

2005 Manpower Survey Report
Building and Civil Engineering Industry

土木工程及建築業
二〇〇五年人力調查報告

**Building and Civil Engineering
Training Board**

Vocational Training Council

職業訓練局
土木工程及建築業訓練委員會

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Executive Summary of the 2005 Manpower Survey Report of the Building and Civil Engineering Industry

Introduction

The Building and Civil Engineering Training Board conducted a survey in March 2005 to collect information on the manpower structure and training requirements by principal jobs in construction and related disciplines of the building and civil engineering industry.

Scope of the Survey

2. The survey covered a total of 18 598 construction sites, offices, firms and institutions in the following 9 branches of the building and civil engineering industry:

- Branch 1 - all active building construction sites in the public and private sectors (795 sites as recorded by the Census & Statistics Department, C & SD);
- Branch 2 - all active civil engineering and other construction sites in the public and private sectors (413 sites as recorded by the C & SD);
- Branch 3 - new construction works contractors including site investigation, site formation, foundation works and erection works recorded under HSICs 511, 521 and 529 (2 675 establishments);
- Branch 4 - decoration, repair and maintenance contractors recorded under HSIC 531 (7 431 establishments);
- Branch 5 - special trade works contractors [excluding electrical and mechanical fitting and gas fitting, installation and maintenance] recorded under HSICs 541, 542, 5611, 5612, 5618 and 591 (5 743 establishments);
- Branch 6 - architectural, surveying and project engineering services firms related to construction activities under HSIC 8334 [excluding sub-branch HSIC 8334-04: building services engineering] (1 460 establishments);
- Branch 7 - major private estate developers (36 establishments);
- Branch 8 - relevant teaching departments and estate offices of training/ educational institutions, and utility companies undertaking construction work or employing construction workers at the time of the survey (31 departments/offices); and

Branch 9 - government departments undertaking construction work or employing construction workers at the time of the survey (14 departments).

HSIC : Hong Kong Standard Classification

In view of the limited resources, a stratified random sampling method was adopted to select 1 141 samples out of a total of 17 309 establishments in Branches 3 to 6. Together with 1 208 active sites in Branches 1 and 2 and 81 establishments in Branches 7, 8 and 9, a total of 2 430 sites/establishments were visited.

Number of Workers Employed

3. The Survey revealed that in March 2005, 106 702 workers were employed in principal jobs of construction and related disciplines and 38 865 persons of other disciplines in the building and civil engineering industry. The distribution of workers of construction and related disciplines by job level by branch is summarised in the table below and details in **Appendices 1 and 2**.

Manpower Distribution by 9 Branches and 4 Skills Level

Branch \ Job Level	1	2	3	4	5	6	7	8	9	Total
Professional/ Technologist	830	1 219	1 812	1 274	419	4 045	177	787	3 428	13 991
Technician	2 613	2 355	3 114	6 008	3 070	4 338	77	1 119	6 989	29 683
Skilled & Semi-Skilled Worker	21 966	7 885	1 422	7 140	7 430	24	-	447	404	46 718
General Worker	5 975	5 762	1 311	1 377	496	104	-	86	1 199	16 310
Total	31 384	17 221	7 659	15 799	11 415	8 511	254	2 439	12 020	106 702

Number of Vacancies and Trainees

4. Employers reported a total of 244 vacancies and 1 040 trainees, representing about 0.23% and 1.0% respectively of the workforce at the time of the survey. A summary of the vacancies by job level is as below:

Job Level	Number of Vacancies	Number of Trainees
Professional/Technologist	54	723
Technician	137	261
Skilled and Semi-Skilled Worker	45	55
General Worker	8	1
Total	244	1 040

Future Manpower Training Requirement

5. Based on data collected in the present and past manpower surveys, estimated expenditure on construction works in coming years, the wastage rates and other considerations affecting the industry, the Training Board forecasts the industry's likely annual training demand from 2006 to 2011 as below:

<u>Job Level</u>	<u>Average Annual Projected Training Requirement</u>
Professional/Technologist	450 - 500
Technician	970 - 1 110
Skilled and Semi-Skilled Worker	1 590 - 1 940

土木工程及建築業二〇〇五年人力調查

報告摘要

引言

土木工程及建築業訓練委員會於二〇〇五年三月間進行人力調查，蒐集業內各門類主要職務的最新人力情況及訓練需要資料。

範圍

2. 是次人力調查範圍包括下列九個類別的各類地盤、辦事處、公司及機構共 18 598 間：

分類 1： 已動工的私人及公共建築地盤（政府統計處所紀錄的 795 個已動工地盤）；

分類 2： 已動工的私人及公共土木工程和其他地盤（政府統計處所紀錄的 413 個地盤）；

分類 3： 根據香港標準行業分類第 511、521、529 項所紀錄的新建造工程承建商，包括從事地盤勘察、地盤平整、地基工程及上蓋建造工程者（2 675 間）；

分類 4： 根據香港標準行業分類第 531 項所紀錄的裝修、修葺及保養工程承建商（7 431 間）；

分類 5： 根據香港標準行業分類第 541-542、5611、5612、5618、591 項所紀錄的特種工程承建商[不包括電氣與機械安裝及氣體裝置、安裝與維修承建商]（5 743 間）；

分類 6： 根據香港標準行業分類第 8334 項所紀錄，與建造活動有關的建築、測量及工程策劃服務公司，但不包括第 833404 項：建築物設備工程服務（1 460 間）；

分類 7： 主要私人地產發展商（36 間）；

分類 8： 各教育及訓練機構有關學系和物業管理處，以及調查期間正進行建築工程或僱有建造業人員的公用事業公司（31 個學系 / 辦事處）；

分類 9： 調查期間正進行建築工程或僱有建造業人員的政府部門（14 個）。

鑑於調查資源有限，本會採用了分層隨機抽樣法從分類 3 至 6 內 17 309 間機構中抽出 1 141 間，加上 1 208 個分類 1、2 地盤及分類 7、8、9 的 81 間機構，調查對象合共 2 430 間。

各門類的僱員人數

3. 調查顯示，二〇〇五年三月間，本地各土木工程及建築行業主要職務共有僱員 106 702 名，其他職務僱員 38 865 名。各分類不同技能等級的僱員人數概括如下表，詳細數據載於附錄 1、2。

各分類不同技能等級的人力分布情況

分類 技能等級	1	2	3	4	5	6	7	8	9	總數
專業人士／ 技師	830	1 219	1 812	1 274	419	4 045	177	787	3 428	13 991
技術人員	2 613	2 355	3 114	6 008	3 070	4 338	77	1 119	6 989	29 683
技工／ 半熟練技工	21 966	7 885	1 422	7 140	7 430	24	-	447	404	46 718
普通工人	5 975	5 762	1 311	1 377	496	104	-	86	1 199	16 310
總數	31 384	17 221	7 659	15 799	11 415	8 511	254	2 439	12 020	106 702

空缺額及受訓者人數

4. 僱主報稱，調查期間共有 244 個空缺及 1 040 名受訓者，約佔業內僱員總數的 0.23% 及 1.0%。各技能等級的空缺額及受訓者人數概括如下表：

<u>技能等級</u>	<u>空缺數目</u>	<u>受訓者人數</u>
專業人士／技師	54	723
技術員	137	261
技工／半熟練技工	45	55
普通工人	8	1
總數	244	1 040

未來人力訓練需求

5. 根據今次及以往人力調查的數據、未來幾年用於建造工程的預算、流失率及其他影響本業的因素，本會預計業內各技能等級於二〇〇六年至二〇一一年間，平均每年需訓練人力如下：

<u>技能等級</u>	<u>平均每年所需訓練人數</u>
專業人士／技師	450 – 500
技術員	970 – 1 110
技工／半熟練技工	1 590 – 1 940

SECTION I

INTRODUCTION

The Training Board

1.1 The Building and Civil Engineering Training Board of the Vocational Training Council is required by its terms of reference to determine the manpower and training needs of the building and civil engineering industry and to make recommendations on measures to meet such needs. The Training Board comprises members nominated by major trade associations, trade unions, professional institutions, education/training organizations and relevant government departments. The Training Board's membership and terms of reference are listed in **Appendices 6 and 7** respectively.

The Survey

1.2 In pursuance of its terms of reference, the Training Board conducted a survey in March 2005 to collect up-to-date manpower information by principal job in the building and civil engineering industry with a view to assessing the industry's technical manpower structure and training requirements. The fieldwork of the survey was carried out from 21st February to 31st May 2005 with the assistance of the Census and Statistics Department (C&SD).

1.3 The following information was collected from the survey:

- (i) The number of employees at the time of the survey,
- (ii) The number of existing vacancies,
- (iii) The number of trainees, and
- (iv) The distribution of employees by monthly income range.

Scope of the Survey

1.4 The scope of the survey covered a total of 18 598 construction sites, offices, firms and institutions in the following branches of the building and civil engineering industry as recorded by C&SD (based on 4th quarters of 2004 for Branches 1 & 2 and 3rd quarter of 2004 for Branches 3-6):

- Branch 1 - all active building construction sites in the public and private sectors, (795 sites as recorded by the C & SD);

- Branch 2 - all active civil engineering and other construction sites in the public and private sectors (413 sites as recorded by the C & SD);
- Branch 3 - new construction works contractors including site investigation, site formation, foundation works and erection works recorded under HSICs 511, 521 and 529 (2 675 establishments);
- Branch 4 - decoration, repair and maintenance contractors, recorded under HSIC 531 (7 431 establishments);
- Branch 5 - special trade works contractors, [excluding electrical and mechanical fitting and gas fitting, installation & maintenance] recorded under HSICs 541-542, 5611, 5612, 5618 and 591 (5 743 establishments);
- Branch 6 - architectural, surveying and project engineering services firms related to construction activities under HSIC 8334 [excluding HSIC 833404 building services engineering] (1 460 establishments);
- Branch 7 - private estates developers (36 establishments);
- Branch 8 - relevant teaching departments and estate offices of training/educational institutions, and utility companies undertaking construction work or employing construction workers at the time of the survey (31 departments/offices); and
- Branch 9 - government departments undertaking construction work or employing construction workers at the time of the survey (14 departments).

HSIC : Hong Kong Standard Classification.

1.5 In view of the limited resources available for the fieldwork, a stratified random sampling method was adopted in Branches 3 to 6 to select 1 141 samples out of a total of 17 309 establishments. Together with the 1 208 sites in Branches 1 and 2 and the 81 establishments in Branches 7, 8 and 9, a total of 2 430 sites/establishments were visited in the fieldwork period of the survey.

1.6 The survey covered all technical persons in construction and related disciplines employed by main contractors, sub-contractors as well as self-employed persons in construction sites and offices, matched to the 101 principal jobs as listed in **Appendix 10**. It excluded workers employed in Hong Kong but posted outside Hong Kong for more than six months during the twelve-month period prior to the survey. To avoid double counting, the electrical and mechanical (E & M) contracting and servicing sectors of the construction industry were separately covered by another manpower survey simultaneously conducted in March 2005 by the Electrical and Mechanical Services Training Board (EM TB). Similarly, the estate surveyor and surveying technician (estate) jobs were also covered separately by the Real Estate Services Training Board (RE TB).

Publicity

1.7 Prior publicity was given to the local press. Relevant employers' associations and professional institutions were also requested to publicize the survey among their members.

Method of the Survey

1.8 Two weeks before the fieldwork, a survey questionnaire (**Appendix 8**) together with an explanatory note (**Appendix 9**) and a list of principal jobs with job descriptions for the building & civil engineering industry (**Appendix 10**) was sent to each employer to be interviewed for completion. Employers were requested to provide information regarding the manpower situation in their establishments at the time of the survey.

1.9 To avoid double counting site workers who might work in different sites during the survey period, a reference date for all sites was fixed to be 7th March 2005 which was a fine day without rain. Only those site workers on the 7th March 2005 log sheet and properly matched with the jobs in the list of principal jobs were included in the survey.

1.10 During the fieldwork period, officers of the C & SD visited every site and employer by appointment to collect the completed questionnaires and, when requested, assisted employers to complete the questionnaires.

1.11 After the fieldwork, the completed questionnaires were scrutinized and, where necessary, verified with the respondents before being processed by the C & SD. The survey data in Branches 3 to 6 were then scaled up by appropriate factors to reflect the overall manpower situation of the branches.

Survey Response

1.12 Of the 2 430 sites and establishments surveyed, 1 576 supplied the required information and 7 refused to do so. Among the remaining 847 sites/establishments, 433 sites had returned without persons engaged, 65 establishments employed no manpower in the list of principal jobs, 44 sites suspended work, 33 closed, 21 not engaged in the specific trade and the remaining 251 establishments either moved, vacant, non-contact, wrong address or door-locked. The effective response rate was 89.4%.

The Report

1.13 The Training Board endorsed the survey findings and published the 2005 manpower survey statistical report of the building and civil engineering industry on the website of the Vocational Training Council in October 2005 for public information.

1.14 This report presents the findings of the survey (**Appendices 1 to 3**) and also the Training Board's forecast manpower needs of the building and civil engineering industry for 2006 to 2011 as well as the Training Board's recommendations on measures to meet these needs. In this report, both the terms 'employees' and 'workers' refer to personnel engaged (or self-employed) in the principal jobs of construction and related disciplines at the time of the survey; whereas the term 'trainees' includes both trainees under any form of training and apprentices. The report is also mounted on the website of the Vocational Training Council in the Building and Civil Engineering Training Board page for public reference.

SECTION II

SUMMARY OF SURVEY FINDINGS

Total Number Employed

(Appendices 1 and 2)

2.1 The survey revealed that in March 2005, 106 702 persons (excluding 1 040 trainees) were employed in principal jobs of construction and related disciplines and 38 865 persons of other disciplines in the building and civil engineering industry; i.e. the industry employed a total of 146 607 persons at the time of the survey. The distribution of employees of construction and related disciplines by job level is given in **Appendices 1 and 2** and summarized below in 3 categories of employment - directly by main contractors, by sub-contractors, and self-employed:

Table 2.1 Distribution of Employees of Construction and Related Disciplines by Job Level

Job Level	Number of Employees				Percentage of Total Number Employed
	Direct	Sub-contractor	Self-employed	Sub-total	
Professional/Technologist	13 813	174	4	13 991	13.11%
Technician	28 888	792	3	29 683	27.82%
Skilled and Semi-skilled Worker	21 815	24 658	245	46 718	43.78%
General Worker	8 809	7 437	64	16 310	15.29%
Total	73 325	33 061	316	106 702	100.00%

2.2 Of these 106 702 employees, 73 325 (68.7%) were directly employed by main contractors, 33 061 (31.0%) by sub-contractors and 316 (0.3%) were self-employed.

2.3 A new job title, “building services and engineering supervisor” at the technician level (code 219), was added during data processing to cover workers engaged mainly in decoration/renovation work and taking an overseeing position.

Distribution of Employees of Construction and Related Disciplines by Branch

2.4 The distribution of employees by principal jobs in the 9 branches of the industry is shown in **Appendix 2** and summarised below:

Table 2.2 : Manpower Distribution by 9 Branch by Skill Levels

表 2.2 : 各分類的僱員人數

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 公用事業等 的管業處	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數
PROFESSIONAL/TECHNOLOGIST 專業人士/技師										
Sub-total 分級小計	830	1 219	1 812	1 274	419	4 045	177	787	3 428	13 991
TECHNICIAN 技術員										
Sub-total 分級小計	2 613	2 355	3 114	6 008	3 070	4 338	77	1 119	6 989	29 683
SKILLED AND SEMI-SKILLED WORKERS 技工/半技術工人										
Sub-total 分級小計	21 966	7 885	1 422	7 140	7 430	24	-	447	404	46 718
GENERAL WORKERS 普通工人										
Sub-total 分級小計	5 975	5 762	1 311	1 377	496	104	-	86	1 199	16 310
GRAND TOTAL 總計	31 384	17 221	7 659	15 799	11 415	8 511	254	2 439	12 020	106 702

2.5 Among the 106 702 employees, 31 384 (29.4%) worked in the active building sites and 17 221 (16.1%) in active civil engineering sites.

Number of Trainees of Construction and Related Disciplines

2.6 Employers reported a total of 1 040 trainees at the time of the survey, representing about 1.0% of the total workforce in construction and related disciplines. A summary of the trainees by job level is shown below with full distribution by principal job in **Appendix 1:**

Table 2.3 Distribution of Trainees of Construction and Related Disciplines by Job Level

Job Level	Number of Trainees	No. of Workers Employed	Trainees as Percentage of Workers Employed (at the Same Job Level)
Professional/Technologist	723	13 991	5.2%
Technician	261	29 683	0.9%
Skilled and Semi-skilled Worker	55	46 718	0.1%
General Worker	1	16 310	-
Total	1 040	106 702	1.0%

2.7 There were 723 trainees at the professional/technologist level (5.2%), 261 technician trainees (0.9%) and only 55 trainees at the skilled and semi-skilled worker level (0.1%).

Number of Vacancies

2.8 Employers reported a total of 244 vacancies of construction and related disciplines at the time of the survey, representing only 0.23% of the workforce. A summary of the vacancies by job level is shown below with full distribution by principal job in **Appendix 1:**

Table 2.4 Distribution of Job Vacancies by Job Level

Job Level	Number of Vacancies	No. of Workers Employed	Vacancies as Percentage of Workers Employed (at the Same Job Level)
Professional/Technologist	54	13 991	0.39%
Technician	137	29 683	0.46%
Skilled and Semi-skilled Worker	45	46 718	0.10%
General Worker	8	16 310	0.05%
Total	244	106 702	0.23%

Distribution of Employees by Monthly Income Range

2.9 The distribution of employees by the monthly income range at each job level is shown in **Appendix 3**.

SECTION III

OBSERVATIONS AND CONCLUSIONS

General

3.1 The Training Board has carefully examined the survey findings and is of the opinion that the data collected generally reflect the manpower situation of the building and civil engineering industry at the time of the survey. It is also noted that the vacancy rates at all levels and the number of the trainees at the skilled worker and the technician levels were exceptionally low.

Analysis on Manpower Needs

3.2 In order to project the future manpower needs of the industry, the following major future developments or trends of the industry should be taken into consideration:

Trend of Public Works Spending

- 3.3
- (i) Since the reunification in 1997, the Government have spent some \$225 billion on the Capital Works Programme or an annual average of \$28 billion.
 - (ii) The Government has assured its commitment for infrastructure projects necessary to sustain the economic development and long-term competitiveness of Hong Kong. Examples include the Hong Kong-Zhuhai-Macao Bridge and connecting roads and the Kai Tak Development.
 - (iii) In the medium term, the Government has allowed provision for an average annual public works expenditure of \$29 billion.

Thus there may still be a moderate demand for all levels of manpower by the industry for the next few years.

Public Housing

- 3.4
- (i) To meet the housing needs of low income families, the Housing Authority will continue to implement the massive public housing construction programme. The Authority will complete the construction of some 19,600 public housing units in 2005/06. It will produce a total of about 83,700 public housing units for the five years between 2005/06 and 2009/10. The Authority's construction expenditure amounts to some \$5,432M in 2005/06.

- (ii) The Authority is also planning to implement a Total Maintenance Scheme to enhance its public housing maintenance service in 2006. The Scheme would entail a 10% increase in maintenance works, with an increase of about 900 to 1,000 employment opportunities for construction workers. The Housing Authority's maintenance expenditure for the next five years up to 2009/10 is around \$2 billion per annum.

Private Housing

- 3.5
- (i) As regards land supply for private housing, the Government resumed the land sale by the Application List System from January 2004. The 2005/06 Application List comprises a total of 35 sites, including 29 residential sites and 6 commercial/business sites. The residential sites have a total area of about 22 hectares. Ten of the sites are located on Hong Kong Island, seven in Kowloon and twelve in the New Territories. As of now, three residential sites have been sold.
 - (ii) To ensure that there would not be any adverse impact on the property market, the Government will continue to liaise closely with the two railway corporations through the established mechanism to co-ordinate the timetable for the disposal of railway-property developments.
 - (iii) According to the figures published by the Rating and Valuation Department early this year, it was estimated that some 21,200 and 17,400 private residential units will be produced in 2005 and 2006 respectively based on the data available at that time. Comparing with 2002 to 2004 (some 26,000 – 31,000 units), this estimated quantity of residential production is rather moderate, and thus may not generate a substantial increase in the demand for skilled and semi-skilled workers.

Renovation, Renewal and Building Maintenance

- 3.6
- (i) To speed up urban renewal and building maintenance, the Government has announced in the 2005/06 budget speech that it has obtained the support of the Hong Kong Housing Society to launch a \$3 billion Building Management and Maintenance Scheme. The scheme will provide “one-stop” services to owners of old buildings to help them improve the overall condition of their buildings and living environment. An estimated 800 buildings will benefit from the scheme each year. In addition, a total of \$830 million has been earmarked to the Buildings Department over a period of five years starting from 2006-07, for the purpose of removing over 180 000 unauthorised structures and improving the safety and external appearance of old buildings. These initiatives will create job opportunities for the building construction and decorating sectors and help ease the unemployment situation of low-skilled workers. Thus, there should be a moderate increasing demand for skill and semi-skilled workers.

- (ii) To provide comprehensive one-stop assistance to owners to upkeep their buildings, the Housing Authority has solicited the support and agreement of the Hong Kong Housing Society (HKHS) to roll out a ten-year building management and maintenance scheme. The results of the public consultation on building management and maintenance also reveal a broad community preference for putting in place some form of mandatory requirements on owners as an effective measure to ensure proper building management and maintenance. In this connection, the introduction of mandatory building inspection is believed to be a practicable and effective long-term solution to arrest building decay.
- (iii) Apart from promoting proper building management and maintenance, the Government is committed to regenerating older urban areas. The Urban Renewal Authority (URA) has rolled out steadily over the past three years an enhanced urban renewal programme comprising redevelopment, rehabilitation, preservation and revitalization covering over 300 buildings.
- (iv) Other than the URA's continued efforts in its target areas, the private sector's involvement in urban renewal has been and will remain an important locomotive for improvement of the older urban fabric. Over the last ten years, the private sector has initiated about 1,000 redevelopments.

Infrastructural Development/Projects

- 3.7
- (i) With the upturn in our economy, an early reactivation of the plan to re-provision the Central Government Offices and the Legislative Council Building on the Tamar site, will help create employment opportunities for the construction industry.
 - (ii) To meet the demand for public transport, the government will be completing various major infrastructural projects. The construction of the KCRC Lok Ma Chau Spur Line is progressing well and is expected to be commissioned in 2007 as scheduled. Route 8, being constructed, will be completed in two phases in 2007 and 2008.
 - (iii) There will also be a number of large railway projects proposed for the next ten years including the KCRC South Kowloon Line, construction of which has just started and will be completed in 2009. The government is also actively planning for the Sha Tin to Central Link and the West Hong Kong Island Line, and assessing the feasibility of the KCRC Northern Link and the MTRC South Hong Kong Island Line.
 - (iv) The Hong Kong-Shenzhen Western Corridor will be commissioned next year when the control point at Shekou is completed. The Government is also studying the KCRC's feasibility report on the Guangzhou-Shenzhen-Hong Kong Express Rail Link.

- (v) In the next two years, infrastructural projects with a total value of \$6.5 billion will be completed at Hong Kong International Airport at Chek Lap Kok. These include a second passenger terminal building and the Asia World-Expo complex.
- (vi) In addition, other major projects in the pipeline including the improvement to Tuen Mun Road, HK-Zhuhai-Macau Bridge, Central-Wanchai Bypass, supporting infrastructure for the Kowloon Southern Link and the Shatin-Central Link, drainage tunnels, Kai Tak Development, etc.
- (vii) The development of an integrated cultural district in West Kowloon is under consideration by the Government after a six-month public consultation.
- (viii) There is also a trend for more and better environmental protection and improvement including landscaping. It is expected that more expenditure will be spent by both the public and private sectors on works for this purpose.

Mainland China & Macau

- 3.8
- (i) The Government has been facilitating the entry of Hong Kong construction professionals into the Mainland market in the context of CEPA, including major undertakings such as the Beijing Olympics in 2008 and the Shanghai Expo and Guangzhou Asian Games in 2010.
 - (ii) The Government has been facilitating discussions between local professional bodies and mainland authorities on mutual recognition of professional qualification between Mainland and Hong Kong. Mutual recognition agreements for estate surveyors, architects, structural engineers, quantity surveyors and planners have been signed. Moreover, Hong Kong residents may now take part in 18 mainland professional qualification examinations related to the construction and engineering services under CEPA II. Therefore, more construction professionals will provide services and eventually take part in the construction projects in the Mainland.
 - (iii) Similarly, there are strong demand for the local construction workers to participate in construction projects in Macau involving construction of hotels and entertainment facilities.
 - (iv) These external factors would provide job opportunities for the existing local professionals/technologists but may not create much additional demand in terms of manpower.

Future Manpower Training Demand

3.9 The Training Board has estimated the wastage rates of manpower to be 3% at the three job levels - professional/technologist, technician, and skilled and semi-skilled worker. Those leaving the industry are due to retirement, death, change of jobs or deployment outside Hong Kong.

3.10 Based on the manpower data collected from the past and present surveys, estimated expenditure on building and civil engineering project works in coming years, the wastage rates, additional demand for specific workers, unemployment rates at different job levels (**Appendix 4**) and the business outlook, the Training Board forecasts the average annual manpower training requirement by job level from 2006 to 2011 as follows:

Projected Average Annual Manpower Training
Requirement (from 2006 to 2011)

Job Level	Projected Annual Training Requirement
Professional/technologist	450 – 500
Technician	970 – 1 110
Skilled/Semi-skilled Worker	1 590 – 1 940

3.11 The Training Board will conduct another manpower survey in 2007 to assess and update the manpower requirement of the construction industry.

SECTION IV

RECOMMENDATIONS

4.1 While the Hong Kong economy recovered steadily in the past two years after the SARS outbreak with the employment rates in some sectors going up steadily, the construction industry still remained in the doldrums. The economy of Hong Kong is still undergoing structural changes with a slow pace. As a result, the building activities of residential and commercial properties in both the private and the public sectors remain sluggish. However, there have been signs of recovery as the private property developers are actively bidding for land in order to strengthen their supply of residential flats as well as negotiating with the Government for the change of usage for some of their lands for residential purpose. With the Government continuing to launch medium and long term infra-structural projects (such as highways, new railway lines, bridge to Macau and Zhuhai, etc.), this will help maintain the level of construction activities in the civil engineering sector for providing continuous employment of construction workers.

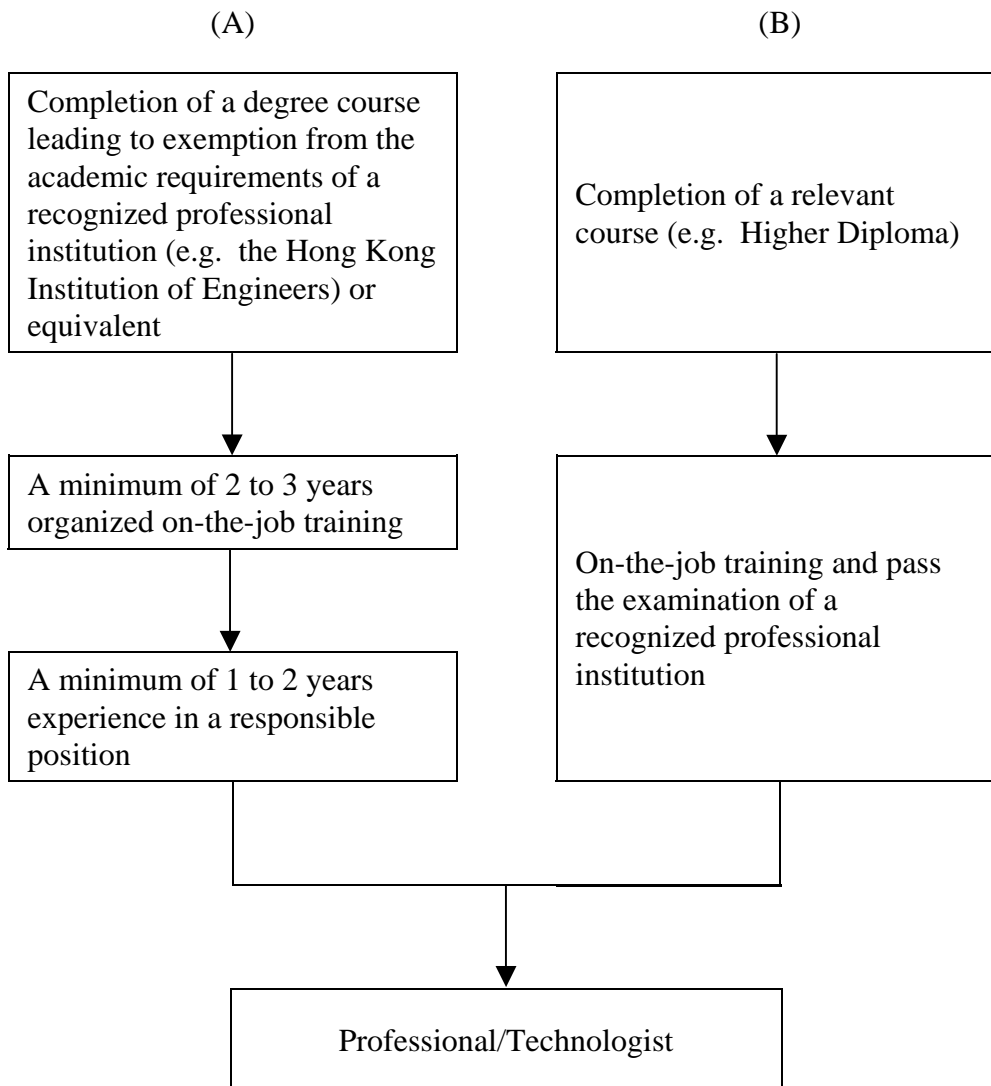
4.2 To assure an adequate supply of competently trained technical manpower to sustain growth and development, the Training Board urges employers to improve their training schemes at all four job levels. Currently, the industry should also provide continuous up-grading and updating technical, safety and legality training to their serving workers to meet the ever increasing stringent requirements on quality standards, quality assurance/public liability and safety at work. The Training Board recommends that the industry as a whole should adopt organized manpower training programs at a scale recommended in paragraph 3.10.

Training of Professionals/Technologists

4.3 A professional/technologist is a person having the qualifications and experience equivalent to those required for corporate membership of a recognized professional institution in Hong Kong (e.g. the Hong Kong Institution of Engineers, HKIE). The person should be competent in analysing and solving a wide range of technical problems, and to apply his knowledge and experience to initiate practical development. Furthermore, he should be able to assume personal responsibility for the development and application of engineering principles, exercise original thought and judgement, follow up projects, apply the latest techniques and supervise and develop his subordinates.

4.4 Professionals/technologists play an important role in bringing about improvement in management and technological innovations. In the construction industry, they are normally trained through completion of a relevant course in technical education followed by a number of years of practical/on-site training and experience in responsible position. The normal training routes for professionals/technologists are as follows:

Training of Professionals/Technologists



4.5 The following table shows the projected average annual manpower training requirement of professionals/technologists in three major construction disciplines from 2006 to 2011. The projected number of degree graduates of local tertiary institutions in the three major disciplines: architectural, civil/geotechnical/structural/building engineering, and surveying is at **Appendix 5**.

Projected Average Annual Training
Requirement of 3 Major Disciplines at the
Professional/Technologist Level (2006 - 2011)

<u>Job Title</u>	<u>No. Employed In March 2005</u>	<u>Projected Annual Training Requirement</u>
<u>Architectural Disciplines</u>		
Architect	1 716	49 – 55
Landscape Architect	219	6 – 10
Total	1 935	55 – 65
<u>Civil/Geotechnical/Structural/Building Engineering Disciplines</u>		
Civil Engineer	3 266	93 – 103
Structural Engineer	1 023	30 – 33
Construction Manager	1 140	43 – 47
Geotechnical Engineer /Geologist	459	13 – 15
Building Services Engineer	1 087	41 – 45
Total	6 975	220 – 243
<u>Surveying Disciplines</u>		
Building/Maintenance Surveyor	612	23 – 25
Land Surveyor	221	7
Quantity Surveyor	2 291	63 – 69
Total	3 124	93 – 101

4.6 There will be an over-supply of local degree graduates in the architectural, civil/geotechnical/structural/environmental engineering and surveying disciplines in the coming three years. However not all graduates will enter into relevant employment in the construction industry. Some will be absorbed by other sectors in the servicing and information technology industries.

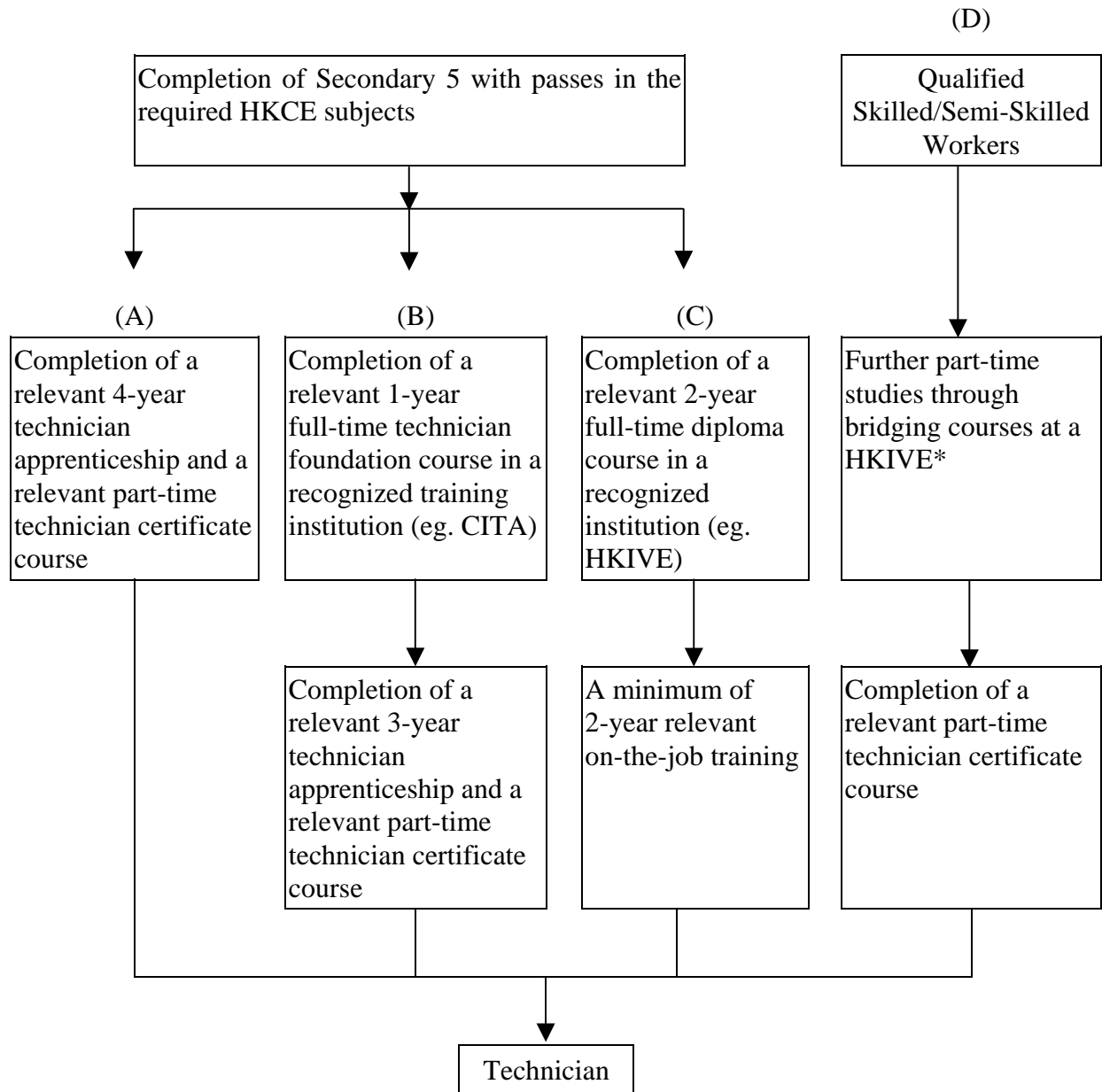
Engineering Graduates Training Scheme

4.7 The Sub-Committee on Engineering Graduate Training Scheme of the Committee on Technologist Training of the Vocational Training Council (VTC) is responsible for administering the Engineering Graduate Training Scheme (EGTS). The EGTS is wholly financed by the government with an objective to bring about more training opportunities for Hong Kong engineering graduates. Employers participating in the EGTS are required to provide up to 18 months practical training of a standard acceptable for Corporate Membership of the Hong Kong Institution of Engineers (HKIE). Employers wishing to participate in the EGTS have to register their training programmes pre-approved by the HKIE under its Scheme 'A' training with the Vocational Training Council. To meet the high cost of training, each trainee being trained under the EGTS is granted a subsidy to be paid through his employer as part of his salary. The subsidy period may comprise partly sandwich and partly post-graduate training up to a maximum of 18 months. The Training Board urges employers to contact the Technologist Training Unit and to join the subsidized scheme to provide formal training opportunities to young graduates.

Training of Technicians

4.8 A technician is one who occupies a position between the professional/technologist and the skilled workers. His education, training and practical experience should enable him to apply proven techniques to solve technical problems. He is expected to carry a measure of technical responsibility, normally under the guidance of a professional/technologist. The usual routes of training technicians are shown as below:

Training of Technicians



* The Hong Kong Institute of Vocational Education.

4.9 The projected average annual training requirements of technicians by job from 2006 to 2011 are shown below:

<u>Job Title</u>	<u>No. Employed in March 2005</u>	<u>Projected Average Annual Training Requirement</u>
Architectural Technician/ Draughtsman	3 537	99 - 113
Civil/Structural/Geotechnical Engineering Technician	2 939	82 - 94
Clerk of Works/Inspector of Works/ Works Supervisor	4 409	164 - 188
Site Agent/Site Foreman	6 500	181 - 209
Surveying Technician	3 813	121 - 140
Laboratory Technician/ Quality Assurance Technician	729	27 - 31
Building Services/Electrical/ Mechanical Engineering Technician	1 577	59 - 67
Building Services and Engineering Supervisor	3 668	137 - 157
Others	2 511	100 - 111
Total	29 683	970 - 1 110

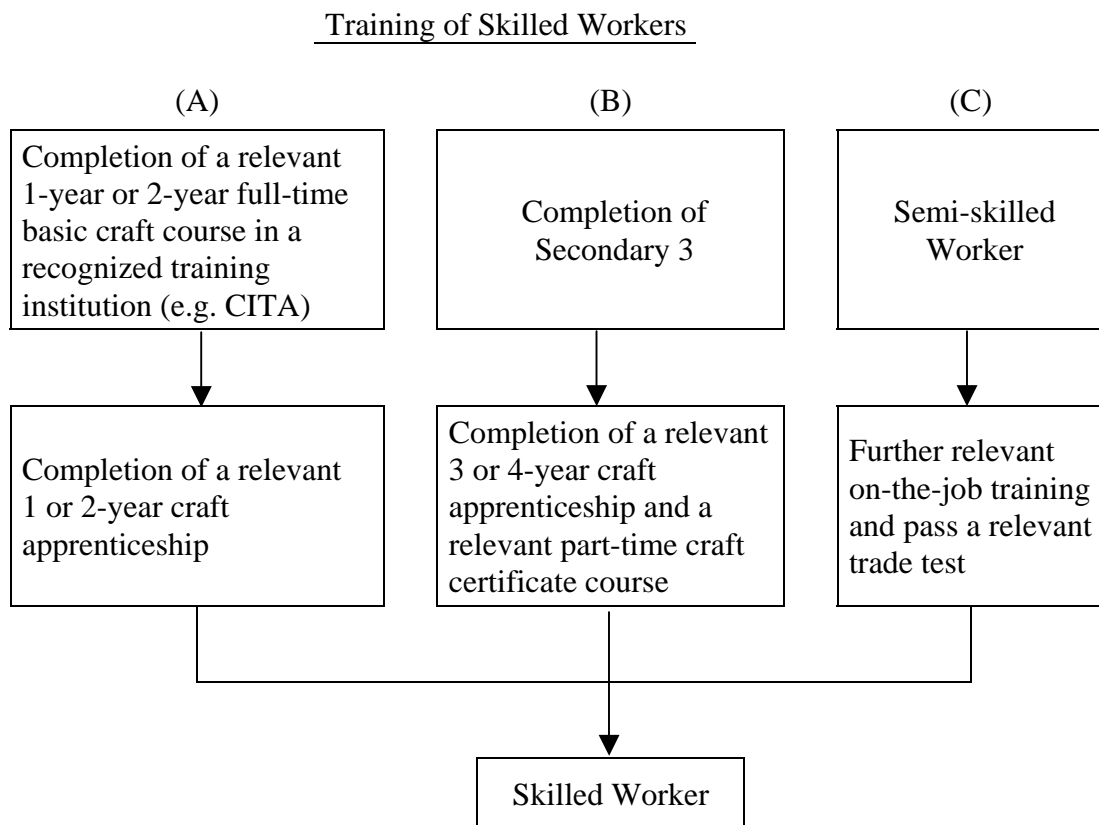
4.10 For construction technician courses, the Hong Kong Institute of Vocational Education (HKIVE) of the Vocational Training Council (VTC) is the major local course provider. It offers Higher Diploma (HD), Higher Certificate (HC)/Diploma (D) and Certificate courses in full-time (FT), part-time-day release (PTDR) and part-time-evening (PTE) modes in building studies, civil/structural engineering, surveying and construction management. Two local universities are also providing HD and Associate Degree (ASc) courses in civil engineering, construction, surveying and related disciplines. (**Appendix 5**).

4.11 It is observed that the projected output of technician graduates would exceed the demand for technicians in the coming three years. The Training Board urges employers to provide more training/educational opportunities and assistance to their junior technicians to enable them to upgrade themselves as competent technicians through continuous learning processes.

Training of Skilled and Semi-skilled Workers

4.12 In the report, a skilled worker in a particular occupation, trade or craft should be able to apply a range of skills and knowledge relevant to his trade with minimum direction or supervision. He should hold a trade certificate or has equivalent qualification and experience such that he should have adequate technical knowledge, which enables him to acquire new skills to cope with the changing technologies. Some categories of construction skilled workers are required by law to hold relevant licenses issued by appropriate authorities. A semi-skilled worker possesses skill level and knowledge in between that of a skilled worker and a general worker. He is normally required to be guided and supervised by a skilled worker or other supervisory staff in performing his duties. He should possess an intermediate trade test certificate or have equivalent qualification and experience. Semi-skilled worker is not applicable to some trades as some existing legislation only allow a fully qualified worker to carry out the work under such trades.

4.13 Skilled workers in the construction industry are normally trained through the following routes:



4.14 Both the Construction Industry Training Authority (CITA) and the Hong Kong Institute of Vocational Education (HKIVE) are offering construction skilled worker courses in various trades. Employers are encouraged to sponsor their trainees, apprentices and in-service workers to attend relevant courses to update and upgrade their skills and knowledge.

4.15 The projected average annual training requirement for skilled and semi-skilled workers from 2006 to 2011 with the projected local supply of skilled and semi-skilled worker graduates in **Appendix 5** is summarised as follows:

Projected Average Annual Training Requirement
of Skilled and Semi-skilled Workers (2006 - 2011)

<u>Job Title</u>	<u>No. Employed in March 2005</u>	<u>Projected Annual Training Requirement</u>
Bamboo Scaffolder	1 009	36 - 44
Bar Bender and Fixer	2 389	65 - 79
Carpenter (Formwork)	3 395	92 - 112
Concretor	1 236	33 - 41
Joiner	4 901	132 - 162
Leveller	1 396	63 - 77
Metal Worker	3 157	86 - 105
Painter & Decorator	5 039	136 - 166
Plasterer	4 629	125 - 153
Plumber	2 741	74 - 90
Window Frame Installer	1 418	219 - 267
Others	15 408	529 - 644
Total	46 718	1 590 - 1 940

4.16 For the coming three years (2006-2008), the total projected output of skilled and semi-skilled worker graduates would marginally meet the demand and training providers might need to organize more evening courses to meet the demand for specific trades. Moreover, they have to constantly review and update their outputs to meet the changing training requirement of the construction industry.

Training of General Workers

4.17 A general worker normally performs general cleaning, minor excavation work and other simple duties as directed by a skilled worker, or other supervisory staff. He should possess simple job related skills which may be acquired on-the-job or off-the-job. Although the typical training period for semi-skilled/general workers is below 6 months, the Training Board believes that a well organized, systematic training would be beneficial to both employers and employees. CITA offers full-time induction courses for prospective adult operative and labourer trainees. CITA has also organized some off-the-job safety and skill training for in-service workers sponsored by their employers. Employers are encouraged to update and upgrade their employees whenever they can spare time and resources.

Relevant Organizations related to Training for Construction Industry

Provisional Construction Industry Co-ordination Board (PCICB)

4.18 A Provisional Construction Industry Co-ordination Board (PCICB) was set up in September 2001 to develop a framework for the establishment of a statutory industry co-ordinating body as envisaged by the Construction Industry Review Committee (CIRC) report. It serves as a focal point to co-ordinate efforts in taking forward the CIRC recommendations. As the precursor of a statutory co-ordinating body, PCICB also deliberates on pan-industry issues and serves as a primary channel for the Government to obtain feedback on construction related matters. The Training Board anticipates that its recommendations on skill development will have vast influence in the training of construction workers.

Construction Industry Training Authority

4.19 The Construction Industry Training Authority (CITA) operates four training centres to provide industrial training courses for the industry. Three of the training centres, located in Kowloon Bay, Kwai Chung and Sheung Shui respectively are dedicated to the training of construction technicians, craftsmen and operators. The fourth training centre at Aberdeen, the Management Training and Trade Testing Centre focuses on management and technology courses which have increasing demand from in-service workers and it also facilitates the organization of trade tests and intermediate trade tests for skilled and semi-skilled workers and operators.

4.20 CITA offers about 58,000 training places in the 2005/06 training year starting from September 2005. Besides providing about 1,900 places for 35 different one-year and two-year full-time training courses, ranging from basic craft trainee to construction supervisor/technician levels, CITA also conducts part-time refresher, up-grading, trade test-related, safety and management-related, and commissioned courses. In the 2005/06 training year, a total of 56,180 part-time places are offered to meet specific needs of construction personnel.

4.21 To encourage contractors to take the lead in employing CITA graduates on a monthly basis and retain CITA graduates in the industry, the Authority has implemented the Employers Subsidy Scheme (ESS) since September 1998. Qualified employers who employ graduates of approved courses on monthly basis under an apprenticeship contract could apply to the Authority for a subsidy of HK\$1,800 per month per apprentice employed for 6 months or 12 months.

The Employees Retraining Board

4.22 The Employees Retraining Board (ERB) administers a wide range of full-time and part-time/evening courses to help the unemployed and eligible workers adjust to changes in the labour market and acquire new or enhanced skills to find alternative employment. Though the priority target group is unemployed and eligible workers aged 30 or above with no more than lower secondary education, younger unemployed persons and those with higher secondary education may also be enrolled in the retraining programme should they encounter employment difficulties. Persons in employment who wish to acquire basic general skills such as computer application may also apply for part-time or evening retraining courses.

Skill Upgrading Scheme (SUS)

4.23 The Skill Upgrading Scheme is a Government funded scheme to upgrade the skill level of the low educated workers. The captioned scheme operated by the Education and Manpower Bureau has been conducting courses related to building and construction industry. A working group on Building Maintenance and Decoration has been set up under the SUS to look into the design of the training courses related to the industry (website: www.emb.gov.hk/sus).

Hong Kong Institute of Vocational Education (HKIVE)

4.24 Besides the full time course, the HKIVE also offer part time evening courses in building studies, civil/structural engineering, surveying, construction management and maintenance.

Industrial Training Division of the Vocational Training Council

4.25 In addition to operating the Engineering Graduate Training Scheme and New Technology Training Scheme, the Industrial Training Division of the Vocational Training Council also assists employers in organizing training schemes, in particular, apprenticeship schemes for training technicians and skilled workers. A free apprentice placement service is also provided. The Training Board recommends employers to contact the Division for assistance in setting up training schemes and the recruitment of trainees.

4.26 In addition, the following organizations also provide upgrading courses for Continual Professional Development in order to facilitate members to keep abreast of current technological and commercial developments in the industry:

- (i) The Chartered Institute of Building (Hong Kong) (CIOB);
- (ii) The Hong Kong Institution of Engineers (HKIE);
- (iii) Hong Kong Institute of Construction Managers (HKICM); and
)
- (iv) The Australian Institute of Building, Hong Kong Chapter (AIB).

Recommended Focus Areas for Training in the Forthcoming Future

Construction Law and Regulation and Work Practices in China

4.27 After the introduction of CEPA III, the local companies will inevitably be involved in the mainland construction projects or contract registration. The local employers should look for training opportunities related to China construction law and regulation and more importantly, the related work practices in order to enrich their employees knowledge in handling the mainland projects. Putonghua language courses should be included in the training priority list.

Environmental Practices and Issues in Building and Construction

4.28 More emphasis will be on environmental practices in building and construction and builders are encouraged to take into account environmental factors in the selection of building material especially avoiding the use of hazardous material.

4.29 Since its inception in 1996, HK-BEAM (the Hong Kong Building Environmental Assessment Method) has become the industry standard to measure, improve and label the environmental sustainability of buildings in Hong Kong. To date, over 100 residential, commercial and mixed-use developments covering 6.2 million square meters and including 52 000 residential units have voluntarily adopted HK-BEAM certification, making it on a per capita basis the most widely used scheme of its kind in the world.

4.30 HK-BEAM defines over 100 best practice environmental criteria on the key aspects of Hong Kong's buildings and provides a forum for the design/maintenance team to work for the same environmental goal:

- (i) Hygiene, health, comfort and amenity;
- (ii) Land use, site impacts and transport;
- (iii) Use of materials, recycling, and waste management;
- (iv) Water quality, conservation and recycling; and
- (v) Energy use, efficient systems and equipment and energy management.

4.31 The local employers are encouraged to keep abreast of the development of HK-BEAM in order to comply with the industry standard.

Professional Ethics and Behaviour/Work Attitude

4.32 Many accidents that had occurred in the past causing injury and casualty of construction workers/tenants are indeed related to professional ethics and behaviour. Training on this subject should be stressed for the local employers in order to establish reputation or image on the quality of their buildings.

Mandatory Safety Training for Employees in the Construction Industry

4.33 As one of the measures to tackle the high accident rate in the construction industry, the Government has introduced legislation which requires all those employed to work in construction sites to have been trained in construction site safety and issued with a valid certificate. Under this legislation, CITA is responsible for providing the bulk of this type of training to workers and issuing certificates to persons who have successfully completed the relevant training courses and passed required tests. The Training Board strongly recommends that employers should make suitable arrangements for their workers to receive the necessary training as soon as possible.

Registration of Construction Workers

4.34 The Construction Workers Registration Authority was established on 18 September 2004 under the Construction Workers Registration Ordinance. Members of the Authority were appointed by the Secretary for the Environment, Transport and Works on 18 October 2004 responsible for executing and managing the implementation of the construction workers registration system.

4.35 The objectives of implementing a mandatory registration system through statutory means are to:

- (i) ensure the quality of construction works through assessment and certification of the skill levels of all construction workers;
- (ii) ensure the availability of more reliable data on labour supply to facilitate manpower planning and training;
- (iii) raise the status of construction workers by statutorily recognising their skill levels;
- (iv) provide the workers with a clear career path with a view to motivating them for higher skill levels for higher position and remuneration and hence fostering a quality culture in the construction industry;
- (v) help combating the hiring of illegal workers on construction sites; and
- (vi) assist in resolving wage disputes between contractors and workers with the availability of site entry and exit records.

4.36 The Construction Workers Registration Authority (CWRA) has started to register construction workers in Hong Kong from 29 December 2005. The registration of construction workers would give statutory recognition to their skill levels in respective trades, thus ensuring the quality of construction works and also raising the status of construction workers. The registration system would also provide more reliable data on labour supply, help combat hiring illegal workers, and also help reduce wage disputes between contractors and workers. When the prohibition provisions under the Construction Workers Registration Ordinance are brought into operation later, all construction workers carrying out construction work at construction sites must be registered and employers shall only employ registered construction workers for carrying out such work. When entering a construction site, construction workers should produce their smart cards for verification and for recording of site attendance by a card reading system. Employers are encouraged to collect detailed information from their website (www.cwra.org.hk).

第一章

緒 論

土木工程及建築業訓練委員會

1.1 土木工程及建築業訓練委員會隸屬職業訓練局，負責確定業內的人力及訓練需求，並就發展訓練設施，向局方提出建議。本會成員由主要行業聯會、工會、專業團體、訓練及教育機構和有關政府部門提名出任。委員名單及職權範圍載於**附錄 6 及 7**。

人力調查

1.2 本會按照職權規定，於二〇〇五年三月，在政府統計處協助下進行人力調查，蒐集土木工程及建築業主要職務的最新人力資料，以評估業內技術人力結構及訓練需求。實地調查工作在二〇〇五年二月二十一日至五月三十一日進行。

1.3 調查所得資料包括：

- (i) 調查期間業內僱員人數；
- (ii) 現有空缺額；
- (iii) 受訓人數；
- (iv) 僱員每月收入。

調查範圍

1.4 實地調查範圍根據政府統計處所記錄的本業下列各類已動工地盤、辦事處、公司及機構共 18 598 間（分類 1、2 根據二〇〇四年第四季記錄，分類 3 至 6 根據二〇〇四年第三季記錄）：

分類 1：已動工的私人及公共建築地盤（政府統計處所記錄的 795 個已動工地盤）；

分類 2：已動工的私人及公共土木工程和其他地盤（政府統計處所記錄的 413 個地盤）；

分類 3：根據香港標準行業分類第 511、521、529 項所記錄的新建造工程承建商，包括從事地盤勘察、地盤平整、地基工程及上蓋建造工程者（2 675 間）；

分類 4：根據香港標準行業分類第 531 項所記錄的裝修、修葺及保養工程承建商（7 431 間）；

分類 5：根據香港標準行業分類第 541 - 542、5611、5612、5618、591 項所記錄的特種工程承建商[不包括電氣與機械安裝及氣體裝置、安裝與維修承建商]（5 743 間）；

分類 6：根據香港標準行業分類第 8334 項所記錄，與建造活動有關的建築、測量及工程策劃服務公司，但不包括第 833404 項：建築物設備工程服務（1 460 間）；

分類 7：私人地產發展商（36 間）；

分類 8： 各教育及訓練機構有關學系和物業管理處，以及調查期間正進行建築工程或僱有建造業人員的公用事業公司（31 個學系 / 辦事處）；

分類 9： 調查期間正進行建築工程或僱有建造業人員的政府部門（14 個）。

1.5 鑑於調查資源有限，本會採用了分層隨機抽樣法，從分類 3 至 6 的 17 309 間機構中，選出 1 141 間為調查對象；加上分類 1、2 的 1 208 個建築地盤及分類 7、8、9 的 81 間機構，受訪地盤／機構合共 2 430 間。

1.6 是次調查包括總承建商，其分包商及自僱人士，於建築地盤及辦事處工作，負責**附錄 10**所載 101 種主要職務的技術員工（但不包括由本港公司僱用，於調查前一年內派往外地工作，逗留超逾半年的僱員）。此外，由於本業的機電工程承建及維修等行業，已包括在機電工程業訓練委員會於同期（二〇〇五年三月）進行的人力調查內，為免重複點算僱員人數，是次調查並不包括這類機構。由於產業測量師及測量技術員（產業）兩職務均由房地產服務業訓練委員會進行人力調查，同樣也不包括在本調查內。

宣傳

1.7 調查進行前，本會在報章刊登新聞稿，廣作宣傳，並籲請有關僱主協會及專業團體，協助向屬下會員宣傳是次調查。

調查方法

1.8 實地調查前兩星期，調查表（附錄 8）連同附註（附錄 9），以及土木工程及建築業各主要職務的工作說明（附錄 10）已寄予僱主填寫，請他們提供機構內的人力資料。

1.9 僱員可能於調查期間在不同地盤工作；為免重複點算人數，是次調查以二〇〇五年三月七日（晴天，無雨）為參照日期，以便各地盤有所依循。只有列在當天執勤紀錄表上，並擔任主要職務名單所述職位的僱員，方會包括在調查內。

1.10 實地調查工作進行期間，政府統計處職員約訪各地盤／機構，蒐集填妥的調查表，並於有需要時，協助填表。

1.11 填妥的調查表經過整理，並於需要時與有關機構複核，然後送交政府統計處作資料處理。分類 3 至 6 的有關數字曾以統計學方法倍大，以反映調查期間這些分類的人力情況。

調查反應

1.12 2 430 個選定地盤／機構中，1 576 個提供所需資料，7 個拒絕作答。其餘 847 個地盤／機構中，433 個地盤竣工後沒有技術人員駐守，65 間沒有聘用擔任調查範圍內主要職務的僱員，44 個地盤暫時停工，33 間機構倒閉，21 間並非從事有關行業；而其餘 251 間或已搬遷，空置、無法接觸、地址不全或已停業。實際填覆率為 89.4%。

調查報告

1.13 本會接納調查結果後，已於本年二〇〇五年十一月在職訓局網頁刊發土木工程及建築業二〇〇五年人力統計報告，供公眾閱覽。

1.14 此報告書**附錄 1 至 3**列出是次調查結果、本會對土木工程及建築業在二〇〇六至二〇一一年間人力需求的預測，以及本會針對業內人力需求而提出的建議措施。報告內「僱員」及「員工」，均指所有在調查期間受僱於業內各主要職務的人員（或自僱人士）。「受訓者」則指正接受各種形式訓練的人員及學徒。報告書亦已上載職訓局土木工程及建築業訓練委員會網頁，讓公眾參閱。

第二章

調查結果摘要

僱員總數

(附錄 1、2)

2.1 調查顯示，二〇〇五年三月時，土木工程及建築業各主要職務共有僱員 106 702 人（不包括 1 040 名受訓者），以及擔任其他職務的僱員 38 865 人，即總人數為 146 607 人。各技能等級僱員的分布情況詳載於附錄 1、2，並按直接僱員、分包商僱員及自僱人士三個類別，摘錄於表 2.1：

表 2.1：各技能等級僱員的分布情況

技能等級	僱員人數				佔僱員總數的百分率
	直接僱員	分包商僱員	自僱人士	小計	
專業人士／技師	13 813	174	4	13 991	13.11%
技術員	28 888	792	3	29 683	27.82%
技工／半熟練技工	21 815	24 658	245	46 718	43.78%
普通工人	8 809	7 437	64	16 310	15.29%
總數	73 325	33 061	316	106 702	100.00%

2.2 全部 106 702 名僱員中，73 325 名（68.7%）直接受僱於總承建商，33 061 名（31.0%）受僱於分包商，316 名（0.3%）屬自僱人士。

2.3 在資料分析期間加入技術員級新職稱「建築物設備及工程服務主管」（編號 219），以涵蓋主要從事裝飾 / 裝修工作的主管級人員。

各分類人力分布

2.4 九個分類各主要職務僱員的分布情況見**附錄 2**。摘要見下表：

Table 2.2 : Manpower Distribution by 9 Branch by Skill Levels

表 2.2 : 各分類的僱員人數

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 公用事業等 的管業處	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數
PROFESSIONAL/TECHNOLOGIST 專業人士/技師										
Sub-total 分級小計	830	1 219	1 812	1 274	419	4 045	177	787	3 428	13 991
TECHNICIAN 技術員										
Sub-total 分級小計	2 613	2 355	3 114	6 008	3 070	4 338	77	1 119	6 989	29 683
SKILLED AND SEMI-SKILLED WORKERS 技工/半熟練技工										
Sub-total 分級小計	21 966	7 885	1 422	7 140	7 430	24	-	447	404	46 718
GENERAL WORKERS 普通工人										
Sub-total 分級小計	5 975	5 762	1 311	1 377	496	104	-	86	1 199	16 310
GRAND TOTAL 總計	31 384	17 221	7 659	15 799	11 415	8 511	254	2 439	12 020	106 702

2.5 在 106 702 名僱員中，31 384 人（29.4%）受僱於已動工的建築地盤，17 221 人（16.1%）則受僱於已動工的土木工程地盤。

受訓者人數

2.6 僱主報稱，調查期間本業共有受訓者 1 040 名，約佔僱員總數的 1.0%。各技能等級受訓人數摘錄如下，分布詳情見附錄 1。

表 2.3：各技能等級受訓者的分布情況

技能等級	受訓者人數	僱員人數	佔同一技能等級僱員的百分率
專業人士／技師	723	13 991	5.2%
技術員	261	29 683	0.9%
技工／半熟練技工	55	48 718	0.1%
普通工人	1	16 310	-
總數	1 040	106 702	1.0%

2.7 調查顯示，業內有 723 名專業人士／技師級受訓者（5.2%），261 名技術員級受訓者（0.9%），以及 55 名技工／半熟練技工級受訓者（0.1%）。

空缺額

2.8 僱主報稱，調查期間本業共有空缺 244 個，僅佔僱員總數的 0.23%。各技能等級的空缺額摘錄如下，主要職務空缺額分布詳情則見附錄 1。

表 2.4：各技能等級空缺額的分布情況

技能等級	空缺額	僱員人數	佔同一技能等級 僱員的百分率
專業人士／技師	54	13 991	0.39%
技術員	137	29 683	0.46%
技工／半熟練技工	45	46 718	0.10%
普通工人	8	16 310	0.05%
總 數	244	106 702	0.23%

僱員每月收入分布情況

2.9 各技能等級大部分僱員每月收入幅度的分布情況載於 **附錄 3**。

第三章

觀察所得及結論

概況

3.1 本會詳細分析調查結果後，認為所得資料大致能反映調查期間本業的人力情況。調查顯示，各技能等級的空缺率，以及技工級、技術員級的受訓者人數均極低。

人力需求分析

3.2 以下為業界未來主要發展趨勢。在推算業界未來人力需求時，必須考慮這些因素：

公共工程開支趨勢

- 3.3
- (i) 香港自一九九七年回歸中國後，政府在公共工程計劃的支出約為\$2 250 億元，平均每年支出 280 億元。
 - (ii) 政府為維持香港經濟發展及長期的競爭性，承諾支持有發展需要的基建項目，包括港珠澳大橋及相關道路建設與啓德發展項目。
 - (iii) 中期發展方面，政府批准每年平均的公共工程開支為 290 億元。

因此，未來數年業界各職級人力需求將會溫和增長。

公共房屋

- 3.4 (i) 香港房屋委員會繼續落實大型公共房屋興建計劃，以滿足低收入人士的住屋需求。房委會將於二〇〇五／〇六年度建成 19 600 個單位；由二〇〇五／〇六年度至二〇〇九／一〇年度五年內的公共房屋建屋量約為 83 700 個單位。二〇〇五／〇六年度，房委會的建造工程開支達 54.32 億元。
- (ii) 房委會亦正計劃於二〇〇六年推行「全方位維修計劃」，改善公共屋邨維修服務。計劃展開後，維修工程將會增加 10%，可為建築工人提供 900 至 1 000 個就業機會。房委會未來五年（至二〇〇九／一〇年度）的維修開支預算約為每年 20 億元。

私營房屋

- 3.5 (i) 至於私營房屋的土地供應，政府自二〇〇四年一月起透過勾地恢復賣地。二〇〇五／〇六年度，勾地表列出的地皮共 35 幅，包括 29 幅住宅用地及 6 幅商業用地。住宅用地總面積約為 22 公頃，其中 10 幅位於香港島、7 幅在九龍、12 幅在新界。迄今為止，共有 3 幅住宅用地售出。
- (ii) 為確保土地供應不會損害物業市道，政府將透過既定機制與兩家鐵路公司緊密聯繫，協調兩鐵物業推出市場的時間表。

- (iii) 根據差餉物業估價署本年初刊載的數字，將於二〇〇五年與二〇〇六年落成的私人住宅單位分別為 21 200 個與 17 400 個，這是該署根據當時的資料而作出的推算，相對二〇〇二至二〇〇四年的落成單位總數（26,000 個 - 31,000 個），推算數字可算溫和，故對技工和半熟練技工的需求將不會有明顯的增長。

裝修、翻新及樓宇維修

- 3.6 (i) 為加快市區重建與樓宇維修的步伐，政府公布二〇〇五／〇六年度預算案時表示已取得香港房屋協會的支持，推出總值 30 億元的「樓宇管理維修綜合計劃」。該計劃將為舊樓業主提供「一站式」服務，協助他們改善樓宇整體狀況及家居環境，預計每年有 800 座樓宇受惠。此外，由二〇〇六／〇七年度起五年，政府已為屋宇署預留 8.3 億元撥款，用以清拆逾 180 000 個僭建物，並改善舊樓樓宇安全及美化建築物外觀。有關計劃將為建造業及裝修行業創造就業機會，有助紓緩低技術工人失業問題。因此，對技工和半熟練技工的需求將會溫和地增長。
- (ii) 房屋協會已接納房委會的要求，推出一項為期十年的樓宇管理及維修計劃，以便全面協助業主妥善保養樓宇。此外，有關樓宇管理及維修的公眾諮詢結果亦顯示，社會人士普遍贊成向業主提出某種形式的強制要求，以便妥善地管理及維修樓宇，而推行強制檢驗樓宇計劃將會是切實而有效地解決樓宇失修問題的長遠措施。

- (iii) 除了推廣妥善管理及維修樓宇措施外，政府更大力支持舊區重建工作。市區重建局過去三年逐步擴大市區重建計劃，涉及重建發展、樓宇復修、文物保育及舊區活化四大範疇，受惠樓宇超過 300 幢。
- (iv) 正當市區重建局繼續在其目標區域努力進行重建工作的同時，私人發展商將仍然擔當火車頭角色，積極改善舊區面貌。過去十年來，私人發展商的重建發展項目約達 1 000 個。

基建發展／項目

- 3.7
- (i) 香港經濟好轉，政府重新考慮在添馬艦地皮上興建政府總部及立法會大樓的建議。該計劃將為建造業創造就業機會。
 - (ii) 政府將會完成多個不同大型基建項目。九廣鐵路落馬洲支線的工程進展良好，將如期於二〇〇七年投入服務。興建中的第八號幹線亦將於二〇〇七年與二〇〇八年分兩期竣工。
 - (iii) 多項大型鐵路工程項目擬於未來十年落實興建，包括剛展開工程的九廣鐵路九龍南線，該工程預計於二〇〇九年完成。政府亦積極計劃興建沙田至中環支線及西港島支線，並研究開闢九鐵北環線及地鐵南港島支線的可行性。
 - (iv) 港深西部通道將於明年蛇口邊境管制站落成後投入服務。政府亦正研究九鐵就興建廣州-深圳-香港區域快線進行的可行性報告。

- (v) 未來兩年，香港赤 角機場總值 65 億港元的基建項目將會完工，其中包括第二座客運大樓及亞洲國際博覽館綜合大樓。
- (vi) 此外，陸續展開的其他大型基建項目包括：屯門公路改善工程、港珠澳大橋、中環-灣仔繞道、九鐵九龍南線及沙田至中環支線的輔助基建項目、排污工程及啓德發展項目等。
- (vii) 政府將於短期內重新推展西九龍文娛藝術區綜合發展計劃。
- (viii) 另一大趨勢是人們愈來愈重視環境保育及美化環境工作，例如園藝設計；預計未來在這方面的公、私營工程項目將會增加。

中國內地與澳門

- 3.8
- (i) 香港政府透過更緊密經貿關係安排（CEPA），讓香港建造業專才有機會進入中國內地工作，參與大型工程項目如二〇〇八年在北京舉行的奧林匹克運動會、二〇一〇年在上海舉行的世界博覽會及同年在廣州舉行的亞運會。
 - (ii) 政府協助本地專業團體與內地有關單位商討中港兩地專業資格互認的安排。目前，與內地簽署資格互認協議的專業人士包括產業測量師、建築師、結構工程師、工料測量師及城市規劃師；此外，根據第二階段CEPA的安排，香港居民現可參加 18 項與建造及工程有關的國內專業試。因此，愈來愈多建造業專才將會向國內提供服務，甚至參與國內建造工程項目。

(iii) 同樣，澳門亟需本港建造業工人參與當地酒店及娛樂設施的建造工程項目。

(iv) 這些外在因素將為現有本地專業人士／技師提供就業機會，但不會明顯地刺激額外人力需求。

未來人力需求

3.9 本會預計業內專業人士／技師、技術員、技工及半熟練技工三個技能等級的人力流失率均為 3%。僱員離職原因包括退休、身故、轉工或調往香港以外地區工作。

3.10 根據過往及是次調查所得人力資料、未來幾年建築及土木工程項目開支預算、流失率、對特殊技能工人額外需求、不同職級失業率（**附錄 4**）及業務前景，本會預計二〇〇六至二〇一一年間本業各技能等級平均每年的人力訓練需求如下：

預測平均每年人力訓練需求（二〇〇六至二〇一一年）

技能等級	預計每年訓練需求
專業人士／技師	450 - 500
技術員	970 - 1 110
技工／半熟練技工	1 590 - 1 940

3.11 本會將於二〇〇七年進行另一次人力調查，評估及更新土木工程及建築業的人力需求資料。

第四章

建 議

4.1 過去兩年，香港經濟已走出 SARS 疫症陰霾，逐漸回復升軌，部分行業的就業率亦穩定回升，然而，建築業的就業情況並無大起色。事實上，本港經濟結構仍在緩緩地轉變中，故公私營的商業及住宅建設活動仍然呆滯，不過，跡象顯示，建造業開始復甦。私人發展商爲了增加可供發展的住宅用地，開始積極參與土地競投或要求政府將土地改爲住宅用途。而且，政府正不斷推出中長期的基建工程項目（如興建高速公路、新鐵路幹線及港珠澳大橋），這些發展趨勢均有助土木工程業的建造活動維持一定水平，爲建造工人提供持續就業機會。

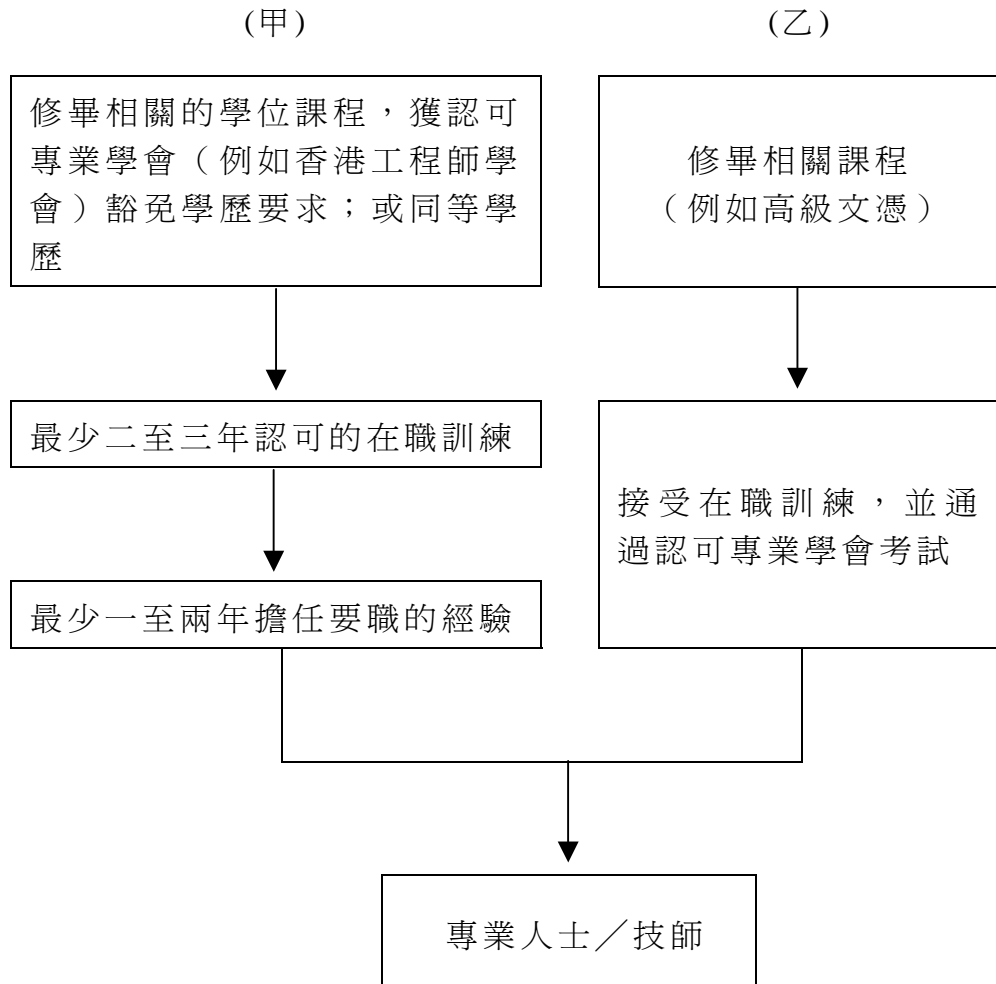
4.2 本會促請業界僱主改善四個技能等級的人才培訓計劃，以便提供業界所需幹練技術人才，並確保人力供應充足，使本業能持續增長和發展。與此同時，本業應繼續爲僱員提供在職培訓，加強他們在技術、安全及法例方面的認識，使他們在質素水平、質素保證／公眾責任及工業安全等方面均能達到業界對工人日趨嚴格的要求。本會建議業界根據本報告書 3.10 段對人力培訓需求的預測，採用有系統的人力培訓計劃。

專業人士／技師訓練

4.3 「專業人士／技師」須具有相當於專業學會（如香港工程師學會）正式會員所需的資歷和經驗，能分析和解決各種技術問題，且能運用其知識及經驗領導工作發展；此外，亦須負責研究及運用工程原理，具創見和判斷力；監察計劃進度，運用最新技術，以及督導和培訓下屬。

4.4 在改善業內管理及技術創新方面，專業人士／技師擔當十分重要角色。建造業專業人士／技師一般會在修畢一項相關的工業教育課程後，再接受數年的實務訓練和擔任要職，汲取經驗。專業人士／技師的訓練途徑如下：

專業人士／技師訓練



4.5 下表列出二〇〇六至二〇一一年建造業內三大行業平均每年預計的技師／專業人士訓練需求。本地專上院校建築、土木／土力／結構／營造工程、測量三個主要學科預計的學位課程畢業生數字則載於**附錄 5**。

二〇〇六至二〇一一年三大行業對專業人士／技師
平均每年預計的訓練需求

職稱	二〇〇五年 三月時受僱人數	預計每年須訓練人數
<u>建築行業</u>		
建築師	1 716	46 – 55
園景規劃師	219	6 – 10
總數	1 935	55 – 65
<u>土木／土力／結構／營造工程行業</u>		
土木工程師	3 266	93 – 103
結構工程師	1 023	30 – 33
營造師	1 140	43 – 47
土力工程師／ 工程地質學家	459	13 – 15
屋宇設備工程師	1 087	41 – 45
總數	6 975	220 – 243
<u>測量行業</u>		
屋宇／保養測量 師	612	23 – 25
土地測量師	221	7
工料測量師	2 291	63 – 69
總數	3 124	93 – 101

4.6 本會預見未來三年，建築系、土木／土力／結構／環境工程及測量系的學位課程畢業生將會供過於求。然而，並非所有畢業生都選擇入行，部分畢業生可能加入服務業及資訊科技等行業。

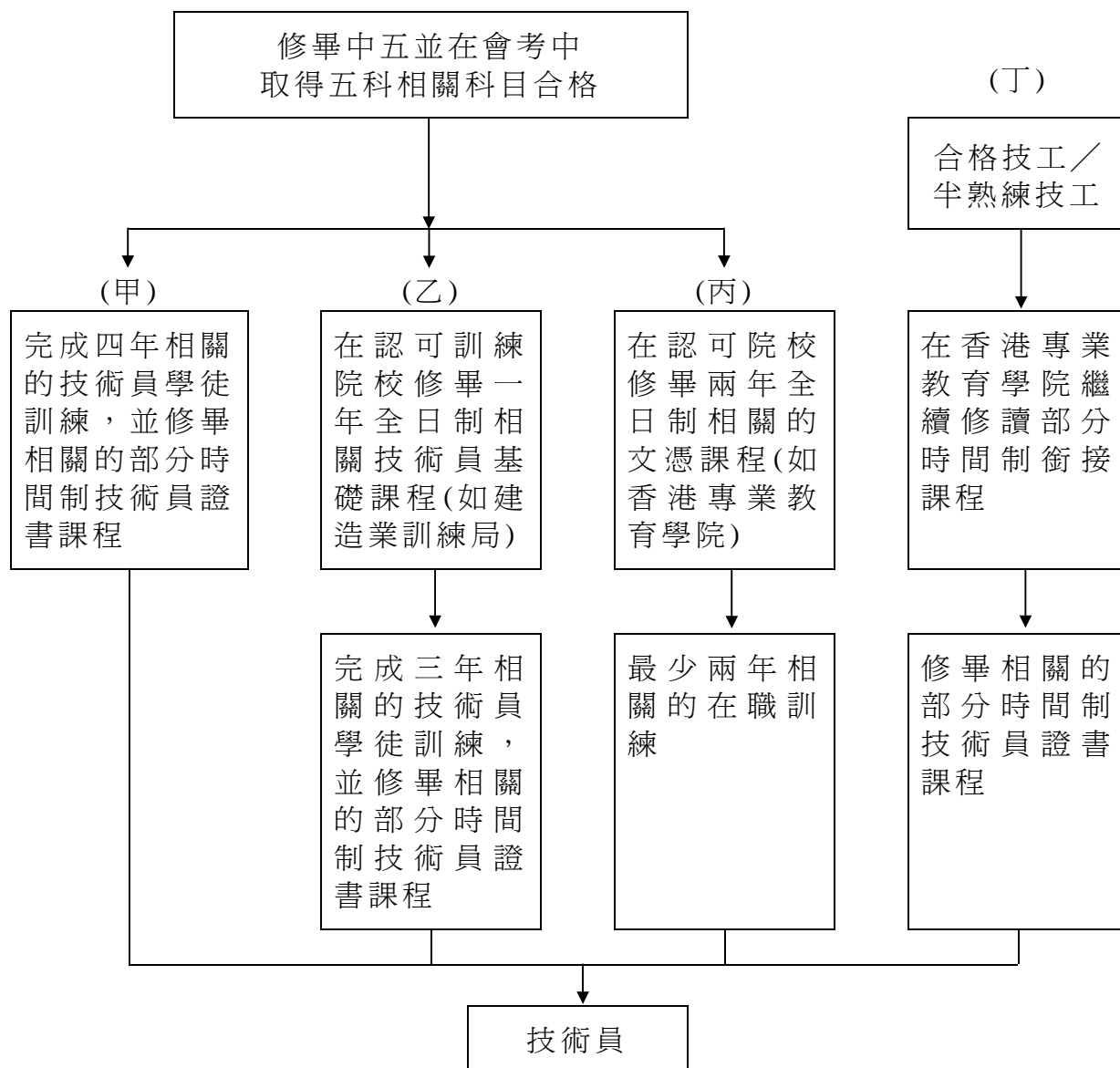
工科畢業生訓練計劃

4.7 職業訓練局技師訓練委員會屬下工科畢業生訓練計劃小組委員會，負責管理工科畢業生訓練計劃，為本港工科畢業生提供實務訓練機會。計劃經費來自政府。參加計劃的僱主須為參加者提供最長可達 18 個月的實務訓練，程度符合香港工程師學會正式會員資格的要求。有意參加該計劃的僱主，須向職訓局登記擬定的培訓計劃，並預先根據香港工程師學會對「A 計劃」培訓類別的規定取得其批准。鑑於訓練費用高昂，受訓者可於受訓期內獲發津貼，經由僱主支付，作為部分薪金。津貼期內，訓練形式包括廠校交替制訓練及畢業後訓練，最長可達 18 個月。本會促請僱主聯絡技師訓練組，並參加該項資助訓練計劃，為年輕畢業生提供正規訓練機會。

技術員訓練

4.8 「技術員」乃指技能等級介乎專業人士／技師與技工之間的人員，曾受一定的相關教育、訓練以及具備實務經驗，能運用已確立的方法解決技術問題；此外，一般能在專業人士／技師的指示下，肩負部分技術責任。訓練技術員的一般途徑如下：

技術員訓練



4.9 二〇〇六至二〇一一年間平均每年預計的技術員訓練需求如下：

職稱	二〇〇五年三月時 受僱人數	預計平均每年 須訓練人數
建築技術員／繪圖員	3 537	99 – 113
土木／結構／土力工程技術員	2 939	82 – 94
監工	4 409	164 – 188
地盤總管／管工	6 500	181 – 209
測量員	3 813	121 – 140
材料測試員／品質技術員	729	27 – 31
屋宇設備／電機工程／機械工程技術員	1 577	59 – 67
屋宇設備技術及工程監督	3 688	137 – 157
其他職務	2 511	100 – 111
總數	29 683	970 – 110

4.10 職業訓練局屬下香港專業教育學院是本地建造業技術員的主要培訓機構，辦有全日制、部分時間給假調訓制、夜間制課程，分高級文憑、高級證書、文憑及證書程度，學科範圍包括建築學、土木／結構工程、測量與施工管理。本地兩間大學亦開辦土木工程、建築、測量及相關學科高級文憑及副學士課程。（附錄 5）

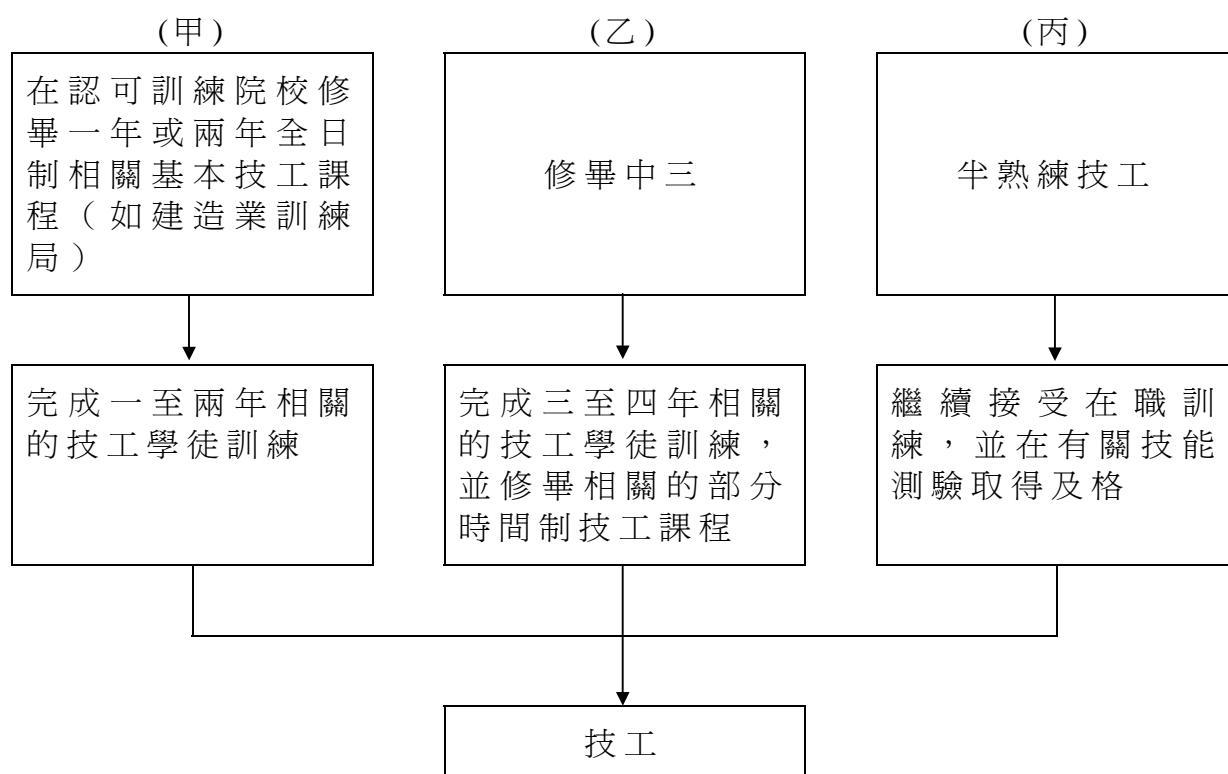
4.11 根據有關資料，預計未來三年，技術員畢業人數會高於業內需求。本會促請僱主盡量為年資淺的技術員提供協助，使他們通過持續進修，成為幹練員工。

技工／半熟練技工訓練

4.12 本報告書所指「技工」，乃其所屬行業的熟練工人，能夠在極少指導和監督下，將多方面的技能和知識應用到工作上；持有技工證書或具同等資歷及經驗，擁有足夠技術知識，以學習新技能，適應科技發展。建築業部分門類的技工更須按法例要求考取有關資格。「半熟練技工」指知識技能介乎技工與普通工人之間的僱員，通常在技工或其他督導人員的督導下工作。這類員工持有中級工藝測試證書或具同等資歷及經驗。部分門類不設半熟練技工級別，原因是現行法例規定，某些職務須由合格人員擔任。

4.13 訓練本業技工的一般途徑如下：

技工訓練



4.14 建造業訓練局及香港專業教育學院均有為建造業各門類開辦技工課程，現籲請僱主保送學徒及僱員修讀有關課程，以提升知識和改進技能。

4.15 二〇〇六至二〇一一年間平均每年預計的技工及半熟練技工訓練需求，以及本地院校的預計人力供應情況見附錄 5。摘要如下：

二〇〇六至二〇一一年平均每年預計的
技工及半熟練技工訓練需求

<u>職稱</u>	<u>二〇〇五年三月時 受僱人數</u>	<u>預計每年平均 須訓練人數</u>
竹棚工	1 009	36 - 44
鋼筋屈紮工	2 389	65 - 79
木工（護木）	3 395	92 - 112
木模板工	1 236	33 - 41
細木工	4 901	132 - 162
平水工	1 396	63 - 77
金屬工	3 157	86 - 105
髹漆及裝飾工	5 039	136 - 166
批盪工	4 629	125 - 153
水喉工	2 741	74 - 90
窗框工	1 418	219 - 267
其他	15 408	529 - 644
總數	46 718	1 590 - 1 940

4.16 預計未來三年（二〇〇六至二〇〇八年），技工及半熟練技工結業學員總數勉強能應付業界人力需求，培訓機構或有需要增辦某些特種門類夜間課程，以應付業界需求，並須不時檢討及更新課程內容，確保能配合業內訓練需求的轉變。

普通工人訓練

4.17 「普通工人」通常在技工或其他督導人員的指示下，從事一般清潔、小型挖泥及其他簡單工作；他們須具備簡單的技能，可透過在職或職外訓練習得。雖然這個技能等級僱員的訓練期一般少於六個月，但有系統的基礎訓練可讓僱主及僱員同時受惠。建造業訓練局為有意擔任操作工或雜工的轉業人士提供全日制入職訓練；此外，亦舉辦職外安全及技能訓練，供僱主保送員工參加；如資源及時間允許，僱主應盡量提升和改進屬下員工的技能。

建造業相關培訓機構

臨時建造業統籌委員會

4.18 臨時建造業統籌委員會（臨時建統會）於二〇〇一年九月成立，負責制定大綱，以成立“建業圖新”報告書所建議的法定機構，統籌建造業的發展。臨時建統會凝聚業界力量，落實報告書的建議。在未成立法定機構前，臨時建統會擔當先驅角色，就建造業重大事宜進行協商，並作為政府徵詢業界的主要渠道。本會期望臨時建統會對有關技能發展的建議，有助大力推動建築工人的培訓工作。

建造業訓練局

4.19 建造業訓練局屬下四間訓練中心，為本業開辦多項行業訓練課程。位於九龍灣、葵涌及上水的三間中心，負責為業內技術員、技工和操作工提供訓練。另一間位於香港仔的中心，則屬管理培訓及測試中心，為僱員提供日益重要的管理和科技訓練，以及為技工、半熟練技工及操作工舉辦技能及中級工藝測試。

4.20 建造業訓練局於二〇〇五／〇六年度提供訓練名額約 58 000 個，另開辦 35 項為期一年至兩年的全日制課程，程度由技工級至建造監督／技術員級，訓練名額約 1 900 個。此外，該局亦提供各類部分時間制課程，包括複修、增修課程、與技能測試、安全及管理有關的課程，以及委約課程。二〇〇五／〇六年度，該局因應業內僱員的需要，提供的部分時間制訓練名額達 56 180 個。

4.21 為鼓勵承建商帶頭以月薪形式長期聘用建造業訓練局結業學員，建造業訓練局自一九九八年九月起推行「資助僱主訓練學徒計劃」。如僱主以月薪形式聘用建造業訓練局認可課程結業學員，並與其簽定學徒合約，可向該局申請津貼，津貼金額為每名受聘六個月或十二個月學員每月 1 800 元。

僱員再培訓局

4.22 僱員再培訓局開辦了不同種類的全日制、部分時間制／夜間制課程，協助失業人士及合資格工人學習新技術或改進已有技能，以適應勞工市場的轉變，擴大就業機會。課程對象主要為三十歲以上初中教育程度的失業人士或合資格工人；不過，具高中教育程度及年紀較輕的失業人士，倘若在尋找工作過程中遇到困難，亦可報讀再培訓課程。在職人士如欲掌握基本技能如電腦應用技術亦可報讀部分時間制／夜間制再培訓課程。

技能提升計劃

4.23 技能提升計劃是政府資助的培訓計劃，協助低學歷基層工人提升技能水平。該計劃由教育統籌局負責推行，包括開辦建築及建造業相關課程。此外，大廈維修及裝修業技能提升計劃工作小組已經成立，探討建造業培訓課程的設計（網址：www.emb.gov.hk/sus）。

香港專業教育學院

4.24 除開辦全日制課程外，香港專業教育學院也提供部分時間制夜間課程，包括建築學、土木／結構工程、測量、施工管理及維修。

職業訓練局工業訓練科

4.25 職業訓練局轄下工業訓練科，除推行工科畢生訓練計劃及新科技培訓計劃外，亦協助僱主籌辦其他訓練計劃，特別是學徒訓練計劃，以培訓技術員和技工。該科亦提供免費的學徒就業輔導服務。僱主可就設立訓練計劃及招聘受訓者事宜與該科聯絡，請其協助。

4.26 此外，下列機構亦開辦技能提升課程，為其會員提供持續專業進修機會，以掌握業內相關技術及商業發展的最新資訊：

- (i) 英國特許建造學會香港分會（CIOB）
- (ii) 香港工程師學會（HKIE）
- (iii) 香港營造師學會（HKICM）
- (iv) 澳洲建造學會香港分會（AIB）

未來主要培訓範疇建議

中國內地建造業法例和規則與執行情況

4.27 CEPA 第三階段協議落實後，本港公司或多或少會觸及內地建造工程項目或合約登記事宜，因此，本地業內僱員應把握培訓機會，加強自己對中國內地建造業法例及規則的認識，特別是相關法規在內地的實際執行情況，以便更有效地推展當地的工程項目。在編定培訓計劃時，普通話更是不可或缺的必修科。

建築及建造過程中的環保因素

4.28 環保因素在建築及建造過程中日受重視。承建商在選擇建築材料時應顧及環保因素，特別是避免使用有害物料。

4.29 本港自一九九六年開始引入香港建築環境評估法（HK-BEAM），該評估方法現已成了行業標準，用以量度、改進及標籤本港樓宇的環保設計及可持續發展能力。至今，超過 100 幢住宅、商業及商住用途的樓宇自願採納 HK-BEAM 認證，覆蓋面積 620 萬平方米，包括住宅單位 52 000 個。若以人均計算，HK-BEAM 是世界上同類計劃中最普及的建築環境評估標準。

4.30 HK-BEAM 就本港樓宇以下主要範疇訂定了超過 100 項優質環保準則，作為業界設計／保養工作人員共同努力保護環境的依據：

- (i) 衛生、健康、舒適度及設施
- (ii) 土地用途、土地影響及運輸
- (iii) 材料運用、循環再用及廢物處理
- (iv) 水質、節約及循環再用
- (v) 能源應用、高效率系統與設備及能源管理

4.31 本地僱主應密切留意 HK-BEAM 的最新發展，務求工程項目能符合該行業標準。

專業操守及行爲／工作態度

4.32 過去，不少建造業意外導致建造業工人／租戶傷亡，這些意外的成因，往往涉及專業失誤及失職行爲。本地僱主必須加強僱員在這方面的培訓，以建立其公司名下建築物質素的聲譽及形象。

建築業僱員強制性安全訓練

4.33 爲減少建造業的工業意外，政府已立例規定所有受僱於建造工地工作的人士，必須受過建造工地安全訓練，並具有效證書。根據法例，建造業訓練局會主力負責開辦上述課程，並頒發證書予修畢課程和測試及格的人士。本會籲請僱主盡快安排僱員受訓。

建造業工人註冊制度

4.34 建造業工人註冊管理局於二〇〇四年九月十八日根據《建造業工人註冊條例》正式成立，成員由環境運輸及工務局局長於二〇〇四年十月十八日委任，負責有關建造業工人註冊制度的執行及管理事宜。

4.35 當局透過立法形式實施強制註冊制度的目的如下：

- (i) 透過評核建造業工人的技術水平及頒發證書，確保工程的施工質素；
- (ii) 確保提供較可靠的建造業人力供應資料，以便進行人力策劃和培訓的工作；

- (iii) 透過立法確認建造業工人的技術水平，提高他們的職業地位；
- (iv) 為工人提供明確的職業發展途徑，鼓勵工人尋求提升個人技術，以晉升至更高職位及取得較高報酬，從而培養優質建造業文化；
- (v) 打擊僱用非法勞工於建造工地工作；及
- (vi) 透過工人進出工地的記錄，減少承建商和工人之間的工資糾紛。

4.36 建造業工人註冊管理局於二〇〇五年十二月二十九日起為本港建造業工人註冊，藉以透過立法方式確認不同工種建造業工人的技術水平，從而確保建造工程施工質素，並提高建造業工人的地位。此外，推行建造業工人註冊制度可提供較可靠的建造業人力供應資料，有助打擊僱用非法勞工於建造工地工作，並減少承建商和工人之間的工資糾紛。一俟《建造業工人註冊條例》內的禁制條文生效，只有已經註冊的建造業工人才能在建造工地工作，僱主亦須僱用已經註冊的工人進行相關工作。進入工地的工人必須出示智能註冊證，經讀證系統核實身份及記錄進出工地資料。僱主可登入網址：www.cwra.org.hk，收集詳細資料。

NUMBER EMPLOYED AND NUMBER OF VACANCIES AT DATE OF SURVEY
調查期間僱員人數與空缺額

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
PROFESSIONAL/TECHNOLOGIST LEVEL 專業人士／技師級							
101	Architect 建築師	1 702	13	1	1 716	90	27
102	Builder/ Construction Manager 營造師	1 125	14	1	1 140	3	2
103	Building/ Maintenance Surveyor 屋宇／保養測量師	612	-	-	612	67	-
104	Civil Engineer 土木工程師	3 195	70	1	3 266	270	7
105	Construction Plant Engineer 建造機械工程師	39	-	-	39	-	4
106	Environmental Engineer 環境工程師	159	5	1	165	24	-
107	Estate Surveyor* 產業測量師	-	-	-	-	-	-
108	Geotechnical Engineer 土力工程師	455	4	-	459	149	-
109	Interior Designer 室內設計師	650	-	-	650	-	3
110	Land Surveyor 土地測量師	207	14	-	221	-	-
111	Landscape Architect 園景規劃師	215	4	-	219	3	-

* Covered separately in manpower survey conducted by the Real Estates Services Training Board (RETB)

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
PROFESSIONAL/TECHNOLOGIST LEVEL (Continued)					專業人士／技師級 (續)		
112	Quantity Surveyor 工料測量師	2 271	20	-	2 291	23	1
113	Safety Officer 安全主任	455	9	-	464	-	-
114	Structural Engineer 結構工程師	1 018	5	-	1 023	62	2
115	Town Planner 城市設計師	382	-	-	382	-	-
116	Engineering Geologist 工程地質學家	100	-	-	100	-	-
117	Quality Control/ Assurance Engineer 品質工程師	153	4	-	157	-	3
118	Building Services Engineer 屋宇設備工程師	1 075	12	-	1 087	32	5
	Sub-total 分級小計	13 813	174	4	13 991	723	54
TECHNICIAN LEVEL					技術員級		
201	Architectural Technician/ Draughtsman 建築技術員／ 繪圖員	3 509	25	3	3 537	44	26
202	Assistant Safety Officer/Safety Supervisor 助理安全主任／ 安全督導員	277	13	-	290	9	-
203	Civil/Structural/ Geotechnical Engineering Technician 土木／結構／土力 工程技術員	2 906	33	-	2 939	57	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
TECHNICIAN LEVEL (Continued) 技術員級 (續)							
204	Clerk of Works/ Inspector of Works/ Works Supervisor 監工	4 340	69	-	4 409	6	10
205	Construction Plant Technician 建造機械技術員	57	7	-	64	2	-
206	Construction Purchaser/ Storekeeper 建造物料採購員/ 倉庫管理員	467	1	-	468	-	-
207	Estimator 估價員	811	1	-	812	-	-
208	Interior Design Technician 室內設計員	877	-	-	877	-	24
209	Laboratory Technician (Construction Materials/Soils) 建築材料試驗員	624	20	-	644	3	-
210	Site Agent 地盤總管	881	43	-	924	-	-
211	Site Foreman 地盤管工	5 171	405	-	5 576	54	20
212	Surveying Technician (Building) 屋宇測量員	895	3	-	898	26	-
213	Surveying Technician (Estate)* 產業測量員	-	-	-	-	-	-
214	Surveying Technician (Land) 土地測量員	609	72	-	681	7	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
TECHNICIAN LEVEL (Continued) 技術員級 (續)							
215	Surveying Technician (Quantity) 工料測量員	1 953	21	-	1 974	12	47
216	Surveying Technician (Town Planning) 城市設計員	260	-	-	260	3	6
217	Quality Control/ Assurance Technician 品質控制/保證技術員	67	18	-	85	-	-
218	Building Services Engineering Technician/ Electrical Engineering Technician/ Mechanical Engineering Technician 屋宇設備技術員/ 電機工程技術員/ 機械工程技術員	1 526	51	-	1 577	38	4
219	Building Services and Engineering Supervisor 屋宇設備技術及工程監督	3 658	10	-	3 668	-	-
	Sub-total 分級小計	28 888	792	3	29 683	261	137
SKILLED & SEMI-SKILLED WORKER LEVEL 技工及半熟練技工級							
301	Asphalter (Water Proofing) 瀝青工 (防水)	109	174	-	283	-	-
302	Asphalter (Road Construction) 瀝青工 (道路建造)	5	46	-	51	-	-
303	Bamboo Scaffolder 竹棚工	442	587	-	1 009	-	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)							
304	Bar Bender and Fixer 鋼筋屈紮工	423	1 963	3	2 389	4	-
305	Bricklayer 砌磚工	257	389	-	646	-	-
306	Carpenter (Fender) 木工 (護木)	19	86	-	105	-	-
307	Carpenter (Formwork) 木模板工	570	2 821	4	3 395	-	-
308	Concrete Repairer (Spalling Concrete) 混凝土修補工 (混凝土剝落)	87	66	-	153	-	-
309	Concretor 混凝土工	414	822	-	1 236	-	-
310	Construction Plant Mechanic 建造機械技工	136	120	-	256	-	-
311	Curtain Wall Installer 幕牆工	480	339	-	819	-	-
312	Demolition Worker 清拆工 (建築物)	265	12	-	277	-	-
313	Diver 潛水員	123	7	-	130	-	-
314	Drainlayer 地渠工	151	431	-	582	-	-
315	Electrician (Main Contractor's) 電氣技工 (承建商所僱用)	643	27	-	670	1	-
316	Floor Layer 鋪地板工	433	64	-	497	-	-
317	Gas Plumber 煤氣喉工	169	27	-	196	-	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)							
318	General Welder 普通焊接工	273	444	26	743	-	-
319	Glazier 玻璃工	528	150	26	704	-	-
320	Ground Investigation Operator/Driller/Borer 岩土勘探工/ 鑽井工/鑽孔工	309	46	-	355	-	-
321	Grouting Worker 灌漿工	6	37	-	43	-	-
322	Joiner 細木工	3 475	1 426	-	4 901	16	-
323	Leveller 平水工	605	791	-	1 396	9	34
324	Marble Worker 雲石工	135	834	-	969	-	-
325	Marine Construction Plant Operator 海面建造機械 操作工	62	49	-	111	-	-
326	Mason 砌石工	56	156	-	212	-	-
327	Metal Scaffolder 金屬棚架工	124	214	-	338	-	-
328	Metal Worker 金屬工	1 431	1 696	30	3 157	25	8
329	Painter & Decorator 髹漆及裝飾工	3 113	1 926	-	5 039	-	-
330	Piling Operative 打樁工	6	186	-	192	-	-
331	Pipelayer 敷喉管工	128	211	25	364	-	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)							
332	Builder's Lift Operator 建築工地升降機操作員	10	69	-	79	-	-
333	Plant and Equipment Operator (Load Shifting) 機械設備操作工 (負荷物移動機械)	873	712	29	1 614	-	-
334	Plant and Equipment Operator (Hoist and Crane) 機械設備操作工 (起重機及吊機)	228	368	-	596	-	-
335	Plant and Equipment Operator (Piling) 機械設備操作工 (打樁)	34	93	-	127	-	-
336	Plant and Equipment Operator (Tunnelling) 機械設備操作工 (隧道)	60	5	-	65	-	-
337	Plasterer 批盪工	1 183	3 426	20	4 629	-	3
338	Plumber 水喉工	1 748	993	-	2 741	-	-
339	Rock-Breaking Driller 鑽破工 (風炮工)	124	117	-	241	-	-
340	Prestressing Operative 預應力 (拉力) 工	-	4	-	4	-	-
341	Rigger/Metal Formwork Erector 索具工 (叻) / 金屬模板裝嵌工	118	759	78	955	-	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)							
342	Shotcretor 噴射混凝土工	-	52	-	52	-	-
343	Shotfirer 爆石工	17	1	-	18	-	-
344	Slope Maintenance Worker 斜坡修葺工	46	3	-	49	-	-
345	Structural Steel Erector 結構鋼架工	8	97	-	105	-	-
346	Structural Steel Welder 結構鋼材焊接工	133	137	-	270	-	-
347	Tiler 鋪瓦工	468	375	1	844	-	-
348	Trackworker 鋪軌工	320	-	-	320	-	-
349	Truck Driver 重型車輛駕駛員 (泥頭車司機)	337	639	3	979	-	-
350	Window Frame Installer 窗框工	868	550	-	1 418	-	-
351	Tunnel Worker 隧道工	131	28	-	159	-	-
352	Asbestos Abatement Worker 清除石棉工	-	-	-	-	-	-
353	Hand-dug Caisson Worker 手挖沉箱工	2	-	-	2	-	-
354	Paving Block Layer 地磚鋪砌工	100	19	-	119	-	-

Job Title 職稱	Number Employed at Date of Survey (Excluding Trainees) 調查期間僱員人數 (受訓者除外)				Number of Trainees at Date of Survey 調查期間受訓者人數	Number of Vacancies at Date of Survey 調查期間空缺額	
	Direct 直接僱員	Sub-contractors' 分包商僱員	Self-employed 自僱人士	Total 總數			
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)							
355	Plant and Equipment Operator (Suspended Working Platform) 機械設備操作工 (吊船)	2	24	-	26	-	-
356	Plant and Equipment Operator (Demolition) 機械設備操作工 (清拆)	-	6	-	6	-	-
357	Demolition Worker (Unauthorized Building Work) 清拆工 (僭建物)	28	33	-	61	-	-
358	Roller Operator 平地工	-	1	-	1	-	-
	Sub-total 分級小計	21 815	24 658	245	46 718	55	45
GENERAL WORKER LEVEL 普通工人級							
401	Chainman 測量幫工	628	183	-	811	1	-
402	Concreting Labourer 混凝土幫工	7	200	-	207	-	-
403	Diver's Linesman 潛水員幫工	41	2	-	43	-	-
404	Excavator 挖泥工	395	366	1	762	-	-
405	Heavy Load Labourer 抬重工	174	135	-	309	-	-
406	Labourer 雜工	7 321	6 476	63	13 860	-	8
407	Sewerman 渠務工	243	75	-	318	-	-
	Sub-total 分級小計	8 809	7 437	64	16 310	1	8
	GRAND TOTAL 總計	73 325	33 061	316	106 702	1 040	244

Appendix 2

附錄二

Manpower Distribution By Branch
各分類的僱員人數

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
PROFESSIONAL/TECHNOLOGIST LEVEL 專業人士／技師級											
101	Architect 建築師	15	13	37	21	30	1 243	22	62	273	1 716
102	Builder/Construction Manager 營造師	183	116	284	244	144	74	50	45	-	1 140
103	Building/Maintenance Surveyor 屋宇／保養測量師	18	13	11	11	6	97	3	40	413	612
104	Civil Engineer 土木工程師	78	371	522	-	33	670	-	249	1 343	3 266
105	Construction Plant Engineer 建造機械工程師	4	15	5	-	-	-	10	5	-	39
106	Environmental Engineer 環境工程師	4	29	5	-	-	35	-	19	73	165

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlpers 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
PROFESSIONAL/TECHNOLOGIST LEVEL (Continued) 專業人士/技師級 (續)											
107	Estate Surveyor 產業測量師	-	-	-	-	-	-	-	-	-	
108	Geotechnical Engineer 土力工程師	8	31	38	-	-	172	1	17	192	459
109	Interior Designer 室內設計師	3	-	40	522	3	71	11	-	-	650
110	Land Surveyor 土地測量師	15	126	9	1	-	12	2	26	30	221
111	Landscape Architect 園景規劃師	3	3	6	-	-	147	-	4	56	219
112	Quantity Surveyor 工料測量師	141	244	570	226	134	715	44	67	150	2 291
113	Safety Officer 安全主任	165	151	67	29	16	3	5	26	2	464
114	Structural Engineer 結構工程師	42	18	102	27	31	349	3	47	404	1 023
115	Town Planner 城市設計師	-	1	-	-	-	114	1	4	262	382
116	Engineering Geologist 工程地質學家	-	5	-	-	-	38	-	-	57	100

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
PROFESSIONAL/TECHNOLOGIST LEVEL (Continued) 專業人士/技師級 (續)											
117	Quality Control/ Assurance Engineer 品質工程師	36	32	51	3	6	16	5	8	-	157
118	Building Services Engineer 屋宇設備工程師	115	51	65	190	16	289	20	168	173	1 087
	Sub-total 分級小計	830	1 219	1 812	1 274	419	4 045	177	787	3 428	13 991
TECHNICIAN LEVEL 技術員級											
201	Architectural Technician/ Draughtsman 建築技術員/繪圖員	30	57	157	417	148	1 815	18	135	760	3 537
202	Assistant Safety Officer/Safety Supervisor 助理安全主任/ 安全督導員	82	117	53	11	13	542	-	13	1	290
203	Civil/Structural/ Geotechnical Engineering Technician 土木/結構/ 土力工程技術員	110	267	521	3	46	284	-	226	1 224	2 939

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
TECHNICIAN LEVEL (Continued) 技術員級 (續)											
204	Clerk of Works/ Inspector of Works/ Works Supervisor 監工	117	155	128	310	131	284	29	113	3 142	4 409
205	Construction Plant Technician 建造機械技術員	8	10	1	-	12	-	-	33	-	64
206	Construction Purchaser/Storekeeper 建造物料採購員/ 倉庫管理員	40	28	215	51	129	1	1	3	-	468
207	Estimator 估價員	1	5	125	382	241	56	2	-	-	812
208	Interior Design Technician 室內設計員	2	-	3	781	20	65	1	5	-	877
209	Laboratory Technician (Construction Materials/Soils) 建築材料試驗員	13	14	76	-	-	419	-	56	66	644
210	Site Agent 地盤總管	343	286	102	20	133	-	8	32	-	924
211	Site Foreman 地盤管工	1 430	793	1 023	1 307	940	79	-	4	-	5 576

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlpers 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
TECHNICIAN LEVEL (Continued) 技術員級 (續)											
212	Surveying Technician (Building) 屋宇測量員	29	4	-	-	45	198	1	51	570	898
213	Surveying Technician (Estate) 產業測量員	-	-	-	-	-	-	-	-	-	-
214	Surveying Technician (Land) 土地測量員	69	259	105	-	-	44	-	6	198	681
215	Surveying Technician (Quantity) 工料測量員	126	193	298	149	77	632	6	44	449	1 974
216	Surveying Technician (Town Planning) 城市設計員	-	1	1	-	-	47	2	-	209	260
217	Quality Control/ Assurance Technician 品質控制/ 保證技術員	21	39	24	-	1	-	-	-	-	85

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)											
303	Bamboo Scaffolder 竹棚工	566	97	14	-	351	-	-	-	1	1 029
304	Bar Bender and Fixer 鋼筋屈紮工	1 398	740	17	42	192	-	-	-	-	2 389
305	Bricklayer 砌磚工	434	142	-	-	69	-	-	1	-	646
306	Carpenter (Fender) 木工 (護木)	15	80	-	10	-	-	-	-	-	105
307	Carpenter (Formwork) 木模板工	2 139	1 118	-	-	134	-	-	-	4	3 395
308	Concrete Repairer (Spalling Concrete) 混凝土修補工 (混凝土剝落)	79	32	-	42	-	-	-	-	-	153
309	Concretor 混凝土工	660	363	142	10	56	-	-	-	5	1 236
310	Construction Plant Mechanic 建造機械技工	161	48	-	-	44	-	-	2	1	236
311	Curtain Wall Installer 幕牆工	343	24	8	-	444	-	-	-	-	819

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)											
312	Demolition Worker Installer 清拆工 (建築物)	31	-	196	-	50	-	-	-	-	277
313	Diver 潛水員	-	7	48	-	75	-	-	-	-	130
314	Drainlayer 地渠工	371	143	24	-	34	-	-	10	-	582
315	Electrician (Main Contractor's) 電氣技工 (承建商所僱用)	315	122	40	118	32	-	-	43	-	670
316	Floor Layer 鋪地板工	63	5	-	243	185	-	-	1	-	497
317	Gas Plumber 煤氣喉工	39	-	16	-	-	-	-	141	-	196
318	General Welder 普通焊接工	318	285	30	26	83	-	-	1	-	743
319	Glazier 玻璃工	171	11	-	-	521	-	-	1	-	704
320	Ground Investigation Operator/Driller/ Borer 岩土勘探工/ 鑽井工/鑽孔工	41	40	232	-	25	17	-	-	-	355

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)											
337	Plasterer 批盪工	3 599	224	28	370	395	-	-	7	6	4 629
338	Plumber 水喉工	977	136	16	249	930	-	-	91	342	2 741
339	Rock-Breaking Driller 鑽破工 (風炮工)	84	58	-	70	28	-	-	-	1	241
340	Prestressing Operative 預應力 (拉力) 工	4	-	-	2	-	-	-	-	-	4
341	Rigger/Metal Formwork Erector 索具工 (叻) / 金屬模板裝嵌工	357	503	-	-	95	-	-	-	-	955
342	Shotcretor 噴射混凝土工	48	4	-	-	-	-	-	-	-	52
343	Shotfirer 爆石工	-	18	-	-	-	-	-	-	-	18
344	Slope Maintenance Worker 斜坡修葺工	3	-	30	-	8	-	-	8	-	49
345	Structural Steel Erector 結構鋼架工	35	62	8	-	-	-	-	-	-	105

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlpers 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)											
346	Structural Steel Welder 結構鋼材焊接工	94	83	61	-	32	-	-	-	-	270
347	Tiler 鋪瓦工	442	18	-	2	375	-	-	7	-	844
348	Trackworker 鋪軌工	-	-	-	320	-	-	-	-	-	320
349	Truck Driver 重型車輛駕駛員 (泥頭車司機)	65	811	23	-	75	-	-	1	4	979
350	Window Frame Installer 窗框工	614	3	-	152	649	-	-	-	-	1 418
351	Tunnel Worker 隧道工	-	159	-	-	-	-	-	-	-	159
352	Asbestos Abatement Worker 清除石棉工	-	-	-	-	-	-	-	-	-	-
353	Hand-dug Caisson Worker 手挖沉箱工	-	2	-	-	-	-	-	-	-	2
354	Paving Block Layer 地磚鋪砌工	15	4	-	100	-	-	-	-	-	119

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)											
355	Plant and Equipment Operator (Suspended Working Platform) 機械設備操作工 (吊船)	24	2	-	-	-	-	-	-	-	26
356	Plant and Equipment Operator (Demolition) 機械設備操作工 (清拆)	2	4	-	-	-	-	-	-	-	6
357	Demolition Worker (Unauthorized Building Work) 清拆工(僭建物)	33	1	28	-	-	-	-	-	-	61
358	Roller Operator 平地工	1	-	-	-	-	-	-	-	-	1
	Sub-total 分級小計	21 966	7 885	1 422	7 140	7 430	24	-	447	404	46 718
GENERAL WORKER LEVEL 普通工人級											
401	Chainman 測量幫工	65	352	147	-	-	7	-	3	237	811
402	Concreting Labourer 混凝土幫工	66	135	-	-	4	-	-	-	2	207
403	Diver's Linesman 潛水員幫工	-	2	16	-	25	-	-	-	-	43

Job Title 職稱	Br. 1 Bldg Sites 分類一 已動工的 建築地盤	Br. 2 Civ Eng Sites 分類二 已動工的 土木工程及 其他地盤	Br. 3 New Cons Contr 分類三 新建造工程 承建商	Br. 4 Décor Rep Mtn Contr 分類四 裝修保養 工程承建商	Br. 5 Spec Trade Contr 分類五 特種工程 承建商	Br. 6 Arch, Eng. Surv Serv 分類六 建築、測量 及工程服務 公司	Br. 7 Major Est Devlprs 分類七 主要私人 地產發展商	Br. 8 Tert. Inst. Utilities 分類八 培訓機構 (包括管業處) 及公用事業等	Br. 9 Govt Dept 分類九 政府部門 (僱有建築 工人)	Total 總數	
GENERAL WORKER LEVEL (Continued) 普通工人級 (續)											
404	Excavator 挖泥工	222	137	383	-	17	-	-	-	3	762
405	Heavy Load Labourer 抬重工	167	39	16	84	-	-	-	3	-	309
406	Labourer 雜工	5 392	5 078	593	1 293	445	97	-	79	883	13 860
407	Sewerman 渠務工	63	19	156	-	5	-	-	1	74	318
	Sub-total 分級小計	5 975	5 762	1 311	1 377	496	104	-	86	1 199	16 310
	GRAND TOTAL 總計	31 384	17 221	7 659	15 799	11 415	8 511	254	2 439	12 020	106 702

DISTRIBUTION OF WORKERS BY MONTHLY INCOME RANGE

按每月收入幅度劃分僱員的分布情況

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明	
PROFESSIONAL/TECHNOLOGIST LEVEL 專業人士/技師級										
101	Architect 建築師	-	-	-	13	151	472	690	303	87
102	Builder/ Construction Manager 營造師	-	-	16	-	240	288	297	198	101
103	Building/ Maintenance Surveyor 屋宇/保養 測量師	-	-	-	1	31	70	136	351	23
104	Civil Engineer 土木工程師	-	-	1	18	333	422	483	1 862	147
105	Construction Plant Engineer 建造機械工程師	-	-	-	-	11	5	5	6	12
106	Environmental Engineer 環境工程師	-	-	-	10	11	98	7	20	19
107	Estate Surveyor 產業測量師	-	-	-	-	-	-	-	-	-
108	Geotechnical Engineer 土力工程師	-	-	-	-	44	118	91	172	34
109	Interior Designer 室內設計師	-	-	-	166	372	51	41	1	19
110	Land Surveyor 土地測量師	-	-	-	6	47	45	39	38	46
111	Landscape Architect 園景規劃師	-	-	-	-	28	53	104	34	-
112	Quantity Surveyor 工料測量師	-	-	2	175	539	653	653	170	99
113	Safety Officer 安全主任	-	-	6	19	116	175	61	13	74
114	Structural Engineer 結構工程師	-	-	-	15	195	178	305	285	45
115	Town Planner 城市設計師	-	-	-	8	31	23	87	232	1
116	Engineering Geologist 工程地質學家	-	-	-	8	-	22	-	70	-

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明	
PROFESSIONAL/TECHNOLOGIST LEVEL (Continued) 專業人士/技師級 (續)										
117	Quality Control/ Assurance Engineer 品質工程師	-	-	-	10	40	79	8	5	15
118	Building Services Engineer 屋宇設備工程師	-	-	2	20	114	261	418	124	148
	Sub-total 分級小計	-	-	27	469	2 303	3 013	3 425	3 884	870
TECHNICIAN LEVEL 技術員級										
201	Architectural Technician/ Draughtsman 建築技術員/ 繪圖員	36	341	794	901	612	328	134	5	386
202	Assistant Safety Officer/Safety Supervisor 助理安全主任/ 安全督導員	-	10	36	71	86	51	1	-	35
203	Civil/Structural/ Geotechnical Engineering Technician 土木/結構/土 力工程技術員	-	81	744	555	757	579	86	3	104
204	Clerk of Works/ Inspector of Works/ Works Supervisor 監工	-	93	707	406	1 635	885	490	1	192
205	Construction Plant Technician 建造機械技術員	-	-	2	3	17	36	-	-	6
206	Construction Purchaser/ Storekeeper 建造物料採購 員/倉庫管理員	-	130	126	82	73	36	2	-	19
207	Estimator 估價員	37	1	146	214	157	226	30	1	-
208	Interior Design Technician 室內設計員	-	4	360	349	143	20	-	-	1
209	Laboratory Technician (Construction Materials/Soils) 建築材料試驗員	27	335	47	1	53	63	-	-	118
210	Site Agent 地盤總管	-	26	11	142	269	265	96	2	113
211	Site Foreman 地盤管工	2	19	620	2 582	1 489	438	10	-	416

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明	
TECHNICIAN LEVEL (Continued) 技術員級 (續)										
212	Surveying Technician (Building) 屋宇測量員	-	-	113	679	67	20	16	-	3
213	Surveying Technician (Estate) 產業測量員	-	-	-	-	-	-	-	-	-
214	Surveying Technician (Land) 土地測量員	-	17	113	164	153	182	-	-	52
215	Surveying Technician (Quantity) 工料測量員	-	7	771	381	434	207	124	-	50
216	Surveying Technician (Town Planning) 城市設計員	-	-	69	2	188	-	-	-	1
217	Quality Control/ Assurance Technician 品質控制/ 保證技術員	4	8	21	27	12	7	-	-	6
218	Building Services Engineering Technician/ Electrical Engineering Technician/ Mechanical Engineering Technician 屋宇設備技術 員/電機工程技 術員/機械工程 技術員	-	21	522	337	267	138	179	12	101
219	Building Services and Engineering Supervisor 屋宇設備技術 及工程監督	-	16	1 316	1 027	1 015	182	16	-	96
	Sub-total 分級小計	106	1 109	6 548	7 923	7 427	3 663	1 184	24	1 699
SKILLED & SEMI-SKILLED WORKER LEVEL 技工及半熟練技工級										
301	Asphalter (Water Proofing) 瀝青工 (防水)	-	79	51	89	4	-	-	-	30
302	Asphalter (Road Construction) 瀝青工 (道路建 造)	-	21	5	-	25	-	-	-	-
303	Bamboo Scaffolder 竹棚工	25	-	164	263	439	18	-	-	120

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)										
304	Bar Bender and Fixer 鋼筋屈紮工	-	17	233	814	909	117	3	-	296
305	Bricklayer 砌磚工	-	20	233	297	50	17	-	-	29
306	Carpenter (Fender) 木工 (護木)	-	2	10	22	26	45	-	-	-
307	Carpenter (Formwork) 木模板工	-	42	500	1 143	1 271	63	20	-	356
308	Concrete Repairer (Spalling Concrete) 混凝土修補工 (混凝土剝落)	-	2	82	61	-	-	-	-	8
309	Concretor 混凝土工	-	6	427	309	369	21	-	-	104
310	Construction Plant Mechanic 建造機械技工	-	9	60	135	14	-	-	-	38
311	Curtain Wall Installer 幕牆工	-	32	554	136	41	-	-	-	56
312	Demolition Worker Installer 清拆工 (建築物)	-	6	170	88	13	-	-	-	-
313	Diver 潛水員	-	-	-	-	123	5	2	-	-
314	Drainlayer 地渠工	-	2	249	190	90	2	-	-	49
315	Electrician (Main Contractor's) 電氣技工 (承建商所僱用)	-	9	268	292	86	-	-	-	15
316	Floor Layer 鋪地板工	-	-	-	-	-	-	-	-	-
317	Gas Plumber 煤氣喉工	-	15	412	45	-	25	-	-	-
318	General Welder 普通焊接工	-	33	146	13	-	-	-	-	4
319	Glazier 玻璃工	-	7	225	361	84	5	-	-	61
320	Ground Investigation Operator/Driller/ Borer 岩土勘探工/ 鑽井工/鑽孔工	-	64	208	38	29	1	-	-	15
321	Grouting Worker 灌漿工	-	10	-	11	9	-	-	-	13

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明	
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)										
322	Joiner 細木工	-	310	2 189	1 761	265	49	35	-	292
323	Leveller 平水工	19	146	370	616	80	3	5	-	157
324	Marble Worker 雲石工	-	30	500	59	77	-	-	-	303
325	Marine Construction Plant Operator 海面建造機械 操作工	-	-	-	33	17	-	-	-	61
326	Mason 砌石工	-	55	47	83	27	-	-	-	-
327	Metal Scaffolder 金屬棚架工	-	14	102	111	66	-	-	-	45
328	Metal Worker 金屬工	-	294	1 297	1 018	206	39	-	-	303
329	Painter & Decorator 髹漆及裝飾工	23	797	2 360	1 501	188	16	-	-	154
330	Piling Operative 打樁工	-	-	16	74	2	21	-	-	79
331	Pipelayer 敷喉管工	-	-	96	65	134	-	-	-	69
332	Builder's Lift Operator 建築工地升降機 操作員	22	4	4	29	2	-	-	-	18
333	Plant and Equipment Operator (Load Shifting) 機械設備操作工 (負荷物移動機 械)	6	43	571	753	96	4	-	-	141
334	Plant and Equipment Operator (Hoist and Crane) 機械設備操作工 (起重機及吊機)	-	1	82	343	84	-	-	-	86
335	Plant and Equipment Operator (Piling) 機械設備操作工 (打樁)	-	-	23	85	-	10	-	-	9
336	Plant and Equipment Operator (Tunnelling) 機械設備操作工 (隧道)	-	-	3	33	-	6	-	-	23

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)									
337	Plasterer 批盪工	-	14	1 868	1 709	628	12	-	398
338	Plumber 水喉工	-	761	602	930	291	-	-	157
339	Rock-Breaking Driller 鑽破工 (風炮工)	-	12	136	62	15	7	-	9
340	Prestressing Operative 預應力 (拉力) 工	-	-	-	3	1	-	-	-
341	Rigger/Metal Formwork Erector 索具工 (叻) / 金屬模板裝嵌工	-	163	230	459	62	6	-	35
342	Shotcretor 噴射混凝土工	-	40	8	-	3	-	-	1
343	Shotfirer 爆石工	-	-	1	1	-	5	-	11
344	Slope Maintenance Worker 斜坡修葺工	-	-	38	11	-	-	-	-
345	Structural Steel Erector 結構鋼架工	-	8	3	74	9	8	-	3
346	Structural Steel Welder 結構鋼材焊接工	-	-	95	144	21	7	-	3
347	Tiler 鋪瓦工	-	34	229	387	95	10	-	89
348	Trackworker 鋪軌工	-	-	320	-	-	-	-	-
349	Truck Driver 重型車輛駕駛員 (泥頭車司機)	-	47	274	361	137	-	-	160
350	Window Frame Installer 窗框工	-	212	745	228	43	-	-	190
351	Tunnel Worker 隧道工	-	-	12	3	108	-	-	36
352	Asbestos Abatement Worker 清除石棉工	-	-	-	-	-	-	-	-
353	Hand-dug Caisson Worker 手挖沉箱工	-	-	-	-	-	-	-	2
354	Paving Block Layer 地磚鋪砌工	-	-	104	9	-	-	-	6

Job Title 職稱	Under \$7,000 以下	\$7,001- \$10,000	\$10,001- \$13,000	\$13,001- \$18,000	\$18,001- \$25,000	\$25,001- \$35,000	\$35,001- \$50,000	Over \$50,000 以上	Unspecified 未列明
SKILLED & SEMI-SKILLED WORKER LEVEL (Continued) 技工及半熟練技工級 (續)									
355	Plant and Equipment Operator (Suspended Working Platform) 機械設備操作工 (吊船)	-	-	11	2	8	-	-	5
356	Plant and Equipment Operator (Demolition) 機械設備操作工 (清拆)	-	-	1	4	1	-	-	5
357	Demolition Worker (Unauthorized Building Work) 清拆工(僭建物)	-	-	52	-	-	-	-	9
358	Roller Operator 平地工	-	1	-	-	-	-	-	-
	Sub-total 分級小計	95	3 362	16 800	15 515	6 294	522	65	4 065
GENERAL WORKER LEVEL 普通工人級									
401	Chainman 測量幫工	43	265	396	59	-	-	-	48
402	Concreting Labourer 混凝土幫工	-	73	64	23	15	-	-	32
403	Diver's Linesman 潛水員幫工	-	-	-	43	-	-	-	-
404	Excavator 挖泥工	-	160	429	143	18	-	-	12
405	Heavy Load Labourer 抬重工	-	112	92	87	-	-	-	18
406	Labourer 雜工	1 496	5 516	4 236	1 062	10	-	-	1 567
407	Sewerman 渠務工	-	226	15	73	-	-	-	4
	Sub-total 分級小計	1 512	6 352	5 232	1 490	43	-	-	1 681
	GRAND TOTAL 總計	1 713	10 823	28 607	25 397	16 067	7 198	4 674	3 908

General Household Survey conducted by Census and Statistics Department
Unemployment Rate by Selected Industry (Construction) and Occupation, Q3 2005

政府統計處綜合住戶統計調查
二〇〇五年第三季按選定行業（建造業）及職業劃分的失業率

	<u>%</u>
Occupation 職業	
Managers and Administrators 經理及行政級人員	3.9
Professionals 專業人員	3.7
Associate Professionals 輔助專業人員	3.3
Clerks 文員	2.6
Service Workers and Shop Sales Workers 服務工作及商店銷售人員	0.0
Craft and related Workers 工藝及有關人員	11.8
Plant and Machine Operators and Assemblers 機台及機器操作員及裝配員	5.8
Elementary Occupations 非技術工人	21.1
<hr/>	
Total 合計	11.0

Projected Number of Degrees Graduates
of Local Tertiary Institutions (2005-2008)
二〇〇五至二〇〇八年預計本地學位畢業生人數

Institution 院校	Program 課程	Projected Number of Graduates 預計畢業生人數			
		2005	2006	2007	2008
Architectural Disciplines 建築行業					
Chinese University of Hong Kong (HKCU) 香港中文大學	M. of Arch. 建築學碩士	37	37	40	40
University of Hong Kong (HKU) 香港大學	M. of Arch. 建築學碩士	69	69	69	69
	M. of Arch. (Landscape) 建築學碩士(園景規劃學)	30	-	28	-
Total 總數		136	106	137	109
Civil/Geotechnical/Structural/ Environmental Engineering Disciplines 土木/土力/結構/環境工程行業					
HK Polytechnic University (HKPU) 香港理工大學	B.Eng. (Civil & Envir. Eng.)* 工學士(土木/環境工程學)	37	37	23	-
	B.Eng. (Civil & Struct. Eng.)* 工學士(土木/結構工程學)	97	92	72	45
	B.Eng. (Civil Eng.) ^	-	-	-	85
	B.Sc. (Bldg. Services Eng.) 理學士(建築工程學)	62	61	56	24
HK University of Science & Technology (HKUST) 香港科技大學	B.Eng. (Civil & Struct. Eng.) 工學士(土木及結構工程學)	99	98	100	100
	B.Eng. (Civil & Envir. Eng.) 工學士(土木及環境工程學)	17	12	15	15
University of Hong Kong (HKU) 香港大學	B.Eng. (Civil Eng./Law) 工學士(土木工程學/法律)	119	106	90	86
	B.Eng. (Civil Eng./Envir. Eng.) 工學士(土木/環境工程學)	22	19	13	12
Total 總數		453	425	369	367

* Phasing out starting from 2005/2006

^ Phasing in starting from 2005/06

Institution 院校	Program 課程	Projected Number of Graduates 預計畢業生人數			
		2005	2006	2007	2008
Surveying Disciplines 測量行業					
City University of Hong Kong (CITYU) 香港城市大學	B.Sc. (Surveying) 理學士(測量學)	46	35	36	55
	B.Eng. (Bldg. Serv. Eng.) 工學士(屋宇裝備工程學)	47	50	44	25
	B.Eng. (Const. Eng. and Mgt.) 工學士(建造工程及管理學)	25	27	29	35
	B.Eng. (Modern Structural Eng.) 工學士(現代工程結構學)	17	20	11	15
HK Polytechnic University (HKPU) 香港理工大學	B.Sc. (Building Surveying) 理學士(建築測量學)	57	61	58	79
	B.Sc. (Surveying & Geo-Info.) 理學士(土地測量及地理資訊學)	52	52	28	36
University of Hong Kong (HKU) 香港大學	B.Sc. in Surveying 理學士(測量學)	51	48	45	50
Total 總數		295	293	251	295

Projected Number of Technician Graduates
of Local Institutions (2005-2008)
二〇〇五至二〇〇八年預計本地技術員畢業生人數

Institution 院校	Course 課程	Projected Number of Graduates 預計畢業生人數			
		2005	2006	2007	2008
HKIVE 香港專業教育學院 (職業訓練局)	Higher Diploma (Civil/Struct./Bld. Eng.) 高級文憑(土木/結構/建築學)	484	456	436	428
	Diploma (Civil Eng./Bld. Std/ Surveying) 文憑(土木/建築/測量學)	73	44	32	32
	PT/Higher Certificate (Civil Eng./Bld. Std./Q.S.) 部份時間制/高級證書(土木/建 築/工料測量等)	279	204	161	77
	PT/Certificate (Civil Eng./Bld. Std./Q.S.) 部分時間制/證書(土木/建築/ 工料測量學)	485	440	331	300

Institution 院校	Program 課程	Projected Number of Graduates 預計畢業生人數			
		2005	2006	2007	2008
CityU 香港城市大學	FT / ASc/HD (Arch. Std.) 全日制副學士／高級文憑(建築學)	85	90	90	90
	FT / ASc/HD (Bldg. Serv. Eng) 全日制副學士／高級文憑(屋宇裝備工程學)	85	90	90	90
	FT/Asc (Cons. Eng. & Mgt.) 全日制／副學士(建造工程及管理學)	85	90	90	90
	FT/ASc (Surveying) 全日制／副學士(測量學)	160	150	150	150
HKPU 香港理工大學	FT/HD (Bldg. Eng. & Mgt.) 全日制／高級文憑(建築工程及管理學)	89	89	125	125
	FT/HD (Geomatics) 全日制／高級文憑(地理資訊學)	58	58	40	40
	FT/HD (Civil Engineering) 全日制／高級文憑(土木工程)	73	73	45	45
CITA 建造業訓練局	Construction Supervisor/ Technician Training Program 建造業監工／技術員訓練課程	18 [△]	156	160	160
Total 總數		1 974	1 940	1 750	1 627

Projected Local Supply of Skilled & Semi-skilled Worker Graduates (2005-2008)

二〇〇五至二〇〇八年預計本地技工畢業生人數

Institution	Mode	2005	2006	2007	2008
HKIVE 香港專業教育學院	PTDR (3-year Craft Cert.) 部分時間制(三年制技工證書課程)	49	32	37	39
	PTE (Craft Cert.) 夜間制(技工證書課程)	103	111	115	122
CITA 建造業訓練局	FT (1-2 year Basic Craft Cert.) 全日制(一至兩年制基本技工證書課程)	518	360	440	440
	FT (adult short courses) 全日制(成年人短期課程)	1 495	1 000	1 000	1 000
Total 總數		2 165	1 503	1 592	1 601

△ Starting from the 2004/2005 training year, three courses in the Construction Supervisor/Technician Programme were changed to 2 years. Therefore, only 1 class of 18 trainees in the 1-year Cert in Quantity Measurement course completed the Programme in 2005.

**Membership of the
Building and Civil Engineering Training Board**
土木工程及建築業訓練委員會成員名單
(As at 1 October 2005)

Chairman

主席

Mr MOK Kwok-woo, Peter
莫國和先生
(On an ad personam basis)
(獨立人士)

Members

委員

Mr CHAN Kwan-sang, Tony
陳滾生先生
(nominated by the Hong Kong Construction
Association Ltd.)
(香港建造商會提名)

Mr CHAN Pak-cheung, Raymond
陳柏翔先生
(nominated by a major civil/structural
engineering consulting firm)
(某大土木／結構工程顧問公司提名)

Dr CHEUNG Kwok-wai, Alex
張國維博士
(nominated by a building/civil engineering
contracting firm)
(某建築／土木工程承建公司提名)

Mr CHEUNG Siu-lun
張少麟先生
(nominated by the Hong Kong Construction
Association Ltd.)
(香港建造商會提名)

Mr CHOI Chun-wa
蔡鎮華先生
(nominated by a workers union)
(某工會提名)

Mr CHOW Cheuk-tao
周雀圖先生
(nominated by the Hong Kong Plumbing
and Sanitary Ware Trade Association
Ltd.)
(香港水喉潔具業商會有限公司提名)

Prof CHUNG Hung-kwan, Barnabas
鍾鴻鈞教授
(nominated by the Hong Kong Institute of
Surveyors)
(香港測量師學會提名)

Dr KUANG Jun-shang
鄺君尚博士
(nominated by the Hong Kong University
of Science and Technology)
(香港科技大學提名)

Mr Kyran SZE
施家殷先生
(nominated by the Hong Kong Institute of
Architects)
(香港建築師學會提名)

Mr LOK Tat-hong, Howard 樂達航先生	(nominated by the Hong Kong E & M Contractors Association Ltd.) (香港機電工程承建商協會提名)
Dr NG Shiu-tong, Thomas 吳兆堂博士	(nominated by the University of Hong Kong) (香港大學提名)
Mr NG Yau-ye, Peter 伍又宜先生	(nominated by the Hong Kong Institute of Construction Managers) (香港營造師學會提名)
Mr YIU Kin-sang, Eddie 姚健生先生	(nominated by the Construction Industry Training Authority) (建造業訓練局提名)
Mr HUI Yat-kong, Andrew 許日剛先生	representing the Secretary for Environment, Transport and Works 環境運輸及工務局局長代表
Mr LAM Ho-yin, Ricky 林浩然先生	representing for the Director of Housing 房屋署署長代表
Mr NG Lung-hoi 吳倫海先生	representing the Commissioner for Labour 勞工處處長代表
Mr WONG Man-kai 黃文楷先生	(representing the Executive Director of the Vocational Training Council) (職業訓練局執行幹事代表)

Co-opted Member

增選委員

Mr LO Kin-keung 羅建強先生	(Hong Kong Institute of Vocational Education (Tsing Yi)) (香港專業教育學院(青衣分校))
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Secretary

秘書

Mr LEUNG Wing-kwan, Freddy 梁永鈞先生	(Vocational Training Council) (職業訓練局)
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Terms of Reference of
Building and Civil Engineering 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 development of vocational education and training facilities to meet the assessed manpower demand.
4. To advise the Hong Kong Institute of Vocational Education (IVE) and training & development centres on the direction and strategic development of their programmes in the relevant disciplines.
5. To advise on the course planning, curriculum development and quality assurance systems of the IVE and training & development centres.
6. To prescribe job specifications for the principal jobs in the industry defining the skills, knowledge and training required.
7. To advise on training programmes for the principal jobs in the industry specifying the time a trainee needs to spend on each skill elements.
8. To tender advice in respect of skill assessments, trade tests and certification for in-service workers, apprentices and trainees, for the purpose of ascertaining that the specified skill standards have been attained.
9. To advise on the conduct of skill competitions in key trades in the industry for the promotion of vocational education and training as well as participation in international competitions.
10. To liaise with relevant bodies on matters pertaining to the development and promotion of vocational education and training in the industry, including employers, employers' associations, trade unions, professional institutions, training and educational institutions and government departments.
11. To organize seminars/conferences/symposia on vocational education and training for the industry.
12. To advise on the publicity relating to the activities of the Training Board and relevant vocational education and training programmes of the VTC.
13. 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.
14. To undertake any other functions delegated by the Council in accordance with Section 7 of the Vocational Training Council Ordinance.

**土木工程及建築業
訓練委員會職權範圍**

1. 確定業內的人力需求，包括收集、分析相關的人力和學生／學員統計數字，以及關於社會經濟、科技及人力市場發展的資料。
2. 評估及研究本業的人力供求是否平衡。
3. 就發展業內專業教育及訓練設施應付人力需求，向職業訓練局提供意見。
4. 就相關學科的課程發展方向及策略，向香港專業教育學院(IVE)、訓練及發展中心提出建議。
5. 就 IVE、訓練及發展中心的課程策劃、課程發展及質素保證制度提供意見。
6. 擬訂本業主要職務的工作範圍，界定所需的技能、知識及訓練。
7. 建議本業主要職務訓練方案，訂定每種技能所需的訓練期。
8. 對技術評估、技能測驗及證書頒發制度提供意見，以確定從業員、學徒及見習員的技能水平。
9. 就本業主要行業舉辦技能比賽提供意見，以推廣專業教育與訓練和派員參加國際賽事。
10. 就本業專業教育及訓練的發展與推廣事宜，與僱主、僱主聯會、工會、專業團體、訓練及教育機構、政府部門等聯絡。
11. 為本業舉辦有關專業教育及訓練的研討會與會議。
12. 就業內訓練委員會工作、有關職訓局專業教育及訓練課程的宣傳事宜提供意見。
13. 每年向局方呈交訓練委員會工作報告，以及相關學科課程發展策略建議。
14. 根據《職業訓練局條例》第 7 條，負責局方所委派的其他工作。

CONFIDENTIAL WHEN ENTERED WITH DATA	填入數據後即成 機密文件
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VOCATIONAL TRAINING COUNCIL
職業訓練局

THE 2005 MANPOWER SURVEY OF THE BUILDING AND CIVIL ENGINEERING INDUSTRY
土木工程及建築業二〇〇五年人力調查

QUESTIONNAIRE
調查表

PLEASE READ THE EXPLANATORY NOTES BEFORE COMPLETING THIS QUESTIONNAIRE
填表前，請參閱附註

For Official Use Only: 此欄毋須填寫	Rec. Type	Survey Code	Industry Code	Establishment No.	Enumerator's No.	Editor's No.	Check Digit	No. of Employees Covered by the Questionnaire
	1	0 2 2 3	4 5 6 7 8 9	10 11 12 13 14 15	16 17	18 19	20 21 22	23 24 25 26 27

NAME OF ESTABLISHMENT: _____ ADDRESS: _____
機構名稱 地址

NATURE OF WORK: _____ CONTRACT NO. (for Public Works only): _____
工程性質 政府工程合約編號

NAME OF PERSON TO CONTACT: _____ POSITION: _____
聯絡人姓名 28 47 職位

TEL. NO.: _____ - _____ FAX NO.: _____
電話 48 55 56 63 圖文傳真

E-MAIL: _____
電郵 64 98

VTC-BC-01

For Official Use Only: 此欄毋須填寫	Type of end-use : _____				
Rec. Type	Site RI	Project - Starting (yymm)	Project - Ending (yymm)	Project - Type	End-use code
3 1	8 9 10 11 12 13 14 15 16 17 18 19	20 21 22 23	24 25 26 27	28	29 30 31 32 33 34

- Project Type :
- (1) Site formation, piling and related formation work
 - (2) Erection of superstructure including construction of basement
 - (3) Civil engineering

(A) Job 工作 (See Appendix C) (見附錄 C)			(B) Monthly Income 每月 收入	(C) Number of Employees at Date of Survey (excl. trainees) 現有僱員人數 (受訓者除外)			(D) No. of Vacancies at Date of Survey (excluding trainees) 現有 空缺額 (受訓者 除外)	(E) No. of Trainees at Date of Survey 現有 受訓者 人數	Column B	
Title 職稱	Rec. Type	Code No. 編號	Code No. 編號	Direct 直接僱員	Sub- contractors' 分包商僱員	Self- employed 自僱人士	24-26	27-29	Code 編號	Monthly Income Range 每月總收入幅度
		8-10	11	12-15	16-19	20-23				
1	2								1.	Under \$7,001 以下
2	2								2.	\$7,001 - \$10,000
3	2								3.	\$10,001 - \$13,000
4	2								4.	\$13,001 - \$18,000
5	2								5.	\$18,001 - \$25,000
6	2								6.	\$25,001 - \$35,000
7	2								7.	\$35,001 - \$50,000
8	2								8.	Over \$50,000 以上
9	2									
10	2									
11	2									
12	2									
13	2									
14	2									
15	2									
16	2									
17	2									
18	2									
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26	2									
27	2									
28	2									
29	2									
30	2									
31	2									
32	2									
33	2									
34	2									
35	2									

Note 1 If additional lines are necessary, please tick here and enter on supplementary sheet(s).
附註一 若此頁填滿，請先將 (✓) 號填入此 內，然後在附頁繼續填寫。

Note 2 The term 'trainees' includes all trainees and apprentices.
附註二 「受訓者」包括正在接受各種訓練的人士及學徒。

The 2005 Manpower Survey of the
Building and Civil Engineering Industry
土木工程及建築業二〇〇五年人力調查

Explanatory Notes

附註

1. Before completing the questionnaire, please read carefully the job titles and job descriptions in Appendix C.
填寫調查表前，請先詳閱附錄 C 所列的職稱與工作說明。
2. Please complete the columns ('A' to 'E') of the questionnaire and insert a zero (0) for any column not applicable to your establishment.
請填寫表內各欄 ('A' 至 'E')，並在貴機構不適用的各欄內填入 (0) 符號。
3. Job Titles - Column 'A'
職稱 - 'A' 欄
 - (a) Please enter into column 'A' those job titles together with their appropriate code numbers specified in Appendix C, applicable to your establishment/site in order of their skill levels (i.e. technologist level jobs first followed by technician, skilled/semi-skilled and general worker level jobs).
請將附錄 C 內適用於貴機構／地盤的職稱連同編號，按其技能等級，填入 'A' 欄內。(先填專業人士／技師，其後填寫技術員、技工及半技術及普通工人。)
 - (b) Please add in column 'A' titles of any jobs not mentioned in Appendix C, briefly describe them and indicate their skill levels.
如貴機構另有技術性職稱未載於附錄 C，請一併填入 'A' 欄內，並扼要說明其工作性質及技能等級。
 - (c) Please classify an employee at the professional/technologist level according to his basic training and professional discipline, e.g., a civil engineer performing duties such as contract administration, project management or site management should be classified as a civil engineer.
如屬專業人士／技師級僱員，請根據其基本訓練及專業教育分類。例如，某土木工程師雖擔任合約管理、工程管理或地盤管理等職務，仍應列為土木工程師。

- (d) Please classify an employee according to his main duty irrespective of any additional secondary duties he may be required to perform, (e.g. a technician, who works mainly as a site foreman but is also required to perform the work of a draughtsman occasionally, should be classified as a site foreman and not as a draughtsman).

請根據僱員的主要職務分類，而不以其兼任的其他職務分類（例如，某技術員的主要職務為地盤管工，但間中亦須擔任繪圖員的工作，則應歸類為地盤管工，而非繪圖員）。

4. Total Monthly Income Range of Employees - Column 'B'

僱員每月總收入幅度－‘B’欄

Please enter into this column the average monthly income range code during the past 12 months (1.2.2004 - 31.1.2005) for each type of employees. Monthly income should include basic wages, regular overtime pay, cost of living allowance, meal allowance etc., if any. If you have more than one employee doing the same job, please enter the average figure.

請在‘B’欄填入每類僱員過去十二個月（指二〇〇四年二月一日至二〇〇五年一月三十一日期間）平均每月收入幅度編號；這包括底薪、定期超時工作工資、生活津貼、膳食津貼等。若從事同類工作的僱員多於一名，則請取其平均收入。

5. Number of Employees at Date of Survey (Excluding Trainees) - Column 'C'

現有僱員人數（受訓者除外）－‘C’欄

Direct employee includes both permanent and casual workers directly employed by your establishment. Sub-contractor's employee means those workers employed by your sub-contractors who work in your sites during the period of survey. Self-employed workers are separately entered.

直接僱員包括貴機構直接僱用的長工及散工。分包商僱員則指調查期間分包商所直接僱用在地盤工作的工人。自僱人士包括非直接僱用的人士，請分開填報。

In the case of the office of an establishment, only employees normally stationed in the office need to be filled in. Employees stationed in sites should only be enumerated in the sites.

若為機構辦事處，只須填寫通常在辦事處工作的僱員。駐守地盤的僱員只須在地盤填報時一併呈報。

6. Number of Vacancies at Date of Survey (Excluding Trainees) - Column 'D'

現有空缺額（受訓者除外）－‘D’欄

Please fill in the number of existing vacancies (excluding those for trainees).

請填入貴機構現有的空缺數目（受訓者的空缺額除外）。

‘Existing vacancies’ refer to those unfilled, immediately available job openings for which the establishment is actively trying to recruit personnel at date of survey.

「現有空缺額」是指該職位仍懸空，須立刻填補而現正積極招聘人員填補。

7. Number of Trainees at Date of Survey - Column 'E'
現有受訓者人數—'E' 欄

Please fill in the total number of employees undergoing training.
請填寫正在接受訓練的僱員人數。

8. Example
例子

To facilitate proper completion, an example is given on the next page for your reference.

為協助閣下填表，現將例子附錄於後，以供參考。

(A) Job 工作 (See Appendix C) (見附錄 C)		(B) Monthly Income 每月 收入		(C) Number of Employees at Date of Survey (excl. trainees) 現有僱員人數 (受訓者除外)			(D) No. of Vacancies at Date of Survey (excluding trainees) 現有 空缺額 (受訓者 除外)	(E) No. of Trainees at Date of Survey 現有 受訓者 人數	<u>Column B</u> Enter into cloumn B employees' average monthly income range according to the following code: 請將僱員平均每月總收入幅度按照 下列類別編號填入(B)欄內：		
Title 職稱	Rec. Type	Code No. 編號		Direct 直接僱員	Sub- contractors' 分包商僱員	Self- employed 自僱人士	24-26	27-29		Code 編號	Monthly Income Range 每月總收入幅度
		8-10	11								
1	Site Foreman	2	2 1 1	5	2	0	1 5	1	1	1.	Under \$7,001 以下
2	Bricklayer	2	3 0 5	4	0	2 0	1 0	3	3	2.	\$7,001 - \$10,000
3		2								3.	\$10,001 - \$13,000
4		2								4.	\$13,001 - \$18,000
5		2								5.	\$18,001 - \$25,000
6		2								6.	\$25,001 - \$35,000
7		2								7.	\$35,001 - \$50,000
8		2								8.	Over \$50,000 以上
9		2									
10		2									
11		2									
12		2									
13		2									
14		2									
15		2									
16		2									

**JOB DESCRIPTIONS FOR PRINCIPAL JOBS
IN THE BUILDING AND CIVIL ENGINEERING INDUSTRY**

General Definition

Professional/Technologist - A professional/technologist is a person who applies his professional skills to a wide range of technical activities and is able to use his knowledge and experience to initiate practical developments. He is expected to accept a high degree of responsibility and, in many cases, to push forward the boundaries of knowledge in his particular field. A professional/ technologist should normally have received education and training equivalent to that required for corporate membership of a professional institution.

Technician - A technician is one who occupies a position between the professional/technologist and the tradesman. His education, training and practical experience should enable him to apply proven techniques to solve technical problems. He is expected to carry a measure of technical responsibility, normally under the guidance of a professional/technologist.

Skilled Worker - A skilled worker should be able to apply a range of skills and knowledge relevant to his trade with minimum direction or supervision. He should hold a trade test certificate or has equivalent qualification and experience such that he should have adequate technical knowledge which enables him to acquire new skills to cope with the changing technologies. Some categories of skilled workers are required by law to hold relevant licences issued by appropriate authorities.

Semi-skilled Worker - A semi-skilled worker is one who possesses skill level and knowledge in between that of a skilled worker and a general worker. He should possess an intermediate trade test certificate or have equivalent qualification and experience. Under certain trades, the semi-skilled worker category is not applicable as some existing legislations only allow a fully qualified worker to carry out the work.

General Worker - A general worker normally performs general cleaning, minor excavation work and other simple duties as directed by the skilled worker or other supervisory staff. He should possess simple job related skills which may be acquired on-the-job or off-the-job.

Note: All job titles mentioned in this Job Description apply to both male and female workers.

土木工程及建築業
主要職務的工作說明

定義

專業人士／技師 – 專業人士／技師乃指具有專業技能的人員，能將專業技能應用於多項技術活動，且能運用其知識及經驗領導工作發展；此外，亦須肩負重責；經常拓展其本行的知識領域。專業人士／技師一般須具有相當於專業學會正式會員所需的教育和訓練。

技術員 – 技術員乃指技能等級介乎專業人士／技師與技工之間的人員，曾受一定的教育、訓練以及具備實務經驗，能運用已確立的方法解決技術問題；此外，一般能在專業人士／技師的指示下，肩負部分技術責任。

熟練技工 – 熟練技工乃特定行業的技術工人，能在極少指示及督導下，將有關技術及知識應用於工作上。此外，技工須持有技能測試證書或具備等同的學歷及經驗，以便有足夠的專門知識，學習新技術，配合科技的發展。根據法例，某些建造行業的技工須持有有關機構所發的牌照才可從事指定類別的工作。

半熟練技工 – 此類工人的技術和知識水平一般介乎熟練技工與普通工人之間。他們須持有中級工藝測試證書或具備等同的學歷及經驗。由於法例規定某些指定工作須由合資格技工執行，該等工作並不設有半熟練技工的類別。

普通工人 – 普通工人通常負責技工或其他監督人員指派的簡單職務、一般清潔及小規模的挖掘工作等。普通工人須具備簡單的工作技能，該等技能可透過在職或職外訓練獲得。

注意：本工作說明的所有職務名稱均適用於男性或女性工作人員。

Code 編號	Job Title 職 稱	Job Description 工作說明
PROFESSIONAL/TECHNOLOGIST 專業人士／技師		
101	Architect 建築師	<p>Plans, designs and supervises the erection of all types of building in compliance with building ordinance, regulations and requirements of public utilities. He is responsible for all stages and facets of a building project including advice on the brief, feasibility and sketch-planning, estimates, specifications, contract drawing and documents, tender action, contract supervision, and financial control. He also co-ordinates the work of allied disciplines engaged on building projects.</p> <p>根據建築條例、規則及各公用事業公司的規定，策劃、設計及監督各類建築物的興建。負責每一建築計劃各階段及層面的工作，包括就以下事項提供意見：建築概要、可行性及簡圖策劃、預算、章程、承建圖則及文件、投標步驟、工程監督及經費控制。統籌與建築工程有關的工作。</p>
102	Builder/ Construction Manager 營造師	<p>Directs and assumes responsibilities for all aspects of construction projects in accordance with the agreed method, procedure, budget and specifications; co-ordinates work of main contractor, sub-contractors, specialist contractors and suppliers; liaises with architects, engineers, surveyors, specialist consultants, contractors and government departments; reviews, inspects, evaluates and reports on the quality, progress and cost of works and adjusts schedule as necessary.</p> <p>按照議定方法、程序、預算及章程，管理建築工程各項工作；協調總承建商、各分包商、專門承造商及供應商負責的工作；與建築師、工程師、測量師、專業顧問、承建商及各政府部門聯絡；對工程的質素、進度及成本進行檢討、視察、評估及提交報告，並在需要時修訂工程進度計劃。</p>
103	Building/ Maintenance Surveyor 屋宇／保養測量師	<p>Deals with the planning, administration and co-ordination of all types of works (including maintenance) to buildings and land with particular cognizance of public health, planning and building regulations requirements.</p> <p>策劃、管理及協調各類屋宇及土地工程（包括保養工程），並須注意公共衛生、規劃及建築條例的規定。</p>

Code 編號	Job Title 職 稱	Job Description 工作說明
PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
104	Civil Engineer 土木工程師	<p>Plans, designs, constructs and supervises the construction of all civil engineering works required for the health, welfare, safety, employment and pleasure of mankind, and for development of natural resources and environmental control. Usually specialises in one or more of the following:</p> <ol style="list-style-type: none"> (1) structural engineering (2) geotechnical engineering (3) hydraulic engineering (4) highway engineering (5) material engineering (6) traffic and transportation engineering (7) railway engineering (8) maritime engineering (9) airport engineering (10) other civil engineering fields <p>策劃、設計、建造及監督所有為人類衛生、福利、安全、就業與娛樂而進行的土木工程，與為天然資源發展及環境控制而設的其他建設、通常專於下列一種或多種工作：</p> <ol style="list-style-type: none"> (1) 結構工程 (2) 土力工程 (3) 水力工程 (4) 公路工程 (5) 材料工程 (6) 交通及運輸工程 (7) 鐵路工程 (8) 海事工程 (9) 機場工程 (10) 其他土木工程
105	Construction Plant Engineer 建造機械工程師	<p>Plans, Designs and Supervises the construction, utilization, repair and maintenance of construction plants and machinery.</p> <p>策劃，設計及監督建造機械及設備的製造，使用及維修。</p>
106	Environmental Engineer 環境工程師	<p>Conceives, designs, appraises, directs, manages and supervises the construction of engineering works for the protection and promotion of public health and for the improvement of man's environments; investigates, improves and rectifies engineering works and other projects that are capable of injuring public health by being faulty in conception, design, direction or management.</p> <p>構想、設計、評估、指導、管理及監督各種工程，以保護及促進公眾衛生與改善人類環境；調查、改良及糾正在構想、設計、指導或管理方面出錯以致損害公眾衛生的各種工程及其他計劃。</p>

Code 編號	Job Title 職 稱	Job Description 工作說明
PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
107	Estate Surveyor 產業測量師	(Job not applicable in this Survey)
108	Geotechnical Engineer 土力工程師	Plans, designs and supervises the construction and maintenance of geotechnical aspects of earth works and foundation works, and the development of natural resources for the construction industry. 策劃、設計及監督土力工程及地基工程土力項目的建造與保養，以及為建造業開發天然資源。
109	Interior Designer 室內設計師	Plans and designs interiors and supervises interior building contracts normally within an existing building. 策劃及設計建築物內部，並監督室內設計建築合約。
110	Land Surveyor 土地測量師	Undertakes the physical measurement of land and collates data for the preparation of plans and maps including cadastral surveying for land registration, topographical surveying, geodetic surveying and hydrographic surveying. 從事土地的實體測量及整理資料以編製圖則及地圖，其工作包括地籍測量、地形測量、大地測量及水文測量。
111	Landscape Architect 園景規劃師	Identifies and advises on construction projects requiring landscaping and other major landscaping projects; designs landscaping; organises and supervises landscaping work; and liaises with relevant authorities and other professionals. 確定需要美化環境的建造工程與其他美化環境主要工程，並提供意見；設計美化環境；組織及督導環境美化工作；以及與有關當局及其他專業人士聯絡。
112	Quantity Surveyor 工料測量師	Deals with the following aspects of building and civil engineering design and construction administration: (1) design cost and cost planning, (2) pre-contract documentation including bills of quantities and/or contract specifications, (3) tendering procedures, contractual agreements and advice on selection of tenders, (4) post contract services including measurement of work, preparation of interim and final payment certificates and settlement of other contractual claims. 處理下列各方面的屋宇及土木工程設計與建造管理工作： (1) 設計成本及成本策劃， (2) 訂定合約前的文件，包括工程數量單及／或合約章程， (3) 投標手續、合約協定，並就選取投標提供意見， (4) 訂定合約後的服務，包括估量工程、編製中期與末期承建費証書，以及解決其他與合約有關的索償。

Code 編號	Job Title 職 稱	Job Description 工作說明
PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
113	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。
114	Structural Engineer 結構工程師	Engages in one or more of the following activities (This job title does not refer to a civil engineer engaged in structural engineering work): (1) investigates structural engineering problems, (2) designs and advises on structures of industrial, commercial, public and residential buildings, (3) plans and supervises their erection, maintenance and repair. 從事下列一項或多項工作(從事結構工程的土木工程師並不包括在此工作類別內)： (1) 研究結構工程問題， (2) 設計工業、商業、政府及住宅樓宇的結構，並提供專業意見， (3) 計劃和監督此等樓宇的建造與維修。
115	Town Planner 城市設計師	Prepares and implements town plans at various levels, in the form of maps and planning reports; and undertakes planning studies, for the provision of a satisfactory physical environment in the urban and rural areas with a view to promoting the health, safety, convenience and general welfare of the community. 以地圖及設計報告方式製備及實行各階段的城市設計計劃；從事設計研究，為市區及郊區提供良好自然環境，以促進社會的公眾衛生、安全、利便及福利。
116	Engineering Geologist 工程地質學家	Prepare geological maps; interpret aerial photographs; undertake terrain evaluation studies; provide an engineering geological advisory service related to landslip studies, quarrying, fill resources, materials testing, emergency services; check geological aspects of works design and construction. 繪製地質圖；解析空中拍攝的照片；進行地分析研究；就有關山泥傾瀉調查、採石工程、填料資源及材料試驗等提供工程地質方面的意見；緊急服務；審核工程設計及施工的地質問題。

Code 編號	Job Title 職 稱	Job Description 工作說明
PROFESSIONAL/TECHNOLOGIST (Continued) 專業人士／技師（續）		
117	Quality Control/ Assurance Engineer 品質工程師	Plans, directs and supervises all technical aspects in all phases of the building construction engineering process. Plans, supervises and co-ordinates the quality control and assurance activities to ensure materials and processes complying with standards, specifications, safety and environmental regulations, especially under the ISO-9000 and ISO-14000 series. 策劃、指導及監督土木工程及建築過程中的各種技術工作的品質管理，確保材料及過程均符合相關標準及規格，尤其是現行 ISO-9000 及 ISO-14000 的規範。
118	Building Services Engineer 屋宇設備工程師	Designs and advises on building services in buildings. Plans, supervises and coordinates their installation, testing, maintenance and repair. It is a multi-discipline job. 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。此為一個多門知識的職務。
TECHNICIAN 技術員		
201	Architectural Technician/ Draughtsman 建築技術員／ 繪圖員	Interprets the Architect's initial design concepts and sketches into a practical building solution, and translates this information into submission/contract drawings, taking due account of the constraints imposed by economic, environmental, technological and legislative requirements; coordinates information and works of other disciplines involved including statutory bodies; assists in the checking of shop drawings and prepares site sketches for projects at construction stage; prepares from sketch designs, general and detailed drawing under the supervision of architects, engineers, surveyors or contractors. 考慮到經濟、環境、技術及法例的限制，將建築師的初步設計概念及草圖製成工程繪圖；協調其他行業，包括法定機構的工作；協助查核裝配圖，以及為建築階段工程預備工地草圖；在建築師、工程師、測量師及承建商的監督下根據設計概要繪製一般及明細圖則。
202	Assistant Safety Officer/Safety Supervisor 助理安全主任／ 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. 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。

Code 編號	Job Title 職 稱	Job Description 工作說明
TECHNICIAN (Continued) 技術員 (續)		
203	Civil/Structural/ Geotechnical Engineering Technician 土木／結構／ 土力工程技術員	Carries out civil/structural/geotechnical engineering work under the supervision of a civil/structural/geotechnical engineer. 在土木／結構／土力工程師督導下，從事土木／結構／土力工程工作。
204	Clerk of Works/ Inspector of Works/ Works Supervisors 監工	Acts as the representative of the owner, inspects building and civil engineering construction works (including all maintenance works) to ensure conformity with contracts, drawings, specifications, workmanship standards and relevant legislation. 代表業主視察建築及土木工程（包括所有保養工程）以確保符合合約、圖則、章程、規格及有關法例。
205	Construction Plant Technician 建造機械技術員	Performs tasks contributory to the design, construction, utilisation, repair and maintenance of construction plants and machinery. 協助設計、製造、使用及維修建造機械及設備。
206	Construction Purchaser/ Storekeeper 建造物料採購員／ 倉庫管理員	Purchases construction materials; plans and co-ordinates deliveries of materials to match progress; receives and despatches materials on site and ensures their security. 採購建造物料；策劃及協調物料的運送，以配合工程進展；在地盤負責收發及看管物料。
207	Estimator 估價員	Obtains basic data and calculates from plans and details, the probable cost of construction projects with reference to factors such as materials, labour, equipment, overheads and profit. 取得基本資料，並根據圖則與詳圖，因應材料、人工、設備、雜項及利潤等因素，計算建造工程的大約費用。
208	Interior Design Technician 室內設計員	Plans and designs, under the supervision of an interior designer, interiors normally within an existing building. 在室內設計師的督導下，策劃及設計建築物內部。
209	Laboratory Technician (Construction Materials/Soils) 建築材料試驗員	Receives, documents and tests, in accordance with relevant standard specifications samples of soils, construction materials or components; prepares test reports for certification by the appropriate technologist. 按照有關標準規格收取、記錄與試驗泥土、建築材料或組合件的樣本；編寫試驗報告，以便有關技師簽發證明。
210	Site Agent 地盤總管	Plans, organises, directs and co-ordinates all activities and resources on the construction site through sub-agents and general foremen in accordance with the agreed method, procedure, budget and specifications. 按照議定方法、程序、預算與章程，並在副手及總管工協助下，策劃、組織、管理及協調地盤的全部工作及資源。

Code 編號	Job Title 職 稱	Job Description 工作說明
TECHNICIAN (Continued) 技術員 (續)		
211	Site Foreman 地盤管工	Supervises, directs and co-ordinates normally under the general control of the site agent, the activities of workers engaged in construction works and requisitions, receives and inspects materials and supplies. 通常在地盤總管的管轄下，監督、指揮及協調建造工程工人的工作，並負責申領、接收及檢查材料與供應品。
212	Surveying Technician (Building) 屋宇測量員	Assists the building surveyor in the planning, administration and co-ordination of works to buildings and land. 協助屋宇測量師策劃、管理及協調屋宇及土地工程。
213	Surveying Technician (Estate) 產業測量員	(Job not applicable in this Survey)
214	Surveying Technician (Land) 土地測量員	Assists the land surveyor in carrying out surveys and setting-out work, and supervises chainmen and survey labourers. 協助土地測量師從事測量，負責開線及確定平水。督導丈量及測量工人。
215	Surveying Technician (Quantity) 工料測量員	Assists the quantity surveyor in preparing bills of quantities by performing taking-off, working-up and abstracting, and measuring and valuating completed works or variations. 協助工料測量師編製工程數量單，量度各項完成工程或更改工程，及計算其價值。
216	Surveying Technician (Town Planning) 城市設計員	Assists the town planner in the preparation and implementation of town plans at various levels and in the undertaking or planning studies. 協助城市設計師製備及實行各階段的城市設計計劃，以及從事設計研究工作。
217	Quality Control/ Assurance Technician 品質控制／保證技術員	Performs technical tasks, normally under the direction of a quality control/assurance engineer, contributory to quality control/assurance of in-coming materials and parts, assembly process, and finished products to ensure compliance with standards and specifications, especially under the ISO-9000 and ISO-14000 series. 通常在品質控制／保證工程師的指導下，擔任技術性工作，如控制／保證交來物料及配件、在裝嵌程序中的半製成品及製成品的品質，俾能符合標準及規格，特別是 ISO-9000 及 ISO-14000 的規範。

Code 編號	Job Title 職 稱	Job Description 工作說明
TECHNICIAN (Continued) 技術員 (續)		
218	Building Services Technician/ Electrical Engineering Technician/ Mechanical Engineering Technician 屋宇設備技術員/ 電機工程技術員/ 機械工程技術員	Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design, installation, operation, maintenance and repair of building services systems and equipment, electrical and mechanical engineering systems and equipment. Assists to plan, coordinate and supervise their projects. This is a multi-discipline job. 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、電機或機械裝置及設備，並協助工程師策劃、協調及管理有關計劃。此為一個多門知識的職務。
219	Building Services and Engineering Supervisor 屋宇設備技術及工程監督	To engage mainly in decoration/renovation work and take an overseeing position. 主要負責監督裝修工程的人員。
SKILLED & SEMI-SKILLED WORKER 技工及半熟練技工		
301	Asphalter (Water Proofing) 瀝青工 (防水)	To lay sheathing felt or paint with primer where required; to pour hot asphalt or proprietary waterproofing material on prepared surfaces; to spread and level hot asphalt or proprietary waterproofing material to fit corners, skirtings, flashings and outlets, etc. 在需要的地方先行鋪設墊紙或塗上瀝青底油；在準備好的表面倒上熱瀝青或專利防水物料；撥勻及推平熱瀝青或專利防水物料以配合角位、牆腳線及洞孔邊緣等。
302	Asphalter (Road Construction) 瀝青工 (道路建造)	To mix, place and compact bituminous material using vibrating machines; to level and smoothen bituminous material according to specified level marks. 混和、鋪放和用震動器壓實瀝青；按指定平水推平及燙平瀝青。
303	Bamboo Scaffolder 竹棚工	To erect and dismantle bamboo scaffolding required in construction, repair or decoration work; and other forms of structures. 搭建及拆卸用於建造、修理或裝修工程的竹棚及其他各類構築物。
304	Bar Bender and Fixer 鋼筋屈紮工	To cut, bend and fix reinforcement steel bars according to drawings and bending schedules. 依照圖則及鋼筋表將鋼筋裁剪，屈曲及紮穩。
305	Bricklayer 砌磚工	To lay bricks and other building blocks, except stone and marble, for construction and repair of walls, partitions, arches, openings and other structures. 鋪砌磚塊（石塊及雲石除外）以建造及修理牆壁、間隔、拱門、洞口及其他構築物。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
306	Carpenter (Fender) 木工（護木）	To remove, cut, and erect timber fenders for protection of piers, seawalls, dolphins and landing steps, etc. 移除、切割及架設護木，作保護碼頭、海堤、繫船柱、登岸梯級等用途。
307	Carpenter (Formwork) 木模板工	To erect and strike timber formwork for buildings and civil engineering construction works. 架設及拆卸用於樓宇建造或土木工程の木模板。
308	Concrete Repairer (Spalling Concrete) 混凝土修補工 （混凝土剝落）	To repair substandard or spalled concrete or reinforcement bar using concrete or other approved materials. 利用混凝土或其他經批准的物料，修補不合標準或剝落的混凝土或鋼筋。
309	Concretor 混凝土工	To mix, place and compact concrete using vibrating machines; to carry out curing, levelling and smoothing of concrete. 混和、澆置及使用震搗機搗實混凝土；養護、平整及燙平混凝土。
310	Construction Plant Mechanic 建造機械技工	To maintain and repair building and civil engineering plant and machinery. 保養及修理建築及土木工程機械設備。
311	Curtain Wall Installer 幕牆工	To install metal frames, fix glass or other material panels for curtain walls. 安裝幕牆金屬架，裝嵌玻璃或其他物料的嵌板。
312	Demolition Worker (Building) 清拆工（建築物）	To demolish, dismantle and remove buildings or structures of any part thereof. 清拆、拆卸及移除建築物或結構，或建築物或結構之部份。
313	Diver 潛水員	To perform under-water operations related to inspection, construction and repair of structures and demolition; to prepare reports on all the foregoing operations. 執行各項於水底進行有關於檢查、建造與修理及清拆各種構築物的工作；編寫有關上述各種工作的報告。
314	Drainlayer 地渠工	To lay and join underground drains, construct manholes, install pipes and fittings, construct beds, haunches and surrounds pipes with concrete. 敷設及連接地下渠管、建造沙井，裝設渠管及配件，用混凝土將渠管墊好，或把渠管兩側批斜及四週圍好。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
315	Electrician (Main Contractor's) 電氣技工 (承建商所僱用)	To install, test and maintain electrical wiring, fittings, plants and equipment required for construction activities in construction sites. (This job title refers to electricians employed directly by the main contractor and excludes those employed by the electrical sub-contractor.) 裝設、測試及保養地盤內工程進行所需的電線、電氣配件、機械及設備。 (此職稱乃指由總承建商直接僱用的電工，並不包括由電氣分包商所僱用者。)
316	Floor Layer 鋪地板工	To lay timbre, PVC, linoleum and similar flooring materials to floors, stair threads, skirtings, etc. (This job title excludes the laying of marble and granite slabs (or similar stones) on floor 將各種木地板、塑料地板、膠地蓆及類似材料鋪放在地面、梯級、牆腳線等處。 (此職稱不包括鋪設雲石、花崗石(或類似石材)地板)
317	Gas Plumber 燃氣喉工	To install, repair and maintain gas mains and pipes in buildings supplying consumers from mains or storage tanks. 裝設、修理及保養由總喉管或儲存庫通往大廈用戶的氣管。
318	General Welder 普通焊接工	To carry out general welding or cutting work by electric arc, oxy-acetylene flame or other welding processes. 以電弧、氧乙炔焰或其他焊接工序，執行一般焊接工作或切割。
319	Glazier 玻璃工	To measure, cut and fix glass panes with silicone plastic or beads; to grind or round edges etc. 量度、切割及安裝玻璃，並利用硅塑料或圓線條安裝玻璃，磨滑玻璃的邊或角。
320	Ground Investigation Operator/Driller/Borer 岩土勘探工／ 鑽井工／鑽孔工	To set up and operate drilling plant for ground investigation purposes; to take and store soil and rock samples or specimen for inspection and logging by engineers or technicians or logging geologists; to work with geotechnical field technicians to perform in-situ field tests. 裝置及操縱鑽土機械設備，以作岩土勘探用途；取得及保存岩土樣本，待工程師或技術員或地質學家檢查及紀錄；協助地質技術員實地作測試。
321	Grouting Worker 灌漿工	To mix cement or other materials to carry out underground grouting works. 攪拌英泥或其他材料，進行地下灌漿工作。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
322	Joiner 細木工	To carry out all internal and external woodwork (except formwork and fender) using both hand tools and woodworking machinery. 運用手動工具及造木機械處理戶內外一切與木工有關的工作(除模板及護木外)。
323	Leveller 平水工	To read and interpret drawings; to set up job lines and levels and prepare templates. 閱讀及理解圖則；開線及定平水，並製備模型板
324	Marble Worker 雲石工	To set out, measure, cut and set marble slabs, granite slabs or similar stones on walls, floors, or other surfaces; to grind and polish marble, granite or similar stones. 劃線、量度及割切雲石塊、花崗石塊或類似石材，將之鋪砌在牆壁、地面或其他表面上；磨光及擦亮雲石塊、花崗石塊或類似石材。
325	Marine Construction Plant Operator 海面建造機械 操作工	To operate one or more types of plant and equipment for construction at sea including derrick, boom-grab bucket and boom-hook. (This job excludes mariners such as coxswain and barge and dredger crew responsible for the operation of the vessel (in contrast with construction plant). 操作一類或多類海面建築設備及器材包括吊桿、吊臂(夾吊)及吊臂(吊)。 (此職稱不包括操作船隻(相對於建造機械)的海員，如舵手、駁船及疏浚船的船員)
326	Mason 砌石工	To split and shape stones, and build and lay stone works to specified thickness, patterns and shapes. 依照指定厚度、款式及形狀，將石塊分割及切鑿，並鋪砌石塊及進行築石工程。
327	Metal Scaffolder 金屬棚架工	To erect, dismantle, maintain and repair metal scaffolding required in construction, repair or decoration work. 搭建、拆卸及維修用於建造、修葺或裝修工程的金屬棚架。
328	Metal Worker 金屬工	To fit, assemble, weld and forge metal parts; to install non-structural metalwork; to operate metalworking machines; to make templates; to repair metal formwork. 打磨、裝配、焊接及鍛冶金屬配件；安裝非結構用的金屬製件；操作金工機器；製作樣板；修理金屬模板。
329	Painter & Decorator 髹漆及裝飾工	To prepare surfaces, fittings and fixtures of buildings and other structures for painting and decorating; to apply paints or similar protective and decorative materials; to lay out and write letters, characters and other signs. 處理屋宇及其他構築物配件及設備的表面，以便進行髹漆及裝飾的工作；髹上漆油或同類保護性及裝飾性材料；設計與書寫中英文字體及其他標誌。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
330	Piling Operative 打樁工	To set up piling rig for driven or bored piles works, with basic knowledge of method, hand signals and geology related to piling. 安裝打樁架以便打樁或造鑽孔樁，對打樁的施工方法、手號及地質有基本的認識。
331	Pipelay 敷喉管工	To lay water mains, make pressurised joints by mechanical means, install pipes and fittings, construct beds and haunches and surround pipes with concrete. 敷設主供水喉管，以機械方式接駁經加壓喉管，裝設喉管及配件，用混凝土將喉管墊好，及把喉管兩側批斜及四週圍好。
332	Builder's Lift Operator 建築工地升降機操作員	To operate builders' lifts (passenger hoist) on construction site. 在建造工地操作建築工地升降機（工人 ）。。
333	Plant and Equipment Operator (Load Shifting) 機械設備操作工 (負荷物移動機械)	To operate one or more types of construction plant and equipment for load shifting including excavator, bull dozer, loader, mini-loader, mini-loader with attachments etc. 操作一類或多類用於負荷物移動的建造機械設備，包括挖掘機、推土機、搬土機、小型裝載機及小型裝載機連配件等。
334	Plant and Equipment Operator (Hoist and Crane) 機械設備操作工 (起重機及吊機)	To operate one or more types of construction plant and equipment for material-handling purposes including crawler-mounted mobile crane, wheeled telescopic mobile crane, tower crane, truck-mounted crane, gantry crane etc. 操作一類或多類建造機械設備以輸送材料，包括履帶式固定吊臂起重機、輪胎式液壓伸縮吊臂起重機、塔式起重機、貨車吊機、及龍門式起重機等。
335	Plant and Equipment Operator (Piling) 機械設備操作工 (打樁)	To operate piling machines for driven or bored pile works. 操作打樁機以便作撞擊式打樁或造鑽孔樁。
336	Plant and Equipment Operator (Tunnelling) 機械設備操作工 (隧道)	To operate one or more types of construction plant and equipment inside tunnel including tunnel boring machine, locomotive, jumbo drilling machine and segment erection machine etc. 操作一類或多類用於隧道內的建造機械設備包括鑽挖機械、鑽孔機、機車、拱塊安裝機械等。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
337	Plasterer 批盪工	To apply coats of plaster to and render walls and ceilings to produce a finished surface; to screed floors, staircases and roofs. 將牆壁及天花逐層批盪直至完成表層；盪平地台、樓梯及天台面。
338	Plumber 水喉工	To assemble, install, repair and maintain pipes, fittings, sanitary fixtures, cold, hot and flush water systems, and soil, waste and rain water drainage systems in buildings. 裝配、安裝及維修屋宇的喉管及其配件系統、糞便、穢水及雨水排洩系統。
339	Rock-Breaking Driller 鑽破工（風炮工）	To operate pneumatic or hydraulic drill to make holes and openings or break up concrete, rock or other hard materials 操作氣鑽或油壓鑽鑽孔或將混凝土、石或其他硬物鑽開。
340	Prestressing Operative 預應力（拉力）工	To lay and fix prestressing tendons and ducts ; to assemble prestressing couplings and anchorages and perform prestressing operation and grouting of ducts. 敷設及固定預應力鋼筋束及管道；裝嵌管接頭及錨具；施加預應力及執行管道灌漿工作。
341	Rigger/Metal Formwork Erector 索具工（叻）／ 金屬模板裝嵌工	To set up lifting apparatus and equipment for lifting and lowering of materials, etc; to fix and dismantle large panel metal formwork. 裝設吊升台架及設備，以起落輸送物料；裝嵌及拆除大型金屬模板。
342	Shotcretor 噴射混凝土工	To operate spraying machines to apply shotcrete or gunite. 操作噴射混凝土或噴射水泥沙漿工具進行噴漿工作。
343	Shotfirer 爆石工	To calculate, prepare, load and detonate explosive charges in mines, quarries, civil engineering and building sites. 在礦場、採石場、土木工程及建築地盤從事計算、準備、安裝及引爆炸藥。
344	Slope Maintenance Worker 斜坡修葺工	To perform slope protective and stabilising works. 執行斜坡防護及鞏固工程。
345	Structural Steel Erector 結構鋼架工	To drill, cut and shape steel sections; to assemble structural members and erect steel structures by riveting or bolting; to operate power shears, flame cutting equipment and other tools. 將鋼材鑽孔、切斷及成型；以鉚釘或螺栓方法將構件裝配及建造鋼架結構；操作電剪、氧乙炔切割設備與其他工具。
346	Structural Steel Welder 結構鋼材焊接工	To cut or join structural steel sections including steel water mains or steel gas mains by electric arc, oxy-acetylene flame, or other welding processes. 以電弧、氧乙炔焰或其他焊接工序，切割或焊接結構鋼材，包括水喉或氣體鋼管。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工 (續)		
347	Tiler 鋪瓦工	To cut, shape and set tiles on walls, ceilings and floors to specified levels and patterns. 依照指定平水及圖案，切割及鋪砌磚瓦片於牆壁、天花及地台上。
348	Trackworker 鋪軌工	To lay and maintain trackworks for railways or other vehicles. 放置及保養火車或其他車輛使用的路軌。
349	Truck Driver 重型車輛駕駛員 (泥頭車司機)	To drive heavy vehicles or special purpose vehicles to transport construction equipment or materials, building debris or excavated materials within or into or out of construction sites . 駕駛重型或特別用途車輛進出建造工地或在工地範圍內，運送建築器材或材料，建築碎料或挖掘出來的沙石。
350	Window Frame Installer 窗框工	To install window frame and sash and associated water proofing work for buildings or other structures. 為樓宇及其他構築物安裝窗框及窗肉和有關防水工序。
351	Tunnel Worker 隧道工	To carry out general tunnel construction works inside tunnels including installs temporary support and working platform, ventilation duct, packer, protective fencing etc. 在隧道內執行一般隧道建造工程包括安裝臨時支架及工作台、通風喉管、封隔器及護網等工作。
352	Asbestos Abatement Worker 清除石棉工	To carry out asbestos abatement works. 執行清拆石棉的工作。
353	Hand-dug Caisson Worker 手挖沉箱工	To construct building foundation by hand-dug caisson method. 以手挖沉箱的方法來建造地基。
354	Paving Block Layer 地磚鋪砌工	To lay paving blocks on floor; to compact the base layer with vibrating machines; to cut paving blocks to fit floor layout. 將地磚鋪放在地面；基層須用震搗機壓實； 切地磚以配合地面狀況。
355	Plant and Equipment Operator (Suspended Working Platform) 機械設備操作工 (吊船)	To operate suspended working platform for carrying persons. 操作載人的吊船。

Code 編號	Job Title 職 稱	Job Description 工作說明
SKILLED & SEMI-SKILLED WORKER (Continued) 技工及半熟練技工（續）		
356	Plant and Equipment Operator (Demolition) 機械設備操作工 （清拆）	To operate powered mechanical plant or equipment in demolition works including crane, pneumatic breaker and hammer mounted on backactor etc. 操作以動力推動的機械設備或機器進行清拆工作，包括使用起重機、氣動破石機及裝有鐵鎚的鋤地機等設備。
357	Demolition Worker (Unauthorized Building Work) 清拆工(僭建物)	To demolish, dismantle and remove unauthorized building works. 清拆、拆卸及移除僭建物。
GENERAL WORKER 普通工人		
401	Chainman 測量幫工	To assist the land surveyor or surveying technician in carrying out survey work in the field; to undertake the care, transport and safeguard of all types of survey equipment. 協助土地測量師或土地測量員執行實地測量工作；搬運、保管及妥善處理各類測量儀器。
402	Concreting Labourer 混凝土幫工	To transport mixed concrete using wheel barrows or other equipment and to perform general duties during pouring of concrete. 利用手推車或其他工具運送經拌合的混凝土；在澆置混凝土時執行一般職務。
403	Diver's Linesman 潛水員幫工	To assist the diver and be responsible for communicating with the diver in diving. 協助潛水員；當潛水員執行職務期間，與潛水員聯絡。
404	Excavator 挖泥工	To perform manual excavation work. 擔任人手挖泥工作。
405	Heavy Load Labourer 抬重工	To lift, handle and transport heavy objects on site using mainly physical strength; generally requiring little skill other than basic manual lifting and handling techniques. 主要以體力抬起、處理及搬運地盤的重物；除基本體力抬重及處理技巧外，通常需要很少技能。
406	Labourer 雜工	To perform simple duties as directed by the tradesman, general cleaning or minor excavation work. 按照技工指示，擔任簡單職務、一般清潔，以及小規模的挖掘工作。
407	Sewerman 渠務工	To carry out sewer/drain tracing and flow sampling; gauges, to inspect, desilt and clear sewers/drains. 追溯污水及排水渠、取樣本；測度、視察污水及排水渠，清理淤泥及通渠。