

# Publications

## Training Manual and Job specifications

- I. *JOB TITLE* : ASSISTANT INTERIOR DESIGNER
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Interprets the Interior Designer's concepts and sketches into a practical interior space solution, and translates this information into contract drawings, taking due account of the constraints imposed by economic, social, environmental, technological and legislative requirements; Coordinates information and works of other disciplines involved including statutory bodies; Assists in the checking of shop drawings and to prepare site sketches for projects at the construction stage.
- IV. *TECHNICAL SKILLS* : Ability to:
  1. make necessary calculations, analyse data, interpret Interior Designer's design sketches and specifications and from them, produce neat and clear sketch plans, submission/contract drawings;

2. produce graphical information for presentation to client employing the use of computer media;
3. highlight technical problems and suggest solution for decision making;
4. read and understand survey drawings and site measurement and then produce any necessary plans and elevations;
5. understand and work from structural and building services drawings;
6. review and analyse the usage of interior space and to analyse any restriction on usage;
7. use colours, render simple washes and reproduce colour schemes using manual and/or computer media; and
8. construction models for feasibility studies.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. building technology;

2. building services materials and installation;
3. production of sketch plans and submission / contract drawings;
4. ordinances, regulations and codes of practices related to building works;
5. design procedures, contract documentations especially the specifications;
6. standard conventional signs and symbols in preparing drawings;
7. use of computer knowledge and computer-aided drafting;
8. drawings and record management;
9. interior / construction practice and procedures in Hong interior / construction practice and procedures in Hong Kong / China; and
10. industrial hazards associated with construction works and on-site works, and safety

precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Successful completion of a certificate or diploma course in interior design as follows:

(a) Polytechnic University

- Diploma in Interior Design

(b) Hong Kong Institute of Vocational Education

- Diploma in Interior Design
- Certificate in Interior Design

Training:

Satisfying the requirements for "Diploma! · · membership of the Chartered Society of Designers usually through submission of examples of design work and supervision.

I. *JOB TITLE* : ASSISTANT INTERIOR DESIGNER

- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Interprets the Interior Designer's concepts and sketches into a practical interior space solution, and translates this information into contract drawings, taking due account of the constraints imposed by economic, social, environmental, technological and legislative requirements; Coordinates information and works of other disciplines involved including statutory bodies; Assists in the checking of shop drawings and to prepare site sketches for projects at the construction stage.
- IV. *TECHNICAL SKILLS* : Ability to:
1. make necessary calculations, analyse data, interpret Interior Designer's design sketches and specifications and from them, produce neat and clear sketch plans, submission/contract drawings;
  2. produce graphical information for presentation to client employing the use of computer media;
  3. highlight technical problems and suggest solution for

decision making;

4. read and understand survey drawings and site measurement and then produce any necessary plans and elevations;
5. understand and work from structural and building services drawings;
6. review and analyse the usage of interior space and to analyse any restriction on usage;
7. use colours, render simple washes and reproduce colour schemes using manual and/or computer media; and
8. construction models for feasibility studies.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. building technology;
2. building services materials and installation;
3. production of sketch plans and submission / contract drawings;

4. ordinances, regulations and codes of practices related to building works;
5. design procedures, contract documentations especially the specifications;
6. standard conventional signs and symbols in preparing drawings;
7. use of computer knowledge and computer-aided drafting;
8. drawings and record management;
9. interior / construction practice and procedures in Hong interior / construction practice and procedures in Hong Kong / China; and
10. industrial hazards associated with construction works and on-site works, and safety precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Successful completion of a certificate or diploma course in interior design as follows:

- (a) Polytechnic University
  - Diploma in Interior Design
  
- (b) Hong Kong Institute of Vocational Education
  - Diploma in Interior Design
  - Certificate in Interior Design

Training:

Satisfying the requirements for "Diploma! · · membership of the Chartered Society of Designers usually through submission of examples of design work and supervision.

- I. *JOB TITLE* : ASSISTANT SAFETY OFFICER
  
- II. *JOB LEVEL* : TECHNICIAN
  
- III. *JOB DESCRIPTION* : Assists Safety Officer to promote the safety and health of persons employed in a workplace; Carried out inspection of workplace, plants, equipment or work processes and makes recommendation of measures for safety improvement; Prepares and



conducts safety trainings and safety meetings; Carries out investigation of accidents and the following-up safety actions arising from the above activities; Promotes the safety awareness of workers and supervisory personnel.

IV. *TECHNICAL SKILLS*

: Ability to:

1. identify most hazards in the environment, set-up, operation, and human behaviour in the workplace;
2. advise management on measures to eliminate or reduce any identified hazards;
3. advise management on most of the legal requirements affecting occupational safety and health, and any changes in relevant legislation;
4. prepare materials and facilities for safety trainings;
5. communication with the middle and lower levels of personnel in the workplace in an effective manner;
6. investigate and determine the

cause of any accident or dangerous occurrence of less serious nature, and recommend means for preventing recurrence;

7. analyze information of accidents and safety performance for assessing the relevant trends and the need of any improvement actions;
8. deputize in liaising with official and professional bodies related to occupational safety and health;
9. keep abreast of any new recommended codes of practice and new safety regulations.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. physical, chemical, and biological hazards;
2. health and hygiene;
3. human psychology;
4. theories of accident causation;

5. principles of accident prevention;
6. safety management;
7. risk assessment;
8. investigation technique;
9. statistics; and
10. law system and relevant Safety Ordinances and Regulations.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

A qualification satisfied the entry requirements of a Safety Officer Course organized by a professional institution.

Training:

- (i) Undertaking a course of safety education leading to the qualification for registration as a safety officer under the Factories and Industrial Undertakings (Safety Officers and Safety Supervisors) Regulations.

OR

- (ii) Completion of the Assistant Safety Officer Course conducted by the Construction Industry Training Authority.

- I. *JOB LEVEL* : **CIVIL ENGINEERING  
TECHNICIAN**
- II. *JOB LEVEL* : **TECHNICIAN**
- III. *JOB DESCRIPTION* : Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design and construction of civil engineering works; Assists to plan, coordinate and supervise civil engineering projects.
- IV. *TECHNICAL  
SKILLS* : Ability to:
  - 1. understand relevant civil engineering ordinances, regulations and codes of practice;
  - 2. undertake simple civil engineering designs;
  - 3. prepare civil engineering project plans;

4. prepare drawings and sketches in connection with civil engineering projects;
5. understand civil, structural and building services drawings;
6. solve technical problems related to civil engineering projects;
7. coordinate with related parties on matters pertaining to civil engineering projects;
8. apply computer systems on design works and analysis for civil engineering;
9. carry out quality and audit checks;
10. design, implement and maintain effective documentation systems; and
11. manage manpower and train subordinates.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. civil engineering technology;

2. maintenance technology;
3. ordinances, regulations and codes of practice related to civil engineering works;
4. construction practice and procedures in Hong Kong and China;
5. management techniques and coordination skills;
6. quality and documentation systems;
7. programming techniques for project planning;
8. computer systems for design, drafting, programming and presentation; and
9. industrial hazards associated with construction works and on-site work, and safety precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5  
with HKCEE Grade E or  
above in five subjects  
including English Language

(Syllabus on of Secondary 5 with HKCEE Grade E or above in five subjects including English Language (Syllabus B) and Mathematics or their equivalent

Training:

- (i) 4-year organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job training with a diploma of a relevant post-secondary course in an institution of technical education or equivalent.

- I. *JOB TITLE* : **CLERK OF WORKS / INSPECTOR OF WORKS**
- II. *JOB LEVEL* : **TECHNICIAN**
- III. *JOB DESCRIPTION* : Acts as the representative of the owner; Inspects building and civil engineering

construction works (including all maintenance works) to ensure conformance with contracts, drawings, specifications, workmanship standards and relevant legislation.

IV. *TECHNICAL SKILLS*

: Ability to:

1. read and interpret drawings, details, specifications, conditions of contract, health and safety plan, etc.;
2. use surveying instruments to check and verify levels, alignment, setting-out work, etc.;
3. inspect and check:
  - (a) materials;
  - (b) workmanship;
  - (c) the placement of steel reinforcement in reinforced concrete work; and
  - (d) temporary works, screens, scaffolding formwork, mechanical installations, etc.



4. conduct/witness tests as necessary on site;
5. monitor construction/maintenance work in progress;
6. prepare site records and reports;
7. advise on safe site practices;
8. liaise with other site personnel, contractors architect/ engineer utilities companies and other government departments;
9. compute estimates of completed work and recommend progress payment to contractors; and
10. monitor the application of specified techniques.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. construction technology;
2. elementary structural engineering;
3. elementary quantity and land surveying;

4. sanitation and building services;
5. Industrial hazards associated with construction works and on-site work and safety precautions to be observed;
6. ordinance and regulations related to construction works; and
7. management techniques and contract administration.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E or above in five subjects, including English Language (Syllabus B), and Mathematics or their equivalent.

Training:

4-years organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course in an institution of technical education.

I. *JOB TITLE* : CONSTRUCTION PURCHASE /

## STOREKEEPER

- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Purchases, plans and arranges delivery, receipt, documents, safe keeping and maintains inventory records of construction materials or components; Handle storekeeping and control of construction materials including transfer, distribution, security, quality and wastage of such materials.
- IV. *TECHNICAL SKILLS* : Ability to:
1. arrange and organise material purchases meeting the quality and quantity requirement in accordance with the direction from site agent or his delegates;
  2. receive and carry out inspection on materials and supplies in accordance with details and specifications, and arrange to conduct tests as necessary on site;
  3. ensure proper handling of materials transfer, distribution, storage and its timely placing of purchase order to meet construction project

requirements; and

4. ensure proper inventory records / documents be made for all material transfer transactions in accordance with specified procedures.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. general site organization, filing and management of records/documents, operation and document flow of site office;
2. understanding of construction materials, inspection and storage requirements;
3. security, safety and house-keeping of site storage spaces / areas;
4. site safety regulation and precautions related to construction works; and
5. inventory control and related documents.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E, or above in five subjects, including English Language (Syllabus B), and Mathematics or their equivalent.

Training:

2-year organised training in site material purchasing, administration, store keeping and inventory control.

- I. *JOB TITLE* : **CONSTRUCTION PLANT  
TECHNICIAN**
- II. *JOB LEVEL* : **TECHNICIAN**
- III. *JOB DESCRIPTION* : Performs technical tasks, either independently or under the direction of qualified engineer, contributory to design, installation, utilisation, repair and maintenance of construction plants and machinery.
- IV. *TECHNICAL  
SKILLS* : Ability to:
  - 1. assist in development, construction, installation, testing and maintenance of construction plants and machinery;

2. assist in the procurement of construction plants and machinery;
3. assist in the establishment of operational procedures and routine maintenance programmes for construction plants and machinery;
4. solve technical problems related to construction plants and machinery;
5. prepare engineering drawings including sketches, detail and assembly drawings;
6. inspect and evaluate the performance of construction plants and machinery;
7. coordinate with contractors, suppliers and workers for works involving construction plants and machinery;
8. assist in documentation work and preparation of technical reports;
9. supervise and give technical guidance to tradesmen and operators; and

10. observe safety precautions.

V. *TECHNICAL  
KNOWLEDGE*

: Knowledge of:

1. mechanical engineering technology;
2. basic electrical theory;
3. maintenance practice;
4. production of sketch plans and engineering drawings;
5. design procedures, contract documentations especially the specifications;
6. drawing and record management;
7. ordinances, regulations and codes of practices related to use of construction plants and machinery; and
8. industrial hazards, associated with machine operation, electrical and mechanical work, construction site and safety precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:  
  
Completion of Secondary 5  
with HKCEE Grade E or  
above in five subjects,  
including English Language  
(Syllabus B) and Mathematics  
or their equivalent.

Training:

(i) 4-year organized technician  
apprenticeship with  
attendance at a relevant  
part-time day-release or  
evening technician course up  
to the standard of higher  
certificate in an institution of  
technical education.

OR

(ii) 2-year on-the-job training  
with a diploma of a relevant  
post-secondary course in an  
institution of technical  
education or equivalent.

I. *JOB TITLE* : **FOREMAN (CONTRACTOR'S)**

II. *JOB LEVEL* : TECHNICIAN

III. *JOB DESCRIPTION* : 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.

IV. *TECHNICAL SKILLS*

: Ability to:

1. read and interpret drawings, specifications and other related documents;
2. instruct and direct workers on site and allocate work, co-ordinate the activities of workers engaged in various trades or functions on site;
3. prepare list of materials from drawings and advise on manpower requirement;
4. requisition, receive and inspect plant, materials and supplies;
5. monitor and maintain standard and quality of work in accordance with drawings and specifications;
6. inspect and ensure that all materials and work in progress meet the requirements of regulations

and ordinances;

7. inspect and approve all sub-contractors' work;
8. check work progress against the time schedule and make progress reports of work completed and recommendations for changes;
9. arrange and conduct tests as necessary on site;
10. enforce regulations regarding safety, health and environmental issues and take necessary precautions;
11. oversees general site house-keeping, security and discipline; and
12. promote good morale among workers and handle grievances.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. construction technology;
2. elementary structural engineering;

3. elementary quantity and land surveying;
4. sanitation and building services;
5. industrial hazards associated with construction works and on-site work, and safety precautions to be observed;
6. ordinances and regulations related to construction works; and
7. basic site management techniques and contract administration.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secretary 5 with HKCEE Grade E or above in five subjects, including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

4-year organised technician apprenticeship with attendance at a relevant part-time day-release or

evening technician course in an institution of technical education.

- I. **JOB TITLE** : **GEOTECHNICAL ENGINEERING TECHNICIAN**
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design and construction of geotechnical engineering works; Assists to plan, coordinate and supervise geotechnical engineering projects.
- IV. *PROFESSIONAL SKILLS* : Ability to:
1. understand relevant civil engineering ordinances, regulations and codes of practice;
  2. undertake simple geotechnical engineering designs;
  3. prepare geotechnical engineering project plans;
  4. prepare drawings and

sketches in connection with geotechnical engineering projects;

5. understand geotechnical and civil engineering drawings;
6. solve technical problems related to geotechnical engineering projects;
7. take measurements and inspection at site related to geotechnical problems;
8. coordinate with related parties for construction site matters;
9. apply computer systems on design works and analysis for geotechnical engineering;
10. carry out quality and audit checks;
11. design, implement and maintain effective documentation systems; and
15. manage manpower and train subordinates.

V. *PROFESSIONAL KNOWLEDGE* : Knowledge of:

1. geotechnical engineering technology;
2. soil properties;
3. ordinances, regulations and codes of practice related to geotechnical engineering works;
4. management techniques and coordination skills;
5. quality and documentation systems;
6. programming techniques for project planning;
7. computer systems for design, drafting, programming and presentation;
8. industrial hazards associated with construction works and on-site work, and safety precautions to be observed; and
9. environmental concerns.

VI. *TRAINING* : Preferred Entry Qualification:

Completion of Secondary 5

with HKCEE in five subjects including English Language (Syllabus Completion of Secondary 5 with HKCEE in five subjects including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

- (i) 4-years organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job training with a diploma of a relevant post-secondary course in an institution of technical education or equivalent.

- I. *JOB TITLE* : LABORATORY  
TECHNICIAN (CONSTRUCTION  
MATERIALS)
- II. *JOB LEVEL* : TECHNICIAN

- III. *JOB DESCRIPTION* : 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.
- IV. *TECHNICAL SKILLS* : Ability to:
1. carry out tests in accordance with specified procedures;
  2. collect and prepare samples in accordance with specified procedures for testing;
  3. ensure laboratory equipment is in proper working order prior to conducting tests;
  4. maintain laboratory equipment and proper records of repairs and provisions of spares;
  5. ensure the safe keeping and maintain records of test results, stores, raw materials, chemicals, tools and instruments; and
  6. assist in devising special equipment or procedures and carrying out special tests.



V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. testing and analysis of construction materials and components;
2. the operation and maintenance of laboratory equipment;
3. British Standard and other relevant specifications;
4. industrial hazards associated with construction works and on-site work, and safety precautions to be observed; and
5. ordinances and regulations related to construction works.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E, or above in five subjects, including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

4-year organised technician apprenticeship with attendance at a relevant part-time day-release

or evening technical course in an institution of technical education.

- I. *JOB TITLE* : **SAFETY SUPERVISOR**
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Assists Safety Officer to promote the safety and health of persons employed in a workplace. Job functions include assistance in the inspection of workplace, plants, equipment or works processes; the recommendation of measures for safety improvement; the conduction of minor safety meetings and tool-box trainings; the investigation of accidents; the following-up of any safety actions arising from the above activities; and the promotion of the safety awareness of workers and supervisory personnel.
- IV. *TECHNICAL SKILLS* : Ability to:
1. identify the general hazards in the environment, set-up, operation, and human behavior in the workplace;
  2. advise workers and supervisory personnel on measures to eliminate or

reduce any identified hazards;

3. communicate with the middle and lower levels of personnel in the workplace in an effective manner;
4. investigate and determine the causes of any accident or dangerous occurrence of less serious nature and recommend means of preventing recurrence;
5. collect information for analysis of accidents; and
6. identify useful safety information for circulating to relevant personnel in the workplace.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. physical and chemical hazards;
2. health and hygiene;
3. human psychology;
4. theories of accident causation;

5. principles of accident prevention;
6. safety management;
7. investigation technique; and
8. general requirements in safety regulations for each type of work.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

A qualification satisfied the entry requirements of a Safety Supervisor Course organized by the Construction Industry Training Authority, or the Occupational Safety & Health Council, or any other educational institutions.

Training:

Completion of a Safety Supervisor Course conducted by the Construction Industry Training Authority, or the Occupational Safety & Health Council, or any other educational institutions.

I. *JOB TITLE* : **SITE AGENT**

- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : 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; Co-ordinates with architects, engineers, quantity surveyors, other professionals and sub-contractors.
- IV. *TECHNICAL SKILLS* : Ability to:
1. Direct all construction functions, establish and develop methods, procedures, schedules, policies and determine the plant and labour required;
  2. Co-ordinate the work of all units and trades, foremen and sub-contractors, to ensure that work progress according to schedule and specifications;
  3. Prepare and advise on construction programmes, progress, costs, schedules and other relevant information and adjust schedules as necessary;

4. Ensure sound industrial relations, safety, health and welfare among employees and maintain overall discipline of personnel on site;
5. Ensure all materials and work in progress meet the requirements of regulations and ordinances;
6. Ensure that materials are ordered and delivered properly and at the right time, checked for quality and satisfactorily stored in accordance with required specifications and standards;
7. Ensure that work and site condition are in accordance with required standards in quality, safety, security and environment protection; and comply with relevant regulations and ordinances;
8. Allocate manpower and maintain adequate labour and plant to ensure that the programme is adhered to;
9. Liaise with clients, architects, engineers, quantity surveyors and specialist consultants, and

communicate decisions to the appropriate personnel; and

10. Ensure accurate records of all site activities are compiled and maintained.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. construction technology and practice;
2. elementary structural engineering;
3. sanitation and building services;
4. elementary land and quantity surveying;
5. principle of site management techniques and contract administration;
6. ordinances and regulations related to construction works; and
7. industrial hazards associated with construction works and on-site work, environmental issues and safety precautions

to be observed.

- VI. *ENTRY ROUTE* : Preferred Entry Qualification:
- Completion of a course of technical education leading to exemption from the Final Examination Parts I and II of the HKIE or equivalent.
- Training:
- 3-year organised practical experience acceptable to HKIE or equivalent.
- I. *JOB TITLE* : **STRUCTURAL ENGINEERING TECHNICIAN**
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Performs technical tasks, either independently or under the direction of a qualified engineer, contributory to design and construction of structural engineering work; Assists to plan, coordinate and supervise structural engineering projects.
- IV. *PROFESSIONAL SKILLS* : Ability to:



1. understand relevant civil engineering ordinances, regulations and codes of practice;
2. undertake simple structural engineering designs;
3. prepare structural engineering project plans;
4. prepare drawings and sketches in connection with structural engineering projects;
5. understand structural and civil engineering drawings;
6. solve technical problems related to structural engineering projects;
7. coordinate with related parties for construction site matters;
8. apply computer systems on design works and analysis for structural engineering;
9. carry out quality and audit checks;
10. design, implement and maintain effective

documentation systems; and

11. manage manpower and train subordinates.

V. *PROFESSIONAL KNOWLEDGE* : Knowledge of:

1. structural engineering technology;
2. construction material technology;
3. ordinances, regulations and codes of practice related to structural engineering works;
4. construction practice and procedures in Hong Kong and China;
5. management techniques and coordination skills;
6. quality and documentation systems;
7. programming techniques for project planning;
8. computer systems for design, drafting, programming and presentation; and

9. industrial hazards associated with construction works and on-site work, and safety precautions to be observed.

VI. *TRAINING*

: Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E or above in five subjects including English Language (Syllabus Completion of Secondary 5 with HKCEE Grade E or above in five subjects including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

- (i) 4-year organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job training with a diploma of a relevant post-secondary course in an

institution of technical  
education or equivalent.

- I. *JOB TITLE* : **SURVEYING TECHNICIAN (Estate)**
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Assists the Estate Surveyor in work associated with property valuation, land development and estate management.
- IV. *TECHNICAL SKILLS* : Ability to:
1. investigate land titles, occupancy and tenancy particulars and prepare reports;
  2. obtain land and property transaction records, analyse sale and rental comparable and make necessary calculations;
  3. read and understand lease conditions of various types of land grants and tenancy agreement;
  4. read and understand building plan drawings and check

against lease conditions, and  
prepare reports;

5. take measurements of floor  
area and prepare sketch floor  
plans;
6. assist in daily routine  
management of properties;
7. assist in acquisition of  
properties and land including  
stock taking, posting of notice,  
and screening of occupiers;  
and
8. handle computer work, such  
as retrieve computerised  
records from the land  
registration system.

V. *TECHNICAL* : Knowledge of:  
*KNOWLEDGE*

1. property valuation, real estate  
development and property  
management;
2. statutory requirements  
affecting land development;
3. statutory provisions for land  
acquisition; and

4. building construction, site measurement, and calculations of floor area.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE grade E or above in five subjects including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

- (i) 4-year organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job-training with a diploma of a relevant course in an institution of technical education or equivalent.

I. *JOB TITLE* : **SURVEYING TECHNICIAN (Land)**

II. *JOB LEVEL* : TECHNICIAN

- III. *JOB DESCRIPTION*
1. Assists Land Surveyor in carrying out land and engineering surveys; Collects and summarizes information and works of other disciplines involved for land and engineering survey projects; Carries out field survey operation for data acquisition and setting out work and supervises tradesmen and survey workmen.
  2. To process survey data and information, and to prepare plans and maps either in graphical or digital format.

IV. *TECHNICAL SKILLS* : Ability to:

1. carry out land and engineering survey with understanding of topographical, land boundary and civil engineering drawings;
2. use, calibrate and adjust surveying equipment and instruments such as measuring tapes, levels (tradition and digital), theodolite (tradition and digital), electronic distance meter, total stations, and global

positioning system;

3. use computers with plan production peripherals and software in computer aided drafting, digital terrain modelling and geographical information system;
4. record and process survey data;
5. prepare detail survey plans, setting-out plans, cross-sections and profile etc. to a specific scale;
6. prepare survey reports as required; and
7. supervise subordinates.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. General land surveying:
  - (a) topographic surveys and digital mapping;
  - (b) control surveys;
  - (c) land boundary surveys; and



(d) elementary serial survey.

2. Engineering Surveying:

(a) site surveys;

(b) monitoring surveys;

(c) sounding surveys; and

(d) setting out survey for civil engineering works.

3. Use of survey equipment and instrument:

(a) measuring tapes and scale;

(b) levels and theodolites;

(c) total stations;

(d) GPS (Global Positioning System);  
and

(e) GIS (Geographical Information System).

4. Survey computation and plan preparation:

- (a) basic survey data reduction;
- (b) control survey computation and adjustment;
- (c) land boundary computation;
- (d) engineering layout computation;
- (e) basic survey plans;
- (f) engineering site plans;
- (g) dimensioned plans; and
- (h) photo mosaic.

5. Computer systems for survey applications, plan drafting and presentation and geographical information system:

- (a) PC computers;
- (b) word processor and spreadsheet;
- (c) CAD software (e.g. AutoCAD, Microstation etc.);

- (d) DTM software (e.g. InRoads, MOSS etc.);  
and
  - (e) GIS software (e.g. Geomap, Arcview etc.).
6. Standard conventional signs and symbols in preparing drawing.
  7. Ordinances, regulations and codes of practices related to land surveying and construction works.
  8. Industrial hazards associated with construction works and on-site work, and safety precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE grade E or above in five subjects including English Language (Syllabus B), and Mathematics or their equivalent.

Training:

- (i) 4-year organized technician apprenticeship with attendance

at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job-training with a diploma of a relevant course in an institution of technical education or equivalent.

- I. *JOB TITLE* : **SURVEYING TECHNICIAN (Quantity)**
- II. *JOB LEVEL* : **TECHNICIAN**
- III. *JOB DESCRIPTION* : Assists the Quantity Surveyor in preparing bills of quantities by performing taking-off, abstracting, working-up, and measuring and valuating completed works or variations.
- IV. *TECHNICAL SKILLS* : Ability to:
  - 1. prepare from plans and details, comprehensive lists of the measurement of materials and labour required for construction projects;

2. group together under relevant work section items of a similar type;
3. present information obtained from taking off in bills of quantities;
4. assist in the preparation of contract documents;
5. measure and value work done by contractors for the computation of interim and final payments;
6. measure and value all variations; and
7. estimate labour and material cost and time for construction projects and set up detailed cost sheets.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. quantity surveying and estimating;
2. construction technology;
3. sanitation and building services;

4. pre and post contract administration;
5. industrial hazards associated with construction works and on-site work, and safety precautions to be observed; and
6. ordinances and regulations related to construction works.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E or above in five subjects including English Language (Syllabus B) and Mathematics or their equivalent.

Training:

4-year organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course in an institution of technical education.

I. *JOB TITLE* : **SURVEY TECHNICIAN (TOWN PLANNING)**

II. *JOB LEVEL* : TECHNICIAN

III. *JOB DESCRIPTION* Provides technical assistance to professional officers in forward planning, development control, planning enforcement, planning enquiries, computer services and other planning activities; Undertakes various planning surveys and studies; Collect, analyse, compile and present planning data/information; Maintain and update various types of planning records; Undertakes enforcement actions under the Town Planning Ordinance.

IV. *TECHNICAL SKILLS* : Ability to:

1. carry out land use surveys, building condition surveys and other socio-economic surveys;
2. use, calibrate and adjust surveying equipment and instruments such as measuring tapes, scales, planimeters and stereoscopes;
3. interpret aerialphotos;
4. run the Population and Living Quarters Information System and the Land Availability Information System (LAIS) for the preparation of the New

Town Development  
Programme;

5. assess the requirements on Government / Institution / Community facilities by applying the relevant standards laid down in the Hong Kong Planning Standards & Guidelines for the preparation of the Community Facilities Programme;
6. run the living quarter programme and to apply relevant parameters such as the occupancy rate and domestic use rate, persons per occupied flat (PPOF) by density zone by year and rate of change of PPOF by year to derive population distribution projections;
7. apply different assumptions and parameters to produce various options/scenarios of land requirement for respective land uses and to extract the relevant data from LAIS for the preparation of the land supply and land requirement forecasts;
8. carry out enforcement actions against unauthorised



developments within  
development permission areas  
in accordance with the Town  
Planning Ordinance;

9. design and develop various  
computer systems and to  
provide supporting services  
such as hardware set-up,  
software application and  
programme design/testing etc.;
10. maintain, update and retrieve  
planning records;
11. handle planning enquiries  
from various statutory bodies,  
advisory boards, media,  
community groups and the  
public;
12. make physical planning  
models;
13. prepare land use plans and  
other extract plans, including  
the use of computers with plan  
production peripherals;
14. check and interpret building  
plans and Land Development  
Corporation Scheme plans in  
relation to town planning  
comments or decisions;

15. prepare survey reports; and
16. prepare witness statements.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. surveying techniques:

land use survey;

building condition  
survey;

site inspections survey;

industrial / office  
building survey;

household / population  
survey;

traffic and transport  
survey;

questionnaire survey.

2. using surveying equipment  
and instrument:

measuring tape and scale;

stereoscope; and

camera.

3. ordinances, regulations, guidelines and procedures related to planning applications, planning objections, and planning enforcement;
4. hierarchy of town plans in Hong Kong and their relationships;
5. statistical analysis of planning data;
6. computer systems for design, drafting, programming, data maintenance and presentation; and
7. communication technique in handling public enquiries, complaints and referral of suspected unauthorised developments.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5 with Grade E or above in five subjects including English Language (Syllabus B), and Mathematics or their equivalent.

Training:

3-year training programme  
with attendance at a relevant  
part-time day-release or  
evening technician course up  
to the standard of certificate in  
an institution of technician  
education.

- I. *JOB TITLE* : **SURVEYING TECHNICIAN  
(Building)**
- II. *JOB LEVEL* : TECHNICIAN
- III. *JOB DESCRIPTION* : Assists Building and Maintenance  
Surveyor in the planning,  
administration and coordination of  
works related to buildings and land.
- IV. *TECHNICAL  
SKILLS* : Ability to:
1. understand Buildings  
Ordinance and allied  
legislation for building  
control;
  2. carry out inspection and  
prepare proofs of evidence  
under Buildings Ordinance  
and allied legislation;

3. carry out simple feasibility studies, calculation of plot ratio and site coverage;
4. carry out condition surveys of buildings;
5. use, check and adjust surveying equipment and instruments such as rebound hammer, PUNDIT (digital concrete strength measuring instrument), cover meter and half-cell;
6. recognise defects in buildings and their causes;
7. understand structural and building services drawings;
8. plan and implement maintenance programmes and remedial works;
9. plan alteration and improvement to buildings;
10. understand the legislation applicable to maintenance work;
11. produce graphical information for presentation to client employing the use of

computer media;

12. prepare plans, specifications and estimates for building works and administer building contracts;
13. inspect, control and supervise building construction works (including all maintenance work and finding out works) to ensure conformity with contracts, drawings, specifications, workmanship standards and relevant legislation; and
14. take measurements of structural, buildings and related elements on sites.

V. *TECHNICAL KNOWLEDGE* : Knowledge of:

1. building technology;
2. maintenance technology;
3. ordinances, regulations and codes of practices related to building works and maintenance responsibility;
4. principles in law of contract,

law of tort and law of negligence;

5. basic management techniques and contract administration;
6. different procurement methods and contract documentations;
7. programming techniques such as bar-chart programming, critical path techniques and network analysis;
8. computer systems for design, drafting, programming and presentation;
9. techniques of measurement of building works;
10. construction practice and procedures in Hong Kong and China; and
11. industrial hazards associated with construction works and on-site work, and safety precautions to be observed.

VI. *ENTRY ROUTE* : Preferred Entry Qualification:

Completion of Secondary 5

with HKCEE Grade E or above in five subjects including English Language (Syllabus B), and Mathematics and their equivalent.

Training:

- (i) 4-year organized technician apprenticeship with attendance at a relevant part-time day-release or evening technician course up to the standard of higher certificate in an institution of technical education.

OR

- (ii) 2-year on-the-job-training with a diploma of a relevant post-secondary course in an institution of technical education or equivalent.

- I. *JOB TITLE* : **WORKS SUPERVISOR**
- II. *JOB LEVEL* : **TECHNICIAN**
- III. *JOB DESCRIPTION* : Assists Clerk of Works in carrying out all aspects of site inspection and tests as required.



IV. *TECHNICAL  
SKILLS*

: Ability to:

1. read and interpret drawings, details, specifications, etc.;
2. use surveying instruments to check and verify levels, alignment, setting-out work, etc.;
3. inspect and check:
  - materials;
  - workmanship;
  - the placement of steel reinforcement in reinforced concrete work; and
  - temporary works, screens, scaffolding formwork, mechanical installations, etc.
4. conduct/witness tests as necessary on site;
5. prepare site records and reports; and
6. compute estimates of complete

work.

V. *TECHNICAL  
KNOWLEDGE*

: Knowledge of:

1. basic construction technology;
2. elementary structural engineering;
3. elementary quantity and land surveying
4. sanitation and building services; and
5. industrial hazards associated with construction works and on-site work and safety precautions to be observed.

VI. *ENTRY ROUTE*

: Preferred Entry Qualification:

Completion of Secondary 5 with HKCEE Grade E or above in five subjects, including English Language (Syllabus B), and Mathematics or their equivalent.

Training:

2-year organized technician

apprenticeship with attendance  
at a relevant part-time  
day-release or evening  
technician course in an  
institution of technical  
education.