

ELECTRONICS AND TELECOMMUNICATIONS

INDUSTRIES

2014 MANPOWER SURVEY

STATISTICAL REPORT

ELECTRONICS AND TELECOMMUNICATIONS TRAINING BOARD

VOCATIONAL TRAINING COUNCIL

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I. INTRODUCTION

The Training Board

1.1 The Electronics and Telecommunications Training Board of the Vocational Training Council (VTC) is a statutory body appointed by the Government of the Hong Kong Special Administration Region (HKSAR) to be responsible for matters pertaining to manpower training in the electronics industry. The Training Board comprises members nominated by major trade associations, professional bodies, worker unions, training and educational institutions, as well as representatives from government departments. The membership and terms of reference of the Training Board are given in Annexes A and B respectively.

1.2 The Training Board is required by its terms of reference to determine the manpower needs of the electronics industry and to recommend to the VTC the development of vocational education and training facilities to meet such needs.

The Manpower Survey

1.3 The Training Board conducted a survey in April 2014 to collect up-to-date information on the manpower situation of the electronics industry. The survey was conducted with the assistance of the Census and Statistics Department of the HKSAR Government. Follow-up of the fieldwork finished in November and data processing was completed in October 2014.

1.4 The following manpower statistics and information were collected from the survey:

- (i) number of employees in various principal jobs at the time of the survey;
- (ii) number of existing vacancies;
- (iii) number of trainees;
- (iv) employers' forecast of the total number of employees by April 2015;
- (v) average monthly income of employees; and
- (vi) employers' views on the preferred education, training mode and training period of employees.

1.5 Employers were also requested to provide other information such as the number of technologists, technicians and craftsmen who had been promoted in the past 12 months, and also those who had been deployed to work for more than 6 months outside Hong Kong during the 12 months prior to the survey, as well as the skills employees needed to enhance.

Scope of Survey

1.6 The survey covered firms, relevant departments in the government and educational institutions in the following six sectors of the industry:

Sector 1: Manufacturing

Manufacturers of :

- (a) Computers and peripheral equipment (HSICs 262000, 281700, 952100);
- (b) Audio and video equipment (HSICs 264000, 953100);
- (c) Communications equipment and cables (HSICs 263000, 273100, 952200);
- (d) Magnetic and optical media, and reproduction of recorded media (HSICs 182000, 268000);
- (e) Electronic parts and components for computer and telecommunication equipment (HSIC 261100);
- (f) Electronic parts and components not elsewhere classified (HSIC 261900);
- (g) Electronic games and toys (HSIC 324500); and
- (h) Electronic industrial apparatus, and measuring testing, navigating and control equipment (HSICs 265100, 331300).

Sector 2: Trading and Services

Establishments of :

- (a) Anti-burglar system, intercommunication system, and telecommunications equipment, installation and maintenance (HSICs 432104, 432105, 432106);
- (b) Imports and exports of:
 - (i) Scientific and professional instruments and apparatus (HSICs 451631, 452631)*;
 - (ii) Telecommunications equipment and parts (HSICs 451611, 452611)*;
 - (iii) Electrical goods (HSICs 451452, 452452)*;
 - (iv) Computers and computer peripherals and computer software (HSICs 451601, 451602, 452601, 452602)*;

- (v) Office appliances and equipment (HSICs 451634, 452634)*;
- (vi) Electronic parts (HSICs 451613, 452613)*
- (c) Data processing, hosting and related activities (HSICs 620121, 620199, 620200, 620900, 631100)*; and
- (d) Other electronics engineering services not included in (a) to (c).
(Appendix A)

Sector 3: Telecommunication Services

Establishments of :

- (a) Telecommunications network operation services (HSIC 611000);
- (b) Other miscellaneous telecommunications activities nowhere else classified (HSIC 619900);
- (c) Internet access services (HSIC 619100); and
- (d) Radio broadcasting, motion picture, video and television programming, and broadcasting activities (HSICs 591100, 601000, 602000).

Sector 4: Wholesale

Establishments of wholesale of :

- (a) Telecommunications equipment and parts (HSIC 460611);
- (b) Electrical goods (excluding machinery, office and telecommunications equipment and appliances) (HSIC 460452);
- (c) Computers and computer peripheral equipment (HSICs 460601, 460602); and
- (d) Office machines, appliances and equipment (excluding computer, furniture and fixtures) (HSIC 460634).

Sector 5: Design houses and Relevant Departments in Universities and the Government

- (a) Electronics design houses;
- (b) Relevant educational institutions; and
- (b) Relevant government departments.

Sector 6: Retail Shops for Electronics Products (9 large shops)

- Notes: (1) *HSIC denotes Hong Kong Standard Industrial Classification*
- (2) ** Excluding those establishments with an employment size below 10 as they are unlikely to have a significant number of technical staff.*

1.7 Prior to the survey, the Census and Statistics Department recorded some 7 567 establishments in the above six sectors of the electronics industry in Hong Kong. In view of the limited resources available, a stratified random sampling method was adopted and a total of 709 samples were selected to be surveyed. The data collected were then processed and scaled up statistically to give an overall picture of the manpower situation of the industry.

Method of the Survey

1.8 Two weeks before the survey, relevant survey documents including questionnaire (Annex D), explanatory notes (Annex E) and list of principal jobs (Annex F) were mailed to the 709 establishments. Prior publicity was also given through the local press and relevant trade and industrial organizations to solicit employers' co-operation in the survey.

1.9 During the survey period, interviewing officers of the Census and Statistics Department visited all 709 establishments to collect the completed questionnaires and, where required, to assist employers in completing them. All returned questionnaires were scrutinized and where necessary, cross checked with the respondents.

Response to the Survey

1.10 Of the 709 establishments, 487 completed the questionnaires and 33 refused to supply information. The remaining 189 establishments had either moved, closed and could not be traced, or no longer engaged in the trade. The effective response rate was 93.7%.

1.11 During the survey, some of the establishments just provided the rough manpower information and did not give details of their employees' monthly income, number of trainees or number of vacancies at the date of survey. The reasons were that they were too busy and not willing to provide confidential information of their organizations.

The Report

1.12 After follow-up of the fieldwork and data processing, the Training Board compiled in November 2014 a statistical report which presented the main manpower data collected from the survey. The statistical report was subsequently mounted onto the VTC website for public information.

1.13 This report presents all the findings of the survey together with the Training Board's forecast of the training needs of the industry and recommendations on measures to meet these needs. In the report, the terms "employees", "workers" and "manpower" refer to the total number of persons employed in the principal jobs at the time of the survey but excluding trainees and apprentices. The term "trainees" means all persons receiving any form of training including those registered apprentices under a contract of apprenticeship.

II. SUMMARY OF SURVEY FINDINGS

Number of Persons Employed

2.1 The survey revealed that in April 2014, a total of 144 149 persons were employed in the electronics industry in Hong Kong. Of them, 62 599 were engaged in the principal jobs of electronics engineering and related disciplines. The following paragraphs present only the manpower statistics of those employees employed in the principal jobs.

Distribution of Employees by Job Level and by Sector

2.2 The distribution of employees by job level and by sector of the electronics industry is shown in Table 2.1, Figure 2.1 and Figure 2.2.

Table 2.1 : Distribution of Employees by Job Level and by Sector

Sector	Job Level				Total (% of Total MP)
	Technologist	Technician	Craftsman	Operative	
1. Manufacturing	797	2 158	352	1 367	4 674 (7.5%)
2. Trading and Services	9 847	23 113	4 295	1 021	38 276 (61.1%)
3. Telecommunications Services	2 302	4 602	614	142	7 660 (12.2%)
4. Wholesale	390	3 502	249	97	4 238 (6.8%)
5. Design Houses and Relevant Departments in Universities and Government	1 302	2 019	858	73	4 252 (6.8%)
6. Retail Shops for Electronics Products (9 large shops)	4	3 495	-	-	3 499 (5.6%)
Total (Percentage (%) of Total Manpower (MP))	14 642 23.4%	38 889 62.1%	6 368 10.2%	2 700 4.3%	62 599 100%

Figure 2.1 : Distribution of Employees by Job Level

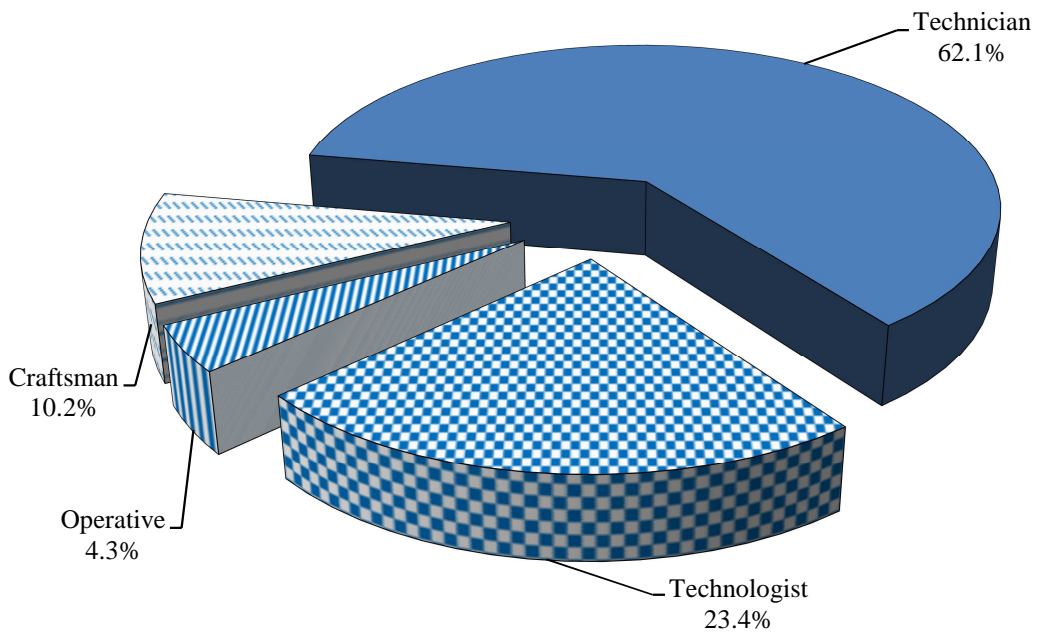
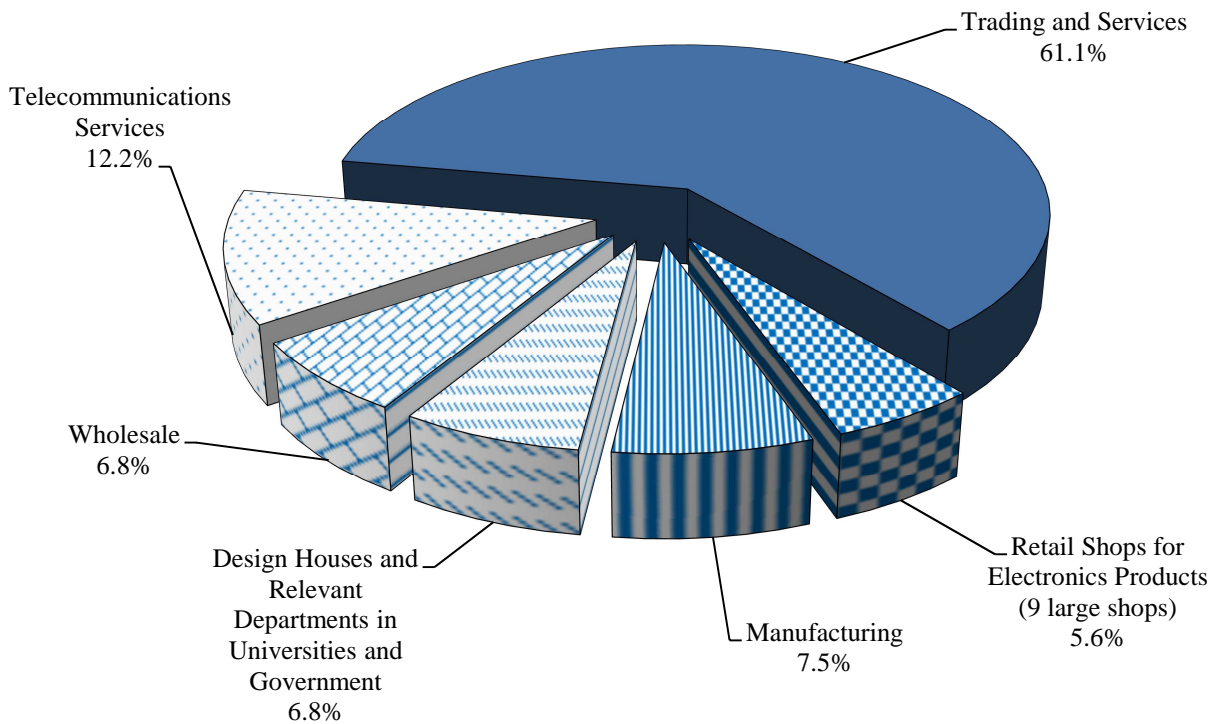


Figure 2.2 : Distribution of Employees by Job Sector



Number of Trainees

2.3 At the time of the survey, there were 695 trainees in the electronics industry. Their distribution by job level is shown in Table 2.2:

Table 2.2 : Distribution of Trainees by Job Level

Job Level	No. of Trainees (a)	No. of Employees (b)	Percentage $\frac{(a)}{(b)} \times 100\%$
Technologist	92	14 642	0.6%
Technician	304	28 889	0.8%
Craftsman	295	6 368	4.6%
Operative	4	2 700	0.1%
Total	695	62 599	1.1%

Number of Vacancies at Time of Survey and Forecast Manpower by April 2015

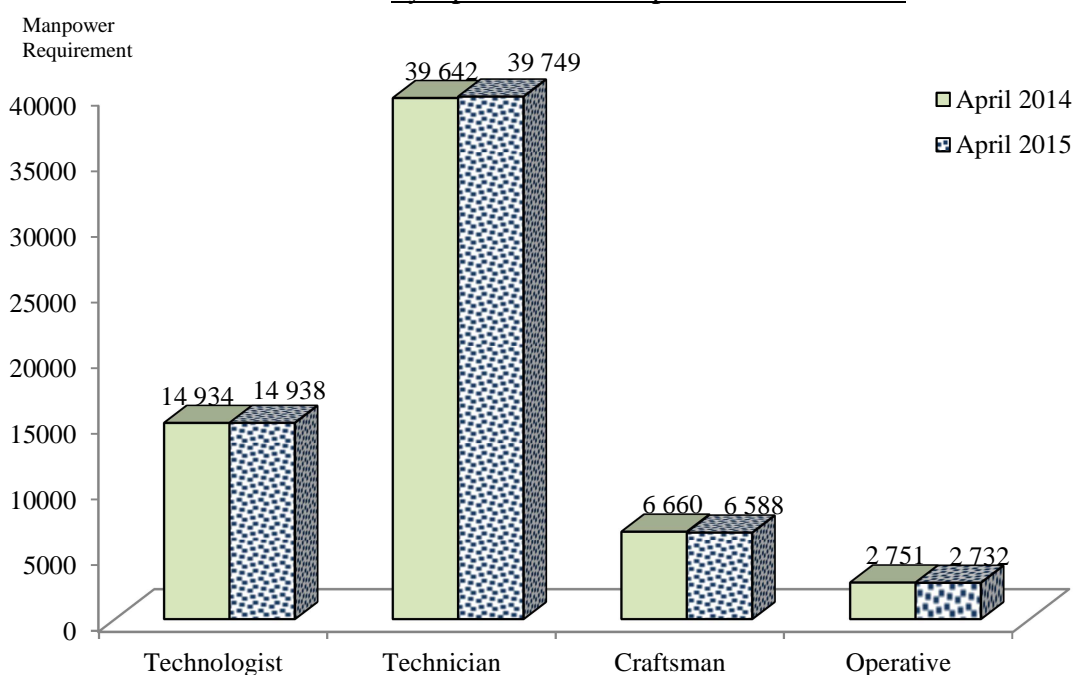
2.4 The total number of job vacancies was 1 388, or 2.2% of the total number employed in the electronics industry at the time of the survey. Employers also forecast that there would be 64 007 employees in the industry by April 2015, which is 1 408 employees (+2.2%) more than that in April 2014.

2.5 A comparison of the manpower requirement at the time of survey and the employers' forecast of the number of employees by April 2015 are shown in Table 2.3 and Figure 2.3:

Table 2.3 : Comparison of Manpower Requirement by April 2014 and April 2015

Job Level	At Time of Survey (April 2014)			Forecast Total No. of Employees by April 2015	Forecast Increase/Decrease in Manpower Requirement
	No. of Employees	No. of Vacancies	Total Manpower Requirement		
Technologist	14 642	292	14 934	14 938	+0.03%
Technician	38 889	753	39 642	39 749	+0.3%
Craftsman	6 368	292	6 660	6 588	-1.1%
Operative	2 700	51	2 751	2 732	-0.7%
Total	62 599	1 388	63 987	64 007	+0.03%

Figure 2.3 : Comparison of Manpower Requirement by April 2014 and April 2015



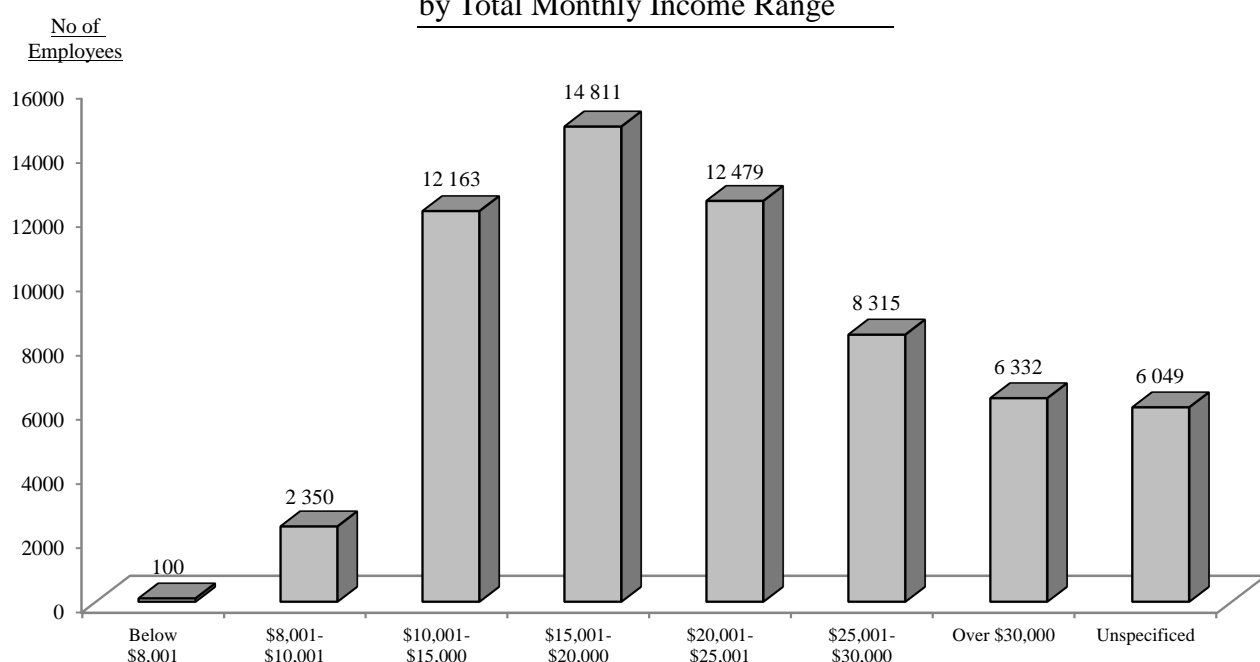
Total Monthly Income Range of Employees

2.6 The distribution of employees by total monthly income range in the electronics industry is shown in Table 2.4 and Figure 2.4:

Table 2.4 : Distribution of Employees by Total Monthly Income Range

Job Level	Below \$8,001	\$8,001-\$10,000	\$10,001-\$15,000	\$15,001-\$20,000	\$20,001-\$25,000	\$25,001-\$30,000	Over \$30,000	Un-specified
Technologist	-	-	38	977	2 476	4 522	4 846	1 783
Technician	-	235	7 734	12 616	9 341	3 793	1 486	3 684
Craftsman	-	218	4 020	1 182	662	-	-	286
Operative	100	1 897	371	36	-	-	-	296
Total	100	2 350	12 163	14 811	12 479	8 315	6 332	6 049

Figure 2.4 : Distribution of Employees by Total Monthly Income Range



Preferred Education, Mode of Training and Period of Training of Employees

2.7 The majority views of employers on the preferred education, mode of training and period of training of their technologists, technicians and craftsmen are shown in Table 2.5:

Table 2.5 : Preferred Education, Mode of Training and Period of Training of Employees

Job Level	Preferred Education	Preferred Mode of Training	Preferred Period of Training
Technologist	Degree/ Associateship or equivalent	On-the-job Training	4 years or above
Technician	Secondary 4 to 6/ Hong Kong Diploma of Secondary Education or equivalent	On-the-job Training	1 to less than 2 years
Craftsman	Craft Certificate	On-the-job Training	3 to less than 4 years

Internal Promotion

2.8 In the twelve months prior to the survey, a total of 463 employees were promoted to higher level jobs in their own companies. Their distributions in each job level are shown below:

Table 2.6 : Internal Promotion

Internal Promotion	No. of Employees Promoted (a)	Total No. of Employees at the Promoted Level (b)	Percentage $\frac{(a)}{(b)} \times 100\%$
From Technician to Technologist	149	14 642	1.0%
From Craftsman to Technician	268	38 889	0.7%
From Other Levels to Craftsman	46	6 368	0.7%
Total	463	59 899	0.8%

Employees Deployed to Work Outside Hong Kong

2.9 Employers reported the following number of employees who had been deployed to work outside Hong Kong for more than 6 months during the 12 months prior to the survey:

Table 2.7 : No. of Employees Deployed to Work Outside Hong Kong

Job Level	No. of Employees Deployed to Work Outside Hong Kong (a)	Total No. of Employees at Same Job Level (b)	Percentage $\frac{(a)}{(b)} \times 100\%$
Technologist	607	14 642	4.1%
Technician	280	38 889	0.7%
Craftsman	41	6 368	0.6%
Total	928	59 899	1.6%

Skills Employees Need to Enhance

2.10 The three most important skills that employees need to enhance are shown in Table 2.8:

Table 2.8 : No. of Employees by Skills Need to Enhance

Job Level	The 3 most important skills that employees need to enhance			
	Order	Code	Skills/ Knowledge/ Attributes	No. of Employees
Technologist	1.	107	Leadership skills	3 291
	2.	401	Problem solving	2 400
	3.	103	Project management	2 193
Technician	1.	401	Problem solving	7 534
	2.	411	Customer services skills	7 327
	3.	406	Time management skills	6 512
Craftsman	1.	413	Ability to learn/adapt new skills/knowledge	2 369
	2.	411	Customer services skills	1 482
	3.	404	Communication skills	1 356

Statistical Tables

2.11 Detailed manpower statistics analysed by principal job and by sector of the electronics industry are shown in Appendices 1 to 7. The distribution of employees by their monthly income range is shown in Appendix 8 and the number of employees by skills need to enhance is shown in Appendix 9.

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 1: Manufacturing (門類一：製造)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	339	9	15	352
Electrical Engineer 電機工程師	2	-	-	2
Mechanical Engineer 機械工程師	109	9	11	119
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	247	-	21	268
Chemical Engineer 化學工程師	17	-	-	17
Product/Graphic Designer 產品/平面設計員	11	-	-	11
System Analyst 系統分析員	72	-	-	72
Sub-total 小計	797	18	47	841
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	1 232	-	4	1 236
Mechanical Technician 機械技術員	181	-	-	181
Draughtsman 繪圖員	2	-	-	2
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	179	-	-	179
Supervisor/Foreman/Leader 監督/管工/組長	234	-	-	234
Programmer 程序編製員	12	-	-	12
Web Developer/Designer 網站開發員/設計員	3	-	-	3
Sales Technician 推銷技術員	315	-	-	315
Sub-total 小計	2 158	0	4	2 162
CRAFTSMAN LEVEL 技工級				
Cable Jointer/Wireman 電纜接駁技工/駁線技工	2	-	-	2
Electronics Craftsman 電子技工	329	-	-	288
Electrician 電氣技工	13	-	1	14
Mechanic 技工	8	-	-	8
Sub-total 小計	352	0	1	312
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	1 367	-	33	1 397
Sub-total 小計	1 367	-	33	1 397
GRAND TOTAL 總計	4 674	18	85	4 712

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 2: Trading and Services (門類二：貿易及服務)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	4 958	16	27	5 001
Electrical Engineer 電機工程師	1 348	30	55	1 403
Mechanical Engineer 機械工程師	489	19	10	499
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	733	5	8	741
Chemical Engineer 化學工程師	16	-	-	16
Product/Graphic Designer 產品/平面設計員	354	-	3	357
System Analyst 系統分析員	1 949	-	39	1 992
Sub-total 小計	9 847	70	142	10 009
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	6 648	106	168	6 914
Mechanical Technician 機械技術員	1 527	99	88	1 625
Draughtsman 繪圖員	172	-	1	141
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	412	-	14	424
Supervisor/Foreman/Leader 監督/管工/組長	2 155	-	43	2 207
Programmer 程序編製員	3 843	2	57	3 900
Web Developer/Designer 網站開發員/設計員	852	-	28	880
Sales Technician 推銷技術員	7 504	-	104	7 608
Sub-total 小計	23 113	207	503	23 699
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	581	21	10	591
Electronics Craftsman 電子技工	2 800	142	129	2 910
Electrician 電氣技工	699	29	29	728
Mechanic 技工	215	11	5	222
Sub-total 小計	4 295	203	173	4 451
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	1 021	-	2	1 023
Sub-total 小計	1 021	-	2	1 023
GRAND TOTAL 總計	38 276	480	820	39 182

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 3: Telecommunications Services (門類三：電訊服務)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	2 014	1	21	2 035
Electrical Engineer 電機工程師	13	-	1	14
Mechanical Engineer 機械工程師	5	-	-	5
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	27	-	2	29
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	44	-	2	46
System Analyst 系統分析員	199	-	1	200
Sub-total 小計	2 302	1	27	2 329
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	2 455	3	45	2 499
Mechanical Technician 機械技術員	7	-	-	7
Draughtsman 繪圖員	50	-	-	50
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	-	-	-	-
Supervisor/Foreman/Leader 監督/管工/組長	179	-	-	179
Programmer 程序編製員	212	-	5	217
Web Developer/Designer 網站開發員/設計員	613	-	-	613
Sales Technician 推銷技術員	1 086	-	46	1 132
Sub-total 小計	4 602	3	96	4 697
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	-	-	-	-
Electronics Craftsman 電子技工	498	2	9	507
Electrician 電氣技工	113	-	-	113
Mechanic 技工	3	-	-	3
Sub-total 小計	614	2	9	623
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	142	-	-	142
Sub-total 小計	142	-	-	142
GRAND TOTAL 總計	7 660	6	132	7 791

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 4: Wholesale (門類四：批發)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	278	-	1	279
Electrical Engineer 電機工程師	35	-	-	35
Mechanical Engineer 機械工程師	-	-	-	-
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	21	-	-	21
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	9	-	-	9
System Analyst 系統分析員	47	-	-	47
Sub-total 小計	390	-	1	391
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	1 037	-	22	1 059
Mechanical Technician 機械技術員	6	-	-	6
Draughtsman 繪圖員	-	-	-	-
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	1	-	-	1
Supervisor/Foreman/Leader 監督/管工/組長	58	-	-	58
Programmer 程序編製員	163	-	5	163
Web Developer/Designer 網站開發員/設計員	24	-	-	24
Sales Technician 推銷技術員	2 213	-	22	2 235
Sub-total 小計	3 502	-	49	3 546
CRAFTSMAN LEVEL 技工級				
Cable Jinter/Wireman 電纜接駁技工/駁線技工	-	-	-	-
Electronics Craftsman 電子技工	192	5	5	202
Electrician 電氣技工	57	-	8	65
Mechanic 技工	-	-	-	-
Sub-total 小計	249	5	13	267
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	97	-	-	97
Sub-total 小計	97	-	-	97
GRAND TOTAL 總計	4 238	5	63	4 301

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 5: Design Houses, Relevant Departments in Educational Institutions and Government
(門類五：設計公司、教育院校及政府有關部門)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	911	3	59	960
Electrical Engineer 電機工程師	247	-	15	259
Mechanical Engineer 機械工程師	21	-	-	21
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	40	-	-	40
Chemical Engineer 化學工程師	21	-	1	22
Product/Graphic Designer 產品/平面設計員	1	-	-	1
System Analyst 系統分析員	61	-	-	61
Sub-total 小計	1 302	3	75	1 364
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	930	28	22	954
Mechanical Technician 機械技術員	173	15	10	193
Draughtsman 繪圖員	7	-	-	7
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	12	-	-	12
Supervisor/Foreman/Leader 監督/管工/組長	753	48	57	826
Programmer 程序編製員	135	1	7	142
Web Developer/Designer 網站開發員/設計員	-	-	-	-
Sales Technician 推銷技術員	9	-	-	9
Sub-total 小計				
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	-	-	-	-
Electronics Craftsman 電子技工	192	14	15	193
Electrician 電氣技工	311	37	31	335
Mechanic 技工	355	34	50	407
Sub-total 小計	858	85	96	935
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	73	4	16	73
Sub-total 小計	73	4	16	73
GRAND TOTAL 總計	4 252	184	283	4 515

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY

電子業人力統計數字

Sector 6: Retail Shops for Electronics Products (9 large shops)

(門類六：零售—9間大型電子產品零售公司)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	3	-	-	3
Electrical Engineer 電機工程師	-	-	-	-
Mechanical Engineer 機械工程師	-	-	-	-
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	-	-	-	-
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	-	-	-	-
System Analyst 系統分析員	1	-	-	1
Sub-total 小計	4	-	-	4
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	26	2	-	28
Mechanical Technician 機械技術員	-	-	-	-
Draughtsman 繪圖員	-	-	-	-
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	-	-	-	-
Supervisor/Foreman/Leader 監督/管工/組長	172	-	1	173
Programmer 程序編製員	-	-	-	-
Web Developer/Designer 網站開發員/設計員	2	-	-	2
Sales Technician 推銷技術員	3 295	-	4	3 299
Sub-total 小計	3 495	2	5	3 502
CRAFTSMAN LEVEL 技工級				
Cable Joints/Wireman 電纜接駁技工/駁線技工	-	-	-	-
Electronics Craftsman 電子技工	-	-	-	-
Electrician 電氣技工	-	-	-	-
Mechanic 技工	-	-	-	-
Sub-total 小計	-	-	-	-
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	-	-	-	-
Sub-total 小計	-	-	-	-
GRAND TOTAL 總計	3 499	2	5	3 506

MANPOWER STATISTICS OF THE ELECTRONICS INDUSTRY (ALL SECTORS)
電子業人力統計數字 (各門類)

Job Title 職稱	Number of Workers Employed 僱員人數	Number of Trainees 受訓者人數	Number of Vacancies at Date of Survey 調查期間 空缺數目	Forecast of Total Workers by April 2015 預測至 2015 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	8 503	29	123	8 630
Electrical Engineer 電機工程師	1 645	30	71	1 713
Mechanical Engineer 機械工程師	624	28	21	644
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	1 068	5	31	1 099
Chemical Engineer 化學工程師	54	-	1	55
Product/Graphic Designer 產品/平面設計員	419	-	5	424
System Analyst 系統分析員	2 329	-	40	2 373
Sub-total 小計	14 642	92	292	14 938
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	12 328	139	261	12 690
Mechanical Technician 機械技術員	1 894	114	98	2 012
Draughtsman 繪圖員	231	-	1	200
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	604	-	14	616
Supervisor/Foreman/Leader 監督/管工/組長	3 551	48	101	3 677
Programmer 程序編製員	4 365	3	74	4 434
Web Developer/Designer 網站開發員/設計員	1 494	-	28	1 522
Sales Technician 推銷技術員	14 422	-	176	14 598
Sub-total 小計	38 889	304	753	39 749
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	583	21	10	593
Electronics Craftsman 電子技工	4 011	163	158	4 100
Electrician 電氣技工	1 193	66	69	1 255
Mechanic 技工	581	45	55	640
Sub-total 小計	6 368	295	292	6 588
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	2 700	4	51	2 732
Sub-total 小計	2 700	4	51	2 732
GRAND TOTAL 總計	62 599	695	1 388	64 007

DISTRIBUTION OF EMPLOYEES BY MONTHLY INCOME RANGE (ALL SECTORS)

根據每月總收入幅度的僱員人數分布情況（各門類）

Job Title 職稱	Unspecified 未有說明	Below \$8,001 以下	\$8,001 - \$10,000	\$10,001 - \$15,000	\$15,001 - \$20,000	\$20,001 - \$25,000	\$25,001 - \$30,000	Over \$30,000 以上
TECHNOLOGIST LEVEL 技師級								
Electronics Engineer 電子工程師	726	-	-	8	539	1 813	2 625	2 792
Electrical Engineer 電機工程師	2	-	-	-	2	42	1 026	573
Mechanical Engineer 機械工程師	87	-	-	3	31	110	201	192
Manufacturing/Quality Assurance Engineer 製造／品質保證工程師	220	-	-	8	49	192	279	320
Chemical Engineer 化學工程師	3	-	-	4	-	4	41	2
Product/Graphic Designer 產品／平面設計員	6	-	-	7	135	164	25	82
System Analyst 系統分析員	739	-	-	8	221	151	325	885
Sub-total 小計	1 783	-	-	38	977	2 476	4 522	4 846
TECHNICIAN LEVEL 技術員級								
Electronics Technician 電子技術員	1 206	-	-	2 483	3 421	3 982	722	514
Mechanical Technician 機械技術員	122	-	-	81	309	1 253	117	12
Draughtsman 繪圖員	1	-	6	111	66	10	37	-
Manufacturing/Quality Assurance Technician 製造／品質保證技術員	107	-	1	65	286	121	24	-
Supervisor/Foreman/Leader 監督／管工／組長	71	-	-	255	1 164	80	1 749	232
Programmer 程序編製員	979	-	-	308	1 644	872	532	30
Web Developer/Designer 網站開發員／設計員	307	-	-	14	650	407	75	41
Sales Technician 推銷技術員	891	-	228	4 417	5 076	2 616	537	657
Sub-total 小計	3 684	-	235	7 734	12 616	9 341	3 793	1 486
CRAFTSMAN LEVEL 技工級								
Cable Jointer/Wireman 電纜接駁技工／駁線技工	2	-	-	282	299	-	-	-
Electronics Craftsman 電子技工	204	-	187	2 766	829	25	-	-
Electrician 電氣技工	80	-	31	471	26	585	-	-
Mechanic 技工	-	-	-	501	28	52	-	-
Sub-total 小計	286	-	218	4 020	1 182	662	-	-
OPERATIVE LEVEL 操作工級								
Operator 生產線操作工	296	100	1 897	371	36	-	-	-
Sub-total 小計	296	100	1 897	371	36	-	-	-
GRAND TOTAL 總計	6 049	100	2 350	12 163	14 811	12 479	8 315	6 332

SKILLS EMPLOYEES NEED TO ENHANCE
僱員需要加強培訓的技能

Skills 技能	No. of Employees 僱員人數			
	Technologist 技師	Technician 技術員	Craftsman 技工	All 總數
Management Skills 管理技能				
101 Production and engineering management 工業生產及工程管理	1 133	273	-	1 406
102 Marketing management 經銷管理	659	398	-	1 057
103 Project management 項目管理	2 193	370	-	2 563
104 Quality management 品質管理	947	1 210	5	2 162
105 Purchasing management 採購管理	-	180	-	180
106 People management 人事管理	1 602	1 574	-	3 176
107 Leadership skills	3 291	337	-	3 628
China-related Knowledge and World Vision 有關中國的知識及世界視野				
201 Social and economic development in China 在中國內地的社會和經濟發展	92	400	-	492
202 Laws and regulatory restrictions to China 進入中國市場的法律和規條限制	160	240	-	400
203 Trade practices in the mainland of China 在中國內地的營商常規	159	355	-	514
204 Cross-cultural knowledge 跨文化的知識	-	-	-	-
205 World vision 世界視野	148	151	-	299
Language Skills 語文能力				
301 Spoken English 英語會話	339	2 368	162	2 869
302 Written English 英文書寫能力	54	422	-	476
303 Putonghua 普通話	404	2 633	153	3 190
304 Written Chinese 中文書寫能力	6	32	93	131
Interpersonal and Intrapersonal Skills for the Workplace 工作間的人際及個人才能				
401 Problem solving 解決問題	2 400	7 534	1 123	11 057
402 Creativity 創意力	6	479	959	1 444
403 Critical thinking 批判思考能力	227	503	52	782
404 Communication skills 溝通技巧	2 141	4 894	1 356	8 391
405 Team building 團隊建立	833	2 602	922	4 357
406 Time management skills 時間管理技巧	766	6 512	896	8 174
407 Optimism/Positive 樂觀/積極	153	1 636	25	1 814
408 Self-esteem 自尊	-	-	-	-
409 Perseverance 毅力	2	1 242	47	1 291
410 Change management skills 變革管理技巧	1576	131	-	1 707
411 Customer services skills 客戶服務技巧	887	7 327	1 482	9 696
412 Numerical skills 數學運用技巧	117	4	-	121
413 Ability to learn/adapt new skills/knowledge 學習或適應新科技、新知識的能力	1611	5 218	2 369	9 198
Others 其他				
699 Others	1 181	4 051	517	5 749