



The Hong Kong Institute for IT Professional Certification

LG1, 78 Tat Chee Avenue, Kowloon Tong, Hong Kong

Tel.: (852) 2834 2227

Fax: (852) 2834 3003

Email: hkitpc@hkitpc.org

Website: <http://www.hkitpc.org>

Application Guide for CPIT(QAM) Certified Professional IT (Quality Assurance Manager)

Document Code: QAMAPP_2009V1.0

Version: 1.0

11 December 2009

Certified Professional of IT

Table of Contents

1	CERTIFIED PROFESSIONAL OF IT	3
2	APPLICATION	3
2.1	General Eligibility Requirement	3
2.2	Application Procedure	4
2.3	Submission of Application	4
2.4	Credential and Experience Verification	5
2.5	Submission of Essay	5
2.6	Interview	5
2.7	Interview Cancellation, Rescheduling or Absence	5
2.8	Result Notification	6
2.9	Appeal Process	6
3	ASSESSMENT	6
3.1	Overview of the Assessment	6
3.2	Assessment Part 1 – Essay	7
3.3	Assessment Part II – Interview	9
3.4	Overall Assessment	10
4	NOTES TO APPLICANT	10
4.1	Intellectual Property Rights and Privacy of Information	10
4.2	Reference Documents	11
4.3	Contact Information	11
Appendix 1:	IT Quality Assurance Management Competency Activity Groups (ITQAMCAG)	12
Appendix 2:	IT Quality Assurance Management Assessment Supplementary Forms	17

1 CERTIFIED PROFESSIONAL OF IT

The Hong Kong Institute for IT Professional Certification (HKITPC) pioneers the first IT professional certification scheme in Hong Kong with the synergy and recognition of IT professionals, academics and employers. By granting a credible credential with a rigorous experience and knowledge assessment, the Certified Professional of IT (CPIT) scheme strives to maintain and promote the profession's expertise, to inspire IT professionals' personal professional development and ultimately to foster the development and competitiveness of the Hong Kong IT Industry.

Originating from an industry-led certification system development project, the HKITPC advances the identification of fundamental competency elements for various specializations in the IT profession whilst values regional application knowledge and experience. The professional competency definitions are also designed to be seamlessly synchronized with the respective frameworks of the Education Bureau's Qualification Framework.

A CPIT must satisfy all education and experience requirements for the CPIT scheme and demonstrates an acceptable level of understanding and competency in a specific IT specialization in the assessment. To maintain the CPIT credential, substantiation of professional commitment to the IT profession by satisfying the CPIT Continuing Professional Development Program is a requisite.

2 APPLICATION

2.1 General Eligibility Requirement

A CPIT applicant should meet the following requirements:

1.1.1 Professional work experience

- Posses adequate work experience in IT from the date of application submission;
- Posses the relevant professional experience satisfying the respective specialization requirements as stipulated in the specific application guides and
- Posses at least one year of IT experience obtained with local exposure.

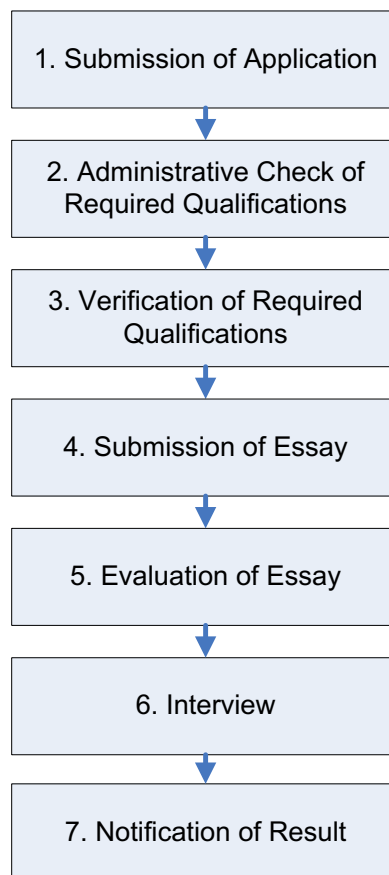
1.1.2 Supporting Entities

- An application must receive support in writing from three references who are either peers, superiors and/or clients of the applicant and are familiar with the applicant's accomplishments and character;
- At least one reference must be a CPIT or with an equivalent professional qualification granted by other IT related professional bodies recognized by the HKITPC Certification Board and
- The references should not be relatives of the applicant.

2.2 Application Procedure

The CPIT scheme is supervised by the HKITPC Certification Board (CB) and administered by the HKITPC Secretariat Office (Secretariat Office). To apply for the CPIT, the applicant is required to follow the procedure as stated in Chart 1 below.

Chart 1: Application Procedure for CPIT



2.3 Submission of Application

An application will only be accepted for processing when a complete application package is submitted in person to the Secretariat Office. The application package must contain:

- a. A duly signed Application Form completed according to the stated instructions;
- b. Payment of application fee and
- c. Photocopies of supporting documents in A4 size for all submitted academic/professional qualifications and working experiences (i.e. academic and/or professional credentials, reference letters, etc.)

2.4 Credential and Experience Verification

For verification purpose, the applicant should present the original documents to the Secretariat Office for verification at the time of application submission and provide contact information of the references.

2.5 Submission of Essay

The applicant deemed satisfying both the general and specialization requirements for the respective CPIT credential will be requested by email to submit six short essays. The essays should be prepared with reference to section **Assessment Part I – Essay** and submitted within the deadline specified in the email.

2.6 Interview

If the submitted essays are found to be satisfactory by an Assessment Panel, the applicant will be invited to attend an interview with compliance guidelines as described in section **Assessment Part II – Interview**.

The interview invitation will be sent by email. The Secretariat Office will offer 3 tentative interview schedules for the applicant's selection. The applicant is obliged to attend the interview at one of the schedules provided.

2.7 Interview Cancellation, Rescheduling or Absence

If the applicant knows he/she cannot attend the scheduled interview due to unexpected circumstances (such as medical emergency), he/she must inform the Secretariat Office as soon as possible. If the applicant is absent from the scheduled interview due to unexpected circumstances, he/she must inform the Secretariat Office within 3 business days after the scheduled date. The applicant is allowed to reschedule the interview ONCE and in both cases, he/she must produce justification and supporting documentation for failing to attend the interview as previously scheduled.

Applicant failing to comply with the aforementioned guideline will risk termination of the assessment process and forfeiture of the full application fee. Payment of a \$1,750 re-interview fee will be levied to reactivate the assessment process.

The HKITPC reserves the authority to review, accept and reject the claimed justification for absence. If the submitted explanation is not reckoned to be extenuating, the applicant will be required to pay the re-interview fee.

The applicant is allowed a maximum of 6 months to reschedule and attend the interview.

2.8 Result Notification

The notification letter indicating the result of the application will be sent to the applicant by post.

2.9 Appeal Process

If the applicant has questions with the assessment result, he/she can request a general review from the Secretariat Office. On request, the Executive Officer of the Secretariat Office will be the initial contact for:

- Confirming the status of assessment result;
- Seeking clarification on the certification disapproval (e.g. incomplete application, the required academic qualification and/or work experience is not met, the essay assessment is below the eligible level for an interview or the interview assessment is below the eligible level for a certification);
- Understanding the appropriate course of actions with respect to the assessment result and status (e.g. the validity of filing and appeal and how to submit an appeal request);
- Finding out the requirements for an appeal and
- Confirming submission of an appeal.

The Appeal Process, to be conducted by the Appeal Panel, is the only method to review all decisions regarding the application. The detailed Appeal Process can be found online at the HKITPC website.

3 ASSESSMENT

3.1 Overview of the Assessment

As part of the certification requirement, the applicant of CPIT(QAM) is required to submit six short essays describing six Competency Activities Groups (CAG) which the applicant has served as the quality engineer/manager as well as to attend an interview.

The essays are intended to serve primarily as an indicator of the applicant's knowledge and experience in performing IT quality assurance management activities based on the IT Quality Management Competency Activity Groups (ITQAMCAG) as shown in Appendix 1. It also helps to demonstrate the applicant's written communication capability which is considered a key personal competency required for a successful IT Quality Assurance Manager.

The essays will be reviewed by an **Assessment Panel (AP)** consisting of 2 assessors (namely the Primary Assessor and the Secondary Assessor). Upon a favorable review, the applicant will be invited to attend an interview with the AP. The interview will be in the form of a presentation and a Question and Answer (Q&A) session. The purpose of the interview serves to:

- validate claims of competency in the essay;
- provide an opportunity for the applicant to further elaborate his/her ITQA knowledge and skills and
- further assess the applicant's personal competency with particular regard to his/her verbal communication and presentation skills.

Both the essays and the interview are important in the final assessment as it is imperative for a successful quality assurance manager to articulate his/her thoughts and ideas in both formats.

A holistic assessment of the applicant's competency will be made based on the ITQAMCAG as demonstrated through the essay and the interview.

Minimum academic qualifications and professional work experience required for the application are tabulated in Table 1 below:

Table 1: Academic and Professional Work Experience Requirements of CPIT(QAM)

Academic Qualification	Experience related to IT Quality Assurance
Degree holder	Minimum ten years with substantial hands on experience on two high complexity* quality programs**
Non-degree holder	Minimum fifteen years with substantial hands on experience on four high complexity* quality programs**

* High Complexity of a program herein denotes and involves a multitude of attributes including:

- The scope and overall cost of the program (cost herein denoted HK\$ 3 million and above)
- The number of stakeholders and parties involved
- The technical and technological elements deployed
- The complexity of the quality management functionalities and their associated financial and operational risks.

** Quality Program herein denotes the establishment of the quality strategies, standards, policies and procedures for the organization which could follow, resulting in better quality products and services.

3.2 Assessment Part 1 – Essay

3.1.1 Essay Requirements

The applicant is required to submit SIX(6) short essays written in English of about 500 words each using the supplementary forms provided in the Application Form (refer to Appendix 3 of the Application Form). Each essay should address a single Competency Activities Group (CAG). One of the essays must be written on the topic of Personal Competency Activity Group. Three of the essays must be written on the topics from five competency activity groups relating to Quality Assurance (i.e. Organizational Quality Initiation, Quality Plan Development, Quality Assurance Execution, Quality Measurements and Improvements, Quality

Training and Development). Two of the essays must be written on the topics in the remaining four competency activity groups (i.e. Key Business Management Knowledge and Professional Ethics, IT Governance and Control Practices, Software Engineering, Information and Communications Technologies).

3.1.2 Essay Content

For each CAG described, the applicant must explain the work and involvement of IT Quality Assurance (ITQA) activities in the past. The applicant should provide:

- detailed background about the ITQA activities, including the organizations involved, the stakeholders, users, etc.;
- the objectives of the activities;
- the detailed activities carried out, including the approaches, methodologies, and processes;
- the results achieved and
- most important of all, the responsibilities and the specific activities carried out by the applicant.

The applicant should provide physical dimensions of these activities, including the duration, manpower efforts (in man-days), the number of parties/users involved, tangible and intangible benefits, and costing implications.

For each CAG selected, the applicant should address each of the competency elements described in Appendix 1 where appropriate. Where some elements are found not applicable in some activities, the applicant must either demonstrate the competency elements with some other activities, or explain why such competency elements are not applicable in that particular situation.

3.1.3 Essay Format and Guidelines

- The essays must be written in English or Chinese.
- The essays should be about 500 words each describing a single CAG.
- The essays should be submitted as softcopy using the supplementary form provided. MS Word (.doc) and Adobe Acrobat (.pdf) are the only acceptable file formats. The essay can also be submitted as hardcopy.
- Flowcharts, graphs, tables, charts, graphics, pictures, icons and images may be included or embedded in the essay and will be assessed, but not counted as words. The file size of each document, with embedded elements, must not be larger than 10M bytes.
- Flash, animation, audio, video, JavaScript and plug-in program of any kind must not be included in the softcopy and such media will not be assessed.

- Contents in hyperlinks will not be assessed as submitted contents.
- Reference publications with relevant title, name and page number presented in prologue, epilogue, footnotes and biography published by the applicant will not be checked, word-counted, reviewed or assessed. The applicant may directly quote the relevant contents in the body text of the essay for easy reference and such cases will be assessed accordingly.
- Contents repeated in the same essay will not be word-counted or scored more than the unique contents.

3.1.4 Essay Assessment

The essays will be reviewed and marked by the AP consisting of two assessors. The applicant must demonstrate satisfactory performance of ALL six CAGs selected.

The applicant will be invited to attend an interview if all six CAGs are evaluated to be satisfactory by both assessors.

3.3 Assessment Part II – Interview

If the submitted essays have passed the review of the AP, the applicant will be invited to attend an interview in the form of a presentation and a Q&A session.

3.1.5 Interview Procedures and Guidelines

The applicant can select to use English, Cantonese or Putonghua to conduct the interview and such selection has to be made in the application form. The duration of the interview session will be between 1 to 2 hours. The interview venue will be held in a location approved by the CB. The dress code is formal or smart casual.

The applicant should prepare to present the CAGs he/she selected in writing the essays. The content of the presentation should focus on the objectives and achievements of the activities carried out, and the specific involvements of the applicant in these activities. The applicant should make use of the presentation to elaborate key points that cannot be easily explained in the essay. Besides the content, the AP will also evaluate the presentation based on:

- the general presentation skills;
- how and if the content is systematically and logically presented and
- the proper use of visual aids or tools to help articulate a complicated technology concept.

The presentation is expected to be between 30 and 60 minutes, followed by another 30 to 60 minutes for Q&A. The AP may raise questions during and after the presentation in order to gain more insight into the activities for

further evaluating the applicant's competency. The Q&A session will also serve to test the applicant's genuine understanding of the ITQA activities involved as well as his/her communication skills.

To facilitate the assessment, it is highly recommended for the applicant to submit samples of his/her work, during the interview, to demonstrate the activities performed and the artifacts produced by the applicant. The applicant is encouraged to provide as many samples as possible.

The applicant may be asked to submit additional documents before or after the interview for clarifying and/or supporting certain areas of the activities involved. Normally, one month (from the date of notification) will be given to the applicant to gather and furnish the requested documents.

3.4 Overall Assessment

The applicant is expected to demonstrate sufficient competency in the competency groups as defined in the ITQAMCAG. The professional experience and knowledge of each competency activity/process (as exhibited through the essay and interview) will be used as a reference to evaluate the applicant's skill in that particular competency group. The evaluation will be based on the ITQAM competencies demonstrated in the essay and at the interview.

The applicant must demonstrate satisfactory performance of ALL CAGs selected.

A final assessment score, based on the essay, interview and additional documents, will be submitted to the CB for decision. The CB will normally take no more than two months to review the assessment and make a decision on the application.

4 NOTES TO APPLICANT

4.1 Intellectual Property Rights and Privacy of Information

By submitting the application, the applicant agrees to release, waive or delegate rights, including any present or future copyright, other intellectual property and authorship in any work created by the applicant contained in the essay and described in the interview for the purpose of certification of the applied professional title. It is the applicant's duty to give notice to the Secretariat Office immediately if the applicant at any time knows or should reasonably know of any third-party claim to intellectual property presented by the applicant in the essay or interview.

The applicant should not release any private or confidential information, trade secrets of companies, clients or third-parties in the essay or interview. No score will be gained by describing any private and confidential information of companies, clients or third-parties. It is the duty and obligation of the applicant to obtain written permission for disclosing any perceivable private and confidential

information from relevant companies, clients and third-parties before including as contents in the essay and the interview for the assessment.

4.2 Reference Documents

Up-to-date reference documents are available online at the HKITPC website.

4.3 Contact Information

HKITPC Secretariat Office:

Phone: (852) 2319 0900

Fax: (852) 2834 3003

Address: LG1, 78 Tat Chee Avenue, Kowloon Tong, Hong Kong

Email: hkitpc@hkitpc.org

Website: <http://www.hkitpc.org>

Appendix 1: IT Quality Assurance Management Competency Activity Groups (ITQAMCAG)

1 Core Competency Activity Group – Organizational Quality Initiation

1.1 Unit of Competence – Organizational Quality Initiation (3 clusters)

1.1.1 Establish QA Entity in Organizational Level (6 elements)

- Have knowledge of the requirements of establishing a QA entity in an organization
- Establish the needs of a QA entity and appropriate supporting infrastructure and resources required
- Prepare a QA proposal
- Liaise with the senior management to agree on a QA proposal in alignment with corporate policy
- Secure the resources (including recruitment) to establish the agreed QA entity
- Establish a QA entity

1.1.2 Plan for Organizational Quality Initiatives (2 elements)

- Understand organizational quality initiatives
- Plan and execute quality initiatives

1.1.3 Certifications and (International) Standards Adoption (3 elements)

- Understand available relevant certification standards
- Plan and obtain a suitable certification of standards
- Maintain the certification of standards

2 Core Competency Activity Group – Quality Plan Development

2.1 Unit of Competence – Quality Plan Development (3 clusters)

2.1.1 Establish Organizational Quality Policies and Procedures (2 elements)

- Establish Quality Policies and Procedures
- Improve Quality Policies and Procedures

2.1.2 Establish Quality Requirements of Software Product (1 element)

- Establish the quality requirements and measurement criteria of a software product

2.1.3 Plan QA Activities of Software Project (3 elements)

- Identify various components of a project QA plan
- Select adequate tools and techniques for the required QA activities
- Develop a software project QA plan

3 Core Competency Activity Group – Quality Assurance Execution

3.1 Unit of Competence – Quality Assurance Execution (2 clusters)

3.1.1 Implement Quality Plan, Policies and Procedures in an Organization (4

elements)

- Identify the implementation requirements
- Plan and execute the organizational level quality plan
- Implement quality policies and procedures
- Review the execution of the organizational quality plan

3.1.2 Perform QA Activities of Software Project (3 elements)

- Identify various QA activities in software project
- Execute project QA activities
- Monitor overall quality activates and feedback

4 Core Competency Activity Group – Quality Measurements and Improvements

4.1 Unit of Competence – Quality Measurements and Improvements (1 cluster)

4.1.1 Evaluate the Quality of Project Deliverables (4 elements)

- Capable to evaluate the quality of various project deliverables
- Ascertain objective evaluation of deliverables to customers
- Conduct root cause and trend analysis to drive quality process improvement
- Summarize quality issues and lessons learned

5 Core Competency Activity Group – Quality Training and Development

5.1 Unit of Competence – Quality Training and Development (1 cluster)

5.1.1 Plan and conduct training for QA activities (3 elements)

- Identify the training requirements for QA activities
- Plan the training for QA activities
- Conduct training for QA activities

6 Elective Competency Activity Group – Key Business Management Knowledge and Professional Ethics

6.1 Unit of Competence – Key Business Management Knowledge (2 clusters)

6.1.1 Knowledge Management (2 elements)

- The Concepts of Knowledge Management
- The Contents, Tools, and Means of Knowledge Management

6.1.2 Strategic Management (2 elements)

- Fundamentals for Strategic Management
- The Process of the Strategic Management

6.2 Unit of Competence – Professional Ethics (4 clusters)

6.2.1 Professional Ethics (4 elements)

- Responsibilities to the Profession
- Responsibilities to Customers and the Public
- Administration of Code of Conduct
- Comply with rules and regulations

7 Elective Competency Activity Group – IT Governance and Control Practices

7.1 Unit of Competence – IT Governance and Control Practices (2 clusters)

7.1.1 Governance Framework (3 elements)

- Organizational Strategies and Objectives
- Value Delivery / Process Management
- Risk Management

7.1.2 Review and Audit (3 elements)

- Review Proficiency
- Review Plan
- Review Execution

8 Elective Competency Activity Group – Software Engineering

8.1 Unit of Competence – Software Engineering (4 clusters)

8.1.1 Software Environments (2 elements)

- Identify project development life cycles
- Identify suitable tools and methods

8.1.2 Engineering Processes (4 elements)

- Practise development and management of requirements
- Practise technical design and development
- Conduct verification and validation
- Maintain systems

8.1.3 Program and Project Management (3 elements)

- Perform project planning
- Perform project tracking and controlling
- Risk management

8.1.4 Other Software Support Processes (5 elements)

- Perform configuration management
- Manage changes and releases
- Manage incidents and problems
- Evaluate security management
- Perform service level management

9 Elective Competency Activity Group – Information and Communications Technologies

9.1 Unit of Competence – Information Systems Knowledge (3 clusters)

9.1.1 The Information Systems and the Constructs of Information Systems (3 elements)

- Concepts of the Information Systems
- The Construct of Information Systems
- Systems Architecture

- 9.1.2 Characteristics of the Information Systems Projects (2 elements)
 - Nature and the complexity of the Information Systems Projects
 - The project life cycle of the Information Systems Projects
- 9.1.3 Software Component Technologies and Tools (2 elements)
 - Object Oriented Systems Analysis and Design and Typical Applications Integration Technologies
 - Software Tools
- 9.2 Unit of Competence – Computer Network Systems and Information Security Knowledge (2 clusters)
 - 9.2.1 Computer Network and Systems (1 element)
 - Network Technologies and Standards
 - 9.2.2 Information Security (3 elements)
 - Information System Security and risk assessments
 - Security Strategies and technologies
 - Other considerations of Information Security

10 Mandatory Competency Activity Group – Personal Competencies

- 10.1 Unit of Competence – Leadership (1 cluster)
 - 10.1.1 Leadership (4 elements)
 - Establish visions
 - Validate visions
 - Align the visions with business objectives
 - Turn visions into action plans
- 10.2 Unit of Competence – Team Work (1 cluster)
 - 10.2.1 Team work (3 elements)
 - Cherish ideas from team members
 - Supportive
 - Participative
- 10.3 Unit of Competence – Self-Management (3 clusters)
 - 10.3.1 Initiative (4 elements)
 - Take initiative when needed
 - Take immediate and independent actions when needed
 - Willing to take challenge beyond own responsibilities
 - Proactively identify problem and propose solutions
 - 10.3.2 Adaptability (2 elements)
 - Able to work with different people and environments
 - Work effectively under pressure and stress
 - 10.3.3 Result Driven (3 elements)

- Work with commitment
- Evaluate metrics
- Time management

10.4 Unit of Competence – Communication (1 cluster)

10.4.1 Communication (5 elements)

- Inter-personal skill
- Presentation
- Listening
- Writing
- Intercultural understanding

10.5 Unit of Competence – Negotiation Skill (1 cluster)

10.5.1 Negotiation Skill (3 elements)

- Negotiation positioning
- Negotiation tactics
- Negotiation tools

10.6 Unit of Competence – Integrity (1 cluster)

10.6.1 Integrity (1 element)

- Adhere to a set of professional value and code of conduct

10.7 Unit of Competence – Critical Thinking (2 clusters)

10.7.1 Analytical Skills & Problem Solving (2 elements)

- Problem analysis
- Problem solving

10.7.2 Decision Making (1 element)

- Make rational decision

Appendix 2: IT Quality Assurance Management Assessment Supplementary Forms

Using the space provided below, please:

1. Write a short essay of around 500 words describing your achievement in any THREE of the following Competency Activity Groups.
 - Organizational Quality Initiation
 - Quality Plan Development
 - Quality Assurance Execution
 - Quality Measurements and Improvements
 - Quality Training and Development

2. Write a short essay of around 500 words describing your achievement in any TWO of the following Competency Activity Groups.
 - Key Business Management Knowledge and Professional Ethics
 - IT Governance and Control Practices
 - Software Engineering and Support Processes
 - Information and Communication Technologies

3. Write a short essay of around 500 words describing your Personal Competencies

Quality Competency Activity 1 _____

Quality Competency Activity 2

Quality Competency Activity 3

Other Competency Activity 1 _____

Other Competency Activity 2

Personal Competencies



Hong Kong Institute for IT Professional Certification

Application Guide for CPIT(QAM)