

# Rules and Guide to the

# ASSESSMENT OF PROFESSIONAL COMPETENCE

**Quantity Surveying Division** 

**May 2012** 

The Hong Kong Institute of Surveyors (HKIS) reserves the right to amend the Rules and Guide without prior notice. All matters or disputes relating to the Rules and Guide are subject to the final decision of the Institute. This is not a Contractual Publication.

# All inquiries and applications should be addressed to:

# THE EDUCATION DEPARTMENT

# THE HONG KONG INSTITUTE OF SURVEYORS

Room 1205, 12/F, Wing On Centre 111 Connaught Road Central Sheung Wan Hong Kong

> Tel: 2526 3679 Fax: 2868 4612

e-mail: edudept@hkis.org.hk

# CONTENTS

| Section |   | Page |
|---------|---|------|
| 1.      | Objectives  | 1    |
| 2.      | Principal Parties   | 2    |
| 3.      | Form of the APC Scheme  | 3    |
| 4.      | Eligibility   | 4    |
| 5.      | Entry to the APC Scheme   | 4    |
| 6.      | Arrangements for Professional Training                                      | 6    |
| 7.      | Supervision and Counselling   | 6    |
| 8.      | Approved Professional Training Experience                                   | 7    |
| 9.      | Diary   | 15   |
| 10.     | Log Book  | 15   |
| 11.     | Pre-Qualification Structured Learning                                       | 16   |
| 12.     | Final Assessment  | 17   |
| 13.     | Arrangements for Unsuccessful Candidates                                    | 20   |
| 14.     | Appeal  | 20   |
| 15.     | Submission of Applications  | 20   |
| 16.     | Fees  | 21   |
| 17.     | Transitional Arrangements   | 21   |
| 18.     | Annex 1 - APC Training Periods for Different<br>Routes of Admission to HKIS | 23   |

## 1. **OBJECTIVES**

- 1.1 Through its Assessment of Professional Competence (APC) Scheme, the Hong Kong Institute of Surveyors (hereinafter called 'the Institute') seeks to satisfy itself that only those who are considered to be able to competently carry out the work of a professionally qualified Quantity Surveyor or a technically proficient Quantity Surveyor, on behalf of clients or employers are admitted to the Corporate Membership or Associate Membership respectively of the Institute under the Quantity Surveying Division.
- 1.2 In deciding whether you meet the requirements for Corporate Membership or Associate Membership, the Institute will seek, through the APC, to establish that you:
  - (a) are able to apply your theoretical knowledge through professional training and experience to attain the practical skills in quantity surveying;
  - (b) have achieved a satisfactory level of understanding and application of the skills that form an essential part of the knowledge base of the core competencies and chosen optional competencies;
  - (c) are able to pay particular attention to accuracy and essential detail to safeguard the interests of employers and clients;
  - (d) are able to act in accordance with the Institute's Rules of Conduct, possess the highest level of professional integrity and objectivity, and recognize your duties to clients, employers and the community; and
  - (e) are able to communicate effectively verbally, in writing and graphically and prepare reports which are well structured, organized, and written in a professional manner.
- 1.3 In addition, you are also expected to demonstrate that you:
  - (a) are a good ambassador for the Institute, your profession and employer;
  - (b) are aware of the technical, professional and commercial implications of your work:
  - (c) are able to understand your clients' and employer's objectives, requirements, and considerations;
  - (d) have an up-to-date and developing knowledge of technical and legal matters relevant to the work of quantity surveyors;
  - (e) are able to play a role in a team and have built up experience in client contact;

- (f) have motivation, initiative, administrative ability, and leadership potential; and
- (g) have the confidence to work unsupervised.

#### 2. PRINCIPAL PARTIES

2.1 Achieving the aforesaid objectives to the satisfaction of the Institute will involve a partnership among several essential parties and, if you are not to be delayed unnecessarily, their co-operation:

#### You

You need to enter into the APC Scheme with enthusiasm and commitment and to follow the procedures described in this document precisely and by the deadlines.

#### Your Employer

Your Employer, being a proprietor or an organization with business directly or indirectly related to quantity surveying, is expected to provide you with opportunities to acquire the appropriate professional training under proper supervision, suitable encouragement and necessary facilities and time, and to timely endorse the appropriate forms for you when being requested.

#### Your Supervisor

Your Supervisor as appointed by your Employer to supervise your day-to-day work must be a professional quantity surveyor and a Corporate Member of the Institute or a corporate member of a professional body as the Institute may recognize (such as a professional engineer, architect, planner or construction manager) of not less than **three years'** standing. Your Supervisor is expected to provide guidance on practical training and to timely endorse your Diary and Log Book when being requested.

#### Your Counsellor

Your Counsellor who must be a professional quantity surveyor and a Corporate Member of the Institute of not less than **five years'** standing is responsible for providing professional advice on your training and completing timely the appropriate forms for you when being requested. In addition, your Counsellor is also responsible for monitoring your training progress and ensuring that you are suitably prepared before you present yourself for the requisite assessments as hereinafter described for Corporate Membership or Associate Membership. Your Counsellor may also act as your Supervisor.

#### The Assessors

Assessors are Corporate Members of the Institute in the Quantity Surveying Division of not less than **five years'** standing. They are responsible for conducting the Assessments.

### The Quantity Surveying Division

The Quantity Surveying Division of the Institute will provide opportunities for Pre-Qualification Structured Learning. The QS Divisional Education Committee administers the APC and answers technical inquiries, while the Administration Office of the Institute provides the necessary administrative backup and assists in answering general inquiries.

2.2 You should study this document with great care. Any deviation from the requirements of the APC Scheme may delay you qualifying as a Corporate Member or an Associate Member.

## 3. FORM OF THE APC SCHEME

- 3.1 In outline, the APC Scheme comprises:
  - (a) a requirement to undergo a Minimum Training Period of the requisite number of months (as stated in Annex 1 hereto and immediately before the relevant Written Assessment) of approved professional training and experience following Hong Kong surveying practices in specified core and optional competencies to be properly documented in the Diary and Log Book provided by the Institute;
  - (b) a requirement to undertake at least **fifteen hours** of Pre-Qualification Structured Learning for every **six full months** after entry to the APC but before taking the relevant Written Assessment complementary to the professional training or for professional development;
  - (c) a requirement to take, after fulfilling (a) to (b) above, Part I Written Assessment and an Admission Interview to testify your competence as a technically proficient quantity surveyor for admission to Associate Membership; and
  - (d) a requirement to take, after fulfilling (a) to (b) above, Part I Written Assessment, Part II Written Assessment and an Admission Interview to testify your competence as a professionally qualified quantity surveyor for admission to Corporate Membership.

#### 4. ELIGIBILITY

- 4.1 To enter the APC Scheme, you must be:
  - (a) a Probationer or an Associate Member of the Institute or have already applied for admission to the Probationer or Associate Membership without being rejected subsequently (which status shall be continuously maintained by paying the relevant membership subscriptions throughout the APC period); and
  - (b) in a suitable employment with an organization that can provide the appropriate professional training.
- 4.2 To be a Probationer of the Institute, you should at least be **18 years** old and have obtained either:
  - (a) a cognate graduate degree or equivalent as may be approved by the Institute from time to time as being of sufficient academic standard for entry to the profession (Category A); or
  - (b) a non-cognate but relevant graduate degree or equivalent as may be approved by the Institute from time to time as being of sufficient academic standard for entry to the profession (Category B); or
  - (c) any other graduate degree and after having obtained such degree been engaged in surveying practices for not less than **one year** (Category C); or
  - (d) a cognate sub-degree or diploma or equivalent as may be approved by the Institute from time to time as being of sufficient academic standard for entry to the profession (Category D).

#### 5. ENTRY TO THE APC SCHEME

- 5.1 To apply for entry into the APC Scheme, you have to complete the relevant application form as prescribed by the Institute and submit it, together with documentary proof of your academic qualification and the prescribed application fee, to the Institute for approval. Fees are subject to revision from time to time and you are advised to check with the Institute before submitting your application. If you fail a Written Assessment or an Admission Interview, a further fee will be payable for each time of re-taking.
- 5.2 The Institute will acknowledge receipt of your application. You must notify the Institute in writing if acknowledgement is not received within **one month** of your delivery of the original copy of the application to the Institute.

HKIS QSD APC Rules and Guide Page 5

5.3 If the Institute is satisfied with the proposed professional training arrangements, the Institute will inform you the Minimum Training Period you will be required to undertake, and which would normally commence on the next date of receipt by the Institute of relevant application form. If the Institute is not satisfied with the proposed professional training arrangements, it may reject the application or accept it on condition that you shall, upon the completion of the proposed professional training as submitted, obtain wider experience of a specified period under a new professional training arrangement to be approved by the Institute.

- 5.4 Generally, the Minimum Training Period refers to that after graduation, except as described below.
- 5.5 The period of engagement in surveying practices while taking the final year of a parttime or distance learning undergraduate or post-graduate degree programme under
  Category A, subject to the express conditions of approval laid down by the Institute in
  connection with such early commencement when accrediting the programme under
  Category A, will be counted towards the Minimum Training Period provided the
  application for Student or Probationer (deemed as appropriate under the prevailing
  circumstances) Membership and the application to enter the APC are submitted in
  advance of the Training Period to be recognised, and the Training Period after
  graduation should in any case be not less than 12 months for Part II Written
  Assessment. If the application is submitted late, the recognised period will be reduced
  as considered appropriate at the sole discretion of the Divisional Education
  Committee.
- 5.6 The period of placement training of a full-time sandwich degree programme under Category A will be counted towards the Minimum Training Period to the extent approved by the Institute when accrediting the programme under Category A.
- 5.7 Post-graduation working experience of every continuous period of not less than **six months** of full time employment within the same organization gained before application to enter the APC may be counted towards the Minimum Training Period at the conversion rate of 2:1 for **every full month** of working experience, subject always to the sole consideration by the Divisional Education Committee on the relevance of the working experience. The maximum period that can be counted towards the Minimum Training Period for Part I or II Written Assessment is equivalent to the Minimum Training Period required for Part I Written Assessment.
- 5.8 A person eligible to choose more than one route of APC may elect to follow any route chosen by him but any exemptions under one route is not transferable to another route.

#### 6. ARRANGEMENTS FOR PROFESSIONAL TRAINING

- 6.1 You must familiarize yourself with the areas of professional training set out in this document. You should ascertain if your employment would provide sufficient opportunity for you to acquire the necessary training with adequate coverage.
- 6.2 In general, private practices offering professional quantity surveying services, and general contractors and public bodies with established quantity surveying departments or sections are suitable grounds for acquiring practical experience. Other organizations such as specialist contractors, developers, project management and property/facilities management companies, etc. may provide opportunities in specialized areas. Only a few employers are able to provide structured professional training. You should therefore take initiatives to seek professional knowledge from your Supervisor and Counsellor and to acquire experience upon hands-on involvement in your projects.
- 6.3 If in doubt, you may write to the Institute for preliminary opinion on the suitability of your proposed employment and professional training arrangements, which will generally be responded to within **six weeks**.
- 6.4 When you change your Employer, Supervisor or Counsellor, you should seek the approval of the Institute on your altered professional training arrangements by making a supplementary application within **one month** of the change. Otherwise, experience gained after such change and before the application is received by the Institute will **not** be admitted.

## 7. SUPERVISION AND COUNSELLING

- 7.1 When undergoing professional training, you should be guided and instructed by a Supervisor with the relevant expertise. In addition, you must be properly advised by a Counsellor. Normally, a Counsellor should have under his/her guidance not more than **three** Candidates undertaking the APC Scheme at any one time.
- 7.2 It is preferable for your Counsellor to be appointed by the Employer from within the organization, who may also act as the Supervisor as well. If for any reason your Employer is unable to provide an in-house Counsellor, you must enlist the assistance of a professional quantity surveyor and a Corporate Member of the Institute from another organization to act as an external Counsellor.
- 7.3 You should frequently discuss your training progress with your Counsellor in order that you may be properly guided.
- 7.4 The "Notes for Guidance of Employers, Supervisors and Counsellors" provide further explanation of the roles of an Employer, a Supervisor and a Counsellor.

#### 8. APPROVED PROFESSIONAL TRAINING EXPERIENCE

- 8.1 Before any considerations are given by the Divisional Education Committee to your application to take Part I or Part II Written Assessment, your must satisfy the Institute that you have received a broadly based and reasonably balanced professional training in all core competencies and the chosen optional competencies for the Minimum Training Period as prescribed in accordance with your admission route in Annex 1 hereto, and have attained the required competency standards. You may work with quantity surveying consultants, contractors, subcontractors, suppliers, developers, government departments, project management companies, and property/facilities management companies, specialising in building, civil engineering and/or building services works. You should endeavour to cover the core competencies and the chosen optional competencies within the Minimum Training Period, or within such extended period as may be necessary.
- 8.2 The APC aims at assessing whether you are competent to carry out quantity surveying professional work to such competency standards expected of a Corporate Member or an Associate Member of the Institute for the purpose of admission respectively to the Corporate Membership or Associate Membership of the Institute. Competency is defined as the skill or ability needed to perform the specific task within an occupation to the standard expected for employment under the relevant grade. After completing your academic studies and upon entry into the APC Scheme, you should have acquired the basic skills and knowledge of most practice-based competencies and theoretical knowledge (such as technical communication, information technology, construction technology, building services, environmental sciences, business management, construction economics, quantity surveying, construction law, etc.). After gaining adequate experience within the Minimum Training Period required for Part I Written Assessment, you are expected to be able to perform most of the practice-based skills competently to the standards expected of a technically proficient Quantity Surveyor. After gaining further adequate experience within the Minimum Training Period required for Part II Written Assessment, you are expected to be able to perform most of the practice-based skills with the added ability to give reasons, judge, adjust and explore to deal with varying circumstances competently to the standards expected of a professionally qualified Quantity Surveyor.
- 8.3 The competencies in the APC Scheme have two distinct categories:
  - (a) Core competencies covering the primary skills of quantity surveying. You are required to gain professional training in these core competencies, but not necessarily in all sub-competencies.
  - (b) Optional competencies covering skills which vary depending on the type of employment, or enlarged or specialist skills akin to quantity surveying. You are required to gain professional training in optional competencies of your choice.

8.4 The approved core and optional competencies together with their corresponding competency standards are described as follows:

| <b>Core Competencies</b>            | Com  | petency Standards   |
|-------------------------------------|------|---|
| 1. Measurement and billing          | 1.1  | Able to apply knowledge in construction materials and sciences, construction technologies and building services   |
|                                     | 1.2  | Able to identify, ask for, register, interpret, and raise queries to clarify drawings, specifications, variation instructions, works orders and other information necessary for measurement   |
|                                     | 1.3  | Able to apply the industry standard methods of measurement or project specific methods of measurement   |
|                                     | 1.4  | Able to measure quantities from drawings, and draft<br>and edit item descriptions to reflect specification<br>requirements for the purposes of preparation of bills<br>or schedule of quantities, remeasurement of<br>provisional quantities, variations, works orders,<br>claims or final accounts |
|                                     | 1.5  | Able to measure approximate quantities for bulk-checking of quantities and understand quantity factors such as concrete steel ratios, quantities per floor areas, etc.  |
|                                     | 1.6  | Able to prepare pro-forma schedules of rates (without quantities)   |
|                                     | 1.7  | Able to interpret preliminaries and preambles and add special provisions to suit the specific circumstances   |
|                                     | 1.8  | Able to undertake quantity and other checks for any input document discrepancies and/or omissions and final output document completeness, spelling, omissions, etc.   |
|                                     | 1.9  | Able to organize and supervise the measurement, billing, editing, checking, printing and dispatch processes   |
|                                     | 1.10 | Able to use bill production, CAD and BIM softwares to assist  |
| Pre-contract cost data     handling | 2.1  | Able to retrieve past cost data of similar work and apply in new work   |
| nanding                             | 2.2  | Able to carry out arithmetic and consistency checking on the cost data on returned tenders or vendors' quotations   |
|                                     | 2.3  | Able to compile cost data or pricing comparison from among returned tenders or vendors' quotations  |
|                                     | 2.4  | Able to enquire, search and analyse cost data including building cost and tender price indices  |

| <b>Core Competencies</b>                               | Competency Standards |   |  |  |
|--|----------------------|---|--|--|
|  | 2.5                  | Able to apply discounts, mark-ups, margins and other  |  |  |
|  |                      | adjustment factors  |  |  |
|  | 2.6                  | Able to appreciate the approximate order of costs for   |  |  |
|  |                      | major construction works  |  |  |
| 3. Pricing   | 3.1                  | Able to appreciate project, industrial and general economic factors affecting the unit costs and quantities of the constituent rates  |  |  |
|  | 3.2                  | Able to make adjustments to past cost data or pre-<br>fixed rates for applications in different circumstances   |  |  |
|  | 3.3                  | Able to build up prime cost rates for labour, materials and plant, and all-in unit rates for works for the purposes of pricing preliminary cost estimates, bills or schedules of quantities, variations, work orders, |  |  |
|  |                      | claims and final accounts.  |  |  |
|  | 3.4                  | Able to build up and analyse preliminaries items, overheads and profits   |  |  |
|  | 3.5                  | Able to understand, analyse and apply quantity factors such as concrete steel ratios, quantities per floor areas, etc.  |  |  |
|  | 3.6                  | Able to understand contract conditions, specification standards, preliminaries and preambles for pricing the relevant risks   |  |  |
| 4. Pre-contract cost planning, estimating and control* | 4.1                  | Able to understand the build-up of properties development budget, and methods of valuation of construction costs  |  |  |
|  | 4.2                  | Able to use cost data including adjustments to various factors such as locations, specification, time and market forces   |  |  |
|  | 4.3                  | Able to demonstrate knowledge of various factors affecting economics of design and construction   |  |  |
|  | 4.4                  | Able to undertake financial feasibility and comparative design studies  |  |  |
|  | 4.5                  | Able to prepare cost plans, update cost plans and carry out cost checks and control   |  |  |
|  | 4.6                  | Able to prepare cost estimates by various estimating techniques   |  |  |
|  | 4.7                  | Able to evaluate alternative design solutions and life cycle costs  |  |  |
|  | 4.8                  | Able to prepare and interpret cash flow projections and profit/loss forecasts   |  |  |
|  | 4.9                  | Able to prepare cost reconciliation statements with previous cost estimates and with costs of similar projects  |  |  |
|  | 4.10                 | - ·   |  |  |

| <b>Core Competencies</b> | Com | petency Standards  |  |  |  |  |
|--------------------------|-----|--|--|--|--|--|
|                          | 6.2 | Able to appreciate the project including the method  |  |  |  |  |
|                          |     | statement, tender programme and site visit   |  |  |  |  |
|                          | 6.3 | Able to collate the data obtained from the   |  |  |  |  |
|                          |     | procurement process to build up the costs  |  |  |  |  |
|                          | 6.4 | Able to prepare estimator's report and tender adjudication                                     |  |  |  |  |
|                          | 6.5 | Able to respond to pre-qualification and invitation to   |  |  |  |  |
|                          |     | tender, raise tender queries, attend tender interviews and answer tender questionnaires        |  |  |  |  |
|                          | 6.6 | Able to scrutinise letters of acceptance or intent, and  |  |  |  |  |
|                          |     | drafts of contract documents   |  |  |  |  |
|                          | 6.7 | Able to apply principles of business management to achieve corporate objectives of contracting |  |  |  |  |
|                          |     | organizations objectives of contracting  |  |  |  |  |
|                          | 6.8 | Able to plan or program construction works,  |  |  |  |  |
|                          |     | determine and purchase construction resources (i.e.  |  |  |  |  |
|                          |     | labour, plant and material), and evaluate productivity methods                                 |  |  |  |  |
|                          | 6.9 | Able to undertake financial management of  |  |  |  |  |
|                          |     | contracting organizations including regular  |  |  |  |  |
|                          |     | monitoring and reporting on cash flow and analysis of  |  |  |  |  |
|                          |     | variances between budgeted and actual costs during   |  |  |  |  |
|                          |     | construction   |  |  |  |  |
|                          |     |  |  |  |  |  |

\*Note: You are permitted to take either core competency 4 or 6, or a combination of the two, depending on your status of employment (see Paragraph 8.5). If you work for a professional quantity surveying firm, you should choose "Pre-contract cost planning, estimating and control", whereas if you work for a contractor, you should choose "Contractor's tendering and cost control".

| <b>Core Competencies</b>   | Competency Standards   |  |  |  |  |
|----------------------------|--|--|--|--|--|
| 7. Contract administration | <ul> <li>7.1 Able to survey, measure and record site information</li> <li>7.2 Able to monitor proposed construction methods/ sequences and report on actual requirements including preparing cost benefit reports on alternative construction methods</li> <li>7.3 Able to prepare valuations for interim payments</li> <li>7.4 Able to carry out post-contract cost control including preparation of final costs and reporting on financial effects</li> <li>7.5 Able to carry out day-to-day contract administration of a project including attending site meetings and drafting correspondence on contractual issues</li> </ul> |  |  |  |  |
|                            | draiting correspondence on contractual issues  |  |  |  |  |

| <b>Core Competencies</b> | Competency Standards                                       |
|--------------------------|--|
|                          | 7.6 Able to prepare or interpret cost/value and other      |
|                          | reconciliation statements for management purposes          |
|                          | 7.7 Able to report on, evaluate and negotiate contractual, |
|                          | financial and extra-contractual issues                     |
|                          | 7.8 Able to prepare and agree final accounts and contra    |
|                          | charges  |

| <b>Optional Competencies</b> | Com                             | petency Standards  |
|------------------------------|---------------------------------|--|
| 8. Dispute resolution        | 8.1<br>8.2<br>8.3               | Able to understand various techniques in dispute resolution including negotiation, mediation, conciliation, adjudication, arbitration, independent expert determination and litigation  Able to apply knowledge of the practices and procedures of dispute resolution  Able to apply knowledge of the relevant law governing dispute resolution procedures, including evidence of fact and expert evidence |
| 9. Project management        | 9.1<br>9.2<br>9.3<br>9.4<br>9.5 | Able to identify the client's objectives and develop the client's brief  Able to carry out feasibility studies, including risk analysis and value analyses  Able to establish the budget and project programme  Able to advise on the selection of project team  Able to establish the lines of communication and manage the integration and flow of design information                                    |
|                              | 9.6                             | Able to establish the time, cost and quality control systems, and monitor, control and report from inception to project completion   |
| 10. Facilities management    | 10.1                            | Able to apply principles of business management to achieve the client's corporate objectives   |
|                              | 10.3                            | occupiers of real estate Able to keep up-to-date maintenance information to determine and implement operational maintenance  |
|                              | 10.4                            | Able to maintain a proper procurement system, including invitations to tender, tender enquiries, evaluation of offers received, receipt of noncompliant or alternative offers  Able to manage project costs, time and quality from inception to completion, including value management, risk analysis and financial evaluation   |
| 11. Risk management          | 11.1                            | Able to demonstrate knowledge and understanding of the nature of risks in construction project   |

| <b>Optional Competencies</b>  | Competency Standards                                   |   |  |  |  |
|-------------------------------|--|---|--|--|--|
|                               | 11.2   | Able to apply various methods and techniques used   |  |  |  |
|                               |  | to carry out risk assessment taking into account all  |  |  |  |
|                               | 44.0   | relevant factors  |  |  |  |
|                               | 11.3   | Able to implement risk management system in   |  |  |  |
| 12 V-l                        | 10.1   | relation to specific projects   |  |  |  |
| 12. Value management          | 12.1   | Able to participate and contribute in value   |  |  |  |
|                               | 12.2   | management workshops Able to organize and facilitate value management                       |  |  |  |
|                               | 12.2   | workshop, including pre-meeting and report writing  |  |  |  |
|                               | 12.3   | Able to understand and apply value methodology  |  |  |  |
| 13. Advanced information      | 13.1   | Able to write computer programmes for use on other  |  |  |  |
| technology                    |  | competencies  |  |  |  |
|                               | 13.2   | Able to set up and maintain hardwares or softwares  |  |  |  |
|                               |  | for servers or computer networks for use by more  |  |  |  |
|                               |  | than one person   |  |  |  |
|                               | 13.3   | Able to develop information technology for use on   |  |  |  |
| 14.5                          | 1.4.1  | other competencies  |  |  |  |
| 14. Bankruptcy, liquidation,  | 14.1   | Able to understand the precautions necessary when   |  |  |  |
| determination and termination |  | bankruptcy, liquidation, determination or termination is imminent                           |  |  |  |
| termination                   | 14.2   | Able to advise on the procedures and rights and   |  |  |  |
|                               | 11,2   | liabilities of different parties when such events   |  |  |  |
|                               |  | actually happen   |  |  |  |
|                               | 14.3   | Able to carry out survey, record and value work left  |  |  |  |
|                               |  | incomplete  |  |  |  |
|                               | 14.4   | Able to prepare hypothetical final account and  |  |  |  |
|                               |  | calculate respective final cost liability   |  |  |  |
| 15. Insurances and warranties | 15.1   | Able to understand different types of insurances,   |  |  |  |
|                               |  | bonds and quality warranties normally used in   |  |  |  |
|                               | 15.2   | construction or professional services   |  |  |  |
|                               | 15.2   | Able to procure insurances and bonds Able to vet insurance policies and bonds, draft or vet |  |  |  |
|                               | 13.3   | quality warranties  |  |  |  |
|                               | 15.4   | Able to survey, record, calculate or adjust loss or   |  |  |  |
|                               |  | damage  |  |  |  |
| 16. Third party technical or  | 16.1   | Able to audit quantity surveying work done by other   |  |  |  |
| professional audits           |  | organizations or different departments within the   |  |  |  |
|                               |  | same organization   |  |  |  |
|                               | 16.2   | Able to conduct audits on quantity surveying  |  |  |  |
|                               | practices on behalf of quality assurance agencies      |   |  |  |  |
|                               | (excluding bulk checking recordable under competency 1 |   |  |  |  |
|                               | and o  | rganizing files subject to audit)   |  |  |  |

| <b>Optional Competencies</b> | Competency Standards                                     |  |  |  |
|------------------------------|--|--|--|--|
| 17. Green building or        | 17.1 Able to evaluate life cycle costs of alternative    |  |  |  |
| construction                 | environmentally friendly features                        |  |  |  |
|                              | 17.2 Able to conduct energy audits                       |  |  |  |
|                              | 17.3 Able to calculate scores for environmental          |  |  |  |
|                              | assessment ratings                                       |  |  |  |
|                              | 17.4 Able to set up or maintain environmentally friendly |  |  |  |
|                              | features on site or at office                            |  |  |  |

8.5 You should attempt to obtain a reasonably balanced experience among each competency. The minimum requirements on the number of training days for each competency are as follows:

| Written Assessment                  |  | Part I               | Part I          | Part II | Part II         | Part II |  |
|-------------------------------------|--|----------------------|-----------------|---------|-----------------|---------|--|
| Academic qualifications<br>Category |  | A, B and C           | D               | A       | B and C         | AMHKIS  |  |
| Minimum Training Periods (months)   |  | 12                   | 24 or<br>longer | 24 ¹    | 36 <sup>2</sup> | 36      |  |
| Competencies                        |  | Minimum Working Days |                 |         |                 |         |  |
| 1.                                  | Measurement and billing                            | 80                   | 180             | 120     | 160             | 120     |  |
| 2.                                  | Pre-contract cost data handling                    | 10                   | 20              | 20      | 30              | 20      |  |
| 3.                                  | Pricing  | 10                   | 30              | 30      | 50              | 60      |  |
| 4.                                  | Pre-contract cost planning, estimating and control | 10                   | 20              | 30      | 50              | 60      |  |
| 5.                                  | Procurement  | 10                   | 20              | 50      | 90              | 120     |  |
| 6.                                  | Contractor's tendering and cost control            | 10                   | 20              | 30      | 50              | 60      |  |
| 7.                                  | Contract administration                            | 40                   | 60              | 90      | 140             | 150     |  |
| 8.                                  | All optional competencies                          | 0                    | 0               | 30      | 30              | 30      |  |

- Notes:
- (a) You are permitted to take either core competency 4 or 6 in the above table, or a combination of the two, depending on your status of employment, provided that the aggregate number of working days exceeds the Minimum Working Days of either competency.
- (b) Meeting and filing times should be recorded against the most relevant competency.
- (c) <sup>1</sup> The 24 months shall be inclusive of the 12-month training period for Part I Written Assessment.
- (d) <sup>2</sup> For Category B and C, the 36 months shall be inclusive of the 12-month training period for Part I Written Assessment.

#### 9. DIARY

- 9.1 You are required to maintain a Diary of your professional training throughout the Minimum Training Period and any extended period of training that may be required until passing the APC.
- 9.2 Entries in the Diary should be clear and concise and relate to the work or projects you have undertaken. You are required to analyse the work carried out **every month** for summary in your Log Book. Entries for the work carried out in any **one week** should appear only on the page relating to that week.
- 9.3 When you change employment, the Diary should be continued in the usual way, but a clear indication of the change (with details of the new employment and the date) must be given on the relevant page. It is of course necessary for you to seek the approval of the Institute in respect of you new employment by submitting a supplementary application.
- 9.4 The Diary must be signed by you and your Supervisor at the end of **every week** certifying the correctness of the entries, and by your Counsellor at the end of every **three months**. This is an opportunity for your Counsellor to review the progress and to ensure the adequacy and relevance of your training.
- 9.5 The Diary provides important evidence of your professional training and it is therefore your responsibility that it should be kept in safe custody. It is also advisable that a copy is made before the original is submitted for assessment.

#### 10. LOG BOOK

- 10.1 You are required to keep a Log Book (in the form of Analysis of Diary Sheet) which is an analytical account of your professional training in chronological order based on entries in the Diary, to enable the evaluation of the adequacy and balance of your professional training. It will also provide easy references to any particular aspect of training set out in the Diary.
- 10.2 The details required should be drawn from the Diary. The training received in **each month** must be analysed and entered in **whole days** or **half days** against the relevant core and optional competency in the properly headed monthly columns of the relevant Analysis of Diary Sheet. The Log Book must be signed by you and your Supervisor, and counter-signed by your Counsellor once every **three months**.
- 10.3 Before the Log Book is submitted, the time spent on each area of training must be totalled both vertically and horizontally on each of the Analysis of Diary Sheets with grand totals given at the end.

- 10.4 You must send a photocopy (not original) of your completed Log Book within **one month** of completion of your **first twelve months'** training for the purpose of interim assessment record.
- 10.5 Like the Diary, the Log Book provides important evidence of your professional training and it is therefore your responsibility that it should be kept in safe custody. It is also advisable that a copy is made before the original is submitted for assessment.
- 10.6 The information provided in the Diary and Log Book may be used by the Assessors as reference materials for assessment in the Admission Interview.

## 11. PRE-QUALIFICATION STRUCTURED LEARNING

- 11.1 In addition to the professional training obtained as part of normal work during the Training Period, you must undertake a minimum of **fifteen hours** of Pre-Qualification Structured Learning (PQSL) for every **six full months** after entry to the APC up to the time of taking any Written Assessment. This helps you gain professional skills and knowledge which are not always possible to obtain within day-to-day business of the practice. This may consist of any of:
  - (a) courses or training events or discussion meetings on technical topics organized by the Institute;
  - (b) courses or training events or discussion meetings on technical topics organized by universities or vocational training institutes, other professional bodies, and other relevant course-providers;
  - (c) special courses, training events or discussion meetings on technical topics organized by your Employer (On-job training organized by your Employer is important but is considered as an inherent and unavoidable part of your work and is therefore not normally counted towards PQSL. To qualify as special under this category, the training must be on something special and not on routine tasks, and should be offered to a group of people irrespective of their experience and present or immediately forthcoming work tasks. Training on measurement rules and techniques, measurement using electronic means, induction training to new recruits, briefing training upon beginning of a work task, discussions or meetings with legal advisors, accountants or insurance consultants during the course of the work, day-to-day training to deal with a work task are essential but are not considered as special.);
  - (d) technical research; or
  - (e) authorship of published technical work.

- Notes: (i) Hours recorded under a single course under (b) should not be more than 50% of the total hour required.
  - (ii) Hours recorded under (c) should not be more than 50% of the total hour required.
  - (iii) Reading of books and journals and viewing CPD/PQSL videos are also important but are not counted towards PQSL because of the casual nature of reading and viewing and the difficulties in proving them done.
  - (iv) You are encouraged to record more than the required minimum hours in case some of the hours are not accepted by the Institute.
- 11.2 The PQSL should relate either to the prescribed core/optional competencies or the development of personal and professional practice skills (including communication, client care, information technology, team working, dispute resolution, code of conduct, and structure and role of the Institute).
- 11.3 The PQSL hours should be calculated as follows:
  - (a) The time attributable to any event shall be the duration from the formal opening and formal closing of an event, calculated to the nearest **half hour**.
  - (b) If you attend part of an event, only your attendance time should be counted, subject to fulfilment of the minimum attendance time as may be prescribed by the event organizer for issuing an attendance certificate.
  - (c) The time spent in administering a qualifying event should not be counted.
- 11.4 You are required to keep a record of all PQSL undertaken and submit such record to the Institute at the time of submitting the application for any Written Examination. Such record shall include the dates of events, durations of events, names of the events, organizers and principal speakers, description of learning undertaken, location of event and other relevant details.

#### 12. FINAL ASSESSMENT

- 12.1 In anticipation that the Minimum Training Period or such extended period that may be applicable to you will be fulfilled by the time of any Written Assessment, you may submit an application for the Written Assessment before the deadline set each year and the application must be accompanied by the following documents:
  - (a) Diary and Log Book (less records for the **three months** immediately preceding the Written Assessment in the case of first time candidates);
  - (b) A record of PQSL (a shortfall of **eight hours** below the minimum permitted).

12.2 The Diary and Log Book for the **three months** immediately preceding the Written Assessment in the case of first time candidates and the record of making up any permitted shortfall in PQSL must be submitted **seven working days** before the Written Assessment by applicants whose applications for Written Assessment have been approved by the Divisional Education Committee, otherwise the applicants will be considered as not eligible for taking the Written Assessment. No refund of the assessment fees will be made to these applicants.

- 12.3 Assessment of the records submitted pursuant to Paragraphs 12.1 and 12.2 may take place before or after the Written Assessment. Approval to proceed to take the Written Assessment does not signify that the records so submitted have fulfilled the minimum requirements for Written Assessment.
- 12.4 The Final Assessment is designed to satisfy the Institute that you:
  - (a) have achieved the objectives set out in Section 1;
  - (b) can demonstrate your understanding of the knowledge gained and competencies achieved during the Training Period;
  - (c) have an acceptable understanding of the role and responsibilities of a professionally qualified quantity surveyor or a technically proficient quantity surveyor, as the case may be;
  - (d) can apply your professional and technical skills to benefit those who employ your service; and
  - (e) can express yourself clearly both orally and in writing.
- 12.5 The Final Assessment consists of the following two modes:
  - (a) Part I and Part II Written Assessments

You will be required to sit in an examination hall/room to answer a number of written practical problems in quantity surveying. The practice problems for Part I Written Assessment will mainly cover the core competencies at the technical level, while Part II Written Assessment will cover all aspects of the core competencies and the more common parts of the optional competencies at the professional level.

Part I Written Assessment is required for admission to Associate Membership.

Both Parts I and II Written Assessments are required for admission to Corporate Membership.

Associate Members of the Institute will need to take Part II Written Assessment only for admission to Corporate Membership.

A cognate sub-degree or diploma holder must become an Associate Member first before continuing with the Training Period required for Part II Written Assessment.

Probationers admitted via the routes of degree holders can take Parts I and II Written Assessments in any order provided they satisfy the requirements regarding Minimum Training Period and submission of Diary, Log Book and PQSL records before taking the relevant Written Assessment. However, if they have passed Part I Written Assessment, they are encouraged to attend the Admission Interview as described below to become Associate Members of the Institute, but this is not mandatory before they can proceed to take Part II Written Assessment.

#### (b) Admission Interview

An Admission Interview is required after passing the relevant Written Assessment(s) for admission to Associate Membership or Corporate Membership.

After you have passed the relevant Written Assessment(s), you can proceed to attend an Admission Interview. During the interview, you will be given about **ten minutes** to present your technical or professional training gained over the Training Period, followed by discussions of about **forty five minutes**. If you marginally fail the Written Assessment, you may at the discretion of the Divisional Education Committee on the recommendation of the Assessors be invited to attend the Admission Interview. Your Written Assessment will be considered as failed if you fail the Admission Interview.

- 12.6 The Admission Interview will be conducted by a panel of Assessors who will be looking for the following attributes from you:
  - (a) adequacy in breadth and depth, and in balance, of your technical or professional training, as the case may be;
  - (b) adequacy and relevance of your PQSL;
  - (c) general knowledge of quantity surveying practices on a technical or professional level, as the case may be;
  - (d) professional ethics, the Institute's rules of conduct, legal liabilities of quantity surveyors and current issues of concern to the profession; and
  - (e) professional demeanour, appearance and presentation skill.

- 12.7 The Assessors will be trying to determine your general level of ability. They will be looking to ensure that you have achieved the minimum standard of competence in key areas of the clients being served, and that you understand the professional conduct expected of a Corporate Member or an Associate Member of the Institute.
- 12.8 The results of the Written Assessment and Admission Interview will normally be notified within **three months** and **one month** respectively.

#### 13. ARRANGEMENTS FOR UNSUCCESSFUL CANDIDATES

- 13.1 First time candidates whose technical or professional training experience is considered deficient in coverage or depth will not be allowed to take the Written Assessment or Admission Interview. They will be required and informed to undertake additional days of training in specific competencies which are deficient. They will need to **continue** to maintain their Diary and Log Book **until** the next Final Assessment and ensure that the additional days of specific training are covered during the period.
- 13.2 First time and referred candidates whose PQSL is considered insufficient may be required to undertake supplementary PQSL of such hours as the Divisional Education Committee may specify, normally not less than **fifteen hours**, on top of the regularly required hours and submit a revised record of PQSL.
- 13.3 Candidates who fail in their Written Assessment or Admission Interview may apply to re-take in the next attempt. These referred candidates must **continue** to maintain their Diary, Log Book and PQSL records **until** they are successful in the Final Assessment. They will need to submit the records for the period up to the application for Final Assessment. The records for the period after application for Final Assessment are only required upon request.

#### 14. APPEAL

14.1 All APC results are final and are not subject to appeal. No correspondence with candidates will be entered into in respect of any request for explanation of such decisions or appeals against such decisions.

#### 15. SUBMISSION OF APPLICATIONS

15.1 Your applications in pursuance of the APC should be made on the relevant forms, fully and correctly completed, duly endorsed by your Employer, Supervisor and Counsellor where required, and submitted with the prescribed fees where appropriate.

- 15.2 All applications must be submitted in the prescribed form, accompanied by the appropriate fee and submitted to the Education Department of the Institute in person or by registered post, recorded delivery or ordinary post within the stipulated time open for application as maybe published by the Institute. If by ordinary post, you must ensure that you obtain the Post Office a certificate of posting.
- 15.3 The Institute will acknowledge receipt of your application. You must notify the Education Department of the Institute in writing if acknowledgment is not received within **one month**.
- 15.4 Late applications will not be accepted.

#### 16. FEES

- 16.1 The entry fee for the APC shall be that prescribed by the Institute and prevailing at the time, payable in full at the time of application. The entry fee includes a portion as an administration fee (the amount of which shall be as prescribed by the Institute as prevailing at the time), and this administration fee shall be non-refundable in the event the application is not approved.
- 16.2 An application fee (the amount of which shall be prescribed by the Institute as prevailing at the time) is payable for every application or re-application for Final Assessment and is only refundable under the prescribed terms and conditions.
- 16.3 The fee scale is subject to change from time to time and you are advised to check with the Institute before submitting your application.

#### 17. TRANSITIONAL ARRANGEMENTS

- 17.1 The EGM of the Institute passing the amendments of the Constitution and Bye-Laws leading to this new APC Scheme was conducted on 18 July, 2011. By such amendments, the required Minimum Training Periods have been shortened (except for cognate degree holders). Any Technical Trainees and Probationers existing and graduating before 18 July, 2011 who could have enjoyed the shorter Minimum Training Period had the amendments been passed earlier may have their Minimum Training Period shortened to enjoy the same treatment subject to the consideration by the Divisional Education Committee on the relevance of their working experience. They are still subject to the same PQSL requirements under this new APC Scheme. Other people having prior working experience can enjoy the benefit of Paragraph 5.7.
- 17.2 Candidates, admitted to the Institute under Category A, entering the APC in Year 2011 or Year 2012 may choose between the previous (version November 2007) or this new APC Scheme. In Year 2013, all applicants can only enter the APC in accordance with the requirements of this new APC Scheme.

17.3 Applicants already commencing the requisite training following the previous November 2007 APC Scheme may have one and only one opportunity to change from the previous to this new APC Scheme. The request for change will be subject to the review and approval of the Divisional Education Committee and its decision shall be final. The change will be subject to the payment of necessary fees and charges as prescribed by the Institute.

HKIS QSD APC Rules and Guide Page 23

Annex 1 - APC Training Periods for Different Routes of Admission to HKIS

| Admission Route  | Holder of cognate degree (Category A) | Holder of<br>non-cognate but<br>relevant degree<br>(Category B) | Holder of other graduate degree (Category C)                                  | Holder of cognate sub-degree or diploma (Category D)                  | AMHKIS through reciprocity or not holding a degree |
|--|---------------------------------------|---|---|---|--|
| Prior to admission to HKIS as Probationer  |                                       |   | minimum 12-month<br>full time engagement<br>in quantity surveying<br>services |   |  |
| From commencement of APC training to first attempt of Part I Written Assessment  | minimum 12 months                     | minimum 12 months   | minimum 12 months   | minimum 24 months<br>or more depending<br>on individual<br>programmes |  |
| From commencement of APC training to first attempt of Part II Written Assessment (inclusive of the time for Part I Written Assessment) | minimum 24 months                     | minimum 36 months   | minimum 36 months   |   |  |
| From commencement of APC training after AMHKIS to first attempt of Part II Assessment  |                                       |   |   |   | minimum 36 months                                  |

- NOTE: 1. A Candidate who has commenced APC training via the degree holders' admission routes might attempt Part I and Part II Written Assessments concurrently within the same year or separately in any order. It is not a pre-requisite condition that such a Candidate must pass Part I Written Assessment before the Candidate is eligible to attempt Part II Written Assessment.
  - 2. A person eligible to choose more than one route may elect to follow any route chosen by him but any exemptions under one route is not transferable to another route.
  - 3. Admission to AMHKIS or MHKIS is subject to an Admission Interview after passing the requisite Written Assessment(s).