 12 Months

4.44 When asked to indicate the expected change in the number of full-time employees of their companies in the next 12 months, all (100.0%) expected the number of full-time employees to remain the same. (Table 4.25)

Table 4.25 Views on number of full-time employees in the next 12 months

	Increase	Same	Decrease	No. of companies
Total	0.0%	100.0%	0.0%	241

Note : Percentages are calculated on the basis of the total number of companies

Training Requirements

4.45 In the gas sector, “Safety Awareness”, “Safety Audit/Assessment” and “Safety/Risk Management” of safety aspect were the common training requirements for full-time employees at all job levels. In general, the training requirements for full-time employees at the professional/technologist level spread across various project management related aspect, regulations aspect and safety aspect, while the training requirements for full-time employees at the technician level and the tradesman/craftsman level tended to focus mainly on safety aspect. (Table 4.26)

Table 4.26 Major training requirements

Table 4.20

Major Training Requirements

Job level Rank	Professional/Technologist	Technician	Tradesman/Craftsman
1	Project Management	Safety Awareness	
2	Safety Awareness	Safety/Risk Management	
3	Safety Audit/Assessment		
4	Safety/Risk Management	Use of Personal Protective Equipment	Occupational Safety and Health Ordinance
5	Relevant Trade's Ordinances and Regulations	Construction Site Safety for Workers	

Project Management related

Regulation

Safety

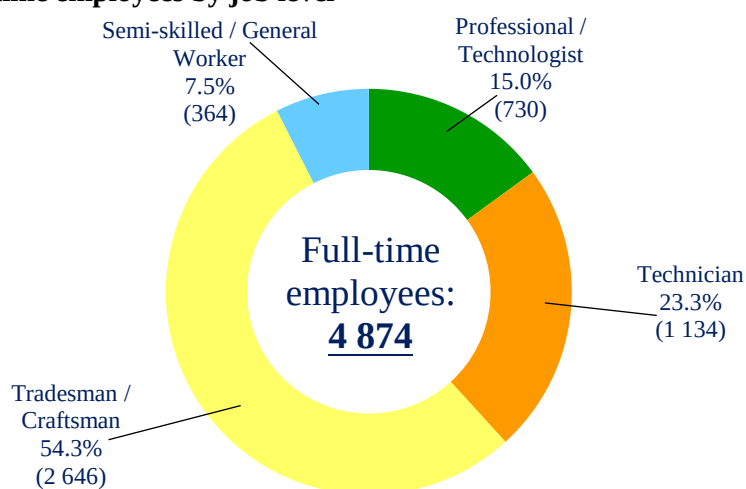
D. Aircraft Maintenance Sector

Full-time Employees

Number of Full-time Employees

4.46 Among the 4 874 full-time employees in the aircraft maintenance sector, over half were employed at the tradesman/craftsman level (2 646 full-time employees or 54.3%), followed by the technician level (1 134 full-time employees or 23.3%) and the professional/technologist level (730 full-time employees or 15.0%). (Chart 4.13)

Chart 4.13 Full-time employees by job level



Prominent Principal Jobs

4.47 As shown in Table 4.27, the most prominent principal job with most employees in the aircraft maintenance sector was “Aircraft Maintenance Mechanic” (2 646 full-time employees), followed by “Aircraft Maintenance Engineer” (700 full-time employees), “Aircraft Maintenance Technician” (576 full-time employees) and “Supervisor” (518 full-time employees). (Table 4.27)

Table 4.27 Prominent principal jobs

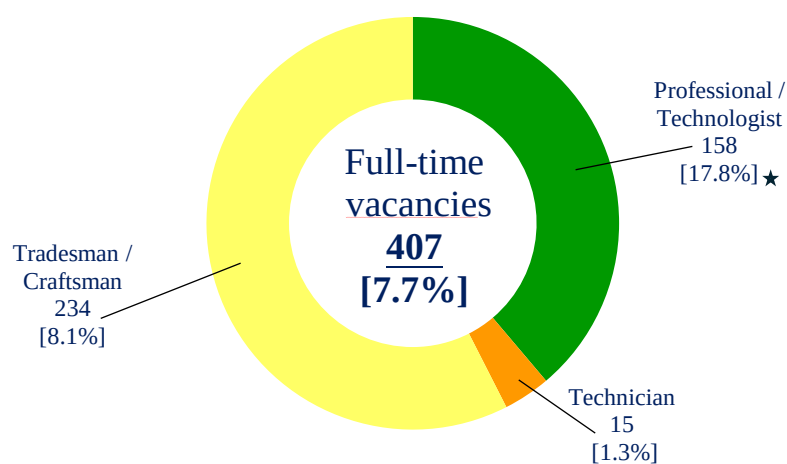
Job level	Principal job	No. of full-time employees	% of total number of full-time employees
Professional / Technologist	◆ Aircraft Maintenance Engineer	700	14.4%
	◆ Safety Officer	15	0.3%
	◆ Building Services Engineer	11	0.2%
Technician	◆ Aircraft Maintenance Technician	576	11.8%
	◆ Supervisor	518	10.6%
	◆ Safety Supervisor	30	0.6%
Tradesman / Craftsman	◆ Aircraft Maintenance Mechanic	2 646	54.3%

Full-time Vacancies

Number of Full-time Vacancies

4.48 As at 1 September 2025, a total of 407 full-time vacancies were reported in the aircraft maintenance sector, representing a vacancy rate of 7.7%. Most of the full-time vacancies were recorded at the tradesman/craftsman level (234 full-time vacancies) and the professional/technologist level (158 full-time vacancies). (Chart 4.14)

Chart 4.14 Full-time vacancies by job level



Notes:

- (1) Figures in [] brackets indicate the **Vacancy rate** = $\frac{\text{No. of full-time vacancies}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$
- (2) Figures marked with the symbol “★” refer to relatively higher vacancy rates than the overall rate.
- (3) No full-time vacancies for semi-skilled/general worker

Prominent Vacancies

4.49 As shown in Table 4.28, the most prominent vacancies with most employees in the aircraft maintenance sector was “Aircraft Maintenance Mechanic” (234 full-time vacancies) and “Aircraft Maintenance Engineer” (158 full-time vacancies). (Table 4.28)

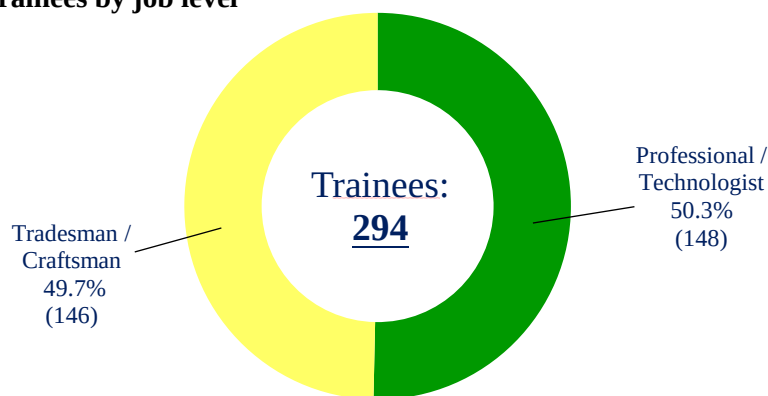
Table 4.28 Prominent vacancies

Job level	Principal job	No. of full-time vacancies	% of total number of full-time vacancies
Professional / Technologist	◆ Aircraft Maintenance Engineer	158	38.8%
Technician	◆ Aircraft Maintenance Technician	15	3.7%
Tradesman / Craftsman	◆ Aircraft Maintenance Mechanic	234	57.5%

Trainees

4.50 As at 1 September 2025, a total of 294 trainees were employed in the aircraft maintenance sector, with 50.3% being employed at the professional/technologist level and 49.7% at the tradesman/craftsman level. (Chart 4.15)

Chart 4.15 Trainees by job level



Average Monthly Income

4.51 The average monthly income for full-time employees at the professional/technologist level in the aircraft maintenance sector is mainly in the range of \$60,001 or above (99.0%), followed by \$45,001 - \$60,000 for the technician level (97.9%), \$25,001 - \$35,000 for the tradesman/craftsman level (100.0%) and \$15,001 - \$18,000 for the semi-skilled/general worker level (100.0%). (Table 4.29)

Table 4.29 Average monthly income by job level

Job level	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below	No. of full-time employees
Professional/technologist	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	730
Technician	0.0%	97.9%	0.2%	1.9%	0.0%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	364

denotes prominent ranges of the monthly income in the respective job level.

Preferred Level of Education

4.52 All the full-time employees at the professional/technologist level in the aircraft maintenance sector were preferred to have a first degree or above qualification (100.0%). The majority of the full-time employees at the technician level were preferred to have a diploma/certificate qualification (80.5%), the tradesman/craftsman level were preferred to have a senior secondary qualification (100.0%) and the semi-skilled/general worker level were preferred to have a junior secondary qualification (99.4%). (Table 4.30)

Table 4.30 Preferred level of education by job level

Job level	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary	No. of full-time employees
Professional/technologist	100.0%	0.0%	0.0%	0.0%	0.0%	730
Technician	0.0%	19.5%	80.5%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	100.0%	0.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.6%	99.4%	364

denotes prominent ranges of the preferred level of education in the respective job level.

Preferred Years of Experience

4.53 The majority of the full-time employees at both the professional/technologist level and the technician level in the aircraft maintenance sector were preferred to have 6 years to less than 10 years of experience (90.8% and 77.7% respectively). The majority of the full-time employees at the tradesman/craftsman level were preferred to have no experience (87.0%) while all the full-time employees at the semi-skilled/general worker level were preferred to have less than 1 year of experience (100.0%). (Table 4.31)

Table 4.31 Preferred years of experience by job level

Job level	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience	No. of full-time employees
Professional/technologist	0.0%	90.8%	9.2%	0.0%	0.0%	0.0%	730
Technician	0.0%	77.7%	22.3%	0.0%	0.0%	0.0%	1 134
Tradesman/craftsman	0.0%	0.0%	0.0%	13.0%	0.0%	87.0%	2 646
Semi-skilled/general worker	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	364

denotes prominent ranges of the preferred years of experience in the respective job level.

Age Range of Full-time Employees

4.54 48.4% of full-time employees in the aircraft maintenance sector were aged 31 – 45 and 32.3% were aged 46 - 60. Relatively fewer were aged 30 or below (13.4%) and aged 61 or above (5.9%). (Table 4.32)

Table 4.32 Age range of full-time employees

	30 or below	31 – 45	46 – 60	61 or above	No. of full-time employees
Total	13.4%	48.4%	32.3%	5.9%	4 874

Note : Percentages are calculated on the basis of the total number of full-time employees

Average Retirement Age of Full-time Employees

4.55 The vast majority of the employers in the aircraft maintenance sector reported that the average retirement age of full-time employees was 60 (85.7%). When asking the trend of retirement age in the future, the retirement age remained unchanged. (Table 4.33)

Table 4.33 Average retirement age of full-time employees

	Less than 60	60	Over 60	Unclassified	No. of companies
Existing retirement age	0.0%	85.7%	14.3%	NA	13
Expected retirement age in the future	0.0%	85.7%	14.3%	0.0%	13

Note : Percentages are calculated on the basis of the total number of companies

Full-time Employees Left and Recruited

4.56 In the aircraft maintenance sector, employers reported that there were 398 full-time employees left their companies in the past 12 months. The turnover rate was 7.5%. Analysed by job level, the tradesman/craftsman level registered the largest number of full-time employees left (357 full-time employees) and the highest turnover rate (12.4%). (Table 4.34)

Table 4.34 Full-time employees left in the past 12 months and turnover rate by job level

Job level	Number of full-time employees left	Turnover rate*
Professional/technologist	29	3.3%
Technician	12	1.0%
Tradesman/craftsman	357	12.4%
Semi-skilled/general worker	0	0.0%
Total	398	7.5%

* Turnover rate = $\frac{\text{No. of full-time employees left in past 12 months}}{\text{No. of full-time employees} + \text{No. of full-time vacancies}}$

4.57 On the other hand, a total of 617 full-time employees were recruited in the past 12 months, with the majority being at the tradesman/craftsman level (470 new recruits), followed by the professional/technologist level (115 new recruits). In general, most of the new recruits were recruited from those with experience in aircraft maintenance engineering (71.8%) while 27.9% were recruited from fresh graduates of related discipline. (Table 4.35)

Table 4.35 Staff recruited in the past 12 months by job level

Job level	Experience in aircraft maintenance engineering	Graduates of 2024 and 2025 from aircraft maintenance engineering programmes	Total number of new recruits
Professional/technologist	77 (67.0%)	38 (33.0%)	115
Technician	32 (100.0%)	0 (0.0%)	32
Tradesman/craftsman	334 (71.1%)	134 (28.5%)	470
Semi-skilled/general worker	NA	NA	0
Total	443 (71.8%)	172 (27.9%)	617

Note : () As a percentage of total no. of new recruits in respective job levels

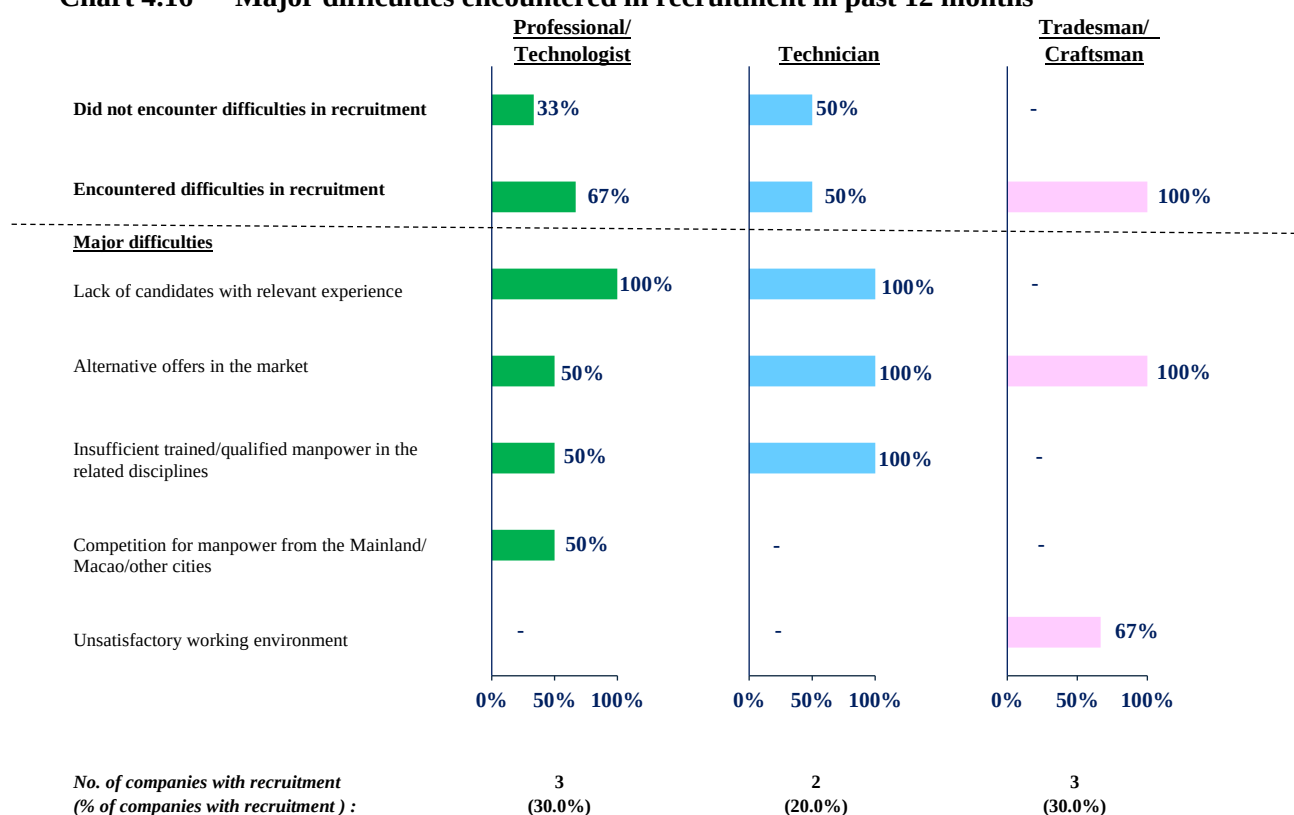
Recruitment Difficulties

4.58 In the aircraft maintenance sector, three companies (30.0%) engaged in recruitment exercise for full-time employees at the professional/technologist level and tradesman/craftsman levels in the past 12 months, while two companies (20.0%) engaged in recruitment exercise for full-time employees at the technician level. (Chart 4.16)

4.59 All the three companies encountered recruitment difficulties in recruiting full-time employees at the tradesman/craftsman level. Two companies encountered recruitment difficulties in recruiting full-time employees at the professional/technologist level while one company encountered recruitment difficulties in recruiting full-time employees at the technician level. (Chart 4.16)

4.60 The recruitment difficulties encountered when recruiting full-time employees at the professional/technologist level and at the technician level were mainly “lack of candidates with relevant experience”, “alternative offers in the market” and “insufficient trained/qualified manpower in the related disciplines”. The difficulties encountered for recruiting full-time employees at the tradesman/craftsman level were mainly “alternative offers in the market” and “unsatisfactory working environment”. (Chart 4.16)

Chart 4.16 Major difficulties encountered in recruitment in past 12 months



Notes: (1) Percentages of difficulties in recruitment are calculated on the basis of companies having the recruitment difficulties in particular job level.

(2) Respondents are allowed to select more than one difficulty.

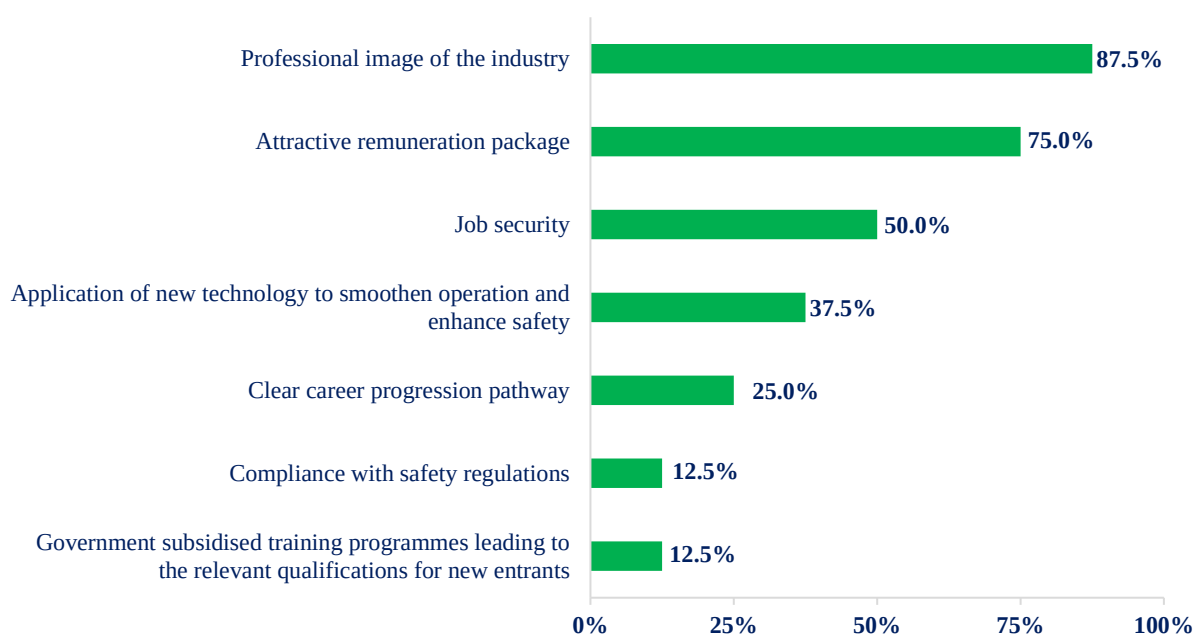
(3) Only major difficulties with larger percentage of mentions are shown above.

(4) The findings should be interpreted with caution due to the small number of sample observation.

Factors Useful to Attract New Entrants to the Industry

4.61 Employers were asked to indicate the factors that are useful to attract new entrants to the industry. “Professional image of the industry” (87.5%), “attractive remuneration package” (75.0%) and “job security” (50.0%) were the top three factors considered useful to attract new entrants to the industry, followed by “application of new technology to smoothen operation and enhance safety” (37.5%) and “clear career progression pathway” (25.0%). (Chart 4.17)

Chart 4.17 Factors useful to attract new entrants to the industry



Notes: 1) Percentage are calculated on the basis of total number of companies.

(2) Respondents are allowed to select top three factors.

Employers' Views on Business Volume in the Next 12 Months

4.62 In the survey, employers were asked about their views on the expected change in business volume of their companies in the next 12 months. 57.1% of the companies expected the business volume to remain stable. The rest 42.9% said it was uncertain. (Table 4.36)

Table 4.36 Views on business volume in the next 12 months

	Better	Stable	Worsen	Uncertain	No. of companies
Total	0.0%	57.1%	0.0%	42.9%	13

Note : Percentages are calculated on the basis of the total number of companies

Expected Change in Number of Full-time Employees in the Next 12 Months

4.63 When asked to indicate the expected change in the number of full-time employees of their companies in the next 12 months, 75.0% expected the number of full-time employees to remain the same. 25.0% expected an increase in the number of full-time employees. (Table 4.37)

Table 4.37 Views on number of full-time employees in the next 12 months

	Increase	Same	Decrease	No. of companies
Total	25.0%	75.0%	0.0%	13

Note : Percentages are calculated on the basis of the total number of companies

Training Requirements

4.64 In the aircraft maintenance sector, the training requirements for full-time employees at all job levels tended to focus on “Safety Awareness”, “Safety Audit/Assessment” and “Safety/Risk Management” of safety aspect, and “Occupational Safety and Health Ordinance” of regulations aspect. Besides, “Risk and Crisis Management” of project management related aspect was another training requirement for full-time employees at the professional/technologist level while “Use of Personal Protective Equipment” and “Construction Site Safety for Workers” of safety aspect, “Workflow Digitalisation and Use of Digital Tools” of technology applications aspect, and “English Writing, Reading and Reporting” of soft skills aspect were the common training requirements for full-time employees at the technician level and the tradesman/craftsman level. (Table 4.38)

Table 4.38 Major training requirements

Common training areas across job levels: • Safety Awareness • Safety Audit/Assessment • Safety/Risk Management • Occupational Safety and Health Ordinance		
Professional/Technologist	Technician	Tradesman/Craftsman
Risk and Crisis Management	• Use of Personal Protective Equipment • Construction Site Safety for Workers • Workflow Digitalisation and Use of Digital Tools • English Writing, Reading and Reporting	

5 Manpower Analysis

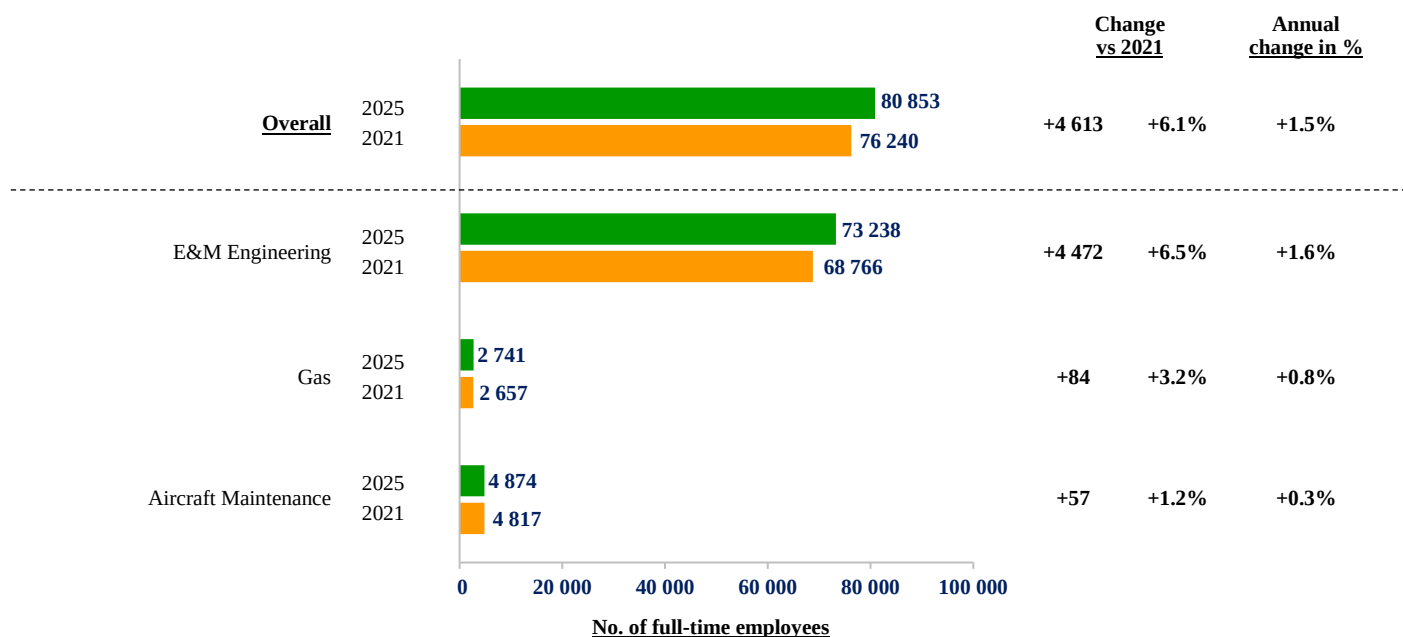
Manpower Changes between 2021 and 2025

A. Overview of the Electrical and Mechanical Services Industry

Change in Full-time Employees

5.1 In the electrical and mechanical services industry, the total number of full-time employees increased from 76 240 in 2021 to 80 853 in 2025 (+4 613 full-time employees; +6.1%). Analysed by sector, increase in manpower was mainly registered in the E&M engineering sector (+4 472 full-time employees; +6.5%). (Chart 5.1)

Chart 5.1 Change in full-time employees by sector



5.2 Analysed by job level, increases in manpower were mainly registered at the technician level (+2 457 full-time employees; +13.2%) and the professional/technologist level (+1 586 full-time employees; +13.8%). (Chart 5.2)

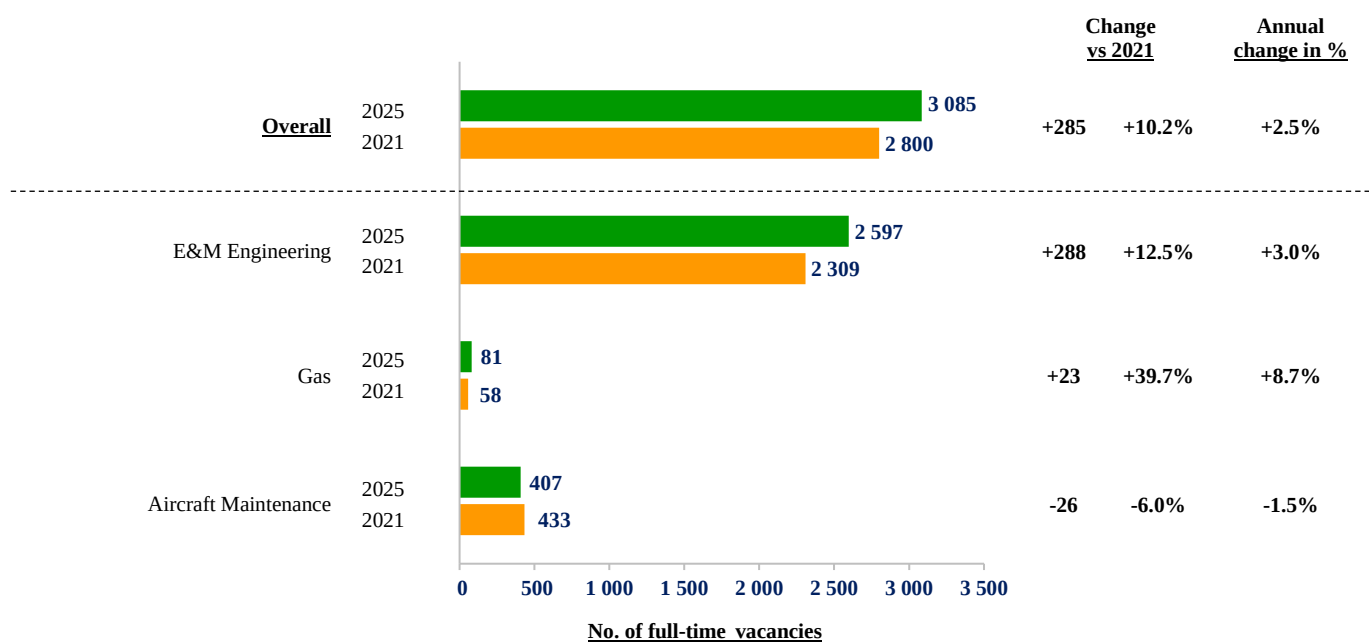
Chart 5.2 Change in full-time employees by job level



Change in Full-time Vacancies

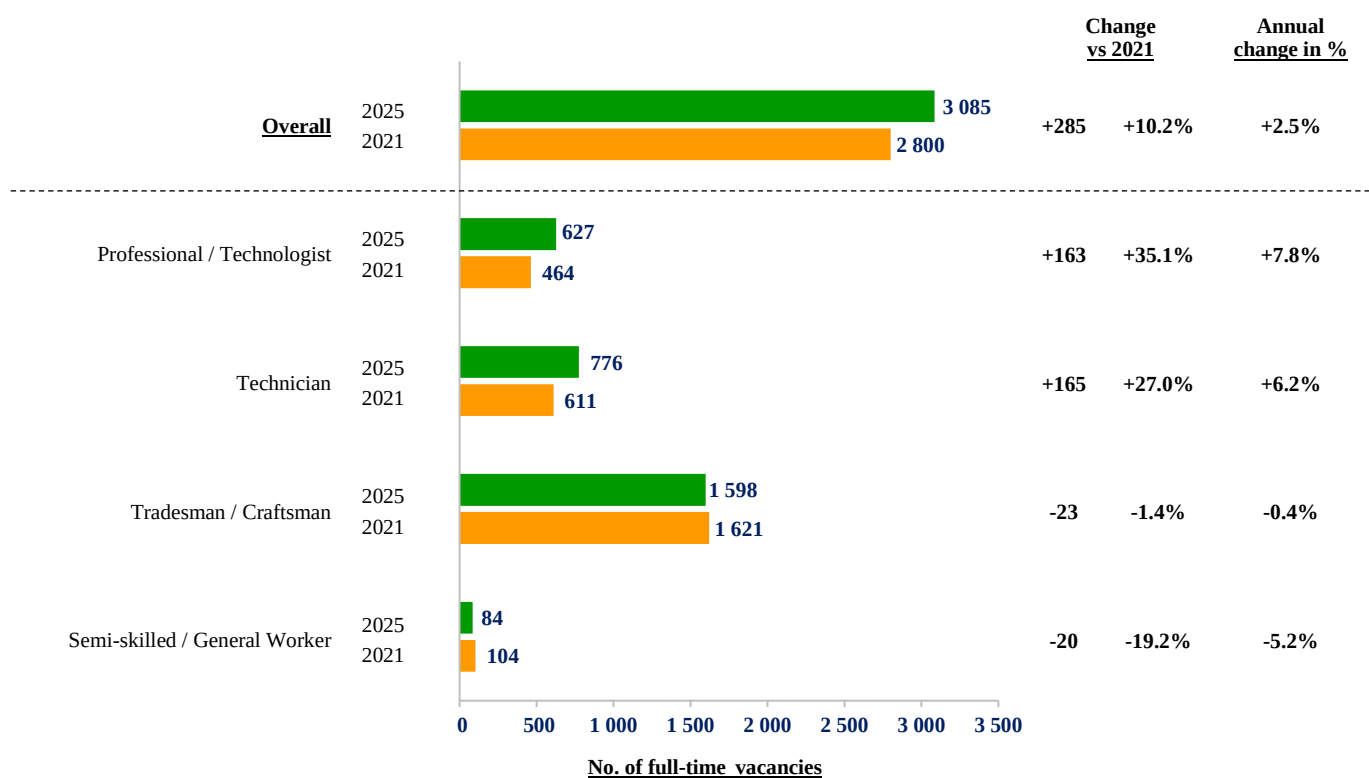
5.3 The total number of full-time vacancies has increased in 2025 (from 2 800 in 2021 to 3 085 in 2025; +285 vacancies). Analysed by sector, increases in full-time vacancies were mainly registered in the E&M engineering sector (from 2 309 to 2 597; +288 full-time vacancies). (Chart 5.3)

Chart 5.3 Change in full-time vacancies by sector



5.4 Analysed by job level, increases in full-time vacancies were recorded at the professional/technologist level (from 464 to 627; +163 full-time vacancies) and the technician level (from 611 to 776; +165 full-time vacancies). (Chart 5.4)

Chart 5.4 Change in full-time vacancies by job level



B. Electrical and Mechanical Engineering Sector

Change in Full-time Employees

5.5 The manpower of the E&M engineering sector exhibited an increase from 68 766 in 2021 to 73 238 in 2025 (+4 472 full-time employees; +6.5%), which is mainly attributed to the increase at the technician level (+2 761 full-time employees; +16.6%) and the professional/technologist level (+1 362 full-time employees; +13.1%). (Chart 5.5)

Chart 5.5 Change in full-time employees by job level



Changes in Average Monthly Income

5.6 Compared with the 2021 survey, a general increasing trend was observed among different job levels. (Table 5.1)

- Professional/technologist: shifted upward from \$25,001 - \$45,000 (57.6% in 2021) to \$35,001 - \$60,000 (61.7% in 2025);
- Technician: shifted upward from \$18,001 - \$35,000 (79.9% in 2021) to \$25,001 - \$45,000 (79.1% in 2025);
- Tradesman/craftsman: shifted upward from \$15,001 - \$25,000 (82.8% in 2021) to \$18,001 - \$35,000 (90.2% in 2025); and
- Semi-skilled/general worker: shifted upward from \$18,000 or below (89.0% in 2021) to \$15,001 - \$25,000 (80.9% in 2025).

Table 5.1 Average monthly income

Job level	Year	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below
Professional/technologist	2025	12.3%	28.7%	33.1%	26.0%	0.0%	0.0%	0.0%
	2021	16.2%	25.5%	24.0%	33.7%	0.7%	0.0%	0.0%
Technician	2025	0.0%	3.0%	27.1%	52.0%	17.7%	0.2%	0.0%
	2021	0.0%	1.2%	14.7%	36.4%	43.5%	3.8%	0.5%
Tradesman/craftsman	2025	0.0%	*	3.5%	27.1%	63.1%	5.4%	0.9%
	2021	0.0%	0.0%	0.1%	14.5%	59.3%	23.5%	2.6%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	2.7%	50.7%	30.2%	16.5%
	2021	0.0%	0.0%	0.0%	0.2%	10.8%	38.1%	50.9%

denotes prominent ranges of the monthly income in the respective job level.

Note: * < 0.05%

Changes in Preferred Level of Education

5.7 Compared with the 2021 survey, the preferred level of education varied among different job levels. (Table 5.2)

- Professional/technologist: the majority remained to prefer first degree or above qualification (100.0% in 2021 and 98.8% in 2025);
- Technician: the preference of diploma/certificate (70.5% in 2021) shifted upward to sub-degree qualification and diploma/certificate (98.8% in 2025);
- Tradesman/craftsman: the majority remained to prefer diploma/certificate and senior secondary qualification (82.9% in 2021 and 90.8% in 2025); and
- Semi-skilled/general worker: most remained to prefer junior secondary qualification (60.8% in 2021 and 64.8% in 2025).

Table 5.2 Preferred level of education

Job level	Year	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary
Professional/technologist	2025	98.8%	1.2%	0.0%	0.0%	0.0%
	2021	100.0%	0.0%	0.0%	0.0%	0.0%
Technician	2025	0.6%	48.2%	50.6%	0.6%	0.0%
	2021	3.3%	26.2%	70.5%	0.0%	0.0%
Tradesman/craftsman	2025	0.0%	0.3%	36.5%	54.3%	8.9%
	2021	0.0%	0.0%	33.9%	49.0%	17.1%
Semi-skilled/general worker	2025	0.0%	0.0%	0.7%	34.5%	64.8%
	2021	0.0%	0.0%	0.5%	38.7%	60.8%

 denotes prominent ranges of the preferred level of education in the respective job level.

Changes in Preferred Years of Experience

5.8 Compared with the 2021 survey, changes in the preferred years of experience varied among different job levels. (Table 5.3)

- Professional/technologist: the majority remained to prefer 6 years to less than 10 years of experience (71.4% in 2021 and 62.5% in 2025);
- Technician: the majority remained to prefer 3 years to less than 10 years of experience (88.9% in 2021 and 88.5% in 2025);
- Tradesman/craftsman: the majority remained to prefer 1 year to less than 6 years of experience (81.3% in 2021 and 77.6% in 2025); and
- Semi-skilled/general worker: the preference of no experience to less than 3 years of experience (93.1% in 2021) shifted to less than 1 year of experience (58.7% in 2025).

Table 5.3 Preferred years of experience

Job level	Year	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience
Professional/technologist	2025	6.7%	62.5%	30.1%	0.7%	0.0%	0.0%
	2021	8.8%	71.4%	19.2%	0.6%	0.0%	0.0%
Technician	2025	0.2%	40.2%	48.2%	10.7%	0.5%	0.1%
	2021	2.3%	21.0%	67.9%	8.5%	0.3%	0.0%
Tradesman/craftsman	2025	0.4%	0.3%	36.4%	41.2%	15.9%	5.7%
	2021	0.4%	0.3%	36.9%	44.3%	16.3%	1.7%
Semi-skilled/general worker	2025	0.4%	0.0%	4.6%	9.2%	58.7%	27.1%
	2021	0.5%	0.0%	6.3%	34.1%	26.6%	32.4%

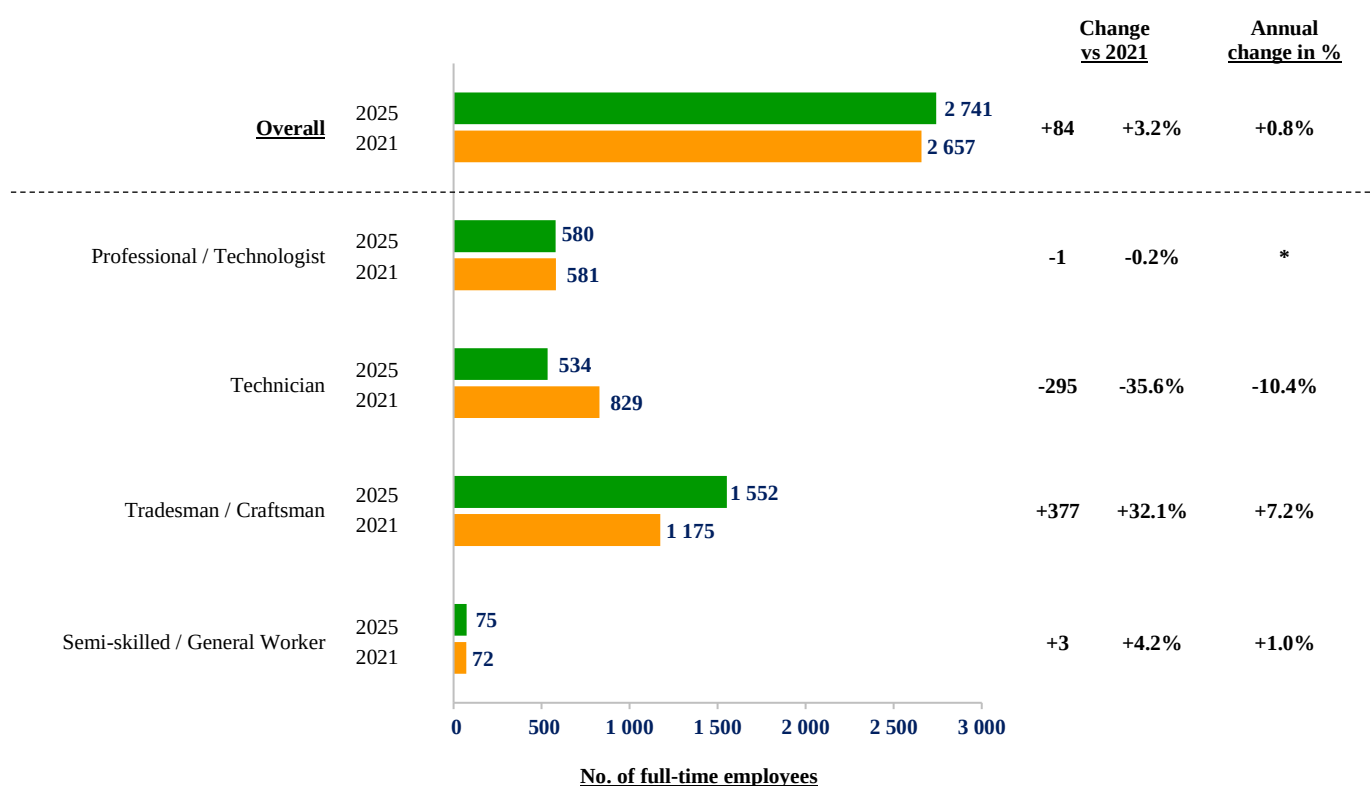
denotes prominent ranges of the preferred years of experience in the respective job level.

C. Gas Sector

Change in Full-time Employees

5.9 The manpower of the gas sector registered a slight increase from 2 657 in 2021 to 2 741 in 2025 (+84 full-time employees; +3.2%). Analysed by job level, an increase in manpower was recorded at the tradesman/craftsman level (+377 full-time employees; +32.1%) while a decrease in manpower was registered for the technician level (-295 full-time employees; -35.6%). (Chart 5.6)

Chart 5.6 Change in full-time employees by job level



Note: * < 0.05%

Changes in Average Monthly Income

5.10 Compared with the 2021 survey, the changes in the average monthly income varied among different job levels. (Table 5.4)

- Professional/technologist: the vast majority remained in the range of \$35,001 - \$45,000 (93.1% in 2021 and 93.9% in 2025);
- Technician: shifted upward from \$18,001 - \$35,000 (84.8% in 2021) to \$25,001 - \$45,000 (92.7% in 2025);
- Tradesman/craftsman: shifted upward from \$15,001 - \$25,000 (85.0% in 2021) to \$18,001 - \$25,000 (80.2% in 2025); and
- Semi-skilled/general worker: the vast majority remained in the range of \$15,001 - \$18,000 (62.1% in 2021 and 77.3% in 2025).
-

Table 5.4 Average monthly income

Job level	Year	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below
Professional/technologist	2025	0.0%	0.0%	93.9%	6.1%	0.0%	0.0%	0.0%
	2021	0.0%	3.0%	93.1%	3.9%	0.0%	0.0%	0.0%
Technician	2025	0.0%	0.0%	25.6%	67.0%	7.3%	0.0%	0.0%
	2021	0.0%	0.0%	14.5%	17.3%	67.5%	0.7%	0.0%
Tradesman/craftsman	2025	0.0%	0.0%	0.0%	2.5%	80.2%	16.0%	1.3%
	2021	0.0%	0.0%	0.0%	3.2%	49.0%	36.0%	11.8%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	0.0%	11.4%	77.3%	11.4%
	2021	0.0%	0.0%	0.0%	0.0%	4.5%	62.1%	33.3%

denotes prominent ranges of the monthly income in the respective job level.

Changes in Preferred Level of Education

5.11 Compared with the 2021 survey, the preferred level of education varied among different job levels. (Table 5.5)

- Professional/technologist: shifted downward from first degree or above qualification (100.0% in 2021) to sub-degree qualification (86.3% in 2025);
- Technician: the preference of diploma/certificate (91.1% in 2021) shifted upward to sub-degree qualification and diploma/certificate (86.3% in 2025);
- Tradesman/craftsman: shifted upward from senior secondary qualification (63.9% in 2021) to diploma/certificate (65.5% in 2025); and
- Semi-skilled/general worker: most remained to prefer junior secondary qualification (75.7% in 2021 and 73.3% in 2025).

Table 5.5 Preferred level of education

Job level	Year	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary
Professional/technologist	2025	13.7%	86.3%	0.0%	0.0%	0.0%
	2021	100.0%	0.0%	0.0%	0.0%	0.0%
Technician	2025	0.0%	25.2%	61.1%	13.7%	0.0%
	2021	0.0%	8.9%	91.1%	0.0%	0.0%
Tradesman/craftsman	2025	0.0%	0.0%	65.5%	27.5%	7.0%
	2021	0.0%	0.0%	24.3%	63.9%	11.7%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	26.7%	73.3%
	2021	0.0%	0.0%	0.0%	24.3%	75.7%

denotes prominent ranges of the preferred level of education in the respective job level.

Changes in Preferred Years of Experience

5.12 Compared with the 2021 survey, changes in the preferred years of experience varied among different job levels. (Table 5.6)

- Professional/technologist: the vast majority remained to prefer 6 years to less than 10 years of experience (98.9% in 2021 and 96.3% in 2025);
- Technician: shifted downward from 3 years to less than 6 years of experience (93.1% in 2021) to 1 year to less than 3 years of experience (71.0% in 2025);
- Tradesman/craftsman: the majority remained to prefer 1 year to less than 3 years of experience (58.0% in 2021 and 68.8% in 2025); and
- Semi-skilled/general worker: shifted downward from 1 year to less than 3 years of experience (67.1% in 2021) to no experience (73.3% in 2025).

Table 5.6 Preferred years of experience

Job level	Year	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience
Professional/technologist	2025	0.2%	96.3%	3.5%	0.0%	0.0%	0.0%
	2021	0.0%	98.9%	1.1%	0.0%	0.0%	0.0%
Technician	2025	0.4%	4.4%	24.3%	71.0%	0.0%	0.0%
	2021	0.1%	2.7%	93.1%	4.0%	0.0%	0.0%
Tradesman/craftsman	2025	0.0%	0.1%	6.9%	68.8%	10.8%	13.4%
	2021	0.3%	0.0%	10.2%	58.0%	22.1%	9.4%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	16.0%	10.7%	73.3%
	2021	0.0%	0.0%	0.0%	67.1%	15.7%	17.1%

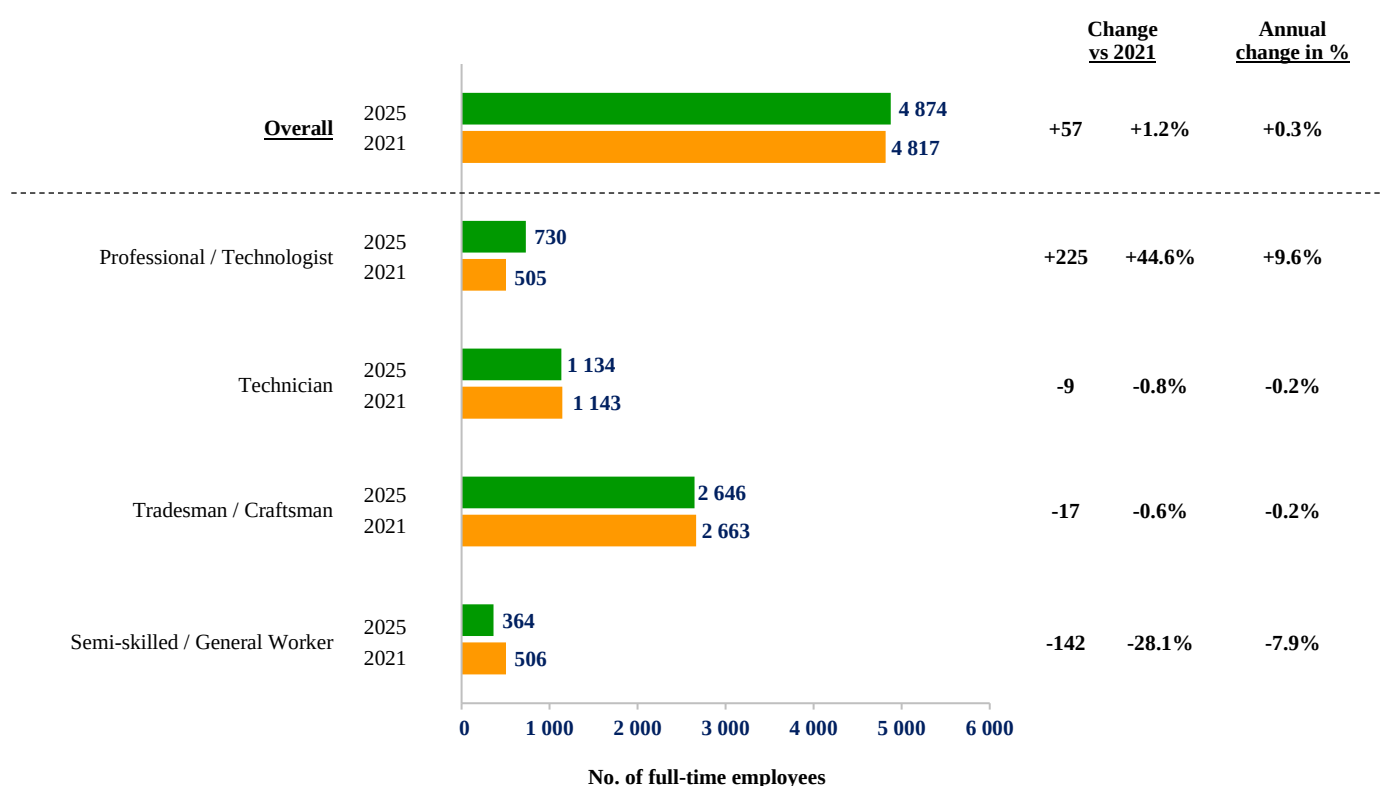
 denotes prominent ranges of the preferred years of experience in the respective job level.

D. Aircraft Maintenance Sector

Change in Full-time Employees

5.13 The manpower of the aircraft maintenance sector registered a slight increase from 4 817 in 2021 to 4 874 in 2025 (+57 full-time employees; +1.2%). Analysed by job level, an increase in manpower was recorded at the professional/technologist level (+225 full-time employees; +44.6%) while a decrease in manpower was registered for the semi-skilled/general worker level (-142 full-time employees; -28.1%). (Chart 5.7)

Chart 5.7 Change in full-time employees by job level



Changes in Average Monthly Income

5.14 Compared with the 2021 survey, the changes in the average monthly income varied among different job levels. (Table 5.7)

- Professional/technologist: shifted upward from \$35,001 - \$45,000 (99.0% in 2021) to \$60,000 or above (99.0% in 2025);
- Technician: shifted upward from \$25,001 - \$35,000 (95.5% in 2021) to \$45,001 - \$60,000 (97.9% in 2025);
- Tradesman/craftsman: shifted upward from \$18,001 - \$25,000 (88.6% in 2021) to \$25,001 - \$35,000 (100.0% in 2025); and
- Semi-skilled/general worker: the majority remained in the range of \$15,001 - \$18,000 (94.1% in 2021 and 100.0% in 2025).
-

Table 5.7 Average monthly income

Job level	Year	\$60,001 or above	\$45,001 - \$60,000	\$35,001 - \$45,000	\$25,001 - \$35,000	\$18,001 - \$25,000	\$15,001 - \$18,000	\$15,000 or below
Professional/technologist	2025	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	2021	0.0%	0.6%	99.0%	0.4%	0.0%	0.0%	0.0%
Technician	2025	0.0%	97.9%	0.2%	1.9%	0.0%	0.0%	0.0%
	2021	0.0%	0.0%	0.0%	95.5%	0.6%	3.9%	0.0%
Tradesman/craftsman	2025	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
	2021	0.0%	0.0%	0.0%	0.1%	88.6%	11.3%	0.0%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	2021	0.0%	0.0%	0.0%	0.0%	0.0%	94.1%	5.9%

denotes prominent ranges of the monthly income in the respective job level.

Changes in Preferred Level of Education

5.15 Compared with the 2021 survey, the preferred level of education varied among different job levels. (Table 5.8)

- Professional/technologist: virtually all remained to prefer first degree or above qualification (100.0% in 2021 and 100.0% in 2025);
- Technician: shifted downward from sub-degree qualification (80.7% in 2021) to diploma/certificate (80.5% in 2025);
- Tradesman/craftsman: virtually all remained to prefer senior secondary qualification (99.9% in 2021 and 100.0% in 2025); and
- Semi-skilled/general worker: virtually all remained to prefer junior secondary qualification (96.0% in 2021 and 99.4% in 2025).

Table 5.8 Preferred level of education

Job level	Year	First degree or above	Sub-degree	Diploma/certificate	Senior Secondary	Junior Secondary
Professional/technologist	2025	100.0%	0.0%	0.0%	0.0%	0.0%
	2021	100.0%	0.0%	0.0%	0.0%	0.0%
Technician	2025	0.0%	19.5%	80.5%	0.0%	0.0%
	2021	0.0%	80.7%	19.3%	0.0%	0.0%
Tradesman/craftsman	2025	0.0%	0.0%	0.0%	100.0%	0.0%
	2021	0.0%	0.1%	0.0%	99.9%	0.0%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	0.6%	99.4%
	2021	0.0%	0.0%	0.0%	4.0%	96.0%

denotes prominent ranges of the preferred level of education in the respective job level.

Changes in Preferred Years of Experience

5.16 Compared with the 2021 survey, changes in the preferred years of experience varied among different job levels. (Table 5.9)

- Professional/technologist: the vast majority remained to prefer 6 years to less than 10 years of experience (98.4% in 2021 and 90.8% in 2025);
- Technician: shifted upward from 3 years to less than 6 years of experience (99.1% in 2021) to 6 years to less than 10 years of experience of experience (77.7% in 2025);
- Tradesman/craftsman: shifted downward from 1 year to less than 3 years of experience (100.0% in 2021) to no experience (87.0% in 2025); and
- Semi-skilled/general worker: the majority remained to prefer less than 1 year of experience (96.4% in 2021 and 100.0% in 2025).

Table 5.9 Preferred years of experience

Job level	Year	10 years or more	6 years to less than 10 years	3 years to less than 6 years	1 year to less than 3 years	Less than 1 year	No experience
Professional/technologist	2025	0.0%	90.8%	9.2%	0.0%	0.0%	0.0%
	2021	0.0%	98.4%	1.6%	0.0%	0.0%	0.0%
Technician	2025	0.0%	77.7%	22.3%	0.0%	0.0%	0.0%
	2021	0.0%	0.0%	99.1%	0.9%	0.0%	0.0%
Tradesman/craftsman	2025	0.0%	0.0%	0.0%	13.0%	0.0%	87.0%
	2021	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Semi-skilled/general worker	2025	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	2021	0.0%	0.0%	3.6%	0.0%	96.4%	0.0%

 denotes prominent ranges of the preferred years of experience in the respective job level.

Business Outlook

Electrical and Mechanical Engineering Sector

5.17 Hong Kong has completed a series of mega projects in recent years, including the Kai Tak Sports Park, the Three-Runway System, and various new hospital developments. These projects have driven manpower demand in the electrical and mechanical (E&M) services industry in the past decade. Following the completion of these landmark developments, the E&M engineering sector is shifting its focus to the new development projects of the Northern Metropolis and associated railway extensions. The industry is experiencing a transition in its manpower landscape.

5.18 At the same time, private developers have scaled back land acquisitions, resulting in a significant reduction in the construction of new residential buildings recent years. Nevertheless, the Government strives to maintain steady growth in capital works expenditure and continues to invest in land formation, infrastructure development, and the construction of community facilities. Key initiatives include the Northern Metropolis development, the Northern Link Main Line, and the Northern Metropolis Highway (San Tin Section). Redevelopment projects such as Choi Hung Estate, Sai Wan Estate and Ma Tau Wai Estate are also being taken forward⁵. As announced in the 2026–27 Budget⁶, the average annual capital works expenditure is estimated at approximately \$128 billion and is expected to remain at a similar level over the next four years.

5.19 According to the Report on the Quarterly Survey of Construction Output (First Quarter 2026)⁷, the gross value of construction works performed by main contractors increased by 2.9% year on year in the first quarter of 2026, largely driven by a 17.8% increase in public sector construction sites. In addition, the gross value of works in relation to special trades, such as electrical equipment, ventilation, gas, water-fitting installation and maintenance, and carpentry, etc., increased by 3.1% at locations other than sites. Furthermore, the latest Construction Expenditure Forecast⁸ by the Construction Industry Council anticipates a steady increase in E&M works expenditure from 2025/26 to 2030/31. As more development projects commence and progress at an accelerated pace, demand for skilled and experienced E&M professionals and technical personnel is expected to increase accordingly.

⁵ The Chief Executive's 2025 Policy Address (17 September 2025) available at <https://www.policyaddress.gov.hk/2025/en/index.html>

⁶ The 2026–27 Budget (27 February 2026) available at <https://www.budget.gov.hk/2026/chi/index.html>

⁷ Report on the Quarterly Survey of Construction Output (11 June 2026) available at <https://www.censtatd.gov.hk/en/EIndexbySubject.html?scode=330&pcode=B1090002>

⁸ Construction Expenditure Forecast (2025/26 to 2030/31) (April 2026) available at <https://www.cic.hk/en/research-and-data/expenditure-forecast?type=forecast-figures>

Gas Sector

5.20 Overall gas consumption in Hong Kong remained stable in 2024 and 2025. Despite increased outbound travel of residents to Mainland, the Government's active promotion of tourism and the mega-event economy have boosted visitor numbers, thereby stimulating gas consumption in tourism-related industries such as hotels, theme parks, and commercial laundries. Looking ahead, the development of the Northern Metropolis is expected to accommodate a growing population, creating new potential demand for gas.

5.21 In certain remote areas or housing estates not connected to the town gas network, residents have traditionally relied on liquefied petroleum (LP) gas for energy. Some estates even use centralised LP gas tanks to supply energy. However, consumers are increasingly switching to electricity due to convenience and cost considerations, while redevelopment projects have expanded access to town gas networks. This shift is prompting LP gas providers to reassess their business strategies.

Aircraft Maintenance Sector

5.22 The aircraft maintenance sector has shown strong post-pandemic recovery since 2024. Increased passenger and cargo traffic has driven higher demand for maintenance, repair, and overhaul (MRO) services. The commissioning of the Three-Runway System has provided the expanded capacity to further strengthened Hong Kong's position as a major international aviation hub, creating new growth opportunities while also increasing manpower and operational requirements for the sector. The Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China⁹ supports Hong Kong in consolidating and enhancing its status as an international aviation hub. As announced in the First Five-Year Plan for Economic and Social Development of the Hong Kong Special Administrative Region (2026-2030)¹⁰ and the Chief Executive's 2026 Policy Address¹¹, Hong Kong will deeply engage in the development of the national aviation network and continue to launch new routes. Cooperation with the airport cluster in the Guangdong-Hong Kong-Macao Greater Bay Area will be strengthened in terms of operational coordination, airspace optimisation and intermodal arrangement to enhance the overall operational efficiency and service quality.

⁹ Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China (13 March 2026) available at https://www.cmab.gov.hk/tc/issues/15th_5yrsplan.htm

¹⁰ The First Five-Year Plan for Economic and Social Development of the Hong Kong Special Administrative Region (2026-2030) (16 September 2026) available at <https://www.hk5yplan.gov.hk/2026-2030/en/index.html>

¹¹ The Chief Executive's 2026 Policy Address (16 September 2026) available at <https://www.policyaddress.gov.hk/2026/en/index.html>

5.23 As at May 2026, the airport recorded over 402,000 flight movements in the past 12 months, representing year-on-year growth of 6.1%, while cargo throughput increased by 3.0% year on year to 5.14 million tonnes¹². Continued growth in air traffic and cargo activities is expected to increase demand for MRO services, as airlines and operators require more frequent and comprehensive servicing for their fleets. The aircraft maintenance sector is scaling up its operations by recruiting more skilled technicians and engineers to meet this growing demand.

The Northern Metropolis

5.24 The 2026-27 Budget reaffirmed the pivotal role of the Northern Metropolis in driving Hong Kong's economic transformation and enhancing its competitiveness. The Government is pressing ahead with the development of the Northern Metropolis. Currently, four New Development Areas (NDAs), including Kwu Tung North/Fanling North, Hung Shui Kiu/Ha Tsuen, Yuen Long South, and the San Tin Technopole (including the Hong Kong–Shenzhen Innovation and Technology Park in the Loop), are under construction. The first batch of site formation works for the innovation and technology land in San Tin Technopole and the university land in Hung Shui Kiu is expected to be completed in 2026. Preliminary development proposals for four other NDAs, including New Territories North New Town, Ngau Tam Mei, Lau Fau Shan and Ma Tso Lung, were announced in 2024, fully presenting the landscape of the Northern Metropolis. Given the scale and phased development of these NDAs, sustained demand for experienced E&M professionals and skilled workers is expected over the coming decade.

5.25 The Transport Strategy Blueprint¹³ announced in 2026 outlines strategies and specific recommendations for the sustainable development of Hong Kong's transport system, including a series of local and cross-boundary railway projects, major road networks, and the Smart and Green Mass Transit System (SGMTS). The Northern Link Main Line and Spur Line are taken forward, with the target of commissioning the projects in 2034 or earlier. The Government also targets to invite tenders in 2027 for the detailed design and construction works of the Hong Kong Section of the Hong Kong–Shenzhen Western Rail Link (Hung Shui Kiu–Qianhai). In addition, tender invitation for the SGMTS project in the Hung Shui Kiu/Ha Tsuen New Development Area is expected in 2026. Collectively, these measures will enhance the connectivity between various NDAs of the Northern Metropolis, the Mainland, and other parts of Hong Kong, while improving overall traffic conditions in the Northern Metropolis.

¹² Provisional Civil International Air Traffic Statistics at HKIA (15 June 2026) available at https://www.hongkongairport.com/en/media-centre/press-release/2026/pr_1874

¹³ The Transport Strategy Blueprint (6 February 2026) available at [https://www.tlb.gov.hk/doc/Transport%20Strategy%20Blueprint%20\(English\).pdf](https://www.tlb.gov.hk/doc/Transport%20Strategy%20Blueprint%20(English).pdf)

5.26 A District Cooling System (DCS) is a centralized and energy-efficient air-conditioning system that can reduce electricity consumption by up to 35% compared with conventional air-cooled central air-conditioning systems installed separately in individual buildings. Following the commissioning of the first DCS at the Kai Tak Development, DCS projects in the Kwu Tung North New Development Area, Tung Chung New Town Extension (East) and Hung Shui Kiu/Ha Tsuen New Development Area are under construction. These systems will supply chilled water to commercial buildings, government facilities, schools, community facilities and MTR stations within the respective development areas.

Railway and Infrastructure

5.27 To address growing transportation needs, Hong Kong's railway network is being modernised and expanded. New projects such as Kwu Tung Station, Tung Chung Line Extension, Tuen Mun South Extension, Oyster Bay Station, and Hung Shui Kiu Station are also scheduled for completion from 2027 onwards.

5.28 Apart from the new railway and SGMTS projects to be developed in the Northern Metropolis, the SGMTS is being developed in other districts. The railway scheme of the SGMTS in Kai Tak has been approved, with commissioning targeted for 2031. For the SGMTS in East Kowloon, the Government aims to award the contract in 2027, with commissioning planned for 2033.

5.29 The introduction of Hong Kong Railway Standards ¹⁴ in 2026 provides comprehensive technical references and guidelines across the full lifecycle of railway projects. The Standards enable new railway projects to make use of a broader selection of innovative technologies, materials, equipment and systems, etc, facilitating the development and optimisation of work processes by the industry. At the same time, the existing railway network is being upgraded through the renewal of ageing infrastructure and the integration of advanced technologies such as digitalisation and automation. E&M expertise plays a key role in the adoption of smart technologies to optimise train operations, enable predictive maintenance and enhance the overall passenger experience.

Advanced Technology in the Industry

Building Information Modelling

5.30 The E&M services industry is undergoing a profound transformation through the adoption of advanced technologies. Building Information Modelling (BIM) has become

¹⁴ Hong Kong Railway Standard (2026 Edition) (February 2026) available at https://www.hyd.gov.hk/en/technical_references/technical_document/railway_standards/HKRS_ENG.pdf

pivotal throughout the project lifecycle, enhancing design coordination, collaboration and visualisation. As BIM adoption increases, demand is growing for E&M professionals who possess both E&M technical expertise and BIM capabilities. To address this skills gap, the industry is actively developing professionals equipped with dual expertise in E&M and BIM. The Government has also promoted wider BIM adoption and, since 2025, has required the mandatory use of BIM for capital works projects with project estimates exceeding \$30 million.

Modular Integrated Construction

5.31 The adoption of Modular Integrated Construction (MiC) has accelerated project timelines, particularly in public housing projects with standardised designs, and is increasingly embraced by the private sector. To promote wider adoption in private developments, the Buildings Department introduced streamlined measures and guidelines in 2026 to help the industry comply with requirements under the Buildings Ordinance.

Multi-trade integrated Mechanical, Electrical, and Plumbing

5.32 The Multi-trade integrated Mechanical, Electrical, and Plumbing (MiMEP) is an advanced method that integrates building services through off-site prefabrication and modular installation, enhancing efficiency, quality, and safety while reducing project time and environmental impact. To support the adoption of this high-productivity construction method, the Electrical and Mechanical Services Department has updated the relevant guidance notes on the compliance of these methods with the Electricity Ordinance, Gas Safety Ordinance and Energy Efficiency (Labelling of Products) Ordinance. The wider adoption of MiMEP is increasing the demand for E&M practitioners with the expertise required for the on-site installation and quality assurance of MiMEP systems.

Emerging Digital and Smart Technologies

5.33 Beyond new construction methods, the industry is actively adopting emerging technologies for a wide range of applications, including Artificial Intelligence (AI)-driven analytics, Internet of Things (IoT)-enabled monitoring and data collection, RFID tracking, and robotic and drone inspections, etc. These innovations are transforming the E&M services industry by enabling data-driven decision-making and process automation, while enhancing accuracy, reliability, safety and operational efficiency. As a result, demand is rising for professionals with expertise in both E&M and I&T fields, such as AI, big data, IoT, robotics, drone operations, computer science and electronics, to support the development and deployment of these advanced technologies.

Policies and Measures

Electric Vehicles

5.34 The Updated Version of the Hong Kong Roadmap on Popularisation of Electric Vehicles¹⁵, announced in 2026, outlines strategies to promote Electric Vehicles (EV) popularisation. The Government will continue to support the green transition of private cars through charging network expansion, maintenance training and battery recycling. Electric private cars are projected to exceed 290,000 by 2030, while the electrification of commercial vehicles remains at an early stage of technological and market development. Expanding the EV charging network remains a key priority. By mid-2027, around 200,000 private and public parking spaces equipped with charging facilities are expected. A public charging network with fast chargers as the backbone will be built, aiming to increase the number of fast chargers to 4,000 by 2030. As the installation and maintenance of EV charging systems require specialised knowledge of electrical systems, sustained demand for skilled professionals is expected. The Government has also collaborated with tertiary institutions to promote the continuing education and training of EV technicians and maintenance personnel.

Hydrogen Vehicle

5.35 The Government is actively promoting hydrogen energy initiatives, including pilot trials of hydrogen-powered vehicles. While hydrogen has strong potential for heavy-duty transport applications due to its rapid refuelling capability, its widespread adoption remains constrained by high costs and reliance on policy support. The development of hydrogen energy will depend largely on continued government investment and its suitability for specific applications. At present, EVs remain more mature in terms of infrastructure and technology. Nevertheless, hydrogen-powered vehicles are expected to play a growing role in future transport, creating demand for specialised technical expertise. A major gas supplier in Hong Kong is also actively developing green hydrogen projects, including the launch of the first hydrogen-powered EV charging system for a commercial building.

Vocational Professionals Admission Scheme (VPAS)

5.36 The Government promulgated the VPAS in the Chief Executive's 2023 Policy Address, enabling non-local students enrolled in VPAS eligible VTC full-time Higher Diploma (HD) programmes to apply upon graduation to remain in Hong Kong for employment in the trades relevant to their programmes of study, leveraging their acquired expertise to contribute

¹⁵ Hong Kong Roadmap on Popularisation of Electric Vehicles (12 February 2026) available at https://www.eeb.gov.hk/sites/default/files/pdf/Updated_EV_Roadmap_eng.pdf

to crucial industries. In the 2024/25 academic year, the VPAS covers 27 eligible programmes in 5 trades, including the E&M Services trade, and the Aviation, Transport and Logistics trade. Starting from the 2026/27 academic year, VPAS will cover 13 trades and maintain 34 VPAS eligible programmes.

Importation of Labour

5.37 To address the ongoing manpower shortage in the construction sector, the Government launched the Labour Importation Scheme for the Construction Sector (the Scheme) in 2023. This initiative allowed contractors involved in public sector construction projects valued at HK\$1 billion or more to apply for the importation of skilled and semi-skilled workers, as well as technicians. As of September 2025, approximately 2,600 valid quotas have been approved under the Scheme for the trades including refrigeration / air-conditioning / ventilation mechanic (including water system and air system), electrician, fire service mechanic, lift and escalator mechanic, overhead linesman (high voltage) and E&M engineering technician.

Technical Professionals (TP)

5.38 The Government introduced a new channel under the General Employment Policy (GEP) and the Admission Scheme for Mainland Talents and Professionals (ASMTTP) from 30 June 2025 to allow outside individuals to apply for entry into Hong Kong to join eight skilled trades facing acute manpower shortage. The new channel targets mid-level qualified and experienced non-degree technical professionals of specified trades and attracts them to settle in Hong Kong in the long run. The TP List covers eight specified skilled trades, of which those relevant to the E&M services industry include electrical technicians, lift and escalator technicians, aircraft maintenance technicians and BIM coordinators.

Manpower Projection and Annual Additional Manpower Requirement

5.39 The manpower information (i.e. employees and vacancies) collected for the current and past manpower surveys was used to project the manpower trend of the industry in the next four years. (Please refer to Appendix 8 for more details). The respective manpower projections from 2026 to 2029 were included as follows

Annual Additional Manpower Requirement

5.40 The Annual Additional Manpower Requirement has taken into account the (i) projected manpower trend and (ii) wastage rate of the industry (i.e. percentage of employees leaving the industry permanently on annual basis). The estimated Annual Additional Manpower Requirement from 2026 to 2029 in respective sector were shown as follow.

E&M Engineering sector

Table 5.10 Manpower Trend in 2026 – 2029

Year	Professional/Technologist	Technician	Craftsman
2025 (Actual)	12,227	20,170	40,651
2026	12,282 (+0.5%)	20,293 (+0.6%)	40,735 (+0.2%)
2027	12,383 (+0.8%)	20,520 (+1.1%)	40,807 (+0.2%)
2028	12,460 (+0.6%)	20,693 (+0.8%)	40,863 (+0.1%)
2029	12,518 (+0.5%)	20,824 (+0.6%)	40,907 (+0.1%)

Note:

- (1) Figures refer to number of posts (employees and vacancies)
- (2) Percentage in the brackets refers to the annual change of manpower over preceding year.
- (3) Semi-skilled / general worker is excluded

Table 5.11 Estimated Annual Additional Manpower Requirement

Job Level	Wastage rate of the industry	Additional Annual Manpower Requirement		
		Manpower trend (a)	Industry leavers (b)	Total (a) + (b)
Technologist	0.7%	73	84	157
Technician	0.0%^	163	0	163
Craftsman	3.5%	64	1,420	1,484

^ The wastage rate will be marked as zero as experienced new recruits exceeded total employees left

Gas sector

Table 5.12 Manpower Trend in 2026 – 2029

Year	Total no. of posts
2025 (Actual)	2,747
2026	2,753 (+0.2%)
2027	2,762 (+0.3%)
2028	2,768 (+0.2%)
2029	2,773 (+0.2%)

Note:

- (1) Figures refer to number of posts (employees and vacancies)
- (2) Percentage in the brackets refers to the annual change of manpower over preceding year.
- (3) Semi-skilled / general worker is excluded

Table 5.13 Estimated Annual Additional Manpower Requirement

Job Level	Wastage rate of the industry [#]	Additional Annual Manpower Requirement		
		Manpower trend (a)	Industry leavers (b)	Total (a) + (b)
Technologist	3%	1	19	20
Technician	3%	1	16	17
Craftsman	3%	4	48	52

[#]one of the most prominent company reported that a business reconstruction has been undergone which resulted in a big change of manpower structure in 2025. Therefore the findings of 2025 may not be appropriate to estimate the wastage rate in the coming years and the rate of 3% adopted in 2021 MPS will be used for 2025.

Aircraft Maintenance sector

Table 5.14 Manpower Trend in 2026 – 2029

Year	Total no. of posts
2025 (Actual)	4,917
2026	4,966 (+1.0%)
2027	5,010 (+0.9%)
2028	5,049 (+0.8%)
2029	5,084 (+0.7%)

Note:

- (1) Figures refer to number of posts (employees and vacancies)
- (2) Percentage in the brackets refers to the annual change of manpower over preceding year.
- (3) Semi-skilled / general worker is excluded

Table 5.15 Estimated Annual Additional Manpower Requirement

Job Level	Wastage rate of the industry	Additional Annual Manpower Requirement		
		Manpower trend (a)	Industry leavers (b)	Total (a) + (b)
Technologist	0.0% [^]	8	0	8
Technician	0.0% [^]	10	0	10
Craftsman	0.8%	24	23	47

[^] The wastage rate will be marked as zero as experienced new recruits exceeded total employees left

6 Recommendations

6.1 Based on the survey findings and analysis of manpower changes, and taking into account factors such as business outlook, the employers' views on factors for attracting new entrants, and feedback from the Training Board, a list of recommendations on manpower development has been prepared for consideration by various stakeholders in the E&M services industry.

Government

Promoting a Favourable Perception of the Industry to Attract Young Talent

6.2 The perception of an industry significantly influences its attractiveness to young professionals. The Government is recommended to play a pivotal role in promoting the E&M services industry by highlighting its evolving working environment and conditions, thereby encouraging more young people to pursue careers in the sectors. To enhance occupational health and safety, the Government has been promoting the adoption of the Smart Site Safety System (4S) in both public and private construction projects in recent years. To enable the younger generations better understand the industry, the EMSD has organised initiatives such as the E&M Young Ambassador Programme and job shadowing activities, allowing students to gain hands-on experience and insights into the industry. In addition, EMSD hosts the annual "E&M Innovation and Technology (I&T) Day". The 2026 event, themed "AI+ Construction", showcases the latest applications and advancements of AI in the industry. Greater promotion and publicity of these initiatives and events are recommended to enhance the image of the E&M services industry and attract more young talent to the sectors.

Accelerating Digital Capability

6.3 In 2022, the Government promulgated the Innovation and Technology Development Blueprint to establish a clear development path and formulate systematic strategic planning for I&T development over the next 5 to 10 years, with an emphasis on developing Hong Kong into a smart city. To assist the digitalisation of E&M equipment, the EMSD has built the Government-Wide IoT Network, a government network of wireless sensors installed to support various smart applications for the improvement of public service quality. In addition, an E&M InnoPortal was launched to collect the service wishes of various government departments, public organisations, the E&M trades, and to invite the I&T sector to propose relevant I&T solutions for matching. It is recommended that these initiatives be further promoted and adopted across the E&M industry to enhance operational efficiency, foster innovation, and support Hong Kong's development as a smart city.

Strengthening the Promotion of Vocational and Professional Education and Training

6.4 It is recommended that the Government further strengthen the promotion of Vocational and Professional Education and Training (VPET) in response to the growing demand for skilled talent across various industries. By equipping the younger generation with practical skills and professional competencies, VPET helps develop a workforce capable of meeting evolving industry needs. Greater efforts should be made to enhance public awareness and recognition of VPET as a viable progression pathway and career option. The effectiveness of VPET can also be enhanced through the active participation of industry stakeholders to ensure that training remains relevant to industry developments. Therefore, closer collaboration between employers and educational institutions should be fostered through appropriate support measures to encourage wider industry participation. Strengthening VPET will help expand the skilled talent pool and support the sustainable development of the industry.

Continuing Support for Talent Development through Funding Schemes

6.5 Through various subsidies, funding schemes and training initiatives, the Government provides support to employers and practitioners in talent development and workforce upgrading within the E&M services industry. To address evolving manpower needs and technological advancements, the Government could continue to enhance and promote existing support measures, while exploring new initiatives to attract talent, facilitate skills upgrading, support professional development and strengthen the industry's long-term talent pipeline.

Engineering Graduate Training Scheme (EGTS)

6.6 The Government could continue to support the Engineering Graduate Training Scheme (EGTS) to facilitate the professional development of engineering graduates. Consideration could be given to increasing the training places to strengthen the supply of engineering professionals. The scheme provides subsidies to trainees undergoing an approved programme by the Hong Kong Institution of Engineers (HKIE) for corporate membership.

Construction Innovation and Technology Fund (CITF)

6.7 The Construction Innovation and Technology Fund (CITF), established by the Government in 2018, continues to encourage the wider adoption of innovative construction methods and new technologies in the construction industry through funding support. To enhance the capability of construction practitioners and students in construction related disciplines to apply innovative technologies, the CITF supports participation in courses and

events on advanced construction technologies, including local courses, international conferences in Hong Kong, non-local enrichment courses for students, and non-local training or study visits for practitioners. The Government could continue to strengthen the promotion of the CITF to support technology adoption and skills upgrading within the construction industry.

Maritime and Aviation Training Fund (MATF)

6.8 The aviation-related schemes under the Maritime and Aviation Training Fund (MATF) support manpower development in the aviation sector through a range of funding and training initiatives. These include refund schemes for professional training, examinations and specialised aircraft maintenance programmes, as well as scholarship and internship programmes, supporting industry practitioners in obtaining recognised qualifications while encouraging more young people to pursue careers in the aircraft maintenance sector. Continued support through the MATF will help strengthen the aviation talent pipeline and support manpower development in the sector.

New Industrialisation and Technology Training Programme (NITTP)

6.9 As advanced technologies become increasingly important to the E&M services industry, the Government could step up the promotion of the New Industrialisation and Technology Training Programme (NITTP) among E&M companies to support workforce upskilling in emerging technologies and digitalisation. Launched in 2018 and previously known as the Reindustrialisation and Technology Training Programme (RTTS), the NITTP provides funding support to local companies on a matching basis to train their employees in advanced technologies, particularly in areas related to new industrialisation.

On-the-job-training Allowance Pilot Scheme

6.10 To attract more young people to join the industries, the 2025-26 Budget¹⁶ announced that the Government and Construction Industry Council (CIC) would jointly allocate about HK\$95 million to continue the provision of on-the-job training subsidies to trainees enrolled in part-time construction-related degree programmes over two academic years. About 1,000 trainees were expected to benefit from the Scheme, which covers Building Services Engineering, Electrical Engineering and Mechanical Engineering.

¹⁶ The 2025-26 Budget (25 February 2025) available at <https://www.budget.gov.hk/2025/eng/index.html>

6.11 The Government could continue to support lifelong learning among E&M practitioners through initiatives such as Vplus Engineering (as part of the Vplus Subsidy Scheme). Further promotion of the scheme could encourage more working adults to pursue relevant professional qualifications in engineering disciplines. Vplus Engineering provides subsidies to eligible students enrolled in designated VTC part-time professional programmes. Successful applicants are reimbursed 60% of the tuition fees of eligible programmes, subject to a maximum of \$45,000 per person.

Employers

Embracing Cutting-edge Digital Technologies and Advanced Construction Technologies

6.12 In recent years, advanced construction technologies, including BIM, MiMEP and MiC, have continued to evolve, bringing new opportunities to improve works coordination, installation efficiency and lifecycle maintenance of E&M facilities. The growing applications of IoT, smart technologies and AI in E&M systems have also transformed project delivery, asset management and maintenance practices. Employers are encouraged to embrace digitalisation and technology-driven construction practices, and provide opportunities for employees to develop the knowledge and skills required to support the adoption and implementation of these technologies.

Prioritising Workplace Safety

6.13 Employers in the E&M services industry should prioritise workplace safety by implementing robust safety protocols, providing regular training and adopting advanced safety technologies. These measures help reduce workplace risks, enhance workforce morale and foster a safe and supportive working environment. A strong safety culture can also enhance the industry's image, making it more attractive to young talent and supporting long-term workforce development.

Leveraging Government Funding Schemes for Talent Development

6.14 Employers are encouraged to invest in workforce development and leverage available government funding schemes to support their staff in continuous learning and skills upgrading. Various schemes provide funding support and training opportunities for employees to pursue professional development through training, further studies and skills upgrading. This can help enhance employees' competencies and adaptability, enabling the employers to build a capable workforce and maintain their competitiveness.

Nurturing Skilled Young Talent through Apprenticeship Training

6.15 Apprenticeship training plays an important role in developing skilled young talent and supporting long-term manpower needs of the E&M services industry. Employers are encouraged to actively recruit apprentices and participate in apprenticeship training schemes to develop talent and build a sustainable workforce.

VTC Earn & Learn Scheme

6.16 The VTC Earn & Learn Scheme (E&L Scheme) is a subsidy scheme under the Apprenticeship Training Scheme. Apprentices receive a guaranteed salary, a government allowance and an industry incentive allowance from participating employers while acquiring practical skills and industry experience. Employers are encouraged to participate in the scheme and recruit apprentices to nurture young talent and build a skilled workforce for future business needs.

Pilot Incentive Scheme to Employers (PISE)

6.17 To further enhance the effectiveness of the E&L Scheme, VTC has launched the Pilot Incentive Scheme to Employers (PISE) with the support of the Government. The scheme encourages employers to provide structured workplace learning and assessment opportunities for apprentices. Participating employers are eligible for funding support of up to HK\$36,000 per trainee and are encouraged to make use of the scheme to strengthen workplace training and talent development.

Work-Study Degree Scheme for Building Services Engineering

6.18 The Hong Kong Federation of Electrical and Mechanical Contractors (HKFEMC) and the Technological and Higher Education Institute of Hong Kong (THEi) have jointly launched the Work-Study Degree Scheme, namely 《工。書。教。學》, for Year-1 entry students of THEi's Bachelor of Engineering (Honours) in Building Services Engineering programme, offering students a unique opportunity to study and work concurrently without having to pay tuition fees, while receiving a designated monthly salary and total work remuneration of up to HK\$500,000 throughout the four-year programme. Employers are encouraged to support their promising young staff in participating in the Scheme to facilitate their long-term professional development while enhancing the capabilities of company's workforce.

Trade Tests for Electricians, Lift and Escalator Mechanics

6.19 The VTC has been operating a voluntary trade testing and certification system in various industries since 1989. The objectives of implementing the trade testing and certification system for the E&M services industry are to set standards for skilled workers; to help industry in the selection of workers for skilled jobs; to facilitate the acquisition of recognised qualification, in particular for those who have not gone through any formal training, and enhanced the status of skilled workers; and to facilitate the establishment of skills hierarchy for career advancement of skilled workers.

6.20 The trade test certificate of the electrician has been recognised by the Electrical and Mechanical Services Department (EMSD) of the HKSAR Government for the purpose of registration of Grade A electrical workers. To support workers' registration under the Lifts and Escalators Ordinance (Cap. 618), two new trade tests for lift mechanics and escalator mechanics have been launched since December 2012. Employers should encourage their non-registered workers in electrical installations and lift and escalator engineering to take the trade tests so that their tradesman/craftsman status can be formally recognised.

Educational Institutions

Equipping E&M Professionals with Cutting-edge Digital Technologies

6.21 The Government has been actively promoting the adoption of advanced construction and digital technologies to drive industry advancement. Artificial intelligence (AI) and data analytics are increasingly applied to E&M systems to improve performance, energy efficiency and operational reliability through predictive and automated functions. As the adoption of smart, data-driven and AI-enabled E&M systems accelerates, demand for professionals with relevant digital competencies is expected to grow. Educational institutions should therefore strengthen their training programmes by increase coverage of the practical application of emerging technologies, such as IoT applications, digital system integration, AI-assisted operations and data-driven predictive maintenance. This will equip graduates with the skills needed to support the development, installation and maintenance of advanced E&M systems and meet the evolving needs of the industry.

Training Programmes for MiMEP

6.22 Educational institutions play a crucial role in preparing the workforce for modern construction practices, particularly for the implementation of the MiMEP approach. Educational institutions could consider providing MiMEP-related training programmes that offer all-round training covering multiple trades within the MiMEP framework, equipping

students with comprehensive knowledge and skills not only in their own trade but also in other related trades. Particular emphasis could be placed on developing the skills and expertise required for the on-site installation and quality assurance of MiMEP systems. Educational institutions can ensure that both current E&M practitioners and future talent are well equipped with a broad range of technical knowledge and skills in MiMEP.

Encouraging Interdisciplinary Student Project Collaboration

6.23 As the E&M services industry continues to evolve due to rapid technological advancement, E&M projects are becoming increasingly complex and technology-driven. Employers are seeking graduates who can work effectively across disciplines and collaborate with professionals from different fields. To address this need, educational institutions are encouraged to provide more opportunities for interdisciplinary collaboration, particularly through industry-based student projects involving students from different disciplines. Such experiences can strengthen students' teamwork and problem-solving skills, enhance their understanding of industry practices, thereby better preparing them for the collaborative nature of the modern workplace.

Skilled Craftsmanship in the E&M Services Industry

6.24 Despite the increasing adoption of advanced technologies within the E&M services industry, traditional skilled craftsmanship continues to play an important role. Educational institutions are encouraged to maintain training programmes that cover both emerging technological competencies and foundational craftsmanship skills, ensuring that graduates are equipped with the practical expertise and digital skills required to thrive in a rapidly evolving industry.

Training Programmes for Admitted E&M Professionals

6.25 In light of the manpower shortage across different industries, some companies have recruited engineers, technicians, and workers under different talent admission schemes. Educational institutions could consider offering tailored training programmes covering local regulations, safety requirements and industry practices to help admitted professionals and imported workers adapt to the local working environment and contribute effectively to the industry's development.

Continuing Promotion of Apprenticeship Recruitment

6.26 To address the rising demand for technicians and craftsmen in the E&M services industry, education institutions are encouraged to continue and strengthen the promotion of apprenticeship programmes. By increasing apprenticeship intake, institutions can help bridge this gap while meeting the diverse needs of the industry, particularly in areas such as electrical, mechanical, lift and escalator, gas, and plumbing services. Expanding apprenticeships will not only strengthen the talent pipeline but also support the sustainable development of the E&M services industry.

Membership of the Electrical and Mechanical Services Training Board (as at 1 April 2025)

Chairman

Mr LAM Oi-ki

Members

Mr Clement AU

Ir Antonio CHAN Chi-ming

Ir CHAN Hing-keung

Mr Daniel CHAN Wing-fung

Mr Louis CHANG Hon-sang ¹

Ms CHENG Sau-kuen

Mr CHOI Kan-man

Ms Sunny KONG Ming

Ir Frank LAU Yat-fan

Ir Dr Barry LEE Chi-hong, MH

Mr William LEE Pak-wing

Ir Francis LEE Pui-lam

Mr Terry LEUNG King-hang

Mr Peter LIU Man-lok

Mr Edgar LUK Ho-yin ²

Ir NG Hang-wai

Ir Dr Penny PAN Yan ²

Mr POON Tai-fai

Ir Wommy WONG Ming-kwong

Ir Keith WONG Tsz-ming ²

Ir YIP Wai-nam

Director of Electrical and Mechanical Services (or his / her representative)

Commissioner for Labour (or his / her representative)

Executive Director of the Vocational Training Council (or his representative)

Secretary

Mr CHENG Chi-ho

Note: ¹ up to 31 March 2026

² since 1 April 2026

Terms of Reference
Electrical and Mechanical Services Training Board

1. To determine the manpower demand of the industry, including the collection and analysis of relevant manpower and student/trainee statistics and information on socio-economic, technological and labour market developments.
2. To assess and review whether the manpower supply for the industry matches with the manpower demand.
3. To recommend to the Vocational Training Council (the Council) the development of vocational and professional education and training (VPET) facilities to meet the assessed manpower demand.
4. To advise the Council on the strategic development and quality assurance of its programmes in the relevant disciplines.
5. To prescribe job specifications for the principal jobs in the industry defining the skills and knowledge and advise on relevant training programme specifying the time a trainee needs to spend on each skill elements.
6. To tender advice in respect of skill assessments, trade tests and certification, if appropriate, for in-service workers, apprentices and trainees, for the purpose of ascertaining that the specified skill standards have been attained.
7. To advise on the conduct of skill competitions in key trades in the industry for the promotion of VPET as well as participation in international competitions.
8. To liaise with relevant bodies, including employers, employers' associations, trade unions, professional institutions, training and educational institutions and government departments, on matters pertaining to the development and promotion of VPET in the industry.
9. To organise seminars/conferences/symposia on VPET for the industry.
10. To advise on the publicity relating to the activities of the Training Board and relevant VPET programmes of the Council.
11. To submit to the Council an annual report on the Training Board's work and its recommendations on the strategies for programmes in the relevant disciplines.
12. To undertake any other functions delegated by the Council in accordance with Section 7 of the Vocational Training Council Ordinance.

Membership of Working Party on Manpower Survey

Convenor

Mr LAM Oi-ki

Members

Ir Antonio CHAN Chi-ming

Ms CHENG Sau-kuen

Ir Frank LAU Yat-fan

Ir Dr Barry LEE Chi-hong, MH

Ir Francis LEE Pui-lam

Mr Terry LEUNG King-hang

Mr Peter LIU Man-lok

Ir NG Hang-wai

Ms Doris CHUNG Wan-sze

Ms Janet LAM Sze-mei

Ir Billy CHOW Man-hon

Ir Dr MAK Shu-lun

Secretary

Mr CHENG Chi-ho

Definition of Terms

Full-time employees	“Full-time employees” refers to persons who works at least 18 hours per week for four weeks or more and are under the payroll of the sampled company / company for the specified job, disregarding whether the full-time employees are deployed to work in other places (including Chinese Mainland).
Vacancies	“Vacancies” refers to those unfilled, immediately available job openings for which the company is actively trying to recruit personnel at the time of survey.
Vacancy rate	“Vacancy rate” refers to Vacancies as a percentage of the total number of full-time employees and Vacancies.
Turnover rate	“Turnover rate” refers to the number of full-time employees left as a percentage of the total number of full-time employees and Vacancies.
Average monthly income	“Average monthly income” refers to the average monthly income during the past 12 months before enumeration, including basic wages, regular overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus etc.. It is an average figure among full-time employees engaging in the same principal job.
Postgraduate degree	“Postgraduate degree” refers to a higher degree(s) (e.g. master degree) offered by local or non-local education institutions, or equivalent.
First Degree	“First degree” refers to the first degree(s) offered by local or non-local education institutions, or equivalent.
Sub-degree	“Sub-degree” refers to the Associate Degree, Higher Diploma, Professional Diploma, Higher Certificate, Endorsement Certificate, Associateship or equivalent programmes offered by local or non-local institutions.
Diploma / Certificate	“Diploma / Certificate” refers to technical and vocational education programmes, including Diploma / Certificate courses,

Diploma of Foundation Studies, Diploma of Vocational Education and programmes at the craft level or equivalent.

Senior secondary “Senior secondary” refers to the education programmes under the Hong Kong Certificate of Education Examination (HKCEE), the Hong Kong Diploma of Secondary Education (HKDSE) Examination, Diploma of Applied Education (DAE), or equivalent.

Junior secondary “Junior secondary” refers to secondary 3 or below, or equivalent.

Appendix 5 Survey Documents



CONFIDENTIAL
WHEN ENTERED WITH DATA

填 入 數 據 後 即 成
機 密 文 件

Serial No.

VOCATIONAL TRAINING COUNCIL
職 業 訓 練 局

THE 2025 MANPOWER SURVEY OF THE ELECTRICAL AND MECHANICAL SERVICES INDUSTRY
機 電 工 程 業 2 0 2 5 年 人 力 調 查

The 2025 Manpower Survey of the Electrical and Mechanical Services (E&M) Industry aims at collecting manpower information of the industry concerned for formulating recommendations on future manpower training. Please kindly provide the information of your establishment as at **1st September 2025** by answering the questionnaire. Thank you.

機電工程業2025年人力調查旨在蒐集業內人力情況的最新資料，並按此為未來人力訓練制訂適當建議。懇請貴機構根據**2025年9月1日**的人力情況填寫此問卷。多謝合作。

Establishment Information

機構資料

TYPE OF SERVICE: _____
服 務 性 質

(For official use)
Industry Code _____

TOTAL NO. OF PERSONS ENGAGED: _____
僱 員 總 人 數

Details of Contact Person

聯絡人資料

NAME OF PERSON TO CONTACT: _____
聯 絡 人 姓 名

POSITION: _____
職 位

TEL. NO.: _____ - _____
電 話

FAX NO.: _____
圖 文 傳 真

E-MAIL: _____
電 郵

* The information provided will be used for the purpose of this and subsequent manpower surveys.
所提供資料將用作是次及日後人力調查之用。

Survey Reference Date : 1st September 2025
統計日期：2025 年9月1日

Part I — Manpower Information
第一部份 — 人力情況

Please complete columns 'B' to 'E' of the questionnaire according to the list of principal jobs by referring to Appendix B for job description of individual job.

請根據列表中的主要職務，並參考附錄B有關各種職務的工作說明來填寫表內各欄 'B' 至 'E' 。

(A) Principal Jobs (Full-time employees) 主要職務 (全職僱員)

Job Code 職位編號	(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees [#]) 在統計日期的 僱員人數 (受訓者 [#] 除外)	(C) No. of Trainees [#] as at Survey Reference Date 在統計日期的 受訓者 [#] 人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income [^] of Employees (Excl. trainees [#]) 僱員之平均每月收入 [^] (受訓者 [#] 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
	Please enter a zero '0' in the box if no employee/ trainees/ vacancy. 如沒有僱員／受訓者／空缺，請在方格內 填入 '0' 。				
e.g. 例子	Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
	Professional/Technologist 專業人士／技師 A professional/technologist is a person who has the qualification and experience equivalent to that required for corporate membership of a professional institution. He/She should be competent in analysing and solving a wide range of technical problems. Furthermore, he/she should be able to assume personal responsibility for the development and application of engineering principles, to exercise original thought and judgment, to keep abreast of technology, to apply the latest techniques and to supervise/develop his/her sub-ordinates. 專業人士／技師須具備相當於有關專業學會正式會員所需的資歷及經驗，並能分析及解決各類技術上的問題。此外，亦須負責發展及應用工程原理，具創見和判斷力；與科技發展並進，應用最新技術，以及督導和培訓下屬。				
101	Building Services Engineer 屋宇設備工程師				
102	Electrical Engineer 電機工程師				
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷藏／空氣調節／通風設備工程師				
104	Mechanical Engineer 機械工程師				
105	Plumbing and Drainage Engineer 水喉及渠務工程師				
106	Lift/Escalator Engineer 升降機／自動梯工程師				
107	Fire Services Engineer 消防設備工程師				
108	Electronics Engineer 電子工程師				
109	Control and Instrumentation Engineer 控制及儀器工程師				
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)				
111	Safety Officer 安全主任				
112	Aircraft Maintenance Engineer 飛機維修工程師				
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] "Trainees" refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Job
Code
職位
編號

e.g.
例子

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(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees [#]) 在統計日期的 僱員人數 (受訓者 [#] 除外)	(C) No. of Trainees [#] as at Survey Reference Date 在統計日期的 受訓者 [#] 人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income [^] of Employees (Excl. trainees [#]) 僱員之平均每月收入 [^] (受訓者 [#] 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
	Please enter a zero '0' in the box if no employee/ trainees/ vacancy. 如沒有僱員／受訓者／空缺，請在方格內 填入 '0'。			
Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
Technician 技術員 A technician is a person who occupies a position between the professional/ technologist and the tradesman/craftsman. His/Her education, training and practical experience enable him/her to apply proven techniques and procedures to carry out technical tasks, normally under the guidance of a professional/technologist. 技術員的職級介乎專業人士／技師與技工之間，須具備相當學歷、工作經驗及曾接受訓練，一般可在專業人士／技師的督導下，運用已確立的技術和方法完成工作。				
Supervisor 監督				
Building Services Technician 屋宇設備技術員				
Draughtsman 繪圖員				
Electrical Engineering Technician 電機工程技術員				
Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員				
Mechanical Engineering Technician 機械工程技術員				
Lift/Escalator Technician 升降機／自動梯技術員				
Fire Services Technician 消防設備技術員				
Electrical Instrument and Meter Technician 電工儀器技術員				
Electronics Technician 電子技術員				
Telecommunication Technician 電訊技術員				
Office Equipment Service Technician 辦公室設備維修技術員				
Safety Supervisor 安全督導員				
Aircraft Maintenance Technician 飛機維修技術員				
Rolling Stock Technician 鐵道車輛技術員				
Railway Signalling Technician 鐵路訊號技術員				
Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員				
<i>E&M Engineering-related / 機電工程相關</i>				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] "Trainees" refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Job
Code
職位
編號

e.g.
例子

301

302

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(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees [#]) 在統計日期的 僱員 人數 (受訓者 [#] 除外)	(C) No. of Trainees [#] as at Survey Reference Date 在統計日期的 受訓者 [#] 人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income [^] of Employees (Excl. trainees [#]) 僱員 之平均每月收入 [^] (受訓者 [#] 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
	Please enter a zero '0' in the box if no employee/ trainees/ vacancy. 如沒有僱員／受訓者／空缺，請在方格內 填入 '0'。			
Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
Tradesman/Craftsman 技工 A tradesman/craftsman is a skilled worker who is able to apply his/her skills to a wide range of jobs within his/her trade, with minimum direction and supervision. A tradesman/craftsman possesses not only practical skills but also related theoretical knowledge which enables him/her to adapt himself/herself to new technologies. 技工是指熟練工人，能在有限度的指示及督導下，應用各種技能執行個別行業的職務。技工除須具備實際技能外，亦需有相關的理論知識，以便能適應日新月異的科技發展。				
Foreman/Chargehand 管工／領工				
Building Services Mechanic 屋宇設備技工				
Electrician/Electrical Fitter 電工／電氣打磨裝配工				
Control Panel Assembler 控制板裝配工				
Electrical Wireman 電氣佈線工				
Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)				
Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)				
Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工				
Refrigeration/Air-conditioning/Ventilation Mechanic (Thermal Insulation)/Thermal Insulation Craftsman 空調製冷設備技工(保溫)／保溫技工				
Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)				
Plumber and Pipe Fitter 喉管工				
Mechanical Fitter/Machinist 機械打磨裝配工／機床工				
Lift Mechanic 升降機技工				
Escalator Mechanic 自動梯技工				
Fire Services Electrical Fitter 消防電氣裝配工				
Fire Services Mechanical Fitter 消防機械裝配工				
Cable Joiner (Power) 強電流電纜接駁工				
Overhead Linesman 架空電線技工				
Electrical Appliances Service Mechanic 電器用具服務技工				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] "Trainees" refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Job
Code
職位
編號
e.g.
例子

(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees#) 在統計日期的 僱員 人數 (受訓者# 除外)	(C) No. of Trainees [#] as at Survey Reference Date 在統計日期的 受訓者 [#] 人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income [^] of Employees (Excl. trainees#) 僱員 之平均每月收入 [^] (受訓者# 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
Tradesman/Craftsman (Continued) 技工 (續)				
320 Welder 焊接工				
321 Carpenter 木工				
322 Painter 髹漆工				
323 AV and RF Mechanic 影音及射頻技工				
324 Building Security System Mechanic 屋宇防盜系統技工				
325 Communication System Mechanic 電訊系統裝配工				
329 Aircraft Maintenance Mechanic 飛機維修技工				
330 Rolling Stock Tradesman 鐵道車輛技工				
331 Railway Signalling Tradesman 鐵路訊號技工				
Semi-skilled/General Worker 半技術工人／普通工人 A semi-skilled/general worker is normally assigned to perform repetitive work requiring only a narrow range of skills and short period of training. 半技術工人／普通工人通常獲指派擔任性質重複的工作，要求的技能較少，訓練時間亦較短。				
401 Labourer 普通工人				
402 Semi-skilled Worker 半技術工				
OTHER RELATED STAFF 其他相關員工				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] “Trainees” refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Part II
第二部份

Expected Change in Future
未來變化

1. When comparing with the current situation, please indicate your views on the expected change of the following **in the next 12 months**. (Please tick in the box as appropriate)

對於現在，請指出 貴公司預計在未來十二個月於下列之預期變化。(請在適當的格內填上“✓”號)

(i) Business volume
業務額

☐ (a) Better 較佳	+ %
☐ (b) Stable 穩定	
☐ (c) Worsen 較差	- %
☐ (d) Uncertain 不肯定	

(ii) Number of Full-time employees
全職員工數目

☐ (a) Increase 增加	+ %
☐ (b) Same 不變	
☐ (c) Decrease 減少	- %

Please indicate the reasons leading to **“better” or “worsen”**

請說明引起較佳或較差的原因

2. Other than the principal jobs in Part I, please indicate the new job position(s) that will be introduced in the future (if any) in order to meet the emerging trends of the industry. If existing jobs are foreseen to undergo drastic changes in job duties/job specifications, please also provide the information in the table below. (Please tick in the box as appropriate)

除第一部分所列出的職位外，請指出 貴公司未來將會引入的新職位(如有)，以配合行業的新興趨勢。如現有職位將有職務或工作規範上的重大轉變，亦請填寫下表。(請在適當的格內填上“✓”號)

Job title 職位名稱	New Job 新職位	Existing Job 現有職位	Job Descriptions / Changes in Job Duties/Specifications 職位描述 / 職務或工作規範的轉變
	☐	☐	
	☐	☐	
	☐	☐	

Current Employees
現職僱員

3. (a) Please indicate the age range distribution of Full-time employees.
請指出 貴機構全職僱員的年齡分布。

30 or below 30 歲或以下	31 – 45 31 至 45 歲	46 – 60 46 至 60 歲	61 or above 61 歲或以上
%	%	%	%

- (b) Please specify the retirement age of full-time employees
請註明全職僱員的退休年齡

- (c) Compared to the answer given for (b), please indicate the trend of retirement age of full-time employees in the future
與(b)提供的答案相比，請指出全職僱員退休年齡的未來趨勢

- ☐ (i) Delayed
延遲
- ☐ (ii) Same as now
不變
- ☐ (iii) Reduced
提早

4. Please indicate number of employees employed through talent admission scheme* or labour importation scheme^
請指出 貴機構透過吸引人才計劃*或輸入勞工計劃^聘請的僱員人數

5. Please state the number of **Hong Kong Electrical and Mechanical Engineering, or Aircraft Maintenance employees** employed by **your organisation and its subsidiaries** in the Mainland (except Hong Kong) at the Survey Reference Date.
(If there is no employees in the Mainland, please fill "0" in the box)
請列出 貴機構在統計日期在內地（香港除外）的公司及其附屬公司之香港機電工程或飛機維修工程僱員人數。
(如沒有員工在內地，請在方框內填上“0”)

- (a) Professional/ Technologist
專業人士／技師
- (c) Tradesman/ Craftsman
技工

- (b) Technician
技術員

* Refers to the Top Talent Pass Scheme (TTPS), General Employment Policy and Admission Scheme for Mainland Talents and Professionals (including Technical Professionals Stream) [GEP, ASMTTP, GEP(TP) & ASMTTP(TP)], Technology Talent Admission Scheme (TechTAS), Immigration Arrangements for Non-local Graduates (IANG), Quality Migrant Admission Scheme (QMAS) and the Admission Scheme for the Second Generation of Chinese Hong Kong Permanent Residents (ASSG).
For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_b_1
指高端人才通行證計劃、「一般就業政策」及輸入內地人才計劃（包括技術專才類別）、科技人才入境計劃、非本地畢業生留港／回港就業安排、優秀人才入境計劃、輸入中國籍香港永久性居民第二代計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_b_1

^ Refers to the Sector-specific Labour Importation Schemes and Enhanced Supplementary Labour Scheme (ESLS).
For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_c_1
指行業輸入勞工計劃及補充勞工優化計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_c_1

New Recruitment
新聘僱員

6. Please state the number of full-time employees who were newly recruited in the past 12 months.
(If there is no recruitment, please fill “0” in the box)
請列出 貴機構在過去十二個月內新招聘的全職僱員人數。(如沒有招聘，請在方框內填上 “0”)

	<u>Professional/ Technologist</u> 專業人士／技師	<u>Technician</u> 技術員	<u>Tradesman/ Craftsman</u> 技工	<u>Semi-skilled/ General Worker</u> 半技術工人／ 普通工人
(a) Total new recruits 新招聘總人數				
(b) Number of new recruits with the experience in electrical and mechanical engineering or aircraft maintenance engineering 新招聘僱員中， 具 機電工程或飛機維修工程的相關經驗				
(c) Number of new recruits who are graduates of 2024 and 2025 from electrical and mechanical engineering or aircraft maintenance engineering programmes 新招聘僱員中，相關機電工程或飛機維修工程之課程於 2024及2025 的 畢業生 人數				

Employees Leaving the Establishment
僱員離職

7. Please state the number of full-time employees who **left** in the past 12 months.
(If there is no employees left, please fill “0” in the box)
請列出 貴機構在過去十二個月內**離職**的全職僱員人數。(如沒有員工離職，請在方框內填上“0”)

(a) Professional/ Technologist 專業人士／技師		(b) Technician 技術員	
(c) Tradesman/ Craftsman 技工		(d) Semi-skilled/ General Worker 半技術工人／普通工人	

Preferred Level of Education and Years of Experience of Employees

僱員宜有的教育程度及相關年資

8. Please choose preferred Level of Education and Years of Experience of full-time employees.

請選擇全職僱員宜有的教育程度及相關年資。

Job level 職級	Professional/ Technologist 專業人士／技師	Technician 技術員	Tradesman/ Craftsman 技工	Semi-skilled/ General Worker 半技術工人／ 普通工人
(a) Level of Education (Please tick “✓” 1 box for each job level) 教育程度 （每職級請剔“✓” 選 <u>一項</u> ）				
(i) Postgraduate Degree 研究生學位	☐	☐	☐	☐
(ii) First Degree 學士學位	☐	☐	☐	☐
(iii) Sub-degree (e.g. Higher Diploma) 副學位（例如高級文憑）	☐	☐	☐	☐
(iv) Diploma/Certificate 文憑／證書	☐	☐	☐	☐
(v) Senior Secondary (e.g. Secondary 4 – 6/7) 高中（例如中四至中六/七）	☐	☐	☐	☐
(vi) Junior Secondary 初中	☐	☐	☐	☐
(b) Years of Experience (Please tick “✓” 1 box for each job level) 相關年資 （每職級請剔“✓” 選 <u>一項</u> ）				
(i) 10 years or more 十年或以上	☐	☐	☐	☐
(ii) 6 years to less than 10 years 六年至十年以下	☐	☐	☐	☐
(iii) 3 years to less than 6 years 三年至六年以下	☐	☐	☐	☐
(iv) 1 year to less than 3 years 一年至三年以下	☐	☐	☐	☐
(v) Less than 1 year 一年以下	☐	☐	☐	☐
(vi) No experience 無經驗	☐	☐	☐	☐
No such level of staff 沒有相關職級員工	☐	☐	☐	☐

Recruitment Difficulties**招聘困難**

9. Please indicate the difficulties encountered in recruitment of full-time employees of your establishment **in past 12 months**.
請指出 貴機構在過去十二個月招聘全職僱員時所遇到的困難。

Reasons 原因	Professional/ Technologist 專業人士／ 技師	Technician 技術員	Tradesman/ Craftsman 技工
(a) No recruitment was taken place (incl. no recruitment due to no such level of staff) 沒有招聘 (包括因沒有相關職級的員工而沒有進行招聘)	☐	☐	☐
(b) Recruitment was taken place and did not encounter difficulties 有招聘，但 <u>沒有遇到</u> 招聘困難	☐	☐	☐
(c) Recruitment was taken place and the difficulties encountered were: (You may tick “✓” one or more options.) 有招聘，所遇到的困難是：（可剔“✓”選多於一項。）			
(i) Lack of candidates with relevant experience 缺乏具相關經驗求職者	☐	☐	☐
(ii) Unsatisfactory terms of employment 聘用條件不理想	☐	☐	☐
(iii) Unsatisfactory working environment 工作環境不理想	☐	☐	☐
(iv) Limited career prospects 晉升機會有限	☐	☐	☐
(v) Insufficient trained/qualified manpower in the related disciplines 缺乏具相關訓練／資歷的人力資源	☐	☐	☐
(vi) Competition for manpower from the Mainland/Macao/other cities 源自內地／澳門／其他城市之人手競爭	☐	☐	☐
(vii) Alternative offers in the market 市場上有其他選擇	☐	☐	☐
(viii) Others (please specify) 其他（請說明）_____	☐	☐	☐

10. Please indicate the **top three factors** that your establishment considers useful to attract new entrants to the industry.
(Please tick in the box as appropriate)
請指出 貴機構認為最能吸引新人入行的首三個因素。（請在適當的格內填上“✓”號）

☐	Clear career progression pathway 清晰事業晉升階梯
☐	Professional image of the industry 行業專業形象
☐	Attractive remuneration package 吸引的薪酬及條件
☐	Government subsidised training programmes leading to the relevant qualifications for new entrants 有政府資助相關符合入行資格的培訓課程
☐	Compliance with safety regulations 符合安全條例
☐	Application of new technology to smoothen operation and enhance safety 應用新科技令運作暢順及加強安全
☐	Job security 工作穩定
☐	Others, please specify : 其他, 請說明

Training 培訓

11. Please indicate the future training areas for full-time employees in order to meet the emerging trend of the industry.

(You may wish to tick “✓” more than 1 training area for each job level)

請指出 貴機構的全職僱員未來需要加強培訓的範疇，以配合行業的新興趨勢。（每職級可剔“✓”選多個培訓範疇）

Training Area 培訓範疇	Professional/ Technologist 專業人士／技師	Technician 技術員	Tradesman/ Craftsman 技工
A. Technology Applications 科技應用			
(i) BIM Knowledge and Skill 建築信息模擬 (BIM) 知識 及 技巧	☐	☐	☐
(ii) Artificial Intelligent (AI) Applications & Big Data Analytics 人工智能 (AI) 應用 及 大數據分析	☐	☐	☐
(iii) Smart Technology Applications (e.g. Internet of Things (IoT), VR & AR) 智慧科技應用 (如物聯網技術、虛擬實境 及 擴增實境)	☐	☐	☐
(iv) Workflow Digitalisation and Use of Digital Tools 工作流程數碼化 及 數碼工具使用	☐	☐	☐
B. Operations Related 營運相關			
(i) E&M Installation & Assembly for “Modular Integrated Construction” (MiC) 用於組裝合成建築法(MiC)的機電工程安裝 及 組裝技術	☐	☐	☐
(ii) Multi-trade Knowledge for “Multi-trade integrated Mechanical, Electrical & Plumbing” (MiMEP) 機電裝備合成法(MiMEP) 的跨工種知識	☐	☐	☐
(iii) Knowledge of “Design for Manufacture and Assembly” (DfMA) 製造及裝配設計(DfMA)的知識	☐	☐	☐
(iv) Installation, Maintenance and Servicing of New Energy Equipment (e.g. EV Charging System and Solar Photovoltaic System) 新能源設備的安裝、保養及維修 (如電動車充電系統及太陽能光伏系統)	☐	☐	☐
C. Project Management Related 項目管理相關			
(i) Project Management 項目管理	☐	☐	☐
(ii) Construction Contract’s Terms and Conditions 施工合同的條款細則	☐	☐	☐
(iii) Risk and Crisis Management 風險及危機管理	☐	☐	☐
D. Regulations 法規			
(i) Relevant Trade’s Ordinances and Regulations 與行業相關的法規	☐	☐	☐
(ii) Engineering-related ISO Standards 與工程相關的ISO標準	☐	☐	☐
(iii) Occupational Safety and Health Ordinance 職業安全及健康條例	☐	☐	☐
E. Safety 安全			
(i) Safety Awareness 安全意識	☐	☐	☐
(ii) Safety Audit/Assessment 安全審核/評估	☐	☐	☐
(iii) Safety/Risk Management 安全/風險的管理	☐	☐	☐
(iv) Use of Personal Protective Equipment 個人防護裝備的使用	☐	☐	☐
(v) Construction Site Safety for Workers 工人在工地的安全	☐	☐	☐
(vi) Smart Site Safety System (4S) 安全智慧工地系統	☐	☐	☐

Training (Continued)**培訓（續）**

Training Area 培訓範疇	Professional/ Technologist 專業人士／技師	Technician 技術員	Tradesman/ Craftsman 技工
F. Soft Skills 軟性技巧			
(i) English Writing, Reading and Reporting 英語寫作，閱讀和報告	☐	☐	☐
(ii) Communication Skills with Stakeholders Both Internal and External 與內外持份者的溝通技巧	☐	☐	☐
(iii) Time Management Skills 時間管理的技巧	☐	☐	☐
(iv) Design Thinking Skills 設計思維的技巧	☐	☐	☐
(v) Supervisory Skills 督導技巧	☐	☐	☐
(vi) Rapid Response and Reporting Skills 快速回應及報告技巧	☐	☐	☐
G. Others 其他			
(i) Others (please specify): 其他（請說明）：_____	☐	☐	☐
No such level of staff 沒有相關職級員工	☐	☐	☐

(NOT applicable for Aircraft Maintenance Sector)**(不適用於飛機維修工程業)****Proportion of Contracting and Servicing****承造與維修服務的比例**

12. For each job level, please indicate the relative percentage of manpower engaging in "Contracting" and "Servicing" work of the **electrical and mechanical engineering** in your company:

請填寫 貴機構各技能等級的僱員，在從事**機電工程**的「承造」及「維修服務」工作類別上相對的百分比：

	Contracting* 承造*	Servicing* 維修服務*	No such level of staff 沒有相關職級員工
(a) Professional / Technologist 專業人士／技師	%	%	☐
(b) Technician 技術員	%	%	☐
(c) Tradesman / Craftsman 技工	%	%	☐
(d) Semi-skilled / General Worker 半技術／普通工人	%	%	☐

* "Contracting" involves works of design, planning, installation, testing and commissioning of various electrical and mechanical equipment and systems. "Servicing" involves works of maintaining and repairing of electrical and mechanical equipment and systems, including the provision of energy supply and public utilities services in this manpower survey.

* 「承造」指設計、規劃、安裝、測試及投運試驗各種機電設備和系統的工作。「維修服務」指保養和修理機電設備和系統的工作。在本人力調查中亦包括提供能源及公用事業服務等。

For employees engaged in both contracting and servicing at the same time, their principal assignment of duties should be used for demarcation.

若員工同時參與承造及維修服務的工作，應以其主要受派工作類別作界分。

End of questionnaire. Thank you for your co-operation.

問卷完，多謝合作。



CONFIDENTIAL
WHEN ENTERED WITH DATA

填 入 數 據 後 即 成
機 密 文 件

VOCATIONAL TRAINING COUNCIL
職 業 訓 練 局

THE 2025 MANPOWER SURVEY OF THE ELECTRICAL AND MECHANICAL SERVICES INDUSTRY
機 電 工 程 業 2 0 2 5 年 人 力 調 查

The 2025 Manpower Survey of the Electrical and Mechanical Services (E&M) Industry aims at collecting manpower information of the industry concerned for formulating recommendations on future manpower training. Please kindly provide the information of your establishment as at **1st September 2025** by answering the questionnaire. Thank you.

機電工程業2025年人力調查旨在蒐集業內人力情況的最新資料，並按此為未來人力訓練制訂適當建議。懇請貴機構根據**2025年9月1日**的人力情況填寫此問卷。多謝合作。

Establishment Information

機構資料

TYPE OF SERVICE: _____
服 務 性 質

(For official use)
Industry Code _____

TOTAL NO. OF PERSONS ENGAGED: _____
僱 員 總 人 數

Details of Contact Person

聯絡人資料

NAME OF PERSON TO CONTACT: _____
聯 絡 人 姓 名

POSITION: _____
職 位

TEL. NO.: _____ - _____
電 話

FAX NO.: _____
圖 文 傳 真

E-MAIL: _____
電 郵

* The information provided will be used for the purpose of this and subsequent manpower surveys.
所提供資料將用作是次及日後人力調查之用。

Survey Reference Date : 1st September 2025
統計日期：2025 年9月1日

Part I — Manpower Information
第一部份 — 人力情況

Please complete columns 'B' to 'E' of the questionnaire according to the list of principal jobs by referring to Appendix B for job description of individual job.

請根據列表中的主要職務，並參考附錄B有關各種職務的工作說明來填寫表內各欄 'B' 至 'E' 。

(A) Principal Jobs (Full-time employees) 主要職務 (全職僱員)

Job Code 職位編號 e.g. 例子	(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees [#]) 在統計日期的 僱員人數 (受訓者 [#] 除外)	(C) No. of Trainees [#] as at Survey Reference Date 在統計日期的 受訓者 [#] 人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income [^] of Employees (Excl. trainees [#]) 僱員之平均每月收入 [^] (受訓者 [#] 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
	Please enter a zero '0' in the box if no employee/ trainees/ vacancy. 如沒有僱員／受訓者／空缺，請在方格內 填入 '0' 。				
e.g. 例子	Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
	Professional/Technologist 專業人士／技師 A professional/technologist is a person who has the qualification and experience equivalent to that required for corporate membership of a professional institution. He/She should be competent in analysing and solving a wide range of technical problems. Furthermore, he/she should be able to assume personal responsibility for the development and application of engineering principles, to exercise original thought and judgment, to keep abreast of technology, to apply the latest techniques and to supervise/develop his/her sub-ordinates. 專業人士／技師須具備相當於有關專業學會正式會員所需的資歷及經驗，並能分析及解決各類技術上的問題。此外，亦須負責發展及應用工程原理，具創見和判斷力；與科技發展並進，應用最新技術，以及督導和培訓下屬。				
171	Electrical Engineer 電機工程師				
172	Gas Engineer (Fuel Gas) 氣體工程師 (氣體燃料)				
173	Mechanical Engineer 機械工程師				
174	Safety Officer 安全主任				
	Technician 技術員 A technician is a person who occupies a position between the professional/ technologist and the tradesman/craftsman. His/Her education, training and practical experience enable him/her to apply proven techniques and procedures to carry out technical tasks, normally under the guidance of a professional/technologist. 技術員的職級介乎專業人士／技師與技工之間，須具備相當學歷、工作經驗及曾接受訓練，一般可在專業人士／技師的督導下，運用已確立的技術和方法完成工作。				
271	Electrical Engineering Technician 電機工程技術員				
272	Gas Engineering Technician 氣體燃料工程技術員				
273	Mechanical Engineering Technician 機械工程技術員				
274	Safety Supervisor 安全督導員				
275	Supervisor 監督				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] "Trainees" refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Job
Code
職位
編號
e.g:
例子

(A) Principal Job 主要職務 (See Appendix B) (參閱附錄 B)	(B) No. of Employees as at Survey Reference Date (Excl. trainees[#]) 在統計日期的 僱員人數 (受訓者[#] 除外)	(C) No. of Trainees[#] as at Survey Reference Date 在統計日期的 受訓者[#]人數	(D) No. of Vacancies as at Survey Reference Date 在統計日期的 空缺額	(E) Average Monthly Income[^] of Employees (Excl. trainees[#]) 僱員之平均每月收入[^] (受訓者[#] 除外) Code 編號 1 \$15,000 or below 或以下 2 \$15,001 - \$18,000 3 \$18,001 - \$25,000 4 \$25,001 - \$35,000 5 \$35,001 - \$45,000 6 \$45,001 - \$60,000 7 \$60,001 - \$80,000 8 \$80,001 or above 或以上
Job Title A (3 employees, 1 Trainee and 2 vacancies) 職位甲(3名僱員, 1名受訓者及2個空缺)	3	1	2	6
Tradesman/Craftsman 技工 A tradesman/craftsman is a skilled worker who is able to apply his/her skills to a wide range of jobs within his/her trade, with minimum direction and supervision. A tradesman/craftsman possesses not only practical skills but also related theoretical knowledge which enables him/her to adapt himself/herself to new technologies. 技工是指熟練工人，能在有限度的指示及督導下，應用各種技能執行個別行業的職務。技工除須具備實際技能外，亦需有相關的理論知識，以便能適應日新月異的科技發展。				
Electrician/Electrical Fitter 電工／電氣打磨裝配工				
Gas Distribution Fitter (LPG) 氣體燃料輸送技工（石油氣）				
Gas Distribution Fitter (Town Gas) 氣體燃料輸送技工（煤氣）				
Gas Utilisation Fitter (Domestic) 氣體燃料應用技工（住宅式）				
Gas Utilisation Fitter (Non-domestic) 氣體燃料應用技工（非住宅式）				
Mechanical Fitter 機械打磨裝配工				
Welder 焊接工				
Semi-skilled/General Worker 半技術工人／普通工人 A semi-skilled/general worker is normally assigned to perform repetitive work requiring only a narrow range of skills and short period of training. 半技術工人／普通工人通常獲指派擔任性質重複的工作，要求的技能較少，訓練時間亦較短。				
Driver (LPG Cylinder Wagon) 司機（石油氣瓶車）				
Labourer 普通工人				
Semi-skilled Worker 半技術工				
OTHER RELATED STAFF 其他相關員工				

[^] Includes basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus.

每月收入包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。

[#] “Trainees” refer to those employees undergoing any form of training, and includes trainees and apprentices under a contract of apprenticeship.

「受訓者」指正在接受各種形式訓練的僱員，包括受訓者及根據學徒合約受聘的學徒。

Part II
第二部份

Expected Change in Future
未來變化

1. When comparing with the current situation, please indicate your views on the expected change of the following **in the next 12 months**. (Please tick in the box as appropriate)

對於現在，請指出 貴公司預計在**未來十二個月**於下列之預期變化。(請在適當的格內填上“✓”號)

(i) Business volume
業務額

☐ (a) Better 較佳	+ %
☐ (b) Stable 穩定	
☐ (c) Worsen 較差	- %
☐ (d) Uncertain 不肯定	

(ii) Number of Full-time employees
全職員工數目

☐ (a) Increase 增加	+ %
☐ (b) Same 不變	
☐ (c) Decrease 減少	- %

Please indicate the reasons leading to **“better” or “worsen”**

請說明引起**較佳或較差**的原因

2. Other than the principal jobs in Part I, please indicate the new job position(s) that will be introduced in the future (if any) in order to meet the emerging trends of the industry. If existing jobs are foreseen to undergo drastic changes in job duties/job specifications, please also provide the information in the table below. (Please tick in the box as appropriate)

除第一部分所列出的職位外，請指出 貴公司未來將會引入的新職位(如有)，以配合行業的新興趨勢。如現有職位將有職務或工作規範上的重大轉變，亦請填寫下表。(請在適當的格內填上“✓”號)

Job title 職位名稱	New Job 新職位	Existing Job 現有職位	Job Descriptions / Changes in Job Duties/Specifications 職位描述 / 職務或工作規範的轉變
	☐	☐	
	☐	☐	
	☐	☐	

Current Employees
現職僱員

3. (a) Please indicate the age range distribution of **Full-time employees**.
請指出 貴機構**全職僱員**的年齡分布。

30 or below 30 歲或以下	31 – 45 31 至 45 歲	46 – 60 46 至 60 歲	61 or above 61 歲或以上
%	%	%	%

- (b) Please specify the retirement age of full-time employees
請註明全職僱員的退休年齡

- (c) Compared to the answer given for (b), please indicate the trend of retirement age of full-time employees in the future
與(b)提供的答案相比，請指出全職僱員退休年齡的未來趨勢

- ☐ (i) Delayed
延遲
- ☐ (ii) Same as now
不變
- ☐ (iii) Reduced
提早

4. Please indicate number of employees employed through talent admission scheme* or labour importation scheme^
請指出 貴機構透過吸引人才計劃*或輸入勞工計劃^聘請的僱員人數

5. Please state the number of **Hong Kong Gas Services Engineering or Electrical and Mechanical Engineering workers** employed by **your organisation and its subsidiaries** in the Mainland (except Hong Kong) at the Survey Reference Date.
(If there is no employees in the Mainland, please fill "0" in the box)
請列出 貴機構在統計日期在內地（香港 除外）的公司及其附屬公司之**香港氣體燃料工程 或 機電工程僱員**人數。
(如沒有員工在內地，請在方框內填上 "0")

- (a) Professional/ Technologist
專業人士／技師

- (b) Technician
技術員

- (c) Tradesman/ Craftsman
技工

* Refers to the Top Talent Pass Scheme (TTPS), General Employment Policy and Admission Scheme for Mainland Talents and Professionals (including Technical Professionals Stream) [GEP, ASMTTP, GEP(TP) & ASMTTP(TP)], Technology Talent Admission Scheme (TechTAS), Immigration Arrangements for Non-local Graduates (IANG), Quality Migrant Admission Scheme (QMAS) and the Admission Scheme for the Second Generation of Chinese Hong Kong Permanent Residents (ASSG).
For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_b_1
指高端人才通行證計劃、「一般就業政策」及輸入內地人才計劃（包括技術專才類別）、科技人才入境計劃、非本地畢業生留港／回港就業安排、優秀人才入境計劃、輸入中國籍香港永久性居民第二代計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_b_1

^ Refers to the Sector-specific Labour Importation Schemes and Enhanced Supplementary Labour Scheme (ESLS).
For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_c_1
指行業輸入勞工計劃及補充勞工優化計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_c_1

New Recruitment
新聘僱員

6. Please state the number of full-time employees who were newly recruited in the past 12 months.
(If there is no recruitment, please fill “0” in the box)
請列出 貴機構在過去十二個月內新招聘的全職僱員人數。(如沒有招聘，請在方框內填上 “0”)

	<u>Professional/ Technologist</u> 專業人士／技師	<u>Technician</u> 技術員	<u>Tradesman/ Craftsman</u> 技工	<u>Semi-skilled/ General Worker</u> 半技術工人／ 普通工人
(a) Total new recruits 新招聘總人數				
(b) Number of new recruits with the experience in gas services engineering, or electrical and mechanical engineering 新招聘僱員中，具氣體燃料工程 或 機電工程的相關經驗				
(c) Number of new recruits who are graduates of 2024 and 2025 from gas services engineering, or electrical and mechanical engineering programmes 新招聘僱員中，相關氣體燃料工程 或 機電工程之課程於 2024及2025的畢業生 人數				

Employees Leaving the Establishment
僱員離職

7. Please state the number of full-time employees who **left** in the past 12 months.
(If there is no employees left, please fill “0” in the box)
請列出 貴機構在過去十二個月內**離職**的全職僱員人數。(如沒有員工離職，請在方框內填上“0”)

(a) Professional/ Technologist 專業人士／技師		(b) Technician 技術員	
(c) Tradesman/ Craftsman 技工		(d) Semi-skilled/ General Worker 半技術工人／普通工人	

Preferred Level of Education and Years of Experience of Employees

僱員宜有的教育程度及相關年資

8. Please choose preferred Level of Education and Years of Experience of full-time employees.
請選擇全職僱員宜有的教育程度及相關年資。

Job level 職級	Professional/ Technologist 專業人士／技師	Technician 技術員	Tradesman/ Craftsman 技工	Semi-skilled/ General Worker 半技術工人／ 普通工人
(a) Level of Education (Please tick “✓” 1 box for each job level) 教育程度 （每職級請剔“✓”選一項）				
(i) Postgraduate Degree 研究生學位	☐	☐	☐	☐
(ii) First Degree 學士學位	☐	☐	☐	☐
(iii) Sub-degree (e.g. Higher Diploma) 副學位（例如高級文憑）	☐	☐	☐	☐
(iv) Diploma/Certificate 文憑／證書	☐	☐	☐	☐
(v) Senior Secondary (e.g. Secondary 4 – 6/7) 高中（例如中四至中六／七）	☐	☐	☐	☐
(vi) Junior Secondary 初中	☐	☐	☐	☐
(b) Years of Experience (Please tick “✓” 1 box for each job level) 相關年資 （每職級請剔“✓”選一項）				
(i) 10 years or more 十年或以上	☐	☐	☐	☐
(ii) 6 years to less than 10 years 六年至十年以下	☐	☐	☐	☐
(iii) 3 years to less than 6 years 三年至六年以下	☐	☐	☐	☐
(iv) 1 year to less than 3 years 一年至三年以下	☐	☐	☐	☐
(v) Less than 1 year 一年以下	☐	☐	☐	☐
(vi) No experience 無經驗	☐	☐	☐	☐
No such level of staff 沒有相關職級員工	☐	☐	☐	☐

Recruitment Difficulties

招聘困難

9. Please indicate the difficulties encountered in recruitment of full-time employees of your establishment **in past 12 months**.
請指出 貴機構在過去十二個月招聘全職僱員時所遇到的困難。

Reasons 原因	Professional/ Technologist 專業人士／ 技師	Technician 技術員	Tradesman/ Craftsman 技工
(a) No recruitment was taken place (incl. no recruitment due to no such level of staff) 沒有招聘 (包括因沒有相關職級的員工而沒有進行招聘)	☐	☐	☐
(b) Recruitment was taken place and did not encounter difficulties 有招聘，但 <u>沒有遇到</u> 招聘困難	☐	☐	☐
(c) Recruitment was taken place and the difficulties encountered were: (You may tick “✓” one or more options.) 有招聘，所遇到的困難是：（可剔“✓”選多於一項。）			
(i) Lack of candidates with relevant experience 缺乏具相關經驗求職者	☐	☐	☐
(ii) Unsatisfactory terms of employment 聘用條件不理想	☐	☐	☐
(iii) Unsatisfactory working environment 工作環境不理想	☐	☐	☐
(iv) Limited career prospects 晉升機會有限	☐	☐	☐
(v) Insufficient trained/qualified manpower in the related disciplines 缺乏具相關訓練／資歷的人力資源	☐	☐	☐
(vi) Competition for manpower from the Mainland/Macao/other cities 源自內地／澳門／其他城市之人手競爭	☐	☐	☐
(vii) Alternative offers in the market 市場上有其他選擇	☐	☐	☐
(viii) Others (please specify) 其他（請說明）_____	☐	☐	☐

10. Please indicate the **top three factors** that your establishment considers useful to attract new entrants to the industry.
(Please tick in the box as appropriate)
請指出 貴機構認為最能吸引新人入行的首三個因素。（請在適當的格內填上“✓”號）

☐	Clear career progression pathway 清晰事業晉升階梯
☐	Professional image of the industry 行業專業形象
☐	Attractive remuneration package 吸引人的薪酬及條件
☐	Government subsidised training programmes leading to the relevant qualifications for new entrants 有政府資助相關符合入行資格的培訓課程
☐	Compliance with safety regulations 符合安全條例
☐	Application of new technology to smoothen operation and enhance safety 應用新科技令運作暢順及加強安全
☐	Job security 工作穩定
☐	Others, please specify : 其他, 請說明

Training 培訓

11. Please indicate the future training areas for full-time employees in order to meet the emerging trend of the industry.
(You may wish to tick “✓” more than 1 training area for each job level)
請指出 貴機構的全職僱員未來需要加強培訓的範疇，以配合行業的新興趨勢。（每職級可剔“✓”選多個培訓範疇）

Training Area 培訓範疇	Professional/ Technologist 專業人士／技師	Technician 技術員	Tradesman/ Craftsman 技工
A. Technology Applications 科技應用			
(i) BIM for Underground Utilities, Applications and Drawing Skill 用於地下公用設施，應用和繪圖技巧的建築信息模擬(BIM)	☐	☐	☐
(ii) Smart Technology Applications (e.g. RFID, Internet of Things (IoT) and Drone) 智慧科技應用 (如無線射頻識別技術、物聯網技術、無人機)	☐	☐	☐
(iii) Workflow Digitalisation and Use of Digital Tools 工作流程數碼化 及 數碼工具使用	☐	☐	☐
B. Operations Related 營運相關			
(i) Basic Gas Engineering 氣體工程基礎	☐	☐	☐
(ii) Pipe and Cable Detection 管道和電纜檢測	☐	☐	☐
(iii) Engineering Materials for Gas Pipe 管道工程材料	☐	☐	☐
(iv) Pressure Regulating Installation 調壓裝置的基本原理	☐	☐	☐
C. Project Management Related 項目管理相關			
(i) Project Management 項目管理	☐	☐	☐
(ii) Construction Contract's Terms and Conditions 施工合同的條款細則	☐	☐	☐
(iii) Risk and Crisis Management 風險及危機管理	☐	☐	☐
D. Regulations 法規			
(i) Relevant Trade's Ordinances and Regulations 與行業相關的法規	☐	☐	☐
(ii) Engineering-related ISO Standards 與工程相關的ISO標準	☐	☐	☐
(iii) Occupational Safety and Health Ordinance 職業安全及健康條例	☐	☐	☐
E. Safety 安全			
(i) Safety Awareness 安全意識	☐	☐	☐
(ii) Safety Audit/Assessment 安全審核/評估	☐	☐	☐
(iii) Safety/Risk Management 安全/風險的管理	☐	☐	☐
(iv) Use of Personal Protective Equipment 個人防護裝備的使用	☐	☐	☐
(v) Construction Site Safety for Workers 工人在工地的安全	☐	☐	☐

Training (Continued)
培訓（續）

<u>Training Area</u> 培訓範疇	<u>Professional/ Technologist</u> 專業人士／技師	<u>Technician</u> 技術員	<u>Tradesman/ Craftsman</u> 技工
F. Soft Skills 軟性技巧			
(i) English Writing, Reading and Reporting 英語寫作，閱讀和報告	☐	☐	☐
(ii) Communication Skills with Stakeholders Both Internal and External 與內外持份者的溝通技巧	☐	☐	☐
(iii) Time Management Skills 時間管理的技巧	☐	☐	☐
(iv) Design Thinking Skills 設計思維的技巧	☐	☐	☐
(v) Supervisory Skills 督導技巧	☐	☐	☐
(vi) Rapid Response and Reporting Skills 快速回應及報告技巧	☐	☐	☐
G. Others其他			
(i) Others (please specify): 其他（請說明）： _____	☐	☐	☐
No such level of staff 沒有相關職級員工	☐	☐	☐

End of questionnaire. Thank you for your co-operation.
問卷完，多謝合作。

2025 Manpower Survey of the Electrical and Mechanical Services Industry
機電工程業 2025 年人力調查

Explanatory Notes
附註

Part I
第一部份

1. Principal Jobs - Column 'A'
主要職務——‘A’欄

- (a) Please go through column 'A' and mark those principal jobs applicable to your establishment. For detailed job descriptions for principal jobs, please refer to Appendix B.
請瀏覽‘A’欄，選取適用於貴機構的主要職務。有關詳細的工作說明，請參閱附錄 B。
- (b) Please note that some of the job titles may not be the same as those used in your establishment. Please classify an employee according to his/her major duty and supply the required information if the jobs have similar or related functions.
調查表內部分職稱可能有別於貴機構所採用。請根據僱員的主要職責分類。若員工職責與表內某職務的職責相近，可視作相同職務，請提供所需資料。
- (c) In the event where an employee's duties in your establishment are split between two or more job titles, please use the job title that best describes his/her principal responsibility.
如貴機構有員工身兼多項職責，請選用最能反映其主要職責的職稱。
- (d) Please add in column 'A' titles of any principal jobs not mentioned in job descriptions (Appendix B); briefly describe them in respect of the appropriate job categories.
如貴機構另有機電工程的主要職務未載於工作說明（附錄 B），請一併填入‘A’欄內，並簡述其所屬的職務類別及等級。

2. Number of Full Time Employees as at Survey Reference Date (Excl. trainees) - Column 'B'
在統計日期的全職僱員人數（受訓者除外）——‘B’欄

For each principal job, please fill in the total number of full time employees (excluding trainees/apprentices) as at survey reference date.
“Full Time Employees” refer to those working full-time (i.e. at least 4 weeks a month, and not less than 18 hours in each week) under the payroll of the establishment. These include proprietors and partners working full-time for the establishment. These definitions also apply to ‘full-time employee(s)’ appearing in other parts of the questionnaire.
請填寫貴機構於統計日期僱用的每個主要職務的全職僱員總數（實習生／見習員除外）。
「全職僱員」指在貴機構內全職工作（即每月最少四週、每週不少於十八小時）的受薪人員，其中包括在機構內全職工作的東主及合夥人。調查表內所出現的「全職僱員」等詞，定義亦同。

3. Number of Trainees as at Survey Reference Date – Column 'C'
在統計日期的受訓者人數——‘C’欄

Please fill in the total number of employees undergoing any form of training. This includes trainees and apprentices under a contract of apprenticeship.
請填寫正在接受各種形式訓練的僱員總數，包括實習生及根據見習員合約受聘的學徒。

4. Number of Full Time Vacancies as at Survey Reference Date - Column 'D'
在統計日期的空缺額 ——‘D’欄

Please fill in the number of full time vacancies as at Survey Reference Date. 'Vacancies' refer to those unfilled, immediately available job openings for which the establishment is actively trying to recruit personnel as at survey reference date.

請填上在統計日期每一主要職務的全職空缺額。「空缺額」是指該職位於統計參考日期仍懸空，須立刻填補，而現正積極招聘人員填補。

5. Average Monthly Income of Full Time Employees (Excl. trainees) - Column 'E'
全職僱員之平均每月平均收入（受訓者 除外）——‘E’欄

Please enter the code of average monthly income during the past 12 months for each principal job of full time employee(s). This should include basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus. If you have more than one employee doing the same job, please enter the average range.

請在‘E’欄填入每個主要職務的全職僱員過去 12 個月每月平均薪酬的編號。這包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。如 貴機構有多於一名僱員擔任同一主要職務，則請取平均收入。

Part II

第二部份

6. Question 1 - Expected Change in Future

問題 1 — 未來變化

When comparing with the current situation, please indicate your views on the expected change in the next 12 months. 相對於現在，請指出 貴機構預計在未來十二個月之預期變化。

- (i) Business volume and provide the reasons leading to the better or worse.
業務額及指出引起較佳或較差的原因。
- (ii) Number of Full-time employees
全職員工數目

7. Question 2 – New Job Position

問題 2 — 新職位

- ◆ Please indicate the new job position(s) that will be introduced in the future (if any) in order to meet the emerging trends of the industry.
請指出 貴機構未來將會引入的新職位(如有)，以配合行業的新興趨勢。
- ◆ Please indicate the existing jobs that are foreseen to undergo drastic changes in job duties/job specifications.
請指出預計將有職務或工作規範上重大轉變的現有職位。

8. Question 3 – Current Employees

問題 3 — 現職僱員

- ◆ Please indicate the age range distribution of full-time employees.
請指出 貴機構全職僱員的年齡分布
- ◆ Please specify the retirement age of full-time employees.
請註明全職僱員的退休年齡
- ◆ Please indicate the trend of retirement age of full-time employees in the future.
請指出 貴機構全職僱員退休年齡的未來趨勢

9. Question 4 - Number of employees employed through talent admission scheme* or labour importation scheme ^

貴機構透過吸引人才計劃*或輸入勞工計劃^聘請的僱員人數

* Refers to the Top Talent Pass Scheme (TTPS), General Employment Policy and Admission Scheme for Mainland Talents and Professionals (including Technical Professionals Stream) [GEP, ASMTTP, GEP(TP) & ASMTTP(TP)], Technology Talent Admission Scheme (TechTAS), Immigration Arrangements for Non-local Graduates (IANG), Quality Migrant Admission Scheme (QMAS) and the Admission Scheme for the Second Generation of Chinese Hong Kong Permanent Residents (ASSG).

For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_b_1

指高端人才通行證計劃、「一般就業政策」及輸入內地人才計劃（包括技術專才類別）、科技人才入境計劃、非本地畢業生留港／回港就業安排、優秀人才入境計劃、輸入中國籍香港永久性居民第二代計劃。詳情請參閱網址：

https://www.immd.gov.hk/hkt/services/index.html#tab_b_1

^ Refers to the Sector-specific Labour Importation Schemes and Enhanced Supplementary Labour Scheme (ESLS).

For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_c_1

指行業輸入勞工計劃及補充勞工優化計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_c_1

10. Question 5 - Number of Hong Kong Electrical and Mechanical Engineering, or Aircraft Maintenance employees employed by your organisation and its subsidiaries in the Mainland (except Hong Kong) at the Survey Reference Date.

問題 5 — 貴機構在統計日期在內地（香港 除外）的公司及其附屬公司之香港機電工程 或 飛機維修工程僱員人數。

11. Question 6 - New Recruitment

問題 6 — 新聘僱員

- ◆ Please fill in the total number of full-time employees who were newly recruited in the past 12 months.
請填寫 貴機構在過去十二個月內新招聘的全職僱員總人數。
- ◆ Please fill in the number of new recruits with the experience in electrical and mechanical engineering or aircraft maintenance engineering.
請填寫 貴機構的新招聘中，具機電工程或飛機維修工程相關經驗的僱員人數。
- ◆ Please fill in the number of new recruits who are graduates of 2024 and 2025 from electrical and mechanical engineering or aircraft maintenance engineering programmes.
請填寫 貴機構的新招聘中，相關機電工程或飛機維修工程之課程於 2024 及 2025 的畢業生人數。

12. Question 7 – Employees leaving the Establishment

問題 7 — 離職僱員

Please fill in the number of full-time employees who had left in the past 12 months.
請填寫 貴機構過去十二個月內，全職僱員的離職人數。

13. Question 8 – Preferred Level of Education and Years of Experience of Full-Time Employees

問題 8 — 全職僱員宜有的教育程度及相關年資

Please indicate the preferred level of education and years of experience of full-time employees.
請選擇全職僱員宜有的教育程度及相關年資。

Definition of Education Level:

教育程度的定義：

- ◆ “Postgraduate Degree” refers to higher degrees (e.g. master degrees) offered by local or non-local education institutions, or equivalent.
「研究生學位」是指本地或非本地教育機構提供的高等學位（如碩士學位），或同等教育程度。
- ◆ “First Degree” refers to First degrees offered by local or non-local education institutions, or equivalent.
「學士學位」是指本地或非本地教育機構提供的學士學位，或同等教育程度。
- ◆ “Sub-degree” refers to Associate Degrees, Higher Diplomas, Professional Diplomas, Higher Certificates, Endorsement Certificates, Associateship or equivalent programmes offered by local or non-local education institutions.
「副學位」是指本地或非本地教育機構提供的副學士、高級文憑、專業文憑、高級證書、增修證書、院士銜或同等課程。
- ◆ “Diploma/Certificate” refers to technical and vocational education programmes including Diploma/Certificate courses, Diploma of Foundation Studies, Diploma of Vocational Education and programmes at the craft level, or equivalent.
「文憑／證書」是指技術及職業教育課程之文憑／證書、基礎課程文憑、職專文憑及技工程度的課程，或同等教育程度。
- ◆ “Senior Secondary” refers to Secondary 4-6/7, covering the education programmes in relation to the Hong Kong Certificate of Education Examination (HKCEE), the Hong Kong Diploma of Secondary Education (HKDSE) Examination, Diploma of Applied Education (DAE), or equivalent.
「高中」是指「中四至中七」是指中四至中七（包括與香港中學會考、香港中學文憑考試、應用教育文憑等相關的教育課程）或同等教育程度。
- ◆ “Junior Secondary” refers to Secondary 3 or below, or equivalent.
「初中」是指中三或以下，或同等教育程度。

14. Question 9 – Recruitment Difficulties

問題 9 — 招聘困難

Please indicate the difficulties encountered in the recruitment of full-time employees of your establishment in the past 12 months.

請指出 貴機構在過去十二個月在招聘全職僱員時遇到的困難。

15. Question 10 - Top three factors to attract new entrants to the industry

問題 10 — 最能吸引新人入行的首三個因素

Please indicate the top three factors that your establishment considers useful to attract new entrants to the industry

請指出 貴機構認為最能吸引新人入行的首三個因素

16. Question 11 - Training areas

問題 11 — 培訓範疇

Please indicate the future training areas for full-time employees in order to meet the emerging trend of the industry.

請指出 貴機構的全職僱員未來需要加強培訓的範疇，以配合行業的新興趨勢。

17. [NOT applicable for Aircraft Maintenance Sector]

[不適用於飛機維修工程業]

Question 12 - Proportion of Contracting and Servicing

問題 12 — 承造與維修服務的比例

For each job level, please indicate the relative percentage of manpower engaging in "Contracting" and "Servicing" work of the electrical and mechanical engineering in your company

請填寫 貴機構各技能等級的僱員，在從事機電工程的「承造」及「維修服務」工作類別上相對的百分比。

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Part I
第一部份

1. Principal Jobs - Column 'A'
主要職務——‘A’欄

- (a) Please go through column 'A' and mark those principal jobs applicable to your establishment. For detailed job descriptions for principal jobs, please refer to Appendix B.
請瀏覽‘A’欄，選取適用於貴機構的主要職務。有關詳細的工作說明，請參閱附錄 B。
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調查表內部分職稱可能有別於貴機構所採用。請根據僱員的主要職責分類。若員工職責與表內某職務的職責相近，可視作相同職務，請提供所需資料。
- (c) In the event where an employee's duties in your establishment are split between two or more job titles, please use the job title that best describes his/her principal responsibility.
如貴機構有員工身兼多項職責，請選用最能反映其主要職責的職稱。
- (d) Please add in column 'A' titles of any principal jobs not mentioned in job descriptions (Appendix B); briefly describe them in respect of the appropriate job categories.
如貴機構另有機電工程的主要職務未載於工作說明（附錄 B），請一併填入‘A’欄內，並簡述其所屬的職務類別及等級。

2. Number of Full Time Employees as at Survey Reference Date (Excl. trainees) - Column 'B'
在統計日期的全職僱員人數（受訓者除外）——‘B’欄

For each principal job, please fill in the total number of full time employees (excluding trainees/apprentices) as at survey reference date.
“Full Time Employees” refer to those working full-time (i.e. at least 4 weeks a month, and not less than 18 hours in each week) under the payroll of the establishment. These include proprietors and partners working full-time for the establishment. These definitions also apply to ‘full-time employee(s)’ appearing in other parts of the questionnaire.
請填寫貴機構於統計日期僱用的每個主要職務的全職僱員總數（實習生／見習員除外）。
「全職僱員」指在貴機構內全職工作（即每月最少四週、每週不少於十八小時）的受薪人員，其中包括在機構內全職工作的東主及合夥人。調查表內所出現的「全職僱員」等詞，定義亦同。

3. Number of Trainees as at Survey Reference Date – Column 'C'
在統計日期的受訓者人數——‘C’欄

Please fill in the total number of employees undergoing any form of training. This includes trainees and apprentices under a contract of apprenticeship.
請填寫正在接受各種形式訓練的僱員總數，包括實習生及根據見習員合約受聘的學徒。

4. Number of Full Time Vacancies as at Survey Reference Date - Column 'D'
在統計日期的空缺額 ——‘D’欄

Please fill in the number of full time vacancies as at Survey Reference Date. 'Vacancies' refer to those unfilled, immediately available job openings for which the establishment is actively trying to recruit personnel as at survey reference date.

請填上在統計日期每一主要職務的全職空缺額。「空缺額」是指該職位於統計參考日期仍懸空，須立刻填補，而現正積極招聘人員填補。

5. Average Monthly Income of Full Time Employees (Excl. trainees) - Column 'E'
全職僱員之平均每月平均收入（受訓者 除外）——‘E’欄

Please enter the code of average monthly income during the past 12 months for each principal job of full time employee(s). This should include basic salary, overtime pay, cost of living allowance, meal allowance, housing allowance, travel allowance, commission and bonus. If you have more than one employee doing the same job, please enter the average range.

請在‘E’欄填入每個主要職務的全職僱員過去 12 個月每月平均薪酬的編號。這包括底薪、逾時工作津貼、生活津貼、膳食津貼、房屋津貼、旅行津貼、佣金及花紅。如 貴機構有多於一名僱員擔任同一主要職務，則請取平均收入。

Part II

第二部份

6. Question 1 - Expected Change in Future

問題 1 — 未來變化

When comparing with the current situation, please indicate your views on the expected change in the next 12 months. 相對於現在，請指出 貴機構預計在未來十二個月之預期變化。

- (i) Business volume and provide the reasons leading to the better or worse.
業務額及指出引起較佳或較差的原因。
- (ii) Number of Full-time employees
全職員工數目

7. Question 2 – New Job Position

問題 2 — 新職位

- ◆ Please indicate the new job position(s) that will be introduced in the future (if any) in order to meet the emerging trends of the industry.
請指出 貴機構未來將會引入的新職位(如有)，以配合行業的新興趨勢。
- ◆ Please indicate the existing jobs that are foreseen to undergo drastic changes in job duties/job specifications.
請指出預計將有職務或工作規範上重大轉變的現有職位。

8. Question 3 – Current Employees

問題 3 — 現職僱員

- ◆ Please indicate the age range distribution of full-time employees.
請指出 貴機構全職僱員的年齡分布
- ◆ Please specify the retirement age of full-time employees.
請註明全職僱員的退休年齡
- ◆ Please indicate the trend of retirement age of full-time employees in the future.
請指出 貴機構全職僱員退休年齡的未來趨勢

9. Question 4 - Number of employees employed through talent admission scheme* or labour importation scheme ^ **貴機構透過吸引人才計劃*或輸入勞工計劃^聘請的僱員人數**

* Refers to the Top Talent Pass Scheme (TTPS), General Employment Policy and Admission Scheme for Mainland Talents and Professionals (including Technical Professionals Stream) [GEP, ASMTTP, GEP(TP) & ASMTTP(TP)], Technology Talent Admission Scheme (TechTAS), Immigration Arrangements for Non-local Graduates (IANG), Quality Migrant Admission Scheme (QMAS) and the Admission Scheme for the Second Generation of Chinese Hong Kong Permanent Residents (ASSG).

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^ Refers to the Sector-specific Labour Importation Schemes and Enhanced Supplementary Labour Scheme (ESLS).

For details, please refer to the link: https://www.immd.gov.hk/eng/services/index.html#tab_c_1

指行業輸入勞工計劃及補充勞工優化計劃。詳情請參閱網址：https://www.immd.gov.hk/hkt/services/index.html#tab_c_1

10. Question 5 - Number of Hong Kong Gas Services Engineering or Electrical and Mechanical Engineering workers employed by your organisation and its subsidiaries in the Mainland (except Hong Kong) at the Survey Reference Date.

問題 5 — 貴機構在統計日期在內地（香港 除外）的公司及其附屬公司之香港氣體燃料工程或機電工程僱員人數。

11. Question 6 - New Recruitment

問題 6 — 新聘僱員

- ◆ Please fill in the total number of full-time employees who were newly recruited in the past 12 months.
請填寫 貴機構在過去十二個月內新招聘的全職僱員總人數。
- ◆ Please fill in the number of new recruits with the experience in gas services engineering, or electrical and mechanical engineering.
請填寫 貴機構的新招聘中，具氣體燃料工程 或機電工程相關經驗的僱員人數。
- ◆ Please fill in the number of new recruits who are graduates of 2024 and 2025 from gas services engineering, or electrical and mechanical engineering programmes.
請填寫 貴機構的新招聘中，相關氣體燃料工程 或機電工程之課程於 2024 及 2025 的畢業生人數。

12. Question 7 – Employees leaving the Establishment

問題 7 — 離職僱員

Please fill in the number of full-time employees who had left in the past 12 months.

請填寫 貴機構過去十二個月內，全職僱員的離職人數。

13. Question 8 – Preferred Level of Education and Years of Experience of Full-Time Employees

問題 8 — 全職僱員宜有的教育程度及相關年資

Please indicate the preferred level of education and years of experience of full-time employees.

請選擇全職僱員宜有的教育程度及相關年資。

Definition of Education Level:

教育程度的定義：

- ◆ “Postgraduate Degree” refers to higher degrees (e.g. master degrees) offered by local or non-local education institutions, or equivalent.
「研究生學位」是指本地或非本地教育機構提供的高等學位（如碩士學位），或同等教育程度。
- ◆ “First Degree” refers to First degrees offered by local or non-local education institutions, or equivalent.
「學士學位」是指本地或非本地教育機構提供的學士學位，或同等教育程度。
- ◆ “Sub-degree” refers to Associate Degrees, Higher Diplomas, Professional Diplomas, Higher Certificates, Endorsement Certificates, Associateship or equivalent programmes offered by local or non-local education institutions.
「副學位」是指本地或非本地教育機構提供的副學士、高級文憑、專業文憑、高級證書、增修證書、院士銜或同等課程。
- ◆ “Diploma/Certificate” refers to technical and vocational education programmes including Diploma/Certificate courses, Diploma of Foundation Studies, Diploma of Vocational Education and programmes at the craft level, or equivalent.
「文憑／證書」是指技術及職業教育課程之文憑／證書、基礎課程文憑、職專文憑及技工程度的課程，或同等教育程度。
- ◆ “Senior Secondary” refers to Secondary 4-6/7, covering the education programmes in relation to the Hong Kong Certificate of Education Examination (HKCEE), the Hong Kong Diploma of Secondary Education (HKDSE) Examination, Diploma of Applied Education (DAE), or equivalent.
「高中」是指「中四至中七」是指中四至中七（包括與香港中學會考、香港中學文憑考試、應用教育文憑等相關的教育課程）或同等教育程度。
- ◆ “Junior Secondary” refers to Secondary 3 or below, or equivalent.
「初中」是指中三或以下，或同等教育程度。

14. Question 9 – Recruitment Difficulties

問題 9 — 招聘困難

Please indicate the difficulties encountered in the recruitment of full-time employees of your establishment in the past 12 months.

請指出 貴機構在過去十二個月在招聘全職僱員時遇到的困難。

15. Question 10 - Top three factors to attract new entrants to the industry

問題 10 — 最能吸引新人入行的首三個因素

Please indicate the top three factors that your establishment considers useful to attract new entrants to the industry

請指出 貴機構認為最能吸引新人入行的首三個因素

16. Question 11 - Training areas

問題 11 — 培訓範疇

Please indicate the future training areas for full-time employees in order to meet the emerging trend of the industry.

請指出 貴機構的全職僱員未來需要加強培訓的範疇，以配合行業的新興趨勢。

THE 2025 MANPOWER SURVEY OF THE
ELECTRICAL AND MECHANICAL SERVICES INDUSTRY
機電工程業 2025 年人力調查

(E&M-E)

JOB DESCRIPTIONS FOR PRINCIPAL JOBS
IN THE ELECTRICAL AND MECHANICAL ENGINEERING SECTOR
機電工程行業主要職務的工作說明

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
1. PROFESSIONAL/TECHNOLOGIST 專業人士／技師		
101	Building Services Engineer 屋宇設備工程師	Designs and advises on building services facilities in buildings. Plans, supervises and coordinates their installation, testing, maintenance and repair. 設計屋宇內的屋宇設備、策劃、監督及協調其裝設、測試、保養和修理。
102	Electrical Engineer 電機工程師	Researches into electrical engineering problems; designs and advises on electrical systems and equipment; and plans and supervises their development, construction, manufacture, installation, operation, maintenance and repair. 研究電機工程問題；設計電機系統及設備，並就該方面提供意見；策劃及管理其發展、建造、製造、安裝、操作、保養及修理。
103	Refrigeration/ Air-conditioning/ Ventilation Engineer 冷凝／空氣調節／通風 設備工程師	Researches into electrical and mechanical engineering problems related to refrigeration/air-conditioning/ ventilation systems; designs and advises on refrigerating, air-handling and electrical equipment for air-conditioning plant, cold stores and other refrigerating systems; plans and supervises their development, manufacture, construction, installation, operation, maintenance and repair. 研究有關冷藏／空調系統的電機及機械工程問題；設計空調廠房、冷藏庫及其他冷藏系統的各项冷凝、空氣處理及電機設備，並就該方面提供意見；策劃及管理其發展、製造、建造、安裝、操作、保養及修理。
104	Mechanical Engineer 機械工程師	Researches into mechanical engineering problems; designs and advises on mechanical plant and equipment; plans and supervises their development, manufacture, construction, installation, operation, maintenance and repair. 研究機械工程問題；設計機械裝置及設備，並就該方面提供意見；策劃及管理其發展、製造、建造、安裝、操作、保養及修理。
105	Plumbing and Drainage Engineer 水喉及渠務工程師	Researches into plumbing and drainage engineering problems; designs and advises on plumbing and drainage plant and equipment; plans and supervises their development, manufacture, construction, installation, operation, maintenance and repair. 研究水喉及渠務工程問題；設計水喉及渠務裝置和設備，並就該方面提供意見；策劃及管理其發展、製造、建造、安裝、操作、保養及修理。
106	Lift/Escalator Engineer 升降機／自動梯 工程師	Researches into electrical and mechanical engineering problems related to lift and escalator systems; designs and advises on mechanical and electrical equipment for lift and escalator systems; plans and supervises their development, manufacture, construction, installation, operation, maintenance and repair. 研究有關升降機和自動梯系統的電機及機械工程問題；設計升降機和自動梯系統的機械及電機設備，並就該方面提供意見；策劃及管理其發展、製造、建造、安裝、操作、保養及修理。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
1. PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
107	Fire Services Engineer 消防設備工程師	Researches into fire service problems; designs and advises on fire services systems and equipment; and plans and supervises their development, construction, manufacture, installation, operation, maintenance and repair. 研究消防設備問題；設計消防系統及設備，並就該方面提供意見；策劃及管理其發展、建造、製造、安裝、操作、保養及修理。
108	Electronics Engineer 電子工程師	Researches into the application of electronic techniques in electrical engineering problems; designs and advises on electronic systems and equipment; plans and supervises their development, construction, manufacture, installation, operation, maintenance and repair. 研究電子技術在電機工程問題上的應用；設計電子系統及設備，並就該方面提供意見；策劃及管理其發展、建造、製造、安裝、操作、保養及修理。
109	Control and Instrumentation Engineer 控制及儀器工程師	Designs and advises on electrical and mechanical measuring, control and test instruments; and plans and supervises their development, construction, installation, operation and maintenance. 設計電機及機械測量、控制及試驗儀器，並就該方面提供意見；策劃及管理其發展、建造、安裝、操作及保養。
110	Engineering Manager (E&M Engineering-related) 工程經理 (機電工程相關)	Directs and assumes accountabilities for all aspects of electrical and mechanical (E & M) engineering projects or services. The job holder is not normally directly involved in day-to-day work of the engineering projects or services but sometimes offers professional engineering advices and decisions. He/she should have professional qualification and experience in E & M engineering. 管理及負責機電工程或服務。其職務通常不會直接參與工程或服務的日常工作，但會間常提出專業工程建議及決定。此職位需由具備專業資歷的人士擔任。
111	Safety Officer 安全主任	Assists the employer of a workplace or a construction site in promoting the safety and health of persons employed therein, including the inspection of workplace, plants, equipment or works processes to identify any risks and to advise on preventive measures; investigates accidents and dangerous occurrences and makes recommendations to prevent similar accidents. 協助工作場所或建築地盤的東主從事促進僱員安全及健康的工作，包括視察廠房、設備或一般鑒別工作危險的程序，並就預防措施提供意見；調查意外及危險事故的成因，並就如何避免發生同類意外提供意見。
112	Aircraft Maintenance Engineer 飛機維修工程師	Plans, leads and supervises aircraft maintenance checks; Identifies and rectifies problems and defect; Analyses and interprets technical procedures, schematic engineering diagrams, manuals and publications; Establishes and maintains good business relationship with customers; Approves authorisation holder for issuing Certificate of Release to Service for different types of aircraft; He/She should be the holder of Category A or B Aircraft Maintenance Licence. 策劃、領導及監督飛機維修的檢驗工作；找出和矯正相關的問題和缺點；分析和詮釋技術程序、工程繪圖、手冊和刊物；與客戶建立和維繫良好商業關係；批准認可人士為各類飛機發出許可服務證明書；具備甲類或乙類航空器維修執照。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
1. PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
113	Building Information Modelling Manager (E&M Engineering-related) 建築信息模擬經理 (機電工程相關)	Manages BIM technology implementation and assures the quality deliverables on E&M engineering projects and is responsible for BIM facilitation, coordinating data-exchange activities, fulfilling pre-defined design specifications and delivery specifications, and overall model quality control. 為機電工程項目，管理 BIM 技術的實行，並須確保其質量，主要職責包括促使 BIM 推行，協調數據交換活動，完成預定義的設計規範和交付規範以及總體模型質量控制。
2. TECHNICIAN 技術員		
201	Supervisor 監督	Performs supervisory duties contributory to the planning and allocation of tasks to workers and trainees, and to the manufacture, inspection, quality control, installation, operation, maintenance and repair of equipment and system. 擔任管理職務，如策劃及分配工作予工人及受訓者；管理有關設備及系統的製造、查驗、品質控制、安裝、操作、保養及修理。
202	Building Services Technician 屋宇設備技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, installation, operation, maintenance and repair of building services systems and equipment. Assists to plan, coordinate and supervise their projects. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、安裝、操作、保養及修理屋宇裝置及設備。並協助工程師策劃、協調及管理有關計劃。
203	Draughtsman 繪圖員	Prepares detail and assembly drawings and circuit diagrams according to design specifications. 按照設計規格，繪製明細圖、裝配圖及線路圖。
204	Electrical Engineering Technician 電機工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, installation, operation, maintenance and repair of electrical systems and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、安裝、操作、保養及修理電機裝置及設備。
205	Refrigeration/ Air-conditioning/ Ventilation Technician 冷凝／空氣調節／ 通風設備技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, construction, installation, efficient operation, maintenance and repair of air-conditioning plant and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、建造、安裝、有效操作、保養及修理冷凝空氣調節廠房及設備。
206	Mechanical Engineering Technician 機械工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, construction, installation, efficient operation, maintenance and repair of mechanical plant and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、建造、安裝、有效操作、保養及修理機械裝置及設備。
207	Lift/Escalator Technician 升降機／自動梯 技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, installation, operation, maintenance and repair of both mechanical and electrical equipment for various types of lifts and escalators. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、安裝、操作、保養及修理各類升降機及自動梯的機械及電氣設備。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
2. TECHNICIAN (Continued) 技術員（續）		
208	Fire Services Technician 消防設備技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, installation, operation, maintenance and repair of fire services systems, equipment and fire extinguishers. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、安裝、操作、保養及修理消防系統、設備及滅火筒。
209	Electrical Instrument and Meter Technician 電工儀器技術員	Fits, assembles, repairs, tests and calibrates electrical meters and instruments either independently or under the direction of a qualified engineer. 單獨或在有資歷工程師的指導下，裝配、組合、修理、測試及校準電錶及電工儀器。
210	Electronics Technician 電子技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, construction, installation, operation, maintenance and repair of electronic devices and equipment other than telecommunication systems. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、建造、安裝、操作、保養及修理電子裝置及設備（電訊系統除外）。
211	Telecommunication Technician 電訊技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, installation, operation, maintenance and repair of telecommunication systems and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、安裝、操作、保養及修理電訊系統及設備。
212	Office Equipment Service Technician 辦公室設備維修技術員	Checks, tests, installs, maintains and services, repairs and overhauls general office equipment including electronic business equipment and copying machines, in both workshops and customers' premises. 在工場或顧客事務所查驗、測試、安裝、保養及檢修、修理及大修各項常用辦公室裝置，包括電子商業設備及各類複印機器。
213	Safety Supervisor 安全督導員	Assists the employer and Safety Officer, where appropriate, in promoting safety and health of persons employed in a workplace or a construction site. Advises employee on safety standards, and supervises the observance of such standards for the promotion of safety at work. Implementing industrial safety training. 協助東主及安全主任，從事促進工作場所或建築地盤僱員的安全及健康工作；向員工提供有關安全標準的意見，並監督這些標準的切實執行，以促進工作安全。推行工業安全訓練。
214	Aircraft Maintenance Technician 飛機維修技術員	Carries out aircraft maintenance and servicing tasks in a professional manner and certifies his/her own work within the scope of the approval under minimum supervision. Performs diagnostic evaluations of equipment and maintenance works to ensure quality delivery of services. Performs supervisory duties and ensures work is accomplished in accordance with the procedures and is progressively signed off. He/She should be the holder of Category A or B Aircraft Maintenance Licence. 在最少的指導下能專業地完成和保證飛機保養和維修的工作；為器材及維修工作給予準確的診斷評估，以確保有質素的服務；擔任指導的工作，並確保所有工作都能按程序完成及逐步驗收。具備甲類或乙類航空器維修執照。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
2. TECHNICIAN (Continued) 技術員（續）		
215	Rolling Stock Technician 鐵道車輛技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, construction, installation, efficient operation, maintenance and repair of electrical systems and mechanical equipment in rolling stock. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、建造、安裝、有效操作、保養及修理鐵道車輛上的電機裝置和機械設備。
216	Railway Signalling Technician 鐵路訊號技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, construction, installation, operation maintenance and repair of electronic devices and mechanical equipment in railway signalling system. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、建造、安裝、操作保養及修理鐵路訊號系統之電子裝置和機械設備。
217	Building Information Modelling Coordinator/Modeller (E&M Engineering-related) 建築信息模擬協調員 (機電工程相關)	Prepares BIM models and drawings for E&M engineering projects under the instructions of engineers, monitors the models, updates and modifies drawings, coordinates with the project teams for the work process implementation and analysis, and is responsible for model management, project information management and documentation, and the relevant coordination activities with internal and external stakeholders. 在工程師的指導下，準備機電工程項目的 BIM 模型和圖則，監控模型，更新和修改圖則，與項目團隊協調工作流程的實施和分析，並負責模型管理、項目信息管理和文檔管理，以及與內部和外部項目參與者的協調工作。
3. TRADESMAN/CRAFTSMAN 技工		
301	Foreman/Chargehand 管工／領工	Organises and directs groups or teams of craftsmen or other workers. 組織及督導若干組或若干隊技工或其他工人。
302	Building Services Mechanic 屋宇設備技工	Installs, operates, maintains and repairs various types of building services systems and equipment. 安裝、操作、保養和維修各類屋宇裝置及設備。
303	Electrician/ Electrical Fitter 電工／ 電氣打磨裝配工	Installs, tests, maintains and repairs electrical installations including electrical wiring in accordance with regulations and specifications; fits, assembles, erects, installs, maintains and repairs electrical plant and equipment other than refrigeration/air-conditioning/ventilation electrical control, low voltage switchboards and control panels. 依據規例及規格安裝、測試、保養和維修電力裝置，包括敷電線；裝配、組合、設置、安裝、保養及修理各類電氣裝置及設備（控制板及空調製冷設備電力控制除外）。
304	Control Panel Assembler 控制板裝配工	Fits, assembles, installs and repairs low voltage switchboards and control panels, for electrical plants and equipment. 裝配、組合、安裝及修理用於電氣裝置及設備的低電壓電線制箱及控制板。
305	Electrical Wireman 電氣佈線工	Installs and lays wiring for electrical systems and equipment. 安裝和敷設用於電氣裝置及設備的電線。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
3. TRADESMAN/CRAFTSMAN (Continued) 技工 (續)		
306	Refrigeration/ Air-conditioning/ Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	Fits, assembles, installs, commissions, maintains and repairs electrical control for: (a) air-conditioning systems including refrigerating, air-handling and ventilation equipment; (b) cold stores, ice-making and other refrigerating equipment; (c) air-conditioning and ventilation equipment forming part of fire services systems. 裝配、組合、安裝、試動、保養和修理用於下列設備的電力控制： (甲) 空調系統，包括冷凝、空氣處理及通風設備； (乙) 冷藏庫、製冰及其他冷凝設備； (丙) 與消防系統有關連的空調系統及通風設備等。
307	Refrigeration/ Air-conditioning/ Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	Fits, assembles, installs, commissions, maintains and repairs: (a) unitary air-conditioning systems including refrigerating, air-handling and ventilation equipment; (b) unitary cold stores, ice-making and other refrigerating equipment. 裝配、組合、安裝、試動、保養和修理： (甲) 獨立安裝的空調系統和通風設備； (乙) 獨立安裝的冷藏庫、製冰及其他冷凝設備。
308	Refrigeration/ Air-conditioning/ Ventilation Mechanic(Air System)/ Sheet Metal Worker 空調製冷設備技工(送風系統)/薄片金屬構造工	Fabricates, installs and repairs sheet metal assemblies and products (including ventilation ducting, dampers, fire resistant board and fittings). 製造、裝置及修理薄片金屬組合及製品(包括通風槽、風閘、防火板及有關裝置)。
309	Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation)/ Thermal Insulation Craftsman 空調製冷設備技工(保溫)/保溫技工	Prepares, fits, fixes and repairs thermal insulations of air-conditioning and refrigeration plants. 準備、裝配、設置和修理空氣調節及冷凝裝置的保溫設備。
310	Refrigeration/ Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	Fits, assembles, installs, commissions, maintains and repairs water systems for air-conditioning systems (including air-handling and water condensing equipment). 裝配、組合、安裝、試動、保養和修理用於空調系統(包括空氣處理及水冷凝設備)的水系統。
311	Plumber and Pipe Fitter 喉管工	Assembles, installs and maintains pipes, fittings and fixtures for conveying gases and liquids other than refrigeration, air-conditioning, ventilation and fire services piping. 組合、安裝及保養用以供應氣體和液體的喉管及裝置(消防及空調製冷設備喉管除外)。
312	Mechanical Fitter/ Machinist 機械打磨裝配工/ 機床工	Fits, assembles, erects, installs, repairs and services mechanical plant and equipment; sets up and operates machine tools to make products to specified tolerances and surface finishes. 打磨、裝配、裝置、安裝、修理及檢修機械設備；裝設及操作機械工具，製作產品以符合規定的公差及表面公度。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
3. TRADESMAN/CRAFTSMAN (Continued) 技工 (續)		
313	Lift Mechanic 升降機技工	Installs, adjusts, services, maintains and repairs various types of lifts. 安裝、校正、檢修、保養及修理各類升降機設備。
314	Escalator Mechanic 自動梯技工	Installs, adjusts, services, maintains and repairs various types of escalators. 安裝、校正、檢修、保養及修理各類自動梯設備。
315	Fire Services Electrical Fitter 消防電氣裝配工	Installs, tests, maintains, repairs and inspects automatic fire alarm (AFA) and manual fire alarm systems, and electrical/electronic parts of fire services systems. 安裝、測試、保養、修理及查驗自動及手動火警警報系統及消防系統電氣和電子設備。
316	Fire Services Mechanical Fitter 消防機械裝配工	Installs, tests, maintains, repairs and inspects fire services piping systems and mechanical parts of fire services systems. 安裝、測試、保養、修理及查驗消防設備喉管及消防系統機械設備。
317	Cable Jointer (Power) 強電流電纜接駁工	Joins low voltage cables (i.e. not exceeding 1 000 Volts) either with the circuits dead or one or both cables energised and joints dead cables of all voltages. 接駁無通電、或其中一條或兩條已通電的低壓電纜（即不超過 1 000 伏特者），並負責接駁無通電的各級電壓電纜。
318	Overhead Linesman 架空電線技工	Constructs, maintains and repairs overhead line systems of all voltages on tubular steel, concrete, lattice girder or wood supports. 建造、保養及修理裝於管狀鋼鐵、混凝土、格子桁或木支座上的各級電壓架空電線系統。
319	Electrical Appliances Service Mechanic 電器用具服務技工	Fits and assembles, tests and installs, maintains, services and repairs all commonly used commercial and domestic electrical appliances excluding office, refrigeration and air-conditioning equipment. 裝配及組合、測試及安裝、保養、檢修及修理各類常用的商用及家庭電器用具（不包括文儀、冷凝及空氣調節設備）。
320	Welder 焊接工	Joins, cuts and deposits metals by means of an electric arc or a gas flame or by other welding or brazing processes. Holds the BS EN 287-1 qualification or a welder's license (skilled or semi-skilled workers) issued by CIC. 使用電弧、氣體火焰、黃銅焊接或其他焊接法，以接合、割切及附合金屬。持有 BS EN 287-1 資格或建造業議會發出的焊接工註冊證（大工或中工）。
321	Carpenter 木工	Cuts out, assembles, erects and repairs structural and other woodwork. 鋸切、裝配、架設及修理木架及其他木材結構。
322	Painter 髹漆工	Prepares surfaces, selects, mixes and applies paint. 擔任物品表面的打灰與磨滑、選油、混色及塗漆等工作。
323	AV and RF Mechanic 影音及射頻技工	Installs, maintains and repairs television receivers, consumer video equipment and community antenna systems. 安裝、保養及修理電視機、影音設備及公用天線系統。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
3. TRADESMAN/CRAFTSMAN (Continued) 技工（續）		
324	Building Security System Mechanic 屋宇防盜系統技工	Installs, maintains and repairs building security systems including building doorphone systems, CCTV systems, public address systems and security alarm systems and access control system. 安裝、保養及修理各類屋宇防盜系統包括訪客對講機系統、閉路電視系統、擴音系統及防盜警報系統及進出控制系統。
325	Communication System Mechanic 電訊系統裝配工	Fits, assembles, installs, maintains and repairs communication equipment and systems including block wiring systems, private automatic branch exchange system, intercom systems, in-building coaxial cable distribution systems, and other wired or wireless signal transmission and reception systems. 裝配、組合、安裝、保養及修理各類電訊裝置及系統包括電線及光纖的分支及終端接駁系統、專用電話自動接駁系統、內線電話系統、大廈內同軸電纜系統及其他有線或無線的訊號收發系統。
329	Aircraft Maintenance Mechanic 飛機維修技工	Carries out aircraft maintenance/overhaul tasks under supervision to ensure optimal and safe operations. Uses aircraft documentation and maintenance publications relative to corresponding level properly. Ensures works are completed in accordance with the relevant Aircraft Maintenance manual instruction and reaches the required standards. Completes documentation relative to his/her level according to the requirements of the Civil Aviation Department. 在指導下完成飛機保養及大修的工作，以確保飛機在最理想及安全情況下運作。適當地應用相關程度的飛機保養文件及刊物。依照航空器保養手冊來進行維修工作，並達致所需標準。按民航署要求完成相關工作的記錄。
330	Rolling Stock Tradesman 鐵道車輛技工	Installs, tests, maintains and repairs electrical installations and mechanical parts of the rolling stock. 安裝、測試、保養及修理鐵道車輛上的電機裝置和機械部分。
331	Railway Signalling Tradesman 鐵路訊號技工	Installs, tests, maintains and repairs electronic devices and mechanical parts of the railway signalling system. 安裝、測試、保養及修理鐵路訊號系統之電子裝置和機械部分。
4. SEMI-SKILLED WORKER/GENERAL WORKER 半技術工人／普通工人		
401	Labourer 普通工人	Undertakes general labouring work related to electrical and mechanical engineering. 擔任與機電工程有關的一般雜務工作。
402	Semi-skilled Worker 半技術工	Assists skilled craftsmen in the industry. 協助業內的技工工作。

THE 2025 MANPOWER SURVEY OF THE
ELECTRICAL AND MECHANICAL SERVICES INDUSTRY
機電工程業2025年人力調查

JOB DESCRIPTIONS FOR THE PRINCIPAL JOBS
IN THE GAS SECTOR

氣體燃料行業主要職務的工作說明

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
1. PROFESSIONAL/TECHNOLOGIST 專業人士／技師		
171	Electrical Engineer 電機工程師	Designs and advises on electrical systems and equipment of fuel gas production plant; and plans and supervises their development, construction, installation, operation, maintenance and repair. 設計氣體燃料製造廠房的電機系統及設備，並就該方面提供意見；策劃及管理其發展、建造、安裝、操作、保養及修理。
172	Gas Engineer (Fuel Gas) 氣體工程師 (氣體燃料)	Designs and advises on supply or utilisation of gas. Plans, supervises and coordinates their development, construction, installation, operation, maintenance and repair. 設計氣體燃料的供應或應用，並就該方面提供意見。策劃、監督及協調其發展、建造、安裝、操作、保養及修理。
173	Mechanical Engineer 機械工程師	Designs and advises on mechanical equipment of fuel gas production plant; and plans and supervises their development, construction, installation, operation, maintenance and repair. 設計氣體燃料製造廠房的機械裝置及設備，並就該方面提供意見；策劃及管理其發展、建造、安裝、操作、保養及修理。
174	Safety Officer 安全主任	Assists the employer of a workplace in promoting the safety and health of persons employed therein, including the inspection of workplace, plants, equipment or works processes to identify any risks and to advise on preventive measures; investigates accidents and dangerous occurrences and makes recommendations to prevent similar accidents. 協助工作場所的東主從事促進僱員安全及健康的工作，包括視察廠房、設備或一般鑒別工作危險的程序，並就預防措施提供意見；調查意外及危險事故的成因，並就如何避免發生同類意外提供意見。
2. TECHNICIAN 技術員		
271	Electrical Engineering Technician 電機工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, manufacture, installation, operation, maintenance and repair of electrical systems and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、製造、安裝、操作、保養及修理電機裝置及設備。
272	Gas Engineering Technician 氣體燃料工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, installation, operation, maintenance and repair of equipment concerned with the supply or utilisation of gas. Assists to plan, coordinate and supervise their projects. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、安裝、操作、保養及修理氣體燃料的供應或應用的設備。並協助工程師策劃、協調及管理有關計劃。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
2. TECHNICIAN (Continued) 技術員 (續)		
273	Mechanical Engineering Technician 機械工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, development, construction, installation, efficient operation, maintenance and repair of mechanical plant and equipment. 單獨或在有資歷工程師的指導下，擔任技術性工作，從事設計、發展、建造、安裝、有效操作、保養及修理機械裝置及設備。
274	Safety Supervisor 安全督導員	Assists the employer and Safety Officer, where appropriate, in promoting safety and health of persons employed in a workplace. Advises employee on safety standards, and supervises the observance of such standards for the promotion of safety at work. Implementing industrial safety training. 協助東主及安全主任，從事促進工作場所僱員的安全及健康工作；向員工提供有關安全標準的意見，並監督這些標準的切實執行，以促進工作安全。推行工業安全訓練。
275	Supervisor 監督	Performs supervisory duties contributory to the planning and allocation of tasks to workers and trainees, and to the inspection, quality control, installation, operation, maintenance and repair of equipment and system. 擔任管理職務，如策劃及分配工作予工人及受訓者；管理有關設備及系統的查驗、品質控制、安裝、操作、保養及修理。
3. TRADESMAN/CRAFTSMAN 技工		
371	Electrician/Electrical Fitter 電工／電氣打磨裝配工	Installs, tests, maintenances and repairs electrical installations in fuel gas production plants. 安裝、測試、保養和維修在氣體燃料製造廠房的電力裝置及設備。
372	Gas Distribution Fitter (LPG) 氣體燃料輸送技工 (石油氣)	Installs, commissions, tests and services LPG distribution systems including storage and piping before meter point. 安裝、試用、測試及維修石油氣輸送系統，包括在石油氣錶前之石油氣貯藏及喉管鋪設。
373	Gas Distribution Fitter (Town Gas) 氣體燃料輸送技工 (煤氣)	Installs, commissions, tests and services town gas distribution systems starting at outside the gas production works and terminating generally at one metre above ground level outside the consumer's building. 在煤氣生產處至用戶大廈通常離地一米處之間進行安裝、試用、測試及維修煤氣輸送系統。
374	Gas Utilisation Fitter (Domestic) 氣體燃料應用技工 (住宅式)	Installs, commissions, tests and services all types of gas appliances together with their associated equipment, piping and gas supplies in domestic premises, including diagnostic fault finding and repairing. 安裝、試用、測試及維修住宅樓宇內一切氣體燃料用具、其附屬設備、喉管及氣體燃料供應系統。包括判斷與尋找故障及修理工作。
375	Gas Utilisation Fitter (Non-domestic) 氣體燃料應用技工 (非住宅式)	Installs, commissions, tests and services all types of gas appliances together with their associated equipment, piping and gas supplies in commercial and industrial premises, including diagnostic fault finding and repairing. 安裝、試用、測試及維修工商業樓宇內一切氣體燃料用具、其附屬設備、喉管及氣體燃料供應系統。包括判斷與尋找故障及修理工作。
376	Mechanical Fitter 機械打磨裝配工	Fits, assembles, erects, installs, repairs and services mechanical equipment of fuel gas production plant. 打磨、裝配、裝置、安裝、修理及檢修氣體燃料製造廠房的機械設備。

Code 編號	Principal Jobs 主要職務	Job Description 工作說明
3. TRADESMAN/CRAFTSMAN (Continued) 技工 (續)		
377	Welder 焊接工	Joins, cuts and deposits metals by means of an electric arc or a gas flame or by other welding or brazing processes for gas production plant and delivery system. Holds the BS EN 287-1 qualification or a welder's license (skilled or semi-skilled workers) issued by CIC. 使用電弧、氣體火焰、黃銅銲接或其他銲接法，以接合、割切及附合金屬，用於氣體燃料製造廠房及輸送系統。持有BS EN 287-1資格或建造業議會發出的焊接工註冊證(大工或中工)。
4. SEMI-SKILLED WORKER/GENERAL WORKER 半技術工人／普通工人		
471	Driver (LPG Cylinder Wagon) 司機 (石油氣瓶車)	Operates wagons to deliver LPG cylinders. 駕駛石油氣瓶車運送石油氣瓶。
472	Labourer 普通工人	Undertakes general labouring work of gas sector, including assisting the driver in the delivery of LPG cylinder. 擔任有關氣體燃料行業的一般雜務工作，包括協助司機運送石油氣瓶。
473	Semi-skilled Worker 半技術工	Assists skilled tradesmen in the industry. 協助業內的技工工作。

Quality Control Measures

Prior to fieldwork preparation

- Collect contact information of the sampled companies
- Group sampled companies to the same business organisation

Thorough training of fieldwork staff

- Industry briefing workshop by VTC
- Intensive briefing and training sessions by MOV in consultation with VTC

Monitoring of the fieldwork execution

- Well-trained enumerators who are experienced in conducting company surveys
- Closely monitor fieldwork progress and work of enumerators
- Debriefing sessions twice a week

Measures to increase the response rate

- Strategic directions given by VTC
- Assistance from the Training Boards and trade associations, etc.

Checking of the completed questionnaires

- Sample check of completed questionnaires by an independent team of QC checkers
- 100% vetting of the completed questionnaires by VTC

Double data entry and data validation

- Double data entry system
- Validation of collected data via computer programming and systems

Data analysis by VTC

- Comparison of survey findings with last round
- Benchmarking with relevant manpower information (if deemed appropriate)

Response Profile

Sector	(a) No. of valid cases*	(b) No. of companies successfully enumerated	(b)/(a) Effective response rate
E&M Engineering	626	571	91.2%
Gas	52	46	88.5%
Aircraft Maintenance	6	6	100.0%
Overall	684	623	91.1%

Note: * Excluding companies that were relocated to unknown addresses, had unreachable responsible persons, had ceased operations, or without relevant technical staff, etc. at the time of survey.

Manpower Projection Methodology

Adaptive Filtering Method

1. The Adaptive Filtering Method is a forecasting method which rested on the principle of “Weighted Exponential Smoothing”. In this method, past manpower data are weighted and heavier weightings are given to the more recent data. The forecast is more dependent on the recent manpower information. The degree of emphasis on the more recent survey data can be varied by adjusting the weighting factor (A). Thus, the higher the value of ‘A’, the heavier the weightings of the more recent data.
2. The forecast may also be optimised to suit the decisions made by the Training Boards based on the factors such as market trends, technological developments, social-economic factors, future expectations, etc. The method is illustrated in Figure 1 below.

Figure 1 Adaptive Filtering Method

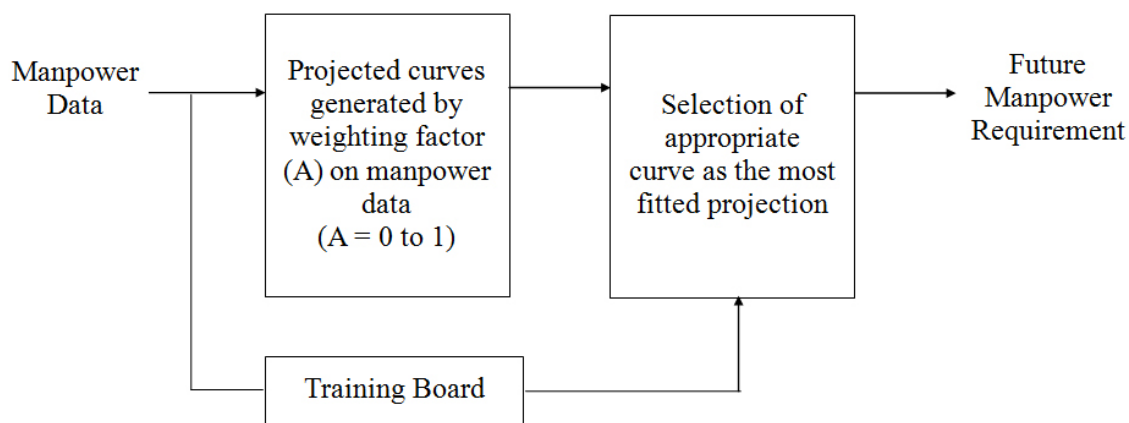


Table 9.1 Manpower Statistics by job level (E&M Engineering sector)
表 9.1 按職級劃分的人力統計 (機電工程行業)

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
101	Building Services Engineer 屋宇設備工程師	2084	44	100
102	Electrical Engineer 電機工程師	2656	66	129
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷凝／空氣調節／通風設備工程師	1136	28	28
104	Mechanical Engineer 機械工程師	1348	62	55
105	Plumbing and Drainage Engineer 水喉及渠務工程師	303	5	8
106	Lift/Escalator Engineer 升降機／自動梯工程師	303	17	16
107	Fire Services Engineer 消防設備工程師	576	6	6
108	Electronics Engineer 電子工程師	706	18	69
109	Control and Instrumentation Engineer 控制及儀器工程師	18	0	0
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)	2019	0	12
111	Safety Officer 安全主任	555	1	10
112	Aircraft Maintenance Engineer 飛機維修工程師	8	0	0
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)	48	0	0
172	Gas Engineer (Fuel Gas) 氣體工程師 (氣體燃料)	34	0	0
Sub-Total 小計		11794	247	433
Technician Level 技術員級				
201	Supervisor 監督	4689	6	76
202	Building Services Technician 屋宇設備技術員	1931	80	106
203	Draughtsman 繪圖員	411	3	5
204	Electrical Engineering Technician 電機工程技術員	2900	331	139
205	Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員	1620	153	25
206	Mechanical Engineering Technician 機械工程技術員	1570	241	151
207	Lift/Escalator Technician 升降機／自動梯技術員	1681	170	73
208	Fire Services Technician 消防設備技術員	840	4	5
209	Electrical Instrument and Meter Technician 電工儀器技術員	91	0	1
210	Electronics Technician 電子技術員	747	133	38
211	Telecommunication Technician 電訊技術員	663	0	9
212	Office Equipment Service Technician 辦公室設備維修技術員	34	0	0

Table 9.1 Manpower Statistics by job level (E&M Engineering sector)

表 9.1 按職級劃分的人力統計 (機電工程行業)

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
213	Safety Supervisor 安全督導員	384	0	15
214	Aircraft Maintenance Technician 飛機維修技術員	6	0	0
215	Rolling Stock Technician 鐵道車輛技術員	1336	0	80
216	Railway Signalling Technician 鐵路訊號技術員	465	0	30
217	Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員 (E&M Engineering-related / 機電工程相關)	49	0	0
Sub-Total 小計		19417	1121	753
Tradesman / Craftsman Level 技工級				
301	Foreman/Chargehand 管工／領工	3342	0	185
302	Building Services Mechanic 屋宇設備技工	4262	47	160
303	Electrician/Electrical Fitter 電工／電氣打磨裝配工	10198	576	115
304	Control Panel Assembler 控制板裝配工	42	0	0
305	Electrical Wireman 電氣佈線工	2738	86	30
306	Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	1909	13	40
307	Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	3533	69	17
308	Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工	443	32	0
309	Refrigeration/Air-conditioning/Ventilation Mechanic (Thermal Insulation)/Thermal Insulation Craftsman 空調製冷設備技工(保溫)／保溫技工	86	10	0
310	Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	294	0	0
311	Plumber and Pipe Fitter 喉管工	1303	0	10
312	Mechanical Fitter/Machinist 機械打磨裝配工／機床工	1464	142	250
313	Lift Mechanic 升降機技工	2164	72	246
314	Escalator Mechanic 自動梯技工	1577	6	208
315	Fire Services Electrical Fitter 消防電氣裝配工	1067	3	1
316	Fire Services Mechanical Fitter 消防機械裝配工	748	0	1
317	Cable Joiner (Power) 強電流電纜接駁工	256	15	2
318	Overhead Linesman 架空電線技工	156	16	3
319	Electrical Appliances Service Mechanic 電器用具服務技工	1014	0	0
320	Welder 焊接工	122	0	0
321	Carpenter 木工	60	0	0

Table 9.1 Manpower Statistics by job level (E&M Engineering sector)

表 9.1 按職級劃分的人力統計 (機電工程行業)

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺額
322	Painter 髹漆工	203	0	0
323	AV and RF Mechanic 影音及射頻技工	107	0	0
324	Building Security System Mechanic 屋宇防盜系統技工	12	0	0
325	Communication System Mechanic 電訊系統裝配工	1596	0	0
329	Aircraft Maintenance Mechanic 飛機維修技工	0	0	0
330	Rolling Stock Tradesman 鐵道車輛技工	625	10	59
331	Railway Signalling Tradesman 鐵路訊號技工	3	0	0
Sub-Total 小計		39324	1097	1327
Semi-skilled / General Worker Level 半技術工人／普通工人				
401	Labourer 普通工人	2015	12	50
402	Semi-skilled Worker 半技術工人	688	1	34
Sub-Total 小計		2703	13	84
Total 總數		73238	2478	2597

Table 9.1a Manpower Statistics by job level (E&M Engineering sector)

表 9.1a 按職級劃分的人力統計 (機電工程行業)

Branch I: Contracting E&M Branch

門類 I : 承造

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
101	Building Services Engineer 屋宇設備工程師	615	0	8
102	Electrical Engineer 電機工程師	781	12	20
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷凝／空氣調節／通風設備工程師	666	3	6
104	Mechanical Engineer 機械工程師	139	12	7
105	Plumbing and Drainage Engineer 水喉及渠務工程師	173	1	7
107	Fire Services Engineer 消防設備工程師	493	1	5
108	Electronics Engineer 電子工程師	63	0	0
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)	673	0	4
111	Safety Officer 安全主任	218	0	4
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)	3	0	0
Sub-Total 小計		3824	29	61
Technician Level 技術員級				
201	Supervisor 監督	1416	0	14
202	Building Services Technician 屋宇設備技術員	503	6	16
203	Draughtsman 繪圖員	209	0	4
204	Electrical Engineering Technician 電機工程技術員	839	38	10
205	Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員	931	24	0
206	Mechanical Engineering Technician 機械工程技術員	228	0	1
208	Fire Services Technician 消防設備技術員	675	2	0
209	Electrical Instrument and Meter Technician 電工儀器技術員	57	0	0
210	Electronics Technician 電子技術員	171	0	0
211	Telecommunication Technician 電訊技術員	365	0	0
212	Office Equipment Service Technician 辦公室設備維修技術員	15	0	0
213	Safety Supervisor 安全督導員	287	0	13
217	Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員 (E&M Engineering-related / 機電工程相關)	14	0	0
Sub-Total 小計		5710	70	58

Table 9.1a Manpower Statistics by job level (E&M Engineering sector)

表 9.1a 按職級劃分的人力統計 (機電工程行業)

Branch I: Contracting E&M Branch

門類 I : 承造

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Tradesman / Craftsman Level 技工級				
301	Foreman/Chargehand 管工／領工	476	0	0
302	Building Services Mechanic 屋宇設備技工	1597	6	46
303	Electrician/Electrical Fitter 電工／電氣打磨裝配工	6992	471	3
304	Control Panel Assembler 控制板裝配工	28	0	0
305	Electrical Wireman 電氣佈線工	2184	0	18
306	Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	1339	0	3
307	Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	2845	0	1
308	Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工	327	10	0
309	Refrigeration/Air-conditioning/Ventilation Mechanic (Thermal Insulation)/Thermal Insulation Craftsman 空調製冷設備技工(保溫)／保溫技工	86	10	0
310	Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	230	0	0
311	Plumber and Pipe Fitter 喉管工	1077	0	10
312	Mechanical Fitter/Machinist 機械打磨裝配工／機床工	40	0	0
315	Fire Services Electrical Fitter 消防電氣裝配工	1007	3	0
316	Fire Services Mechanical Fitter 消防機械裝配工	717	0	0
317	Cable Jointer (Power) 強電流電纜接駁工	4	0	0
319	Electrical Appliances Service Mechanic 電器用具服務技工	218	0	0
320	Welder 焊接工	50	0	0
321	Carpenter 木工	19	0	0
322	Painter 髹漆工	33	0	0
323	AV and RF Mechanic 影音及射頻技工	27	0	0
325	Communication System Mechanic 電訊系統裝配工	1346	0	0
Sub-Total 小計		20642	500	81
Semi-skilled / General Worker Level 半技術工人／普通工人				
401	Labourer 普通工人	924	0	0
402	Semi-skilled Worker 半技術工人	311	1	4
Sub-Total 小計		1235	1	4
Total 總數		31411	600	204

Table 9.1b Manpower Statistics by job level (E&M Engineering sector)

表 9.1b 按職級劃分的人力統計 (機電工程行業)

Branch II: Servicing E&M Branch

門類 II : 服務

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
101	Building Services Engineer 屋宇設備工程師	385	28	21
102	Electrical Engineer 電機工程師	1418	45	82
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷凝／空氣調節／通風設備工程師	465	25	22
104	Mechanical Engineer 機械工程師	827	40	30
105	Plumbing and Drainage Engineer 水喉及渠務工程師	115	4	1
106	Lift/Escalator Engineer 升降機／自動梯工程師	303	17	16
107	Fire Services Engineer 消防設備工程師	83	5	1
108	Electronics Engineer 電子工程師	427	2	61
109	Control and Instrumentation Engineer 控制及儀器工程師	15	0	0
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)	1085	0	4
111	Safety Officer 安全主任	263	1	2
112	Aircraft Maintenance Engineer 飛機維修工程師	0	0	0
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)	34	0	0
172	Gas Engineer (Fuel Gas) 氣體工程師 (氣體燃料)	34	0	0
Sub-Total 小計		5454	167	240
Technician Level 技術員級				
201	Supervisor 監督	2446	6	35
202	Building Services Technician 屋宇設備技術員	894	11	76
203	Draughtsman 繪圖員	169	3	1
204	Electrical Engineering Technician 電機工程技術員	1363	124	113
205	Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員	508	45	17
206	Mechanical Engineering Technician 機械工程技術員	798	89	130
207	Lift/Escalator Technician 升降機／自動梯技術員	1672	170	70
208	Fire Services Technician 消防設備技術員	156	2	5
209	Electrical Instrument and Meter Technician 電工儀器技術員	29	0	1
210	Electronics Technician 電子技術員	139	2	3
211	Telecommunication Technician 電訊技術員	63	0	1

Table 9.1b Manpower Statistics by job level (E&M Engineering sector)

表 9.1b 按職級劃分的人力統計 (機電工程行業)

Branch II: Servicing E&M Branch

門類 II : 服務

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
212	Office Equipment Service Technician 辦公室設備維修技術員	19	0	0
213	Safety Supervisor 安全督導員	73	0	1
215	Rolling Stock Technician 鐵道車輛技術員	1336	0	80
216	Railway Signalling Technician 鐵路訊號技術員	465	0	30
217	Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員 (E&M Engineering-related / 機電工程相關)	23	0	0
Sub-Total 小計		10153	452	563
Tradesman / Craftsman Level 技工級				
301	Foreman/Chargehand 管工／領工	713	0	5
302	Building Services Mechanic 屋宇設備技工	1607	29	0
303	Electrician/Electrical Fitter 電工／電氣打磨裝配工	2413	101	8
304	Control Panel Assembler 控制板裝配工	4	0	0
305	Electrical Wireman 電氣佈線工	524	86	12
306	Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	280	13	5
307	Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	604	69	10
308	Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工	96	22	0
310	Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	52	0	0
311	Plumber and Pipe Fitter 喉管工	198	0	0
312	Mechanical Fitter/Machinist 機械打磨裝配工／機床工	703	142	78
313	Lift Mechanic 升降機技工	2164	72	246
314	Escalator Mechanic 自動梯技工	1577	6	208
315	Fire Services Electrical Fitter 消防電氣裝配工	55	0	1
316	Fire Services Mechanical Fitter 消防機械裝配工	29	0	1
317	Cable Joiner (Power) 強電流電纜接駁工	247	15	2
318	Overhead Linesman 架空電線技工	151	16	3
319	Electrical Appliances Service Mechanic 電器用具服務技工	790	0	0
320	Welder 焊接工	71	0	0
321	Carpenter 木工	32	0	0

Table 9.1b Manpower Statistics by job level (E&M Engineering sector)

表 9.1b 按職級劃分的人力統計 (機電工程行業)

Branch II: Servicing E&M Branch

門類 II : 服務

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
322	Painter 髹漆工	77	0	0
323	AV and RF Mechanic 影音及射頻技工	78	0	0
324	Building Security System Mechanic 屋宇防盜系統技工	12	0	0
325	Communication System Mechanic 電訊系統裝配工	200	0	0
330	Rolling Stock Tradesman 鐵道車輛技工	625	10	59
331	Railway Signalling Tradesman 鐵路訊號技工	3	0	0
Sub-Total 小計		13305	581	638
Semi-skilled / General Worker Level 半技術工人／普通工人				
401	Labourer 普通工人	492	12	4
402	Semi-skilled Worker 半技術工人	334	0	3
Sub-Total 小計		826	12	7
Total 總數		29738	1212	1448

Table 9.1c Manpower Statistics by job level (E&M Engineering sector)

表 9.1c 按職級劃分的人力統計 (機電工程行業)

Branch III: Supplementary Samples

門類 III : 其他相關機構

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
101	Building Services Engineer 屋宇設備工程師	1084	16	71
102	Electrical Engineer 電機工程師	457	9	27
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷凝／空氣調節／通風設備工程師	5	0	0
104	Mechanical Engineer 機械工程師	382	10	18
105	Plumbing and Drainage Engineer 水喉及渠務工程師	15	0	0
108	Electronics Engineer 電子工程師	216	16	8
109	Control and Instrumentation Engineer 控制及儀器工程師	3	0	0
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)	261	0	4
111	Safety Officer 安全主任	74	0	4
112	Aircraft Maintenance Engineer 飛機維修工程師	8	0	0
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)	11	0	0
Sub-Total 小計		2516	51	132
Technician Level 技術員級				
201	Supervisor 監督	827	0	27
202	Building Services Technician 屋宇設備技術員	534	63	14
203	Draughtsman 繪圖員	33	0	0
204	Electrical Engineering Technician 電機工程技術員	698	169	16
205	Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員	181	84	8
206	Mechanical Engineering Technician 機械工程技術員	544	152	20
207	Lift/Escalator Technician 升降機／自動梯技術員	9	0	3
208	Fire Services Technician 消防設備技術員	9	0	0
209	Electrical Instrument and Meter Technician 電工儀器技術員	5	0	0
210	Electronics Technician 電子技術員	437	131	35
211	Telecommunication Technician 電訊技術員	235	0	8
213	Safety Supervisor 安全督導員	24	0	1
214	Aircraft Maintenance Technician 飛機維修技術員	6	0	0
217	Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員 (E&M Engineering-related / 機電工程相關)	12	0	0
Sub-Total 小計		3554	599	132

Table 9.1c Manpower Statistics by job level (E&M Engineering sector)

表 9.1c 按職級劃分的人力統計 (機電工程行業)

Branch III: Supplementary Samples

門類 III : 其他相關機構

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Tradesman / Craftsman Level 技工級				
301	Foreman/Chargehand 管工／領工	2153	0	180
302	Building Services Mechanic 屋宇設備技工	1058	12	114
303	Electrician/Electrical Fitter 電工／電氣打磨裝配工	793	4	104
304	Control Panel Assembler 控制板裝配工	10	0	0
305	Electrical Wireman 電氣佈線工	30	0	0
306	Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	290	0	32
307	Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	84	0	6
308	Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工	20	0	0
310	Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	12	0	0
311	Plumber and Pipe Fitter 喉管工	28	0	0
312	Mechanical Fitter/Machinist 機械打磨裝配工／機床工	721	0	172
315	Fire Services Electrical Fitter 消防電氣裝配工	5	0	0
316	Fire Services Mechanical Fitter 消防機械裝配工	2	0	0
317	Cable Jointer (Power) 強電流電纜接駁工	5	0	0
318	Overhead Linesman 架空電線技工	5	0	0
319	Electrical Appliances Service Mechanic 電器用具服務技工	6	0	0
320	Welder 焊接工	1	0	0
321	Carpenter 木工	9	0	0
322	Painter 髹漆工	93	0	0
323	AV and RF Mechanic 影音及射頻技工	2	0	0
325	Communication System Mechanic 電訊系統裝配工	50	0	0
Sub-Total 小計		5377	16	608
Semi-skilled / General Worker Level 半技術工人／普通工人				
401	Labourer 普通工人	599	0	46
402	Semi-skilled Worker 半技術工人	43	0	27
Sub-Total 小計		642	0	73
Total 總數		12089	666	945

Table 9.2 Manpower Statistics by job level (Gas sector)
表 9.2 按職級劃分的人力統計 (氣體燃料行業)

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
171	Electrical Engineer 電機工程師	20	0	4
172	Gas Engineer (Fuel Gas) 氣體工程師 (氣體燃料)	144	0	8
173	Mechanical Engineer 機械工程師	372	0	21
174	Safety Officer 安全主任	44	0	3
Sub-Total 小計		580	0	36
Technician Level 技術員級				
271	Electrical Engineering Technician 電機工程技術員	28	0	0
272	Gas Engineering Technician 氣體燃料工程技術員	243	0	2
273	Mechanical Engineering Technician 機械工程技術員	70	0	2
274	Safety Supervisor 安全督導員	17	0	0
275	Supervisor 監督	176	0	4
Sub-Total 小計		534	0	8
Tradesman / Craftsman Level 技工級				
371	Electrician/Electrical Fitter 電工／電氣打磨裝配工	4	0	0
372	Gas Distribution Fitter (LPG) 氣體燃料輸送技工 (石油氣)	55	0	0
373	Gas Distribution Fitter (Town Gas) 氣體燃料輸送技工 (煤氣)	390	27	3
374	Gas Utilisation Fitter (Domestic) 氣體燃料應用技工 (住宅式)	859	20	24
375	Gas Utilisation Fitter (Non-domestic) 氣體燃料應用技工 (非住宅式)	221	0	10
376	Mechanical Fitter 機械打磨裝配工	2	0	0
377	Welder 焊接工	21	0	0
Sub-Total 小計		1552	47	37
Semi-skilled / General Worker Level 半技術工人／普通工人				
471	Driver (LPG Cylinder Wagon) 司機 (石油氣瓶車)	32	0	0
472	Labourer 普通工人	31	0	0
473	Semi-skilled Worker 半技術工	12	0	0
Sub-Total 小計		75	0	0
Total 總數		2741	47	81

Table 9.3 Manpower Statistics by job level (Aircraft Maintenance sector)

表 9.3 按職級劃分的人力統計 (飛機維修工程行業)

Job Code 職務編號	Job Title 職稱	Number of Employees as at Survey Reference Date 在統計日期的僱員 人數	Number of Trainees as at Survey Reference Date 在統計日期的受訓 者人數	Number of Vacancies as at Survey Reference Date 在統計日期的空缺 額
Professional / Technologist Level 專業人士／技師級				
101	Building Services Engineer 屋宇設備工程師	11	0	0
110	Engineering Manager 工程經理	4	0	0
111	Safety Officer 安全主任	15	0	0
112	Aircraft Maintenance Engineer 飛機維修工程師	700	148	158
Sub-Total 小計		730	148	158
Technician Level 技術員級				
201	Supervisor 監督	518	0	0
202	Building Services Technician 屋宇設備技術員	10	0	0
213	Safety Supervisor 安全督導員	30	0	0
214	Aircraft Maintenance Technician 飛機維修技術員	576	0	15
Sub-Total 小計		1134	0	15
Tradesman / Craftsman Level 技工級				
329	Aircraft Maintenance Mechanic 飛機維修技工	2646	146	234
Sub-Total 小計		2646	146	234
Semi-skilled / General Worker Level 半技術工人／普通工人				
401	Labourer 普通工人	362	0	0
402	Semi-skilled Worker 半技術工人	2	0	0
Sub-Total 小計		364	0	0
Total 總數		4874	294	407

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

E&M Engineering sector

機電工程行業

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
Professional / Technologist Level 專業人士／技師級										
101	Building Services Engineer 屋宇設備工程師	0.0%	0.0%	0.0%	40.7%	27.0%	23.3%	8.9%	0.1%	2084
102	Electrical Engineer 電機工程師	0.0%	0.0%	0.0%	26.8%	46.2%	19.3%	1.7%	6.0%	2656
103	Refrigeration/Air-conditioning/Ventilation Engineer 冷凝／空氣調節／通風設備工程師	0.0%	0.0%	0.0%	67.8%	22.5%	9.6%	0.0%	0.0%	1136
104	Mechanical Engineer 機械工程師	0.0%	0.0%	0.0%	23.7%	44.3%	24.0%	2.7%	5.3%	1348
105	Plumbing and Drainage Engineer 水喉及渠務工程師	0.0%	0.0%	0.0%	10.2%	80.1%	8.0%	1.8%	0.0%	303
106	Lift/Escalator Engineer 升降機／自動梯工程師	0.0%	0.0%	0.0%	0.0%	9.7%	45.9%	7.2%	37.2%	303
107	Fire Services Engineer 消防設備工程師	0.0%	0.0%	0.0%	17.2%	59.3%	23.3%	0.2%	0.0%	576
108	Electronics Engineer 電子工程師	0.0%	0.0%	0.0%	7.7%	35.5%	56.0%	0.0%	0.8%	706
109	Control and Instrumentation Engineer 控制及儀器工程師	0.0%	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%	0.0%	18
110	Engineering Manager 工程經理 (E&M Engineering-related / 機電工程相關)	0.0%	0.0%	0.0%	5.2%	5.3%	56.8%	27.9%	4.8%	2019
111	Safety Officer 安全主任	0.0%	0.0%	0.0%	11.8%	51.0%	22.1%	15.1%	0.0%	555
112	Aircraft Maintenance Engineer 飛機維修工程師	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	8
113	Building Information Modelling Manager 建築信息模擬經理 (E&M Engineering-related / 機電工程相關)	0.0%	0.0%	0.0%	14.6%	68.8%	0.0%	16.7%	0.0%	48
172	Gas Engineer (Fuel Gas) 氣體工程師（氣體燃料）	-	-	-	-	-	-	-	-	34
Sub-Total 小計		0.0%	0.0%	0.0%	26.0%	33.1%	28.7%	8.6%	3.7%	11794

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
Technician Level 技術員級										
201	Supervisor 監督	0.0%	0.0%	0.6%	68.1%	25.9%	5.5%	0.0%	0.0%	4689
202	Building Services Technician 屋宇設備技術員	0.0%	0.3%	26.9%	35.8%	37.1%	0.0%	0.0%	0.0%	1931
203	Draughtsman 繪圖員	0.0%	0.0%	34.7%	55.1%	10.2%	0.0%	0.0%	0.0%	411
204	Electrical Engineering Technician 電機工程技術員	0.0%	0.0%	31.9%	25.7%	42.4%	0.0%	0.0%	0.0%	2900
205	Refrigeration/Air-conditioning/Ventilation Technician 冷凝／空氣調節／通風設備技術員	0.0%	0.0%	31.4%	51.8%	16.8%	0.0%	0.0%	0.0%	1620
206	Mechanical Engineering Technician 機械工程技術員	0.0%	0.0%	7.7%	41.3%	51.0%	0.0%	0.0%	0.0%	1570
207	Lift/Escalator Technician 升降機／自動梯技術員	0.0%	0.0%	0.0%	92.6%	6.6%	0.8%	0.0%	0.0%	1681
208	Fire Services Technician 消防設備技術員	0.0%	0.0%	43.4%	14.5%	5.4%	36.7%	0.0%	0.0%	840
209	Electrical Instrument and Meter Technician 電工儀器技術員	0.0%	0.0%	10.3%	89.7%	0.0%	0.0%	0.0%	0.0%	91
210	Electronics Technician 電子技術員	0.0%	1.0%	3.9%	25.9%	69.1%	0.0%	0.0%	0.0%	747
211	Telecommunication Technician 電訊技術員	0.0%	0.0%	42.2%	53.0%	4.8%	0.0%	0.0%	0.0%	663
212	Office Equipment Service Technician 辦公室設備維修技術員	0.0%	0.0%	6.3%	93.8%	0.0%	0.0%	0.0%	0.0%	34
213	Safety Supervisor 安全督導員	0.0%	0.0%	58.8%	38.6%	2.6%	0.0%	0.0%	0.0%	384
214	Aircraft Maintenance Technician 飛機維修技術員	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	6
215	Rolling Stock Technician 鐵道車輛技術員	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1336
216	Railway Signalling Technician 鐵路訊號技術員	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	465
217	Building Information Modelling Coordinator/ Modeller 建築信息模擬協調員 (E&M Engineering-related / 機電工程相關)	0.0%	22.4%	0.0%	75.5%	2.0%	0.0%	0.0%	0.0%	49
Sub-Total 小計		0.0%	0.2%	17.7%	52.0%	27.1%	3.0%	0.0%	0.0%	19417

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
Tradesman / Craftsman Level 技工級										
301	Foreman/Chargehand 管工／領工	0.0%	0.0%	16.7%	82.8%	0.3%	0.2%	0.0%	0.0%	3342
302	Building Services Mechanic 屋宇設備技工	0.4%	2.4%	91.4%	5.9%	0.0%	0.0%	0.0%	0.0%	4262
303	Electrician/Electrical Fitter 電工／電氣打磨裝配工	1.1%	4.0%	75.8%	19.1%	0.0%	0.0%	0.0%	0.0%	10198
304	Control Panel Assembler 控制板裝配工	0.0%	0.0%	78.1%	21.9%	0.0%	0.0%	0.0%	0.0%	42
305	Electrical Wireman 電氣佈線工	0.0%	4.3%	95.1%	0.6%	0.0%	0.0%	0.0%	0.0%	2738
306	Refrigeration/Air-conditioning/Ventilation Mechanic (Electrical Control) 空調製冷設備技工(電力控制)	0.0%	2.6%	40.2%	57.2%	0.0%	0.0%	0.0%	0.0%	1909
307	Refrigeration/Air-conditioning/Ventilation Mechanic (Unitary System) 空調製冷設備技工(獨立系統)	0.0%	4.9%	87.6%	7.5%	0.0%	0.0%	0.0%	0.0%	3533
308	Refrigeration/Air-conditioning/Ventilation Mechanic(Air System) /Sheet Metal Worker 空調製冷設備技工(送風系統)／薄片金屬構造工	0.0%	0.0%	85.2%	14.8%	0.0%	0.0%	0.0%	0.0%	443
309	Refrigeration/Air-conditioning/Ventilation Mechanic (Thermal Insulation)/Thermal Insulation Craftsman 空調製冷設備技工(保溫)／保溫技工	0.0%	0.0%	16.7%	83.3%	0.0%	0.0%	0.0%	0.0%	86
310	Refrigeration/Air-conditioning/ Ventilation Mechanic (Water System) 空調製冷設備技工(水系統)	0.0%	0.0%	29.6%	70.4%	0.0%	0.0%	0.0%	0.0%	294
311	Plumber and Pipe Fitter 喉管工	0.2%	5.9%	57.3%	24.5%	12.1%	0.0%	0.0%	0.0%	1303
312	Mechanical Fitter/Machinist 機械打磨裝配工／機床工	0.0%	0.1%	66.2%	33.7%	0.0%	0.0%	0.0%	0.0%	1464
313	Lift Mechanic 升降機技工	0.0%	0.0%	5.0%	66.3%	28.7%	0.0%	0.0%	0.0%	2164
314	Escalator Mechanic 自動梯技工	0.0%	0.0%	0.0%	57.9%	42.1%	0.0%	0.0%	0.0%	1577
315	Fire Services Electrical Fitter 消防電氣裝配工	0.0%	12.2%	59.9%	20.9%	7.0%	0.0%	0.0%	0.0%	1067

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
316	Fire Services Mechanical Fitter 消防機械裝配工	0.0%	40.9%	54.3%	4.8%	0.0%	0.0%	0.0%	0.0%	748
317	Cable Jointer (Power) 強電流電纜接駁工	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	256
318	Overhead Linesman 架空電線技工	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	156
319	Electrical Appliances Service Mechanic 電器用具服務技工	16.7%	16.5%	51.4%	15.4%	0.0%	0.0%	0.0%	0.0%	1014
320	Welder 焊接工	1.8%	1.8%	82.6%	13.8%	0.0%	0.0%	0.0%	0.0%	122
321	Carpenter 木工	0.0%	37.0%	58.7%	4.3%	0.0%	0.0%	0.0%	0.0%	60
322	Painter 髹漆工	0.0%	11.9%	84.6%	3.5%	0.0%	0.0%	0.0%	0.0%	203
323	AV and RF Mechanic 影音及射頻技工	49.1%	0.0%	50.9%	0.0%	0.0%	0.0%	0.0%	0.0%	107
324	Building Security System Mechanic 屋宇防盜系統技工	-	-	-	-	-	-	-	-	12
325	Communication System Mechanic 電訊系統裝配工	0.0%	22.2%	49.5%	28.3%	0.0%	0.0%	0.0%	0.0%	1596
330	Rolling Stock Tradesman 鐵道車輛技工	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	625
331	Railway Signalling Tradesman 鐵路訊號技工	-	-	-	-	-	-	-	-	3
Sub-Total 小計		0.9%	5.4%	63.1%	27.1%	3.5%	0.0%	0.0%	0.0%	39324
Semi-skilled / General Worker Level 半技術工人／普通工人										
401	Labourer 普通工人	19.7%	24.2%	55.0%	1.1%	0.0%	0.0%	0.0%	0.0%	2015
402	Semi-skilled Worker 半技術工人	0.0%	60.8%	28.6%	10.6%	0.0%	0.0%	0.0%	0.0%	688
Sub-Total 小計		16.5%	30.2%	50.7%	2.7%	0.0%	0.0%	0.0%	0.0%	2703
Total 總數		1.2%	4.4%	44.0%	30.9%	12.6%	5.0%	1.3%	0.6%	73238

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Gas sector

氣體燃料行業

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
Professional / Technologist Level 專業人士／技師級										
171	Electrical Engineer 電機工程師	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	20
172	Gas Engineer (Fuel Gas) 氣體工程師（氣體燃料）	0.0%	0.0%	0.0%	12.9%	87.1%	0.0%	0.0%	0.0%	144
173	Mechanical Engineer 機械工程師	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	372
174	Safety Officer 安全主任	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	44
Sub-Total 小計		0.0%	0.0%	0.0%	6.1%	93.9%	0.0%	0.0%	0.0%	580
Technician Level 技術員級										
271	Electrical Engineering Technician 電機工程技術員	0.0%	0.0%	60.9%	39.1%	0.0%	0.0%	0.0%	0.0%	28
272	Gas Engineering Technician 氣體燃料工程技術員	0.0%	0.0%	3.5%	96.5%	0.0%	0.0%	0.0%	0.0%	243
273	Mechanical Engineering Technician 機械工程技術員	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	70
274	Safety Supervisor 安全督導員	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	17
275	Supervisor 監督	0.0%	0.0%	7.7%	24.3%	68.0%	0.0%	0.0%	0.0%	176
Sub-Total 小計		0.0%	0.0%	7.3%	67.0%	25.6%	0.0%	0.0%	0.0%	534
Tradesman / Craftsman Level 技工級										
371	Electrician/Electrical Fitter 電工／電氣打磨磨裝配工	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4
372	Gas Distribution Fitter (LPG) 氣體燃料輸送技工（石油氣）	43.6%	23.1%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	55
373	Gas Distribution Fitter (Town Gas) 氣體燃料輸送技工（煤氣）	0.0%	8.4%	91.6%	0.0%	0.0%	0.0%	0.0%	0.0%	390
374	Gas Utilisation Fitter (Domestic) 氣體燃料應用技工（住宅式）	0.0%	22.6%	73.3%	4.1%	0.0%	0.0%	0.0%	0.0%	859
375	Gas Utilisation Fitter (Non-domestic) 氣體燃料應用技工（非住宅式）	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	221
376	Mechanical Fitter 機械打磨磨裝配工	-	-	-	-	-	-	-	-	2
377	Welder 焊接工	0.0%	47.6%	38.1%	14.3%	0.0%	0.0%	0.0%	0.0%	21
Sub-Total 小計		1.3%	16.0%	80.2%	2.5%	0.0%	0.0%	0.0%	0.0%	1552

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
Semi-skilled / General Worker Level 半技術工人／普通工人										
471	Driver (LPG Cylinder Wagon) 司機（石油氣瓶車）	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32
472	Labourer 普通工人	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31
473	Semi-skilled Worker 半技術工	62.5%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12
Sub-Total 小計		11.4%	77.3%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	75
Total 總數		0.9%	10.3%	46.0%	15.6%	27.2%	0.0%	0.0%	0.0%	2741

Table 9.4 Percentage distribution of average monthly income of full-time employees by principal job by sector

表 9.4 按每月平均收入幅度劃分的全職僱員分佈

Aircraft Maintenance sector

飛機維修工程行業

Job Code 職務編號	Job Title 職稱	\$15,000 or below 或以下	\$15,001 - \$18,000	\$18,001 - \$25,000	\$25,001 - \$35,000	\$35,001 - \$45,000	\$45,001 - \$60,000	\$60,001 - \$80,000	\$80,001 or above 或以上	Total number of full- time employees 全職僱員人數
101	Building Services Engineer 屋宇設備工程師	-	-	-	-	-	-	-	-	11
110	Engineering Manager 工程經理	-	-	-	-	-	-	-	-	4
111	Safety Officer 安全主任	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	15
112	Aircraft Maintenance Engineer 飛機維修工程師	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	99.5%	0.0%	700
Sub-Total 小計		0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	99.0%	0.0%	730
Technician Level 技術員級										
201	Supervisor 監督	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	518
202	Building Services Technician 屋宇設備技術員	-	-	-	-	-	-	-	-	10
213	Safety Supervisor 安全督導員	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	30
214	Aircraft Maintenance Technician 飛機維修技術員	0.0%	0.0%	0.0%	0.0%	0.7%	99.3%	0.0%	0.0%	576
Sub-Total 小計		0.0%	0.0%	0.0%	1.9%	0.2%	97.9%	0.0%	0.0%	1134
Tradesman / Craftsman Level 技工級										
329	Aircraft Maintenance Mechanic 飛機維修技工	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	2646
Sub-Total 小計		0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	2646
Semi-skilled / General Worker Level 半技術工人／普通工人										
401	Labourer 普通工人	-	-	-	-	-	-	-	-	362
402	Semi-skilled Worker 半技術工人	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2
Sub-Total 小計		0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	364
Total 總數		0.0%	0.1%	0.0%	62.6%	0.1%	21.1%	16.2%	0.0%	4874

Table 9.5 Percentage distribution and ranking of training areas should be enhanced for full-time employees by sector by job level
表 9.5 按職級劃分的全職僱員需要加強培訓的技能的分布及排名

E&M Engineering sector
機電工程行業

Skills 技能	Percentage 百分比			Ranking 排名		
	Professional/ Technologist 專業人士/ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級	Professional/ Technologist 專業人士/ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級
A. Technology Applications 科技應用						
(i) BIM Knowledge and Skill 建築信息模擬 (BIM) 知識及技巧	25.7%	5.9%	1.4%	16	21	22
(ii) Artificial Intelligent (AI) Applications & Big Data Analytics 人工智能 (AI) 應用及大數據分析	36.2%	12.0%	0.8%	10	15	23
(iii) Smart Technology Applications (e.g. Internet of Things (IoT), VR & AR) 智慧科技應用 (如物聯網技術、虛擬實境及擴增實境)	19.1%	5.7%	0.5%	23	24	24
(iv) Workflow Digitalisation and Use of Digital Tools 工作流程數碼化及數碼工具使用	24.2%	8.8%	1.7%	18	17	19
B. Operations Related 營運相關						
(i) E&M Installation & Assembly for “Modular Integrated Construction” (MiC) 用於組裝合成建築法(MiC)的機電工程安裝及組裝技術	23.7%	11.2%	11.1%	20	16	9
(ii) Multi-trade Knowledge for “Multi-trade integrated Mechanical, Electrical & Plumbing” (MiMEP) 機電裝備合成法(MiMEP)的跨工種知識	13.1%	5.9%	4.8%	25	21	12
(iii) Knowledge of “Design for Manufacture and Assembly” (DfMA) 製造及裝配設計(DfMA)的知識	10.6%	4.0%	10.7%	26	25	10
(iv) Installation, Maintenance and Servicing of New Energy Equipment (e.g. EV Charging System and Solar Photovoltaic System) 新能源設備的安裝、保養及維修 (如電動車充電系統及太陽能光伏系統)	16.8%	8.2%	1.6%	24	19	20
C. Project Management Related 項目管理相關						
(i) Project Management 項目管理	56.5%	54.9%	0.3%	1	2	25
(ii) Construction Contract's Terms and Conditions 施工合同的條款細則	34.6%	18.6%	0.1%	11	11	27
(iii) Risk and Crisis Management 風險及危機管理	46.8%	33.8%	0.2%	3	7	26
D. Regulations 法規						
(i) Relevant Trade's Ordinances and Regulations 與行業相關的法規	45.9%	45.0%	27.5%	4	3	6
(ii) Engineering-related ISO Standards 與工程相關的ISO標準	43.7%	15.8%	13.9%	5	12	8
(iii) Occupational Safety and Health Ordinance 職業安全及健康條例	40.6%	41.4%	36.7%	8	4	4
E. Safety 安全						
(i) Safety Awareness 安全意識	49.7%	64.2%	75.1%	2	1	1
(ii) Safety Audit/Assessment 安全審核/評估	37.9%	40.6%	52.0%	9	5	2
(iii) Safety/Risk Management 安全/風險的管理	41.9%	34.7%	49.5%	7	6	3
(iv) Use of Personal Protective Equipment 個人防護裝備的使用	31.0%	18.8%	21.8%	13	10	7
(v) Construction Site Safety for Workers 工人在工地的安全	28.4%	20.9%	30.2%	14	8	5
(vi) Smart Site Safety System (4S) 安全智慧工地系統	20.6%	12.3%	2.3%	22	13	15
F. Soft Skills 軟性技巧						
(i) English Writing, Reading and Reporting 英語寫作、閱讀和報告	21.9%	5.9%	1.4%	21	23	21
(ii) Communication Skills with Stakeholders Both Internal and External 與內外持份者的溝通技巧	42.8%	8.3%	4.8%	6	18	12
(iii) Time Management Skills 時間管理的技巧	26.2%	12.2%	8.7%	15	14	11
(iv) Design Thinking Skills 設計思維的技巧	24.2%	3.2%	2.2%	18	26	17
(v) Supervisory Skills 督導技巧	32.4%	19.5%	2.3%	12	9	15
(vi) Rapid Response and Reporting Skills 快速回應及報告技巧	24.8%	6.9%	4.5%	17	20	14
G. Others 其他						
(i) Others 其他	3.5%	1.1%	2.0%	27	27	18
No training requirement 沒有培訓需要	0.7%	1.8%	7.9%			
Number of companies with such level of full-time employees 具有此職級全職僱員的公司數目	644	1 754	11 218			

Note:

Percentages are calculated on the basis of total number of companies with such level of full-time employees

註：

百分比是以具有此職級全職僱員的公司數目為基準計算。

Table 9.5 Percentage distribution and ranking of training areas should be enhanced for full-time employees by sector by job level

表 9.5 按職級劃分的全職僱員需要加強培訓的技能的分布及排名

Gas sector

氣體燃料行業

Skills 技能	Percentage 百分比			Ranking 排名		
	Professional/ Technologist 專業人士／ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級	Professional/ Technologist 專業人士／ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級
A. Technology Applications 科技應用						
(i) BIM for Underground Utilities, Applications and Drawing Skill 用於地下公用設施・應用和繪圖技巧的建築信息模擬 (BIM)	3.7%	1.6%	0.0%	22	22	19
(ii) Smart Technology Applications (e.g. RFID, Internet of Things (IoT) and Drone) 智慧科技應用 (如無線射頻識別技術、物聯網技術、無人機)	25.9%	4.7%	0.6%	9	16	15
(iii) Workflow Digitalisation and Use of Digital Tools 工作流程數碼化及數碼工具使用	14.8%	4.7%	0.0%	14	16	19
B. Operations Related 營運相關						
(i) Basic Gas Engineering 氣體工程基礎	29.6%	17.2%	16.2%	8	7	7
(ii) Pipe and Cable Detection 管道和電纜檢測	3.7%	3.1%	1.2%	22	20	14
(iii) Engineering Materials for Gas Pipe 管道工程材料	7.4%	3.1%	13.9%	19	20	8
(iv) Pressure Regulating Installation 調壓裝置的基本原理	37.0%	17.2%	4.6%	7	7	11
C. Project Management Related 項目管理相關						
(i) Project Management 項目管理	74.1%	25.0%	0.0%	1	6	19
(ii) Construction Contract's Terms and Conditions 施工合同的條款細則	25.9%	9.4%	0.0%	9	13	19
(iii) Risk and Crisis Management 風險及危機管理	22.2%	9.4%	0.0%	12	13	19
D. Regulations 法規						
(i) Relevant Trade's Ordinances and Regulations 與行業相關的法規	44.4%	15.6%	11.6%	5	9	9
(ii) Engineering-related ISO Standards 與工程相關的ISO標準	14.8%	4.7%	6.9%	14	16	10
(iii) Occupational Safety and Health Ordinance 職業安全及健康條例	14.8%	12.5%	48.6%	14	11	4
E. Safety 安全						
(i) Safety Awareness 安全意識	51.9%	79.7%	93.6%	2	1	1
(ii) Safety Audit/Assessment 安全審核/評估	48.1%	60.9%	74.6%	3	2	3
(iii) Safety/Risk Management 安全/風險的管理	48.1%	60.9%	82.7%	3	2	2
(iv) Use of Personal Protective Equipment 個人防護裝備的使用	40.7%	45.3%	20.2%	6	4	6
(v) Construction Site Safety for Workers 工人在工地的安全	11.1%	32.8%	22.5%	18	5	5
F. Soft Skills 軟件技巧						
(i) English Writing, Reading and Reporting 英語寫作、閱讀和報告	3.7%	1.6%	0.0%	22	22	19
(ii) Communication Skills with Stakeholders Both Internal and External 與內外持份者的溝通技巧	25.9%	12.5%	4.0%	9	11	12
(iii) Time Management Skills 時間管理的技巧	7.4%	14.1%	0.6%	19	10	15
(iv) Design Thinking Skills 設計思維的技巧	7.4%	1.6%	0.6%	19	22	15
(v) Supervisory Skills 督導技巧	18.5%	7.8%	0.0%	13	15	19
(vi) Rapid Response and Reporting Skills 快速回應及報告技巧	14.8%	4.7%	3.5%	14	16	13
G. Others 其他						
(i) Others 其他	0.0%	0.0%	0.6%	25	25	15
No training requirement 沒有培訓需要	7.4%	0.0%	2.3%			
Number of companies with such level of full-time employees 具有此職級全職僱員的公司數目	29	77	192			

Note:

Percentages are calculated on the basis of total number of companies with such level of full-time employees

註:

百分比是以具有此職級全職僱員的公司數目為基準計算。

Table 9.5 Percentage distribution and ranking of training areas should be enhanced for full-time employees by sector by job level

表 9.5 按職級劃分的全職僱員需要加強培訓的技能的分布及排名

Aircraft Maintenance sector

飛機維修工程行業

Skills 技能	Percentage 百分比			Ranking 排名		
	Professional/ Technologist 專業人士／ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級	Professional/ Technologist 專業人士／ 技師級	Technician 技術員級	Tradesman/ Craftsman 技工級
A. Technology Applications 科技應用						
(i) BIM Knowledge and Skill 建築信息模擬 (BIM) 知識 及 技巧	0.0%	0.0%	0.0%	14	11	10
(ii) Artificial Intelligent (AI) Applications & Big Data Analytics 人工智能 (AI) 應用 及 大數據分析	0.0%	0.0%	0.0%	14	11	10
(iii) Smart Technology Applications (e.g. Internet of Things (IoT), VR & AR) 智慧科技應用 (如物聯網技術、虛擬實境 及 擴增實境)	0.0%	0.0%	0.0%	14	11	10
(iv) Workflow Digitalisation and Use of Digital Tools 工作流程數碼化 及 數碼工具使用	50.0%	66.7%	66.7%	6	5	5
B. Operations Related 營運相關						
(i) E&M Installation & Assembly for “Modular Integrated Construction” (MiC) 用於組裝合成建築法(MiC)的機電工程安裝 及 組裝技術	25.0%	0.0%	0.0%	11	11	10
(ii) Multi-trade Knowledge for “Multi-trade integrated Mechanical, Electrical & Plumbing” (MiMEP) 機電裝備合成法(MiMEP)的跨工種知識	0.0%	0.0%	0.0%	14	11	10
(iii) Knowledge of “Design for Manufacture and Assembly” (DfMA) 製造及裝配設計(DfMA)的知識	0.0%	0.0%	0.0%	14	11	10
(iv) Installation, Maintenance and Servicing of New Energy Equipment (e.g. EV Charging System and Solar Photovoltaic System) 新能源設備的安裝、保養及維修 (如電動車充電系統及太陽能光伏系統)	0.0%	0.0%	0.0%	14	11	10
C. Project Management Related 項目管理相關						
(i) Project Management 項目管理	25.0%	0.0%	0.0%	11	11	10
(ii) Construction Contract’s Terms and Conditions 施工合同的條款細則	0.0%	0.0%	0.0%	14	11	10
(iii) Risk and Crisis Management 風險及危機管理	75.0%	33.3%	0.0%	1	9	10
D. Regulations 法規						
(i) Relevant Trade’s Ordinances and Regulations 與行業相關的法規	25.0%	0.0%	0.0%	11	11	10
(ii) Engineering-related ISO Standards 與工程相關的ISO標準	50.0%	33.3%	33.3%	6	9	9
(iii) Occupational Safety and Health Ordinance 職業安全及健康條例	75.0%	100.0%	100.0%	1	1	1
E. Safety 安全						
(i) Safety Awareness 安全意識	75.0%	100.0%	100.0%	1	1	1
(ii) Safety Audit/Assessment 安全審核/評估	75.0%	100.0%	100.0%	1	1	1
(iii) Safety/Risk Management 安全/風險的管理	75.0%	100.0%	100.0%	1	1	1
(iv) Use of Personal Protective Equipment 個人防護裝備的使用	50.0%	66.7%	66.7%	6	5	5
(v) Construction Site Safety for Workers 工人在工地的安全	50.0%	66.7%	66.7%	6	5	5
(vi) Smart Site Safety System (4S) 安全智慧工地系統	0.0%	0.0%	0.0%	14	11	10
F. Soft Skills 軟性技巧						
(i) English Writing, Reading and Reporting 英語寫作、閱讀和報告	50.0%	66.7%	66.7%	6	5	5
(ii) Communication Skills with Stakeholders Both Internal and External 與內外持份者的溝通技巧	0.0%	0.0%	0.0%	14	11	10
(iii) Time Management Skills 時間管理的技巧	0.0%	0.0%	0.0%	14	11	10
(iv) Design Thinking Skills 設計思維的技巧	0.0%	0.0%	0.0%	14	11	10
(v) Supervisory Skills 督導技巧	0.0%	0.0%	0.0%	14	11	10
(vi) Rapid Response and Reporting Skills 快速回應及報告技巧	0.0%	0.0%	0.0%	14	11	10
G. Others 其他						
(i) Others 其他	0.0%	0.0%	0.0%	14	11	10
No training requirement 沒有培訓需要	0.0%	0.0%	0.0%			
Number of companies with such level of full-time employees 具有此職級全職僱員的公司數目	12	11	7			

Note:

Percentages are calculated on the basis of total number of companies with such level of full-time employees

註：

百分比是以具有此職級全職僱員的公司數目為基準計算。