



Quality Management Engineer A new Professional for Greater Bay Area

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Hong Kong Institution of Certified Auditors (HKICA)

- HKICA was set up in 2006, a learnt society and professional body
- In May 2016, the HKICA certified by China National Accreditation Service for Conformity Assessment (CNAS) to ISO/IEC 17024: Certification for Person
- In August 2016, HKICA reached Mutual Recognition with China Certification and Accreditation Association (CCAA)
- In June 2018, HKICA joins International Personnel Certification Association (IPC) as Full Member IPC
- In October 2018, HKICA becomes MLA Signatory of IPC



HKICA system bench marking to ISO17024 certified by China National Accreditation Service for Conformity Assessment (CNAS). (5/2016)



HKICA becomes IPC MLA Signatory (10/2018)



HKICA is the only organization reached MRA agreement with China Certification and Accreditation Association (CCAA). (8/2016)







GBA Reciprocal recognition arrangement

工程技术人才专业资格互认啦! 粤港澳 大湾区签订首批协议

人民日报客户端广东频道 贺林平 2020-07-11 16:43 浏览量1.2万

广东省工程师学会成立大会暨粤港澳大湾区工程 技术人才专业资格互认协议签约仪式今天(7月 11日)在广东科学馆举行,粤港澳大湾区工程技 术人才专业资格互认协议同时签订。





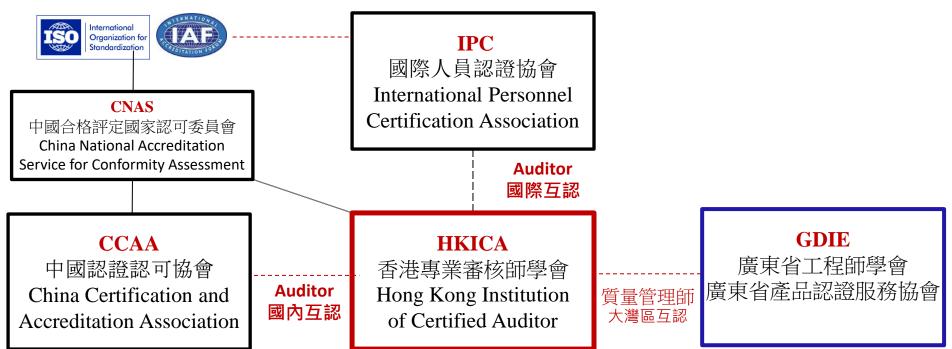
广东省测量控制技术与装备应用促进会、广东省 计算机学会、广东省电机工程学会、广东省土木 建筑学会、广东省公路学会、广东省产品认证服 务协会、香港工程师学会、香港营造师学会、英 国皇家特许计量及控制学会(香港分会)、香港专 业审核师学会、澳门电脑学会等11家粤港澳科技 社团成为第一批工程技术人才专业资格互认签约 单位。





Background and Works of HKICA

- Established in 2006 as Learned Society of Quality Professional
- Reached MRA agreement with China Certification and Accreditation Association (CCAA). (8/2016)
- Joined IPC MLA Signatory (10/2018). Become International Personnel Certification Body
- Extended scope to cover Quality Management Engineers (QME) for GBA Reciprocal recognition arrangement 2020
- Extended scope to cover Quality Testing Engineers (QTE) for GBA Reciprocal recognition arrangement 2022







What is Quality Management Engineer (QME)

QME is an engineering professional engaged in quality production, supervision and audit. He shall have engineering knowledge / training and sense of in quality supervision and assurance in a specific engineering trade.

[HKICA質量管理師的理念是 質量管理 + 工程知識。(工程知識需要配合行業要求, 崗位要求, 年資要求)。

- Quality personnel engaged in management, control, auditing, certification and accreditation, and
- They need to meet the engineering knowledge requirements of the industry and the position;
- they should have experience and professional capabilities in both engineering knowledge and quality management systems
- Competence in line with the respective engineering sectors
- Competence to meet production/projects requirement, implement project inspection and management





HKICA QME Registration Criteria

- 1. Academic qualifications,
- 2. Working experience,
- 3. Professional working experience
- 4. Relevant Training, and
- 5. Other competence and experience requirements





Quality Management Engineer (QME)

- 5.2 Quality management engineer
- 5.2.1 Academic qualification, working experience, professional working experience The applicant shall have
 - (a) Doctoral degree and 1 year of relevant professional experience; or
 - (b) Master degree and 2 years of relevant professional experience; or
 - (c) Bachelor degree and 4 years of relevant professional experience; or
 - (d) Higher diploma, associate degree and 5 years of relevant professional experience; or
 - (e) Qualified as associate quality management engineer and 4 years of relevant or other professional working experience; or
 - (f) Obtained Testing inspection and certification related Qualification Framework (QF) level 5 or above and 5 years of relevant professional working experience; or
 - (g) Secondary school or equivalent and 10 years of relevant working experience.





Quality Management Engineer (QME)

5.2.2 Training

The candidate shall complete at least 16-hour internal audit training course approved; or recognized by HKICA

- 5.2.3 Other competence and experience requirements The applicant shall
 - (a) have educational background/knowledge/training in engineering professional to relevant industry; or the associate engineer grade of a professional engineering institution or Certified personnel by Personnel Certification Scheme recognized by HKICA and
 - (b) (i) obtain internal auditor qualification certified by HKICA; or
 - (ii) have relevant audit experience (at least 4 complete management system audits, with the total duration of which shall be a minimum of 12 days auditing with a minimum of 8 days on site; or
 - (iii) pass the HKICA internal auditor assessment (examination)





Senior Quality Management Engineer (SQME)

- 5.3.1 Academic qualification, working experience, professional working experience The applicant shall have
 - (a) Doctoral degree and 2 years of relevant professional experience; or
 - (b) Master degree and 7 years of relevant professional experience; or
 - (c) Bachelor degree and 10 years of relevant professional experience; or
 - (d) Relevant Higher Diploma, Associate degree and 12 years of relevant professional experience;
 - (e) Qualified as a quality management engineer and 5 years of relevant or other professional working experience;
 - (f) Obtained Testing inspection and certification related Qualification Framework (QF) level 5 or above and 12 years of relevant professional working experience; or
 - (g) Secondary school or equivalent and 15 years of relevant working experience.





Associate Quality Management Engineer (AQME)

- 5.1.1 Academic qualification, working experience, professional working experience The applicant shall have
 - (a) master degree or above; or
 - (b) bachelor degree and 1 year of relevant professional experience; or
 - (c) higher diploma, associate degree and 2 years of professional experience; or
 - (d) qualified as a quality management technologist and 2 years of relevant professional working experience; or
 - (e) obtained Testing inspection and certification related Qualification Framework (QF) level 4 or above and 3 years of relevant professional working experience; or
 - (f) secondary school or equivalent and 5 years of relevant working experience.





Associate Quality Management Engineer (AQME)

5.1.2 Training

The candidate shall complete at least 16-hour internal audit training course approved; or recognized by HKICA

- 5.1.3 Other competence and experience requirements The applicant shall
 - (a) have educational background/knowledge/training in engineering professional to relevant industry; or the associate engineer grade of a professional engineering institution; or Certified personnel by Personnel Certification Scheme recognized by HKICA and
 - (b) (i) obtain internal auditor qualification certified by HKICA; or
 - (ii) have relevant audit experience (at least 4 complete management system audits, with the total duration of which shall be a minimum of 12 days auditing with a minimum of 8 days on site; or
 - (iii) pass the HKICA internal auditor assessment (examination)





Senior Quality Management Engineer (SQME)

5.3.1.1 Training

The candidate is preferred to complete at least 16-hour internal audit training course approved; or recognized by HKICA

- 5.3.2 Other competence and experience requirements The applicant shall
 - (a) obtained Professional Engineering Grade of a professional engineering institution in relevant industry for at least 2 years; and
 - (b) (i) obtain internal auditor qualification certified by HKICA; or
 - (ii) have relevant audit experience (at least 4 complete management system audits, with the total duration of which shall be a minimum of 12 days auditing with a minimum of 8 days on site; or
 - (iii) pass the HKICA internal auditor assessment (examination/interview)





Appendix 1: HKICA Recognized Professional Institution/Qualification

Recognized professional Institution and Personnel Certification Scheme includes:

- (a) Engineering Institution signed the Washington Accord, Sidney Accord, such as Hong Kong Institution of Engineers;
- (b) Personnel Certification Scheme recognized by HKICA, such as Certified Testing Technician (CTT) and Certified Testing Professional (CTP) schemes of Hong Kong Association for Testing, Inspection and Certification;
- (c) Other professional organizations recognized by HKICA, including overseas institutions





GBA Reciprocal Recognition Arrangement

In July 2020, the Institute became the first batch of pilot units for mutual recognition of professional qualifications for engineering and technical talents in the Guangdong-Hong Kong-Macao Greater Bay Area. After two years of joint efforts, the Society and the Guangdong Institution of Engineers have formulated the implementation rules for the evaluation of the professional level of engineers in quality management (certification and accreditation) and mutual recognition arrangements between the two places. At the same time, the Hong Kong Institute of Professional Auditors has also become one of the evaluation institutions for the QME engineer discipline.







Hong Kong Institute of Professional Auditors is one of the evaluation institutions for the GBA QME engineer discipline





Benefits and Contributions of GBA QME

工程技术人才职业资格评价建议 (Initial Idea 11-2019)

建议工程技术领域

工程技术相关测检认证和质量人员职业资格评价及专业认可注册

<u>促进人才流动,建立大湾区专业人流基础,工程技术人才职业 资格评价标准/评</u> <u>审程序</u>

大湾区专业互认目标要促进人才流动,建立共同的专业人流基础。除了国家职业 名称互认,亦需要扩大相关下层工程人员流动,包括如何吸引非国家职业专业 人才参与是非常重要。引入国际认可资格,建立广东香港资历架构评价标准, 拟定学术水平类职称互认,扩大相关下层工程人员职称互认。

加强大湾区内城市互联互通,便利香港居民在大湾区学习,就业和生活,促进 人才流动,建立共同的专业人才基础。突破测检认证专业人才依据市场需要创 新。建议加入水平职称互认,开展测检认证专业人才的资历架构等效评价,加₁₈ 强工程质量水平,建立三地互认、与国际接轨。





Our concerns

- Various management systems have been used in Hong Kong for almost 30 years.
- Quality system failures occurred from time to time, affecting public confidence in quality and safety management.

Our believes

With defined responsibilities and professionalism of QME, quality, inspection and testing personnel are vital to improve project quality, environmental, safety culture.

<u>Conclusion</u> Hong Kong need GBA QME

The ultimate goal is to instill a culture where main contractors are dependable, <u>self-disciplined</u> professionals comparable to architects, engineers <u>and surveyors</u>

Recommendation 6 – Attract and retain talents for <u>quality supervision with certification for non-</u> <u>professional staff</u>

Except for qualified professional architects, engineers and surveyors with membership from recognized professional institutions, there is currently <u>no standard assessment of the competency</u> of personnel involved in construction quality supervision.



Recommendation 6

- 1) To upgrade the standards of site supervision, an industry certification system for supervision personnel should be explored.
- 2) Individuals without recognized professional qualification would be assessed based on their education, experience, practical knowledge and understanding of the BO, commensurate with the role and duties to be undertaken.
- 3) Periodic recertification and continuous training and development should be part of the certification system.
- 4) Implementation details of the certification system, including <u>certification body</u>, entry threshold, standard requirements and complementary training could be developed in consultation with industry stakeholders in further studies.







Thank You

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