

Building Services Operation and Maintenance Executives Society (BSOMES)

Core Competency

Pre-occupancy Stage:

Stream	Building Services	Builder's Work	Sustainable Operation and Maintenance
Levels of Competency			
Level 1	<p>1. <u>Design Requirement for Operation and Maintenance on Building Services</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments in facilitating future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to understand and have knowledge of Specifications of Contract Documents for Building Services Systems. <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge on life cycle costing for 	<p>1. <u>Design Requirement for Operation and Maintenance on Builder's Work</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments in facilitating future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to understand and have knowledge of Specifications of Contract Documents for Builder's works. <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge on life cycle costing for 	<p>1. <u>Design Requirement for Green and Sustainability on Various Systems and Building Materials</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments for Systems Design in Green and Sustainability during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to understand and have knowledge of Specifications of Contract Documents for Green and Sustainability on Various Systems <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge

	<p>budget planning</p> <ul style="list-style-type: none"> - Able to understand and apply knowledge on the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, pollutant emission, etc. <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to manage budget and lead Operation and Maintenance Team 	<p>budget planning</p> <ul style="list-style-type: none"> - Able to understand and apply knowledge on the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, pollutant emission, etc. <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to manage budget and lead Operation and Maintenance Team 	<p>on life cycle costing for budget planning</p> <ul style="list-style-type: none"> - Able to understand and apply knowledge on the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, pollutant emission, etc. <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to manage budget and lead Operation and Maintenance Team
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Stream	Building Services	Builder's Work	Sustainable Operation and Maintenance
Levels of Competency			
Level 2	<p>1. <u>Design Requirement for Operation and Maintenance on Building Services</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the offer of comments on future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to supervise, monitor and prepare the Contract Specification for Building Services Installation <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the budget planning on life cycle costing - Able to supervise and monitor the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy 	<p>1. <u>Design Requirement for Operation and Maintenance on Builder's Works</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the offer of comments on future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to supervise, monitor and prepare the Contract Specification for Builder's Work <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the budget planning on life cycle costing - Able to supervise and monitor the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy 	<p>1. <u>Design Requirement for Operation and Maintenance on Green and Sustainability on Various Systems and Building Materials</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the offer of comments on future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor testing and commissioning during systems handover covering indoor environmental Quality, water & energy consumption, etc. <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to supervise, monitor and prepare the Contract Specification for Green and Sustainability Systems <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the budget planning on life cycle costing - Able to supervise and monitor the necessary insights to evaluate whether a

	<p>utilizations, pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of BS Installation</u></p> <ul style="list-style-type: none"> - Compile and prepare the defect reports to relevant parties. Effectively control the defects rectification program 	<p>utilizations, pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of Builder's Work</u></p> <ul style="list-style-type: none"> - Compile and prepare the defect reports to relevant parties. Effectively control the defects rectification program 	<p>design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to supervise and monitor the pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of Green and Sustainable Installation</u></p> <ul style="list-style-type: none"> - Compile and prepare the defect reports to relevant parties. Effectively control the defects rectification program
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Stream	<u>Building Services</u>	<u>Builder's Work</u>	<u>Sustainable Operation and Maintenance</u>
Levels of Competency			
Level 3	<p>1. <u>Design Requirement for Operation and Maintenance on Building Services</u></p> <ul style="list-style-type: none"> - Able to audit and advise the comments in facilitating future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to audit and advise the witness of testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to audit and advise the Specifications of Contract Documents for Building Services Systems. <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to audit and advise the budget planning on life cycle costing - Able to audit and advise the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, 	<p>1. <u>Design Requirement for Operation and Maintenance on Builder's Work</u></p> <ul style="list-style-type: none"> - Able to audit and advise the comments in facilitating future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to audit and advise the witness of testing and commissioning during systems handover <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to audit and advise the Specifications of Contract Documents for Builder's Work Systems. <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to audit and advise the budget planning on life cycle costing - Able to audit and advise the necessary insights to evaluate whether a design option is of the least life cycle costs to the environmental and building in terms of resources and energy utilizations, 	<p>1. <u>Design Requirement for Green and Sustainability on Various Systems and Building Materials</u></p> <ul style="list-style-type: none"> - Able to audit and advise the comments in facilitating future operation and maintenance during preliminary project design stage <p>2. <u>Testing and Commissioning Plan</u></p> <ul style="list-style-type: none"> - Able to audit and advise the witness of testing and commissioning during systems handover covering indoor environmental Quality, water & energy consumption, etc. <p>3. <u>Contract Specification</u></p> <ul style="list-style-type: none"> - Able to audit and advise the Specifications of Contract Documents for Green and Sustainability Systems <p>4. <u>Life Cycle Costing</u></p> <ul style="list-style-type: none"> - Able to audit and advise the budget planning on life cycle costing - Able to audit and advise the necessary insights to evaluate whether a design option is of the least life cycle costs to the

	<p>pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to audit and advise to manage pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of BS Installation</u></p> <ul style="list-style-type: none"> - Appraise and audit the defect reports to relevant parties. Effectively control the defects rectification program 	<p>pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to audit and advise to manage pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of Builder's Work</u></p> <ul style="list-style-type: none"> - Appraise and audit the defect reports to relevant parties. Effectively control the defects rectification program 	<p>environmental and building in terms of resources and energy utilizations, pollutant emission, etc.</p> <p>5. <u>O&M Team</u></p> <ul style="list-style-type: none"> - Able to audit and advise to manage pre-management budget and setup of Operation and Maintenance Team <p>6. <u>Takeover of Green and Sustainable Installation</u></p> <ul style="list-style-type: none"> - Appraise and audit the defect reports to relevant parties. Effectively control the defects rectification program
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Post-occupancy Stage:

Stream	Building Services	Builder's Work	Sustainable Operation and Maintenance
Levels of Competency			
Level 1	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments for the most up-to-date statutory requirements, authority submission and licensing procedures, engineering best practices, etc. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on engineering calculation and drawing for maintenance work - Able to understand and apply knowledge to offer comments for arranging Planned Maintenance Program - Able to understand and apply knowledge to offer comments to preserve proper operation and maintenance records - Able to understand and apply knowledge to offer comments to analyze 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments for the most up-to-date statutory requirements, authority submission and licensing procedures, best practices, etc. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand the knowledge on engineering calculation and drawing for maintenance work - Able to understand and apply knowledge to offer comments on drawing of building system and structure - Able to understand and apply knowledge to offer comments for arranging Planned Maintenance Program - Able to understand and apply knowledge to offer comments to preserve proper operation and maintenance records 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments for the most up-to-date statutory requirements, authority submission like BEEO etc. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on engineering calculation - Able to understand and apply knowledge to offer comments to prepare, comment on drawing of green and sustainability design. - Able to understand and apply knowledge to offer comments to apply good knowledge for arranging Planned Maintenance Program - Able to understand and apply knowledge to offer comments to preserve proper operation and maintenance records

	<p>a building services system in terms of its performance, failure mode, operability, reliability and energy utilization. Develop effective preventive measures and improvements.</p> <p><u>3. Project Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to understand and apply knowledge to offer comments for the work program, cost, safety and quality controls of new/A&A/improvement project - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p><u>4. Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments to conduct system operation to maintain good indoor environmental quality for occupants 	<p><u>3. Project Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to understand and apply knowledge to offer comments for the work program, cost, safety and quality controls of new/A&A/improvement project - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p><u>4. Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments to conduct system operation to maintain good indoor environmental quality for occupants <p><u>5. Communication Skill</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer technical advice to landlord and tenant - Able to understand and apply knowledge to offer comments to 	<p><u>3. Project Management</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on engineering calculation, engineering drawing and design for energy saving/green project - Able to understand and apply knowledge to offer comments for the work program, cost, safety and quality controls of energy saving/green project - Able to understand and apply knowledge to conduct testing and commissioning during systems handover <p><u>4. Energy Efficiency and Sustainability of Building Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments to operate the Building Services systems in most energy-efficient way - Able to understand and apply knowledge to implement the environmental protection measures for conducting operation and maintenance works - Able to understand and apply knowledge to offer comments to improve the energy efficiencies continuously by strategic
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	<p>5. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer technical advice to landlord and tenant - Able to understand and apply knowledge to offer comments to management and building owners in shortlisting or pre-qualifying eligible and suitable tenderers. Attending to all stakeholder's interests. 	<p>management and building owners in shortlisting or pre-qualifying eligible and suitable tenderers. Attending to all stakeholder's interests.</p>	<p>conservation means including adoption of electricity, water and fuel saving measures.</p> <p>5. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments to conduct system operation to maintain good indoor environmental quality for occupants <p>6. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to understand and apply knowledge to offer comments on green and sustainable advice to landlord and tenant - Able to understand and apply knowledge to offer comments to management and building owners in shortlisting or pre-qualifying eligible and suitable tenderers. Attending to all stakeholder's interests.
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Stream	<u>Building Services</u>	<u>Builder's Work</u>	Sustainable Operation and Maintenance
Levels of Competency			
Level 2	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the compliance of legal and statutory requirements (e.g. Buildings Ordinance and relevant Deed of Mutual Covenant) for building operation - Able to monitor and supervise all works with the most up-to-date legislations and regulations regarding health and safety in the workplace and building environment. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the maintenance inspections to ascertain the quality standard - Able to monitor and supervise the review and fine tune work of the maintenance program periodically - Able to monitor and supervise all works with sound fault-diagnostic, problem-solving and decision-making skills 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the compliance of legal and statutory requirements (e.g. Buildings Ordinance and relevant Deed of Mutual Covenant) for building operation - Able to monitor and supervise all works with the most up-to-date legislations and regulations regarding health and safety in the workplace and building environment. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the maintenance inspections to ascertain the quality standard - Able to monitor and supervise the review and fine tune work of the maintenance program periodically - Able to monitor and supervise all works with sound fault-diagnostic, problem-solving and decision-making skills - Able to monitor and supervise the 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise all works with the most up-to-date legislations and regulations regarding statutory requirements, authority submission like BEEO etc., health and safety in the workplace and building environment. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the maintenance inspections to ascertain the quality standard - Able to monitor and supervise the review and fine tune work of the maintenance program periodically - Able to monitor and supervise all works with sound fault-diagnostic, problem-solving and decision-making skills - Able to monitor and supervise the assessment and certification of the payment to Contractors and Suppliers with

	<ul style="list-style-type: none"> - Able to monitor and supervise the assessment and certification of the payment to Contractors and Suppliers with professional judgment <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the review on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to monitor and supervise for the work program, cost, safety and quality controls of new/A&A/improvement project - Able to monitor and supervise the testing and commissioning during systems handover <p>4. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the system operation to maintain good indoor environmental quality for occupants <p>5. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise for offering consultancy services to landlord and tenant 	<p>assessment and certification of the payment to Contractors and Suppliers with professional judgment</p> <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the review on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to monitor and supervise for the work program, cost, safety and quality controls of new/A&A/improvement project - Able to monitor and supervise the testing and commissioning during systems handover <p>4. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the system operation to maintain good indoor environmental quality for occupants <p>5. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise for offering consultancy services to landlord and tenant 	<p>professional judgment</p> <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the review on engineering calculation, engineering drawing and design for energy saving/green project - Able to monitor and supervise for the work program, cost, safety and quality controls of energy saving/green project - Able to monitor and supervise the testing and commissioning during systems handover <p>4. <u>Energy Efficiency and Sustainability of Building Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the maintenance of the optimization control of Building Services Systems - Able to monitor and supervise the enforcement of the sustainability of building operation and fit-out work - Able to monitor and supervise the technical proficiency to maintain the local ecosystem and microclimate by controlling light pollutions, noises and vibrations, electromagnetic interferences, water
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	<p><u>6. System Re-commissioning and Use of BMS & BIM</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the data collection with application of good knowledge - Able to monitor and supervise the condition survey and data logging with application of good knowledge - Able to monitor and supervise analysis of the data collecting from the operational record <p><u>7. Contingency Plan, Fire Safety Management and Risk Assessment for Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the fault attendance and disaster recovery <p><u>8. Occupational Health and Safety</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the Undertaking of risk assessment for operation and maintenance <p><u>9. Quality Management System</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the formulation of continuous improvement plan 	<p><u>6. Building Inspection & Repair & Use of Building Information Modelling (BIM)</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the works related to structural integrity, water seepage detection, concrete repair, drainage pipe repair, slope maintenance and unauthorized builder's works with application of good knowledge - Able to monitor and supervise the condition survey and data logging with application of good knowledge - Able to monitor and supervise analysis of the data collecting from the operational record <p><u>7. Contingency Plan, Fire Safety Management and Risk Assessment for Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the fault attendance and disaster recovery <p><u>8. Occupational Health and Safety</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the Undertaking of risk assessment for operation and maintenance <p><u>9. Quality Management System</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the 	<p>quality, indoor air quality, etc.</p> <ul style="list-style-type: none"> - Able to monitor and supervise the engagement with stakeholders including building users, business partners, services providers and the communities to encourage awareness of all aspects of conservation and foster a culture of sustainability, GHG reduction and healthy lifestyles within the buildings and nearby community. <p><u>5. Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the system operation to maintain good indoor environmental quality for occupants <p><u>6. Communication Skill</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise for offering consultancy services to landlord and tenant <p><u>7. System Re-commissioning and Use of BMS & BIM</u></p> <ul style="list-style-type: none"> - Able to monitor and supervise the data collection with application of good knowledge - Able to monitor and supervise the condition survey and data logging with
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		formulation of continuous improvement plan	application of good knowledge - Able to monitor and supervise analysis of the data collecting from the operational record <u>8. Quality Management System</u> - Able to monitor and supervise the formulation of continuous improvement plan
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Stream	<u>Building Services</u>	<u>Builder's Work</u>	Sustainable Operation and Maintenance
Levels of Competency			
Level 3	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant laws and codes, Buildings Ordinance and relevant DMC, knowledge and analysis on material and specification, to plan and manage out-sourcing, including writing tender procedures, technical and general specifications, tender documents, and the arrangement on tender opening, tender analysis, selection and appointment of suppliers and contractors - Offer professional advices to tenants during their fit-out works <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant technical requirements to plan and administer on management of improvement project, and to effectively control expenses, time, quality and safety for operation and maintenance works - Able to audit and advise the application 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant laws and codes, Buildings Ordinance and relevant DMC, knowledge and analysis on material and specification, to plan and manage out-sourcing, including writing tender procedures, technical and general specifications, tender documents, and the arrangement on tender opening, tender analysis, selection and appointment of suppliers and contractors - Offer professional advices to tenants during their fit-out works <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant technical requirements to plan and administer on management of improvement project, and to effectively control expenses, time, quality and safety for operation and maintenance works - Able to audit and advise the application 	<p>1. <u>Legal Aspect for Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant laws to ensure that the activities complying with environmental regulatory requirements, minimise environmental degradation and contribute to a sustainable future through the conservation of natural resources, green maintenance, leakage monitoring and environmental footprints auditing and reporting. <p>2. <u>Operation and Maintenance Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the application of relevant technical requirements to plan and administer on management of improvement project, and to effectively control expenses, time, quality and safety for energy saving/green works - Able to audit and advise the application of related technical requirements on management of repair and maintenance tasks in a building, to apply suitable

	<p>of related technical requirements on management of repair and maintenance tasks in a building, to apply suitable design-out maintenance programme, monitor and ensure the reliability of building services systems</p> <ul style="list-style-type: none"> - Adopt various procurement strategies or contracts selection criteria to cope with different organizational objectives and business models - Short term and long term planning for upgrade and optimization of facilities to meet the rapid changing markets. <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to audit and advise the work program, cost, safety and quality controls of new/A&A/improvement project - Able to audit and advise the testing and commissioning during systems handover - Able to audit and advise the Proficiency in use of technical knowledge and skills 	<p>of related technical requirements on management of repair and maintenance tasks in a building, to apply suitable design-out maintenance programme, monitor and ensure the reliability of building systems</p> <ul style="list-style-type: none"> - Adopt various procurement strategies or contracts selection criteria to cope with different organizational objectives and business models - Short term and long term planning for upgrade and optimization of facilities to meet the rapid changing markets. <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review on engineering calculation, engineering drawing and design for new/A&A/improvement project - Able to audit and advise the work program, cost, safety and quality controls of new/A&A/improvement project - Able to audit and advise the testing and commissioning during systems handover - Able to audit and advise the Proficiency in use of technical knowledge and skills 	<p>design-out maintenance programme, monitor and ensure the reliability of energy saving/green systems</p> <ul style="list-style-type: none"> - Able to audit and advise the adoption of various procurement strategies or contracts selection criteria to cope with different organizational objectives and business models - Able to audit and advise the short term and long term planning for upgrade and optimization of facilities to meet the rapid changing markets. <p>3. <u>Project Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review on engineering calculation, engineering drawing and design for energy saving/new project - Able to audit and advise the work program, cost, safety and quality controls of energy saving/new project - Able to audit and advise the testing and commissioning during systems handover - Able to audit and advise proficiency in use of technical knowledge and skills in managing the improvement, refurbishment
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	<p>in managing the improvement, refurbishment and A&A projects including specifying critical tender requirements, tender analysis, contract negotiation, commissioning and assessing the work of consultants and contractors to achieve the contractual and quality requirements under tight budget and programme.</p> <p>4. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to audit and advise the system operation to maintain good indoor environmental quality for occupants - Able to audit and advise the management and promotion for the certification/verification of good indoor environmental quality for occupants <p>5. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to audit and advise the presentation of technical options and engineering solutions to laymen effectively with suitable value engineering approach - Able to audit and advise the compilation with clear, concise and persuasive 	<p>in managing the improvement, refurbishment and A&A projects including specifying critical tender requirements, tender analysis, contract negotiation, commissioning and assessing the work of consultants and contractors to achieve the contractual and quality requirements under tight budget and programme.</p> <p>4. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to audit and advise the system operation to maintain good indoor environmental quality for occupants - Able to audit and advise the management and promotion for the certification/verification of good indoor environmental quality for occupants <p>5. <u>Communication Skill</u></p> <ul style="list-style-type: none"> - Able to audit and advise the presentation of technical options and engineering solutions to laymen effectively with suitable value engineering approach - Able to audit and advise the compilation with clear, concise and persuasive proposals and tender analysis reports to 	<p>and A&A projects including specifying critical tender requirements, tender analysis, contract negotiation, commissioning and assessing the work of consultants and contractors to achieve the contractual and quality requirements under tight budget and programme.</p> <p>4. <u>Energy Efficiency and Sustainability of Building Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to audit and advise the promotion of the Conservation of Energy and Water resources - Able to audit and advise the management of the minimization of the carbon emissions to environment - Able to audit and advise the exploration of the new technology to retrofit with energy-efficient installations - Able to audit and advise the in-depth knowledge of green procurement to specify and select engineering systems, materials, services, processes, transports and practices which cause the least damage and GHG-emission to the environment throughout their life cycles. <p>5. <u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none"> - Able to audit and advise the system
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	<p>proposals and tender analysis reports to facilitate management decision or acquire stakeholders' support in an objective and professional manner.</p> <p><u>6. System Re-commissioning and Use of BMS & BIM</u></p> <ul style="list-style-type: none"> - Able to audit and advise the management of presentation for the data collecting from the operational record based on analytic result <p><u>7. Contingency Plan, Fire Safety Management and Risk Assessment for Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to audit and advise the formulation of emergency handling measures and guiding principles applicable to the building services systems concerned, and to provide relevant improvement plans and preventive measures for minimizing the risk level. - Able to audit and advise the development of effective tailored-made crisis management and contingency plans for business sustainability. - Able to audit and advise the management of the good stock control for 	<p>facilitate management decision or acquire stakeholders' support in an objective and professional manner.</p> <p><u>6. Building Inspection & Repair & Use of BIM</u></p> <ul style="list-style-type: none"> - Able to audit and advise the management of presentation for the works related to structural integrity, water seepage detection, concrete repair, drainage pipe repair, slope maintenance and unauthorized builder's works <p><u>7. Contingency Plan, Fire Safety Management and Risk Assessment for Operation and Maintenance</u></p> <ul style="list-style-type: none"> - Able to audit and advise the formulation of emergency handling measures and guiding principles applicable to the building systems concerned, and to provide relevant improvement plans and preventive measures for minimizing the risk level. - Able to audit and advise the development of effective tailored-made crisis management and contingency plans for business sustainability. - Able to audit and advise the 	<p>operation to maintain good indoor environmental quality for occupants</p> <ul style="list-style-type: none"> - Able to audit and advise the management and promotion for the certification/verification of good indoor environmental quality for occupants <p><u>6. Communication Skill</u></p> <ul style="list-style-type: none"> - Able to audit and advise the presentation of technical options and engineering solutions to laymen effectively with suitable value engineering approach - Able to audit and advise the top management or building owners about the consideration of sustainability in all relevant economic decisions as part of the corporate social responsibility initiatives. <p><u>7. System Re-commissioning and Use of BMS & BIM</u></p> <ul style="list-style-type: none"> - Able to audit and advise the management of presentation for the data collecting from the operational record based on analytic result <p><u>8. Quality Management System</u></p> <ul style="list-style-type: none"> - Able to audit and advise the development
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	<p>maintaining our business activities</p> <p>8. <u>Occupational Health and Safety</u></p> <ul style="list-style-type: none"> - Able to audit and advise the formulation and review of safety policy and guideline for operation and maintenance <p>9. <u>Quality Management System</u></p> <ul style="list-style-type: none"> · Able to audit and advise the development of knowledge management system and training plans for in-house and outsourced stratum - Able to audit and advise the establishment of monitoring and operating control procedural standards to assure services reliability, operability, maintainability and durability <p>10. <u>Maintenance Audit</u></p> <ul style="list-style-type: none"> - Able to audit and advise the ongoing review and audit of the operating conditions, plan to conduct fine commissioning throughout the lifetime of building services systems - Able to audit and advise the exploration of the new technology to retrofit with energy-efficient installations - Able to audit and advise the in-depth knowledge of green procurement to 	<p>management of the good stock control for maintaining our business activities</p> <p>8. <u>Occupational Health and Safety</u></p> <ul style="list-style-type: none"> - Able to audit and advise the formulation and review of safety policy and guideline for operation and maintenance <p>9. <u>Quality Management System</u></p> <ul style="list-style-type: none"> · Able to audit and advise the development of knowledge management system and training plans for in-house and outsourced stratum - Able to audit and advise the establishment of monitoring and operating control procedural standards to assure services reliability, operability, maintainability and durability <p>10. <u>Maintenance Audit</u></p> <ul style="list-style-type: none"> - Able to audit and advise the ongoing review and audit of the operating conditions, plan to conduct building condition survey, e.g. structural integrity, water seepage detection, concrete repair, drainage pipe repair, slope maintenance, unauthorized building works, etc. throughout the lifetime of building systems 	<p>of knowledge management system and training plans for in-house and outsourced stratum</p>
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	<p>specify and select engineering systems, materials, services, processes, transports and practices which cause the least damage and GHG-emission to the environment throughout their life cycles.</p> <p>11. <u>Outsourcing and Contractor Performance Monitoring</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review of the scope and form maintenance contracts with Contractors - Able to audit and advise the review of procurement procedures <p>12. <u>Human Resources and Customer Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review of the market conditions for the resources planning - Able to audit and advise the review of manpower according to the actual operational needs - Able to audit and advise the plan for apprenticeship/mentoring program to strengthen the resources of the industry - Able to audit and advise the succession / training plan 	<ul style="list-style-type: none"> - Able to audit and advise the exploration of the new technology to retrofit with energy-efficient installations - Able to audit and advise the in-depth knowledge of green procurement to specify and select building system, materials, services, processes, transports and practices which cause the least damage and GHG-emission to the environment throughout their life cycles. <p>11. <u>Outsourcing and Contractor Performance Monitoring</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review of the scope and form maintenance contracts with Contractors - Able to audit and advise the review of procurement procedures <p>12. <u>Human Resources and Customer Management</u></p> <ul style="list-style-type: none"> - Able to audit and advise the review of the market conditions for the resources planning - Able to audit and advise the review of manpower according to the actual operational needs 	
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		<ul style="list-style-type: none">- Able to audit and advise the plan for apprenticeship/mentoring program to strengthen the resources of the industry- Able to audit and advise the succession / training plan	
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Personal Integrity and Advancement: (Mandatory Competency)

Stream	Building Services	Builder’s Work	Sustainable Operation and Maintenance
Levels of Competency			
Mandatory Competency	<ul style="list-style-type: none"> - Uphold the honestly, ethical practices to deal with the trade practitioners, business partners and shareholders - Uphold the dignity, standing and reputation of the Profession - Promote the advancement of operation and maintenance and facilitate the exchange of knowledge and innovative ideas - Maintaining confidentiality and avoiding conflict of interest - Plan to assist young members in developing their careers to contribute to society - Promote and Implement Corporate Social Responsibility (CSR) Activities 	<ul style="list-style-type: none"> - Uphold the honestly, ethical practices to deal with the trade practitioners, business partners and shareholders - Uphold the dignity, standing and reputation of the Profession - Promote the advancement of operation and maintenance and facilitate the exchange of knowledge and innovative ideas - Maintaining confidentiality and avoiding conflict of interest - Plan to assist young members in developing their careers to contribute to society - Promote and Implement Corporate Social Responsibility (CSR) Activities 	<ul style="list-style-type: none"> - Uphold the honestly, ethical practices to deal with the trade practitioners, business partners and shareholders - Uphold the dignity, standing and reputation of the Profession - Promote the advancement of operation and maintenance and facilitate the exchange of knowledge and innovative ideas - Maintaining confidentiality and avoiding conflict of interest - Plan to assist young members in developing their careers to contribute to society - Promote and Implement Corporate Social Responsibility (CSR) Activities

Remarks:

(Level 1) – Operational Competency

~ Able to understand and apply the knowledge to perform technical tasks, either independently or under the direction of a qualified Engineer / Surveyor / Supervisor, make contributions to design, installation, operation, maintenance, repair, testing and commissioning, budget planning, contingency plan of building services / builder's work / sustainable operation and maintenance in buildings.

(Level 2) – Supervisory Competency

~ Able to monitor and supervise the technical tasks like design, installation, operation, maintenance, repair, testing and commissioning, budget planning, contingency plan of building services / builder's work / sustainable operation and maintenance in buildings. Able to assist the Manager to implement strategies and policies to the company objectives.

(Level 3) – Managerial Competency

~ Able to audit and advise the technical tasks like design, installation, operation, maintenance, repair, testing and commissioning, budget planning, contingency plan of building services / builder's work systems and facilities. Able to plan, direct and control the overall operations of the building services / builder's works in the building. Formulate and implement strategies and policies to meet the company objectives.

- *Applicants should submit a report with around 1500 words and all relevant documents of respective stream for professional assessment. An interview will be conducted for applicants who apply for the class of fellow/member to ascertain the quality of their technical and responsible experience.*
- *Applicants who apply for the class of associate should declare their fulfillment of core competency according to the predetermined criteria in the application form.*
- *Applicants should demonstrate their fulfilment of all competency items for all classes of membership under the Mandatory Competency.*
- *Applicants should demonstrate their fulfillment of adequate competency items for their application of class of membership under particular stream. The minimum requirements are listed in Appendix A*
- *Applicants should fulfill the minimum mandatory Continuing Professional Development (CPD) hours per year (i.e. Fellow: 20 hours, member: 20 hours, Associate: 15 hours) in relation to Operation and Maintenance and Engineering Industries. The course/seminar/visit organized or supported by BSOMES is preferred. 1 year of CPD record should be submitted together with the application form.*

- *Appendix A*

				Minimum No(s). Of Core Competency Required			
Levels of Competency (Building Services)		Pre-Occupancy	Post-Occupancy	Total	Fellow	Member	Associate
Level 1	Operational Competency	5	5	10	1	3	5
Level 2	Supervisory Competency	6	9	15	4	5	8
Level 3	Managerial Competency	6	12	18	8	5	0

				Minimum No(s). Of Core Competency Required			
Levels of Competency (Builders' Work)		Pre-Occupancy	Post-Occupancy	Total	Fellow	Member	Associate
Level 1	Operational Competency	5	5	10	1	3	5
Level 2	Supervisory Competency	6	9	15	4	5	8
Level 3	Managerial Competency	6	12	18	8	5	0

				Minimum No(s). Of Core Competency Required			
Levels of Competency (Sustainable O&M)		Pre-Occupancy	Post-Occupancy	Total	Fellow	Member	Associate
Level 1	Operational Competency	5	6	11	1	3	4
Level 2	Supervisory Competency	6	8	14	4	4	7
Level 3	Managerial Competency	6	7	13	6	4	0

