

ELECTRONICS INDUSTRY
2010 MANPOWER SURVEY
STATISTICAL REPORT

ELECTRONICS AND TELECOMMUNICATIONS TRAINING BOARD
VOCATIONAL TRAINING COUNCIL

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SECTION 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, workers 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 2010 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 October and data processing was completed in the same month.

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 2011;
- (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 their 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 installation and maintenance (HSICs 432104, 432105);
- (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)*;
- (c) Data processing, hosting and related activities (HSICs 620101, 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
- (c) 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 5 868 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 694 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 694 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 694 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 694 establishments, 395 completed the questionnaires and 30 refused to supply information. The remaining 269 establishments had either moved, closed and could not be traced, or no longer engaged in the trade. The effective response rate was 92.4%.

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 2010 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.

SECTION II

SUMMARY OF SURVEY FINDINGS

Number of Persons Employed

2.1 The survey revealed that in April 2010, a total of 128 854 persons were employed in the electronics industry in Hong Kong. Of them, 52 115 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
	Technologist	Technician	Craftsman	Operative	
1. Manufacturing	998	2 283	1 166	2 559	7 006
2. Trading and Services	7 428	15 441	3 767	593	27 229
3. Telecommunications Services	2 212	4 441	945	144	7 742
4. Wholesale	314	1 663	572	50	2 599
5. Design Houses and Relevant Departments in Universities and Government	874	2 363	1 083	135	4 455
6. Retail Shops for Electronics Products (9 large shops)	7	3 077	-	-	3 084
Total	11 833	29 268	7 533	3 481	52 115
(Percentage of Total Manpower)	22.7%	56.2%	14.5%	6.6%	100%

Figure 2.1 : Distribution of Employees by Job Level

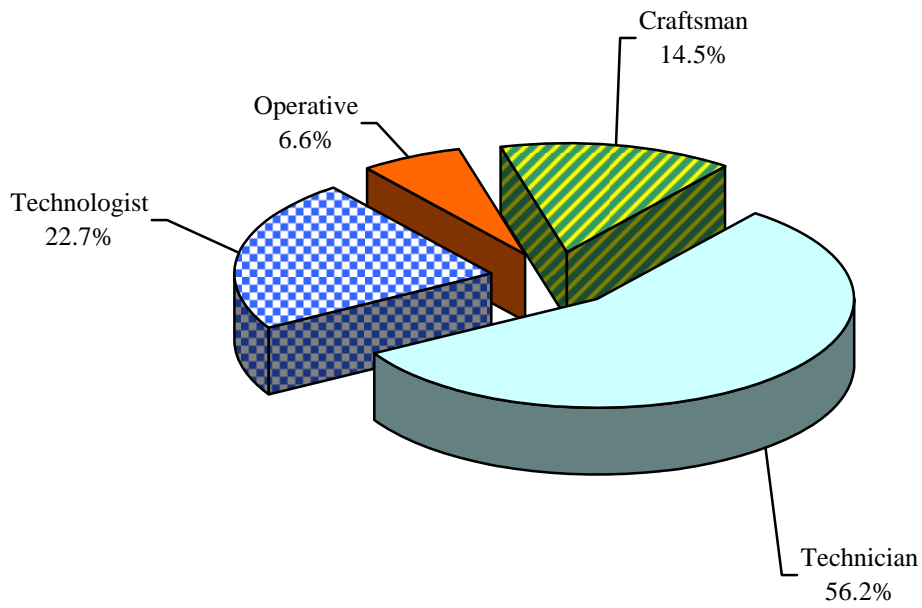
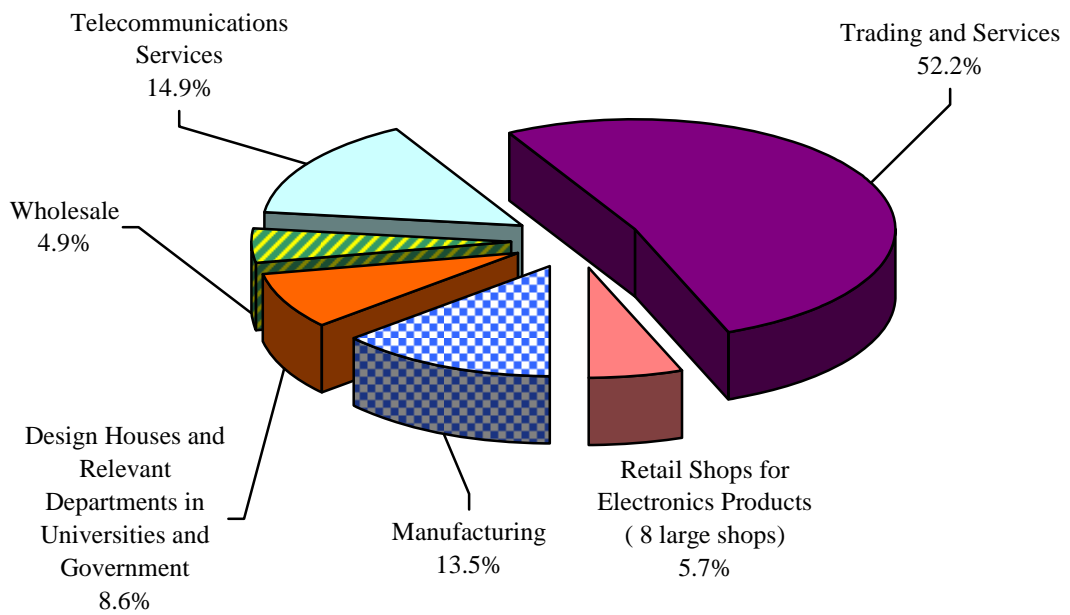


Figure 2.2 : Distribution of Employees by Job Sector



Number of Trainees

2.3 At the time of the survey, there were 288 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	47	11 833	0.4%
Technician	69	29 268	0.2%
Craftsman	157	7 533	2.1%
Operative	15	3 481	0.4%
Total	288	52 115	0.6%

Number of Vacancies at Time of Survey and Forecast Manpower by April 2011

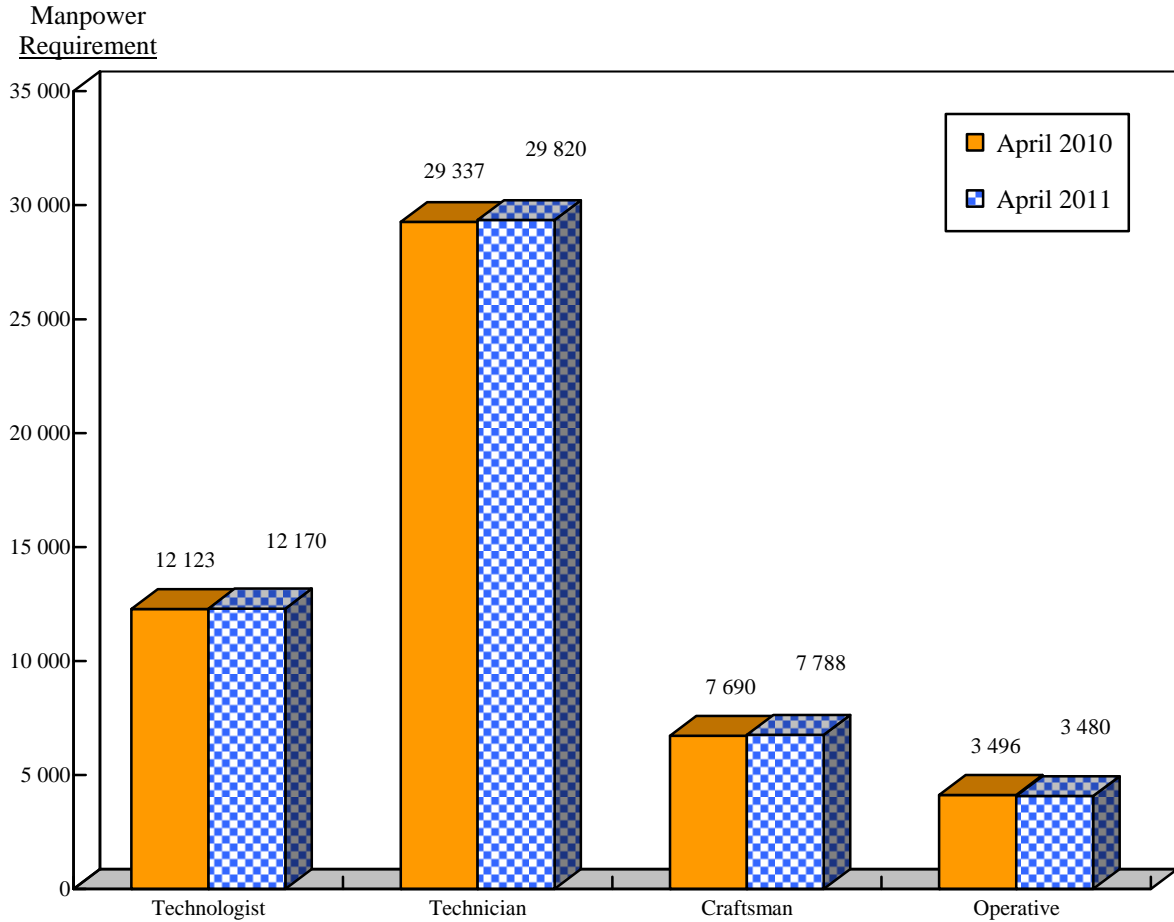
2.4 The total number of job vacancies was 846, or 1.62% of the total number employed in the electronics industry at the time of the survey. Employers also forecast that there would be 53 258 employees in the industry by April 2011, which is 1 143 employees (1.1%) more than that in April 2010.

2.5 A comparison of the manpower requirement at the time of survey and the employers' forecast of the number of employees by April 2011 is shown in Table 2.3 and Figure 2.3:

Table 2.3 : Comparison of Manpower Requirement by April 2010 and April 2011

Job Level	At Time of Survey (April 2010)			Forecast Total No. of Employees by April 2011	Forecast Increase/Decrease in Manpower Requirement
	No. of Employees	No. of Vacancies	Total Manpower Requirement		
Technologist	11 833	290	12 123	12 170	+0.4%
Technician	29 268	447	29 337	29 820	+1.6%
Craftsman	7 533	86	7 690	7 788	+1.3%
Operative	3 481	23	3 496	3 480	-0.5%
Total	52 115	846	52 646	53 258	+1.1%

Figure 2.3 : Comparison of Manpower Requirement by April 2010 and April 2011



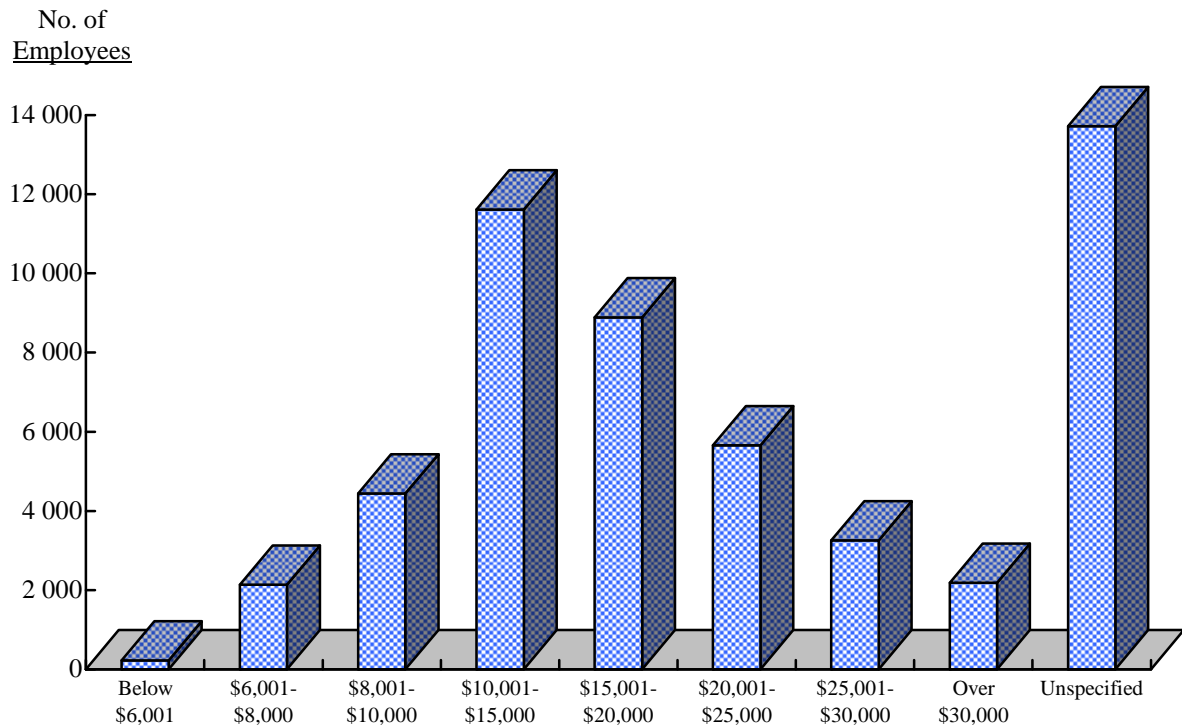
Total Monthly Income Range of Employees

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 \$6,001	\$6,001-\$8,000	\$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	-	-	-	468	1 997	2 150	2 095	1 541	3 582
Technician	1	411	1 482	7 629	6 767	3 505	1 158	640	7 675
Craftsman	114	666	2 269	3 514	126	-	-	-	844
Operative	114	1 062	689	2	-	-	-	-	1 614
Total	229	2 139	4 440	11 613	8 890	5 655	3 253	2 181	13 715

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	3 – 4 years
Technician	Associate Degree/ Higher Diploma	On-the-job Training	3 – 4 years
Craftsman	Craft Certificate	On-the-job Training	1 – 2 years

Internal Promotion

2.8 In the twelve months prior to the survey, a total of 451 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	204	11 833	1.7%
From Craftsman to Technician	239	29 268	0.8%
From Other Levels to Craftsman	8	7 533	0.1%
Total	451	48 634	0.9%

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 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	1 252	11 833	10.6%
Technician	1 094	29 268	3.7%
Craftsman	1	7 533	0.01%
Total	2 347	48 634	4.8%

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.	401	Problem solving	2 836
	2.	103	Project management	2 130
	3.	413	Ability to learn/ adapt new skills/ knowledge	1 915
Technician	1.	411	Customer services skills	9 853
	2.	401	Problem solving	7 420
	3.	413	Ability to learn/ adapt new skills/ knowledge	6 905
Craftsman	1.	401	Problem solving	2 812
	2.	413	Ability to learn/ adapt new skills/ knowledge	1 538
	3.	404	Communication skills	1 189

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 employers 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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	471	-	14	482
Electrical Engineer 電機工程師	93	-	-	93
Mechanical Engineer 機械工程師	122	-	3	125
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	257	-	5	262
Chemical Engineer 化學工程師	10	-	-	10
Product/Graphic Designer 產品/平面設計員	17	-	1	18
System Analyst 系統分析員	28	-	-	28
Sub-total 小計	998	-	23	1 018
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	1 001	-	53	1 016
Mechanical Technician 機械技術員	373	-	1	374
Draughtsman 繪圖員	3	-	-	3
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	326	-	1	327
Supervisor/Foreman/Leader 監督/管工/組長	324	-	-	324
Programmer 程序編製員	33	-	-	33
Web Developer/Designer 網站開發員/設計員	9	-	-	9
Sales Technician 推銷技術員	214	-	-	214
Sub-total 小計	2 283	-	55	2 300
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	12	-	-	12
Electronics Craftsman 電子技工	1 074	-	-	1 070
Electrician 電氣技工	35	5	-	35
Mechanic 技工	45	-	-	45
Sub-total 小計	1 166	5	-	1 162
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	2 559	15	23	2 558
Sub-total 小計	2 559	15	23	2 558
GRAND TOTAL 總計	7 006	20	101	7 038

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	4 254	8	34	4 295
Electrical Engineer 電機工程師	261	3	4	265
Mechanical Engineer 機械工程師	336	-	12	348
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	472	-	-	472
Chemical Engineer 化學工程師	1	-	-	1
Product/Graphic Designer 產品/平面設計員	301	-	-	301
System Analyst 系統分析員	1 803	-	201	2 019
Sub-total 小計	7 428	11	251	7 701
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	6 468	68	75	6 662
Mechanical Technician 機械技術員	389	-	5	394
Draughtsman 繪圖員	57	-	1	58
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	329	-	-	329
Supervisor/Foreman/Leader 監督/管工/組長	761	-	1	762
Programmer 程序編製員	2 287	-	181	2 436
Web Developer/Designer 網站開發員/設計員	312	-	10	322
Sales Technician 推銷技術員	4 838	-	68	4 906
Sub-total 小計	15 441	68	341	15 869
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	273	18	-	273
Electronics Craftsman 電子技工	2 966	86	55	3 067
Electrician 電氣技工	526	42	-	548
Mechanic 技工	2	4	-	6
Sub-total 小計	3 767	150	55	3 894
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	593	-	-	593
Sub-total 小計	593	-	-	593
GRAND TOTAL 總計	27 229	229	647	28 057

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	1 901	36	5	1 906
Electrical Engineer 電機工程師	46	-	-	46
Mechanical Engineer 機械工程師	10	-	-	10
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	34	-	-	34
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	2	-	-	2
System Analyst 系統分析員	219	-	-	219
Sub-total 小計	2 212	36	5	2 217
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	2 916	1	7	2 923
Mechanical Technician 機械技術員	14	-	-	14
Draughtsman 繪圖員	66	-	-	66
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	-	-	-	-
Supervisor/Foreman/Leader 監督/管工/組長	219	-	-	219
Programmer 程序編製員	356	-	3	359
Web Developer/Designer 網站開發員/設計員	392	-	1	393
Sales Technician 推銷技術員	478	-	1	479
Sub-total 小計	4 441	1	12	4 453
CRAFTSMAN LEVEL 技工級				
Cable Jointer/Wireman 電纜接駁技工/駁線技工	48	-	-	48
Electronics Craftsman 電子技工	848	-	14	862
Electrician 電氣技工	44	-	-	44
Mechanic 技工	5	-	-	5
Sub-total 小計	945	-	14	959
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	144	-	-	144
Sub-total 小計	144	-	-	144
GRAND TOTAL 總計	7 742	37	31	7 773

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	249	-	1	250
Electrical Engineer 電機工程師	23	-	-	23
Mechanical Engineer 機械工程師	-	-	-	-
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	8	-	-	8
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	13	-	-	13
System Analyst 系統分析員	21	-	-	21
Sub-total 小計	314	-	1	315
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	630	-	13	643
Mechanical Technician 機械技術員	21	-	-	21
Draughtsman 繪圖員	-	-	-	-
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	2	-	-	2
Supervisor/Foreman/Leader 監督/管工/組長	6	-	-	6
Programmer 程序編製員	25	-	5	30
Web Developer/Designer 網站開發員/設計員	-	-	-	-
Sales Technician 推銷技術員	979	-	4	983
Sub-total 小計	1 663	-	22	1 685
CRAFTSMAN LEVEL 技工級				
Cable Joints/Wireman 電纜接駁技工/駁線技工	10	-	-	10
Electronics Craftsman 電子技工	427	-	17	444
Electrician 電氣技工	135	-	-	135
Mechanic 技工	-	-	-	-
Sub-total 小計	572	-	17	589
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	50	-	-	50
Sub-total 小計	50	-	-	50
GRAND TOTAL 總計	2 599	-	40	2 639

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	550	-	10	573
Electrical Engineer 電機工程師	220	-	-	236
Mechanical Engineer 機械工程師	3	-	-	3
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	31	-	-	31
Chemical Engineer 化學工程師	-	-	-	-
Product/Graphic Designer 產品/平面設計員	12	-	-	12
System Analyst 系統分析員	58	-	-	60
Sub-total 小計	874	-	10	915
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	1 001	-	12	1 030
Mechanical Technician 機械技術員	161	-	1	170
Draughtsman 繪圖員	4	-	-	4
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	24	-	-	24
Supervisor/Foreman/Leader 監督/管工/組長	1 021	-	-	1 047
Programmer 程序編製員	138	-	-	143
Web Developer/Designer 網站開發員/設計員	1	-	1	2
Sales Technician 推銷技術員	13	-	-	13
Sub-total 小計	2 363	-	14	2 433
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	-	-	-	-
Electronics Craftsman 電子技工	226	-	-	226
Electrician 電氣技工	389	-	-	447
Mechanic 技工	468	-	-	511
Sub-total 小計	1 083	-	-	1 184
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	135	-	-	135
Sub-total 小計	135	-	-	135
GRAND TOTAL 總計	4 455	2	24	4 664

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	2	-	-	2
Electrical Engineer 電機工程師	3	-	-	3
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	2	-	-	2
Sub-total 小計	7	-	-	7
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	190	-	1	191
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	-	-	-	-
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	2 885	-	2	2 887
Sub-total 小計	3 077	-	3	3 080
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	3 084	-	3	3 087

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 2011 預測至 2011 年 4 月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Electronics Engineer 電子工程師	7 427	44	64	7 505
Electrical Engineer 電機工程師	646	3	4	666
Mechanical Engineer 機械工程師	471	-	15	486
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	802	-	5	807
Chemical Engineer 化學工程師	23	-	-	23
Product/Graphic Designer 產品/平面設計員	333	-	1	334
System Analyst 系統分析員	2 131	-	201	2 349
Sub-total 小計	11 833	47	290	12 170
TECHNICIAN LEVEL 技術員級				
Electronics Technician 電子技術員	12 206	69	161	12 465
Mechanical Technician 機械技術員	958	-	7	973
Draughtsman 繪圖員	130	-	1	131
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	681	-	1	682
Supervisor/Foreman/Leader 監督/管工/組長	2 331	-	1	2 358
Programmer 程序編製員	2 839	-	189	3 001
Web Developer/Designer 網站開發員/設計員	716	-	12	728
Sales Technician 推銷技術員	9 407	-	75	9 482
Sub-total 小計	29 268	69	447	29 820
CRAFTSMAN LEVEL 技工級				
Cable Joiner/Wireman 電纜接駁技工/駁線技工	343	18	-	343
Electronics Craftsman 電子技工	5 541	86	86	5 669
Electrician 電氣技工	1 129	49	-	1 209
Mechanic 技工	520	4	-	567
Sub-total 小計	7 533	157	86	7 788
OPERATIVE LEVEL 操作工級				
Operator 生產線操作工	3 481	15	23	3 480
Sub-total 小計	3 481	15	23	3 480
GRAND TOTAL 總計	52 115	288	846	53 258

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 \$6,001 以下	\$6,001 - \$8,000	\$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	2 517	-	-	-	271	1 010	1 393	1 300	936
Electrical Engineer 電機工程師	13	-	-	-	-	103	142	272	116
Mechanical Engineer 機械工程師	103	-	-	-	-	57	220	35	56
Manufacturing/Quality Assurance Engineer 製造/品質保證工程師	235	-	-	-	-	72	183	235	77
Chemical Engineer 化學工程師	7	-	-	-	-	3	-	1	12
Product/Graphic Designer 產品/平面設計員	51	-	-	-	97	120	4	60	1
System Analyst 系統分析員	656	-	-	-	100	632	208	192	343
Sub-total 小計	3 582	-	-	-	468	1 997	2 150	2 095	1 541
TECHNICIAN LEVEL 技術員級									
Electronics Technician 電子技術員	2 986	-	340	642	2 565	3 804	846	574	413
Mechanical Technician 機械技術員	137	-	11	18	440	171	172	2	7
Draughtsman 繪圖員	43	1	-	4	68	10	-	-	4
Manufacturing/Quality Assurance Technician 製造/品質保證技術員	315	-	-	118	136	83	1	28	-
Supervisor/Foreman/Leader 監督/管工/組長	260	-	-	-	407	1 326	312	26	-
Programmer 程序編製員	989	-	-	82	985	398	372	13	-
Web Developer/Designer 網站開發員/設計員	198	-	-	74	368	50	25	1	-
Sales Technician 推銷技術員	2 747	-	60	544	2 660	889	1 777	514	216
Sub-total 小計	7 675	1	411	1 482	7 629	6 767	3 505	1 158	640
CRAFTSMAN LEVEL 技工級									
Cable Jointer/Wireman 電纜接駁技工/駁線技工	47	-	28	-	268	-	-	-	-
Electronics Craftsman 電子技工	770	114	590	1 715	2 233	119	-	-	-
Electrician 電氣技工	24	-	48	518	539	-	-	-	-
Mechanic 技工	3	-	-	36	474	7	-	-	-
Sub-total 小計	844	114	666	2 269	3 514	126	-	-	-
OPERATIVE LEVEL 操作工級									
Operator 生產線操作工	1 614	114	1 062	689	2	-	-	-	-
Sub-total 小計	1 614	114	1 062	689	2	-	-	-	-
GRAND TOTAL 總計	13 715	229	2 139	4 440	11 613	8 890	5 655	3 253	2 181

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	763	277	-	1 040
102 Marketing management 經銷管理	190	1 883	100	2 173
103 Project management 計劃管理	2 130	157	-	2 287
104 Quality management 品質管理	552	243	153	948
105 Purchasing management 採購管理	57	1 831	-	1 888
106 People management 人事管理	303	209	-	512
107 Leadership skills 領導能力	1 849	344	-	2 193
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	86	-	-	86
202 Laws and regulatory restrictions to China 進入中國市場的法律和規條限制	16	76	-	92
203 Trade practices in the mainland of China 在中國內地的營商常規	30	16	-	46
204 Cross-cultural knowledge 跨文化的知識	56	284	-	340
205 World vision 世界視野	241	517	-	758
Language Skills 語文能力				
301 Spoken English 英語會話	453	2 691	950	4 094
302 Written English 英文書寫能力	168	1 539	763	2 470
303 Putonghua 普通話	1 010	3 155	249	4 414
304 Written Chinese 中文書寫能力	-	698	-	698
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	2 836	7 420	2 812	13 068
402 Creativity 創意力	837	2 196	4	3 037
403 Critical thinking 批判思考能力	376	1 562	114	2 052
404 Communication skills 溝通技巧	521	4 703	1 189	6 413
405 Team building 團隊建立	696	1 430	1 161	3 287
406 Time management skills 時間管理技巧	361	1 106	255	1 722
407 Optimism/Positive 樂觀/積極	288	1 262	149	1 699
408 Self-esteem 自尊	-	6	-	6
409 Perseverance 毅力	299	496	689	1 484
410 Change management skills 變革管理技巧	315	109	-	424
411 Customer services skills 客戶服務技巧	1 137	9 853	2 438	13 428
413 Ability to learn/adapt new skills/knowledge 學習或適應新科技、新知識的能力	1 915	6 905	1 538	10 358
Others 其他				
699 Others 其他	100	979	146	1 225