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|  | **CHARTERED ENGINEER OF SINGAPORE**  **APPLICATION** | | For enquiries on your application: Tel : (65) 6469 5000  Fax : (65) 6467 1108  Email : [enquiry@charteredengineers.sg](mailto:enquiry@charteredengineers.sg) |
| **New Registration For (** *please tick below* **)** | | | |
| ☐ Senior Chartered Engineer (Snr CEng) | | ☐ Chartered Engineer (CEng) | |
| **Please indicate the domain areas of your work experience in one of the following sectors which you are applying for:** | | | |

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| **□ RAILWAY & TRANSPORTATION SECTOR:** | |
| **□ RAILWAY ENGINEERING**  *Domain Area (you may cross more than one box)* | **□ TRANSPORTATION ENGINEERING**  *Domain Areas (you may cross more than one box)* |
| * Rolling Stock System / Rail Depot Equipment * Building Services   + Electrical Mechanical & Fire Protection System   + Environmental Control System   + Escalators, Platform Doors & Lifts Systems   + Access Management Systems * Railway Signalling Systems   + Railway Control Systems   + Communications Systems   + Fare Systems * Systems Integration / Systems Assurance * Traction Power Supply System * Permanent Way / Track Work * Energy Efficiency Opportunities Assessment * Others: Click or tap here to enter text. | * Automotive Technology & Standards   + Conventional Vehicle / Bus   + Autonomous Vehicle / Bus   + Electric Vehicle / Bus   + Vehicle Homologation & Controls * Intelligent Transport Systems   + Sensors   + Communication Systems   + Command & Control Systems   + Information Dissemination Systems * Traffic Management   + Transportation Planning & Modelling   + Traffic Surveys. Analysis & Design   + Road Safety   + Traffic Impact Assessments & Studies   + Traffic Systems Control & Operations   + Congestion Management * Road Traffic Design * Others: Click or tap here to enter text. |

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| **□ INFRASTRUCTURE ENGINEERING SECTOR:**  *Domain Area (you may cross more than one box)* | |
| * Land   + Planning Design & Construction   + Reclamation * Connectivity   + People Connectivity   + Goods Connectivity   + Road Network   + Multi-modal Transportation Network * Operations   + Estates   + Buildings   + Facilities | * Utilities   + Telecommunications   + Hydraulics & Waste Water Management   + Power Generation, Transmission & Distribution * Underground Space * Airport Infrastructure * Port Infrastructure   + Planning   + Design   + Development   + Maintenance * Others: Click or tap here to enter text. |
| **□ CHEMICAL & ENERGY SECTOR:** | |
| **□ Chemical**  *Sub-sector (please cross the relevant box)* | **□ Energy**  *Sub-sector (please cross the relevant box)* |
| * Refineries * Petrochemicals * Chemicals & Polymers * Biomedical & Pharmaceuticals * Food Processing * Process Engineering | * Energy Efficiency Opportunities Assessment * Energy Consulting Service * Power Generation * Power & Gas Distribution & Supply * Others: Click or tap here to enter text. |
| *Domain Area (you may cross more than one box)* |
| ☐ Process, Production & Operations   * Consulting Services * Control & Instrumentation * Engineering - Static Equipment * Engineering - Rotating Equipment |

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| * Maintenance * Process Safety * Health, Safety & Environment * Others: Click or tap here to enter text. |  |
| **□ AEROSPACE SECTOR:**  *Domain Area (you may cross more than one box)* | |
| * Academia & Research Institute * Defense Maintenance * Energy Efficiency Opportunities Assessment * Flight Test * Maintenance * Research & Development * Simulator Support & Engineering Training | * Civil MRO * Design & Certification * Engineering Fleet Management * Investigation Bureau * Manufacturing & Production * Sales & After-sales Support * Others: Click or tap here to enter text. |
| **□ ENVIRONMENT & WATER SECTOR:**  *Domain Area (you may cross more than one box)* | |
| * Air Quality Assessment, Monitoring & Control * Climate Change * Environmental Microbiology & Biotechnology * Human & Environmental Health * Water Reclamation & Reuse | * Alternative Energy Resources * Environmental Impact Assessment * Hazardous & Solid Waste Management * Water Quality & Treatment * Others: Click or tap here to enter text. |
| **□ ENGINEERING PROJECT MANAGEMENT**  *Domain Area (you may cross more than one box)* | |
| ☐ Underground Infrastructure  ☐ Above Ground Infrastructure   * Buildings * Coastal & Marine   ☐ Oil & Gas | ☐ Others: Click or tap here to enter text. |

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| **□ SYSTEMS ENGINEERING**  *Domain Area (you may cross more than one box)* | |
| * Aerospace & Civil Aviation * Defense & Security * Environment & Water * Healthcare Systems * Infrastructure * Land Transportation * Logistics | * Manufacturing   + Oil & Gas   + Biomedical & Pharmaceutics   + Precision Engineering   + Advanced Manufacturing * Port/Maritime * Power & Energy * SMART City – Network / Infocomms * Others: Click or tap here to enter text. |
| **□ SUSTAINABILITY SECTOR** | |
| ☐ CLEAN ENERGY  ☐ CIRCULAR ECONOMY | * CARBON ACCOUNTING * Others: Click or tap here to enter text. |
| **□ BUILT ENVIRONMENT SECTOR – Domain to be determined** | |
| ☐  ☐  ☐ | ☐  ☐  ☐ Others: Click or tap here to enter text. |
| **□ RENEWABLE ENERGY SECTOR– Domain to be determined** | |
| ☐  ☐  ☐ | ☐  ☐  ☐ Others: Click or tap here to enter text. |

**PART 1: PERSONAL PARTICULARS**

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| Title: | ☐ | Er. | ☐ | Prof. | ☐ | Dr. | ☐ | Mr. | ☐ | Mrs. | ☐ | Ms. |
| Surname / Family Name | Enter Surname / family name / last name here. | | | | | | | | | | | |
| Given Name / First | Enter given name / first name here. | | | | | | | | | | | |
| Gender |  | ☐ |  | Male |  |  |  | ☐ |  | Female | |  |
| Date of Birth | DD / MM / YYYY | | | | | | | | | | | |
| Nationality | Enter Nationality here. | | | | NRIC / Passport No.: | | | | Enter NRIC/Passport No here. | | | |
| IES Membership No.: | Enter IES membership No here. | | | | Membership Grade | | | | Enter membership grade here. | | | |

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| **PART 2: CONTACT DETAILS** | | | |
|  | | | |
| Name of Employer: | Click or tap here to enter text. | | |
| Job Designation: | Click or tap here to enter text. | | |
| Business Address: | Click or tap here to enter text. | | |
| Postal Code: | Click or tap here to enter text. | | |
| Office Phone: | Click or tap here to enter text. | Mobile Phone: | Click or tap here to enter text. |
| Email Address: | Click or tap here to enter text. | Fax No.: | Click or tap here to enter text. |
| Home Address: | Click or tap here to enter text. | | |
| Postal Code: | Click or tap here to enter text. | Home Phone: | Click or tap here to enter text. |

**PART 3: ACADEMIC QUALIFICATIONS**

## Undergraduate degree in engineering: ☐ Please check box if Certificate is attached.

|  |  |
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| Name of University: | Click or tap here to enter text. |
| Campus: | Click or tap here to enter text. |
| Full Title of Degree: | Click or tap here to enter text. |
| Programme Duration: | Click or tap here to enter text. |
| Mode of Delivery: | Click or tap here to enter text. |
| Other (please specify) | Click or tap here to enter text. |
| Date of Graduation | MM / YYYY |

**Postgraduate degree in engineering (if applicable): ☐ Please check box if Certificate is attached.**

|  |  |
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| Name of University: | Click or tap here to enter text. |
| Campus: | Click or tap here to enter text. |
| Full Title of Degree: | Click or tap here to enter text. |
| Programme Duration: | Click or tap here to enter text. |
| Mode of Delivery: | Click or tap here to enter text. |
| Other (please specify) | Click or tap here to enter text. |
| Date of Graduation | MM / YYYY |

**Other engineering qualifications (if applicable): ☐ Please check box if Certificate is attached.**

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| **PART 4: PROFESSIONAL QUALIFICATION (if applicable):** | |
| ☐ Please check box if Certificate is attached. | |
| PEng (Singapore) Reg No: | Click or tap here to enter text. |
| Others: | Click or tap here to enter text. |

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| **PART 5: BRIEF SUMMARY OF CURRENT AND PAST WORK EXPERIENCE** | | | | | | | | | |
| 1. *Please provide a brief summary of your past experience and roles, starting with the most recent.* ***Details of your level of professional competencies acquired through your work experience will be elaborated in Section B of this Application Form****.* 2. *Each section should be verified by someone who was familiar with you and senior to you at the time.* | | | | | | | | | |
| **Part 5: Section 1** | | | | | | | | | |
| **Period** | **Name of Organisation** | | **Position or Title: Nature of project, its significance, your functions / responsibilities, achievements** | | | | | | |
| From  MM / YYYY  To  MM / YYYY |  | |  | | | | | | |
| **Section 1 is a true account of the candidate’s working experience and professional competence.** | | | | | | | | | |
| Name: |  | | | | | | Title: | |  |
| Contact No.: |  | | | Email Address: | |  | | | |
| Professional Qualification(s): | |  | | | | | | | |
| Current Job Title: | |  | | | | | | | |
| Relationship to Candidate: | |  | | | | | | | |
| Signature: | |  | | | Date Verified: | | |  | |

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| **PART 5: BRIEF SUMMARY OF CURRENT AND PAST WORK EXPERIENCE** | | | | | | | | | |
| 1. *Please provide a brief summary of your past experience and roles, starting with the most recent. Details of your level of professional competencies acquired through your work experience will be elaborated in Section B of this Application Form.* 2. *Each section should be verified by someone who was familiar with you and senior to you at the time.* | | | | | | | | | |
| **Part 5: Section 2** | | | | | | | | | |
| **Period** | **Name of Organisation** | | **Position or Title: Nature of project, its significance, your functions / responsibilities, achievements** | | | | | | |
| From  MM / YYYY  To  MM / YYYY |  | |  | | | | | | |
| **Section 2 is a true account of the candidate’s working experience and professional competence.** | | | | | | | | | |
| Name: |  | | | | | | Title: | |  |
| Contact No.: |  | | | Email Address: | |  | | | |
| Professional Qualification(s): | |  | | | | | | | |
| Current Job Title: | |  | | | | | | | |
| Relationship to Candidate: | |  | | | | | | | |
| Signature: | |  | | | Date Verified: | | |  | |

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| **PART 5: BRIEF SUMMARY OF CURRENT AND PAST WORK EXPERIENCE** | | | | | | | | | |
| 1. *Please provide a brief summary of your past experience and roles, starting with the most recent. Details of your level of professional competencies acquired through your work experience will be elaborated in Section B of this Application Form.* 2. *Each section should be verified by someone who was familiar with you and senior to you at the time.* | | | | | | | | | |
| **Part 5: Section 3** | | | | | | | | | |
| **Period** | **Name of Organisation** | | **Position or Title: Nature of project, its significance, your functions / responsibilities, achievements** | | | | | | |
| From  MM / YYYY  To  MM / YYYY |  | |  | | | | | | |
| **Section 3 is a true account of the candidate’s working experience and professional competence.** | | | | | | | | | |
| Name: |  | | | | | | Title: | |  |
| Contact No.: |  | | | Email Address: | |  | | | |
| Professional Qualification(s): | |  | | | | | | | |
| Current Job Title: | |  | | | | | | | |
| Relationship to Candidate: | |  | | | | | | | |
| Signature: | |  | | | Date Verified: | | |  | |

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| **PART 5: BRIEF SUMMARY OF CURRENT AND PAST WORK EXPERIENCE** | | | | | | | | | |
| 1. *Please provide a brief summary of your past experience and roles, starting with the most recent. Details of your level of professional competencies acquired through your work experience will be elaborated in Section B of this Application Form.* 2. *Each section should be verified by someone who was familiar with you and senior to you at the time.* | | | | | | | | | |
| **Part 5: Section 4** | | | | | | | | | |
| **Period** | **Name of Organisation** | | **Position or Title: Nature of project, its significance, your functions / responsibilities, achievements** | | | | | | |
| From  MM / YYYY  To  MM / YYYY |  | |  | | | | | | |
| **Section 4 is a true account of the candidate’s working experience and professional competence.** | | | | | | | | | |
| Name: |  | | | | | | Title: | |  |
| Contact No.: |  | | | Email Address: | |  | | | |
| Professional Qualification(s): | |  | | | | | | | |
| Current Job Title: | |  | | | | | | | |
| Relationship to Candidate: | |  | | | | | | | |
| Signature: | |  | | | Date Verified: | | |  | |

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| **PART 5: BRIEF SUMMARY OF CURRENT AND PAST WORK EXPERIENCE** | | | | | | | | | |
| 1. *Please provide a brief summary of your past experience and roles, starting with the most recent. Details of your level of professional competencies acquired through your work experience will be elaborated in Section B of this Application Form.* 2. *Each section should be verified by someone who was familiar with you and senior to you at the time.* | | | | | | | | | |
| **Part 5: Section 5** | | | | | | | | | |
| **Period** | **Name of Organisation** | | **Position or Title: Nature of project, its significance, your functions / responsibilities, achievements** | | | | | | |
| From  MM / YYYY  To  MM / YYYY |  | |  | | | | | | |
| **Section 5 is a true account of the candidate’s working experience and professional competence.** | | | | | | | | | |
| Name: |  | | | | | | Title: | |  |
| Contact No.: |  | | | Email Address: | |  | | | |
| Professional Qualification(s): | |  | | | | | | | |
| Current Job Title: | |  | | | | | | | |
| Relationship to Candidate: | |  | | | | | | | |
| Signature: | |  | | | Date Verified: | | |  | |

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| **SECTION A – PERSONAL INFORMATION** | | | |
| **PART 6: DECLARATION BY APPLICANT** | | | |
| **I confirm that I have read and understood the Institution of Engineers Singapore’s Rules for Code of Professional Conduct and Ethics in Annex A. I agree that if I am registered as a Chartered Engineer of Singapore, I will observe and be governed by the IES’s Rules for Code of Professional Conduct and Ethics, including the IES’s Disciplinary Regulations.**  **I understand that I will fulfil the obligations expected of Chartered Engineers of Singapore, including an obligation to inform the Chartered Engineering Board of any matter that may affect my fitness for registration.**  **I consent to my business contact details being published in any form associated with my registration as a Chartered Engineer of Singapore.**  **I hereby agree and consent that the IES may collect, use, disclose and process my personal information set out in my application form, or otherwise provided by me or possessed by IES, for one or more of the purposes as stated in IES Personal Data Protection Terms and Conditions** [**www.ies.org.sg/pdpa.**](http://www.ies.org.sg/pdpa)  **I confirm that all statements on this application form are true and correct and I have made claims of competency in good faith.** | | | |
| Signature: |  | Date: | DD / MM / YYYY |

## SECTION B – REPORT ON PROFESSIONAL COMPETENCE

***Section B is a guide to provide evidence through a write-up at least 2,000 words that you have attained the required level of professional competency to support your application for Chartered Engineer in Singapore.***

***The evidence you provide in Section B should be those that are relevant to the sector and domain areas of your application. [For applications in Systems Engineering, please use Part 1A (in page 17) in lieu of Parts 1, 2 and 3]***

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| **Part 1: Evidence of your ability to apply advanced and widely-adopted engineering principles to practical situations in your sector/domain areas of practice.** |
| *You may demonstrate your ability using the following guiding pointers:*   1. *how you have applied first principles, theoretical methods, or sound theoretical approach in your engagement of engineering activities such as in identifying/defining a problem/opportunity/project, feasibility studies, concept design, development of innovative solutions, etc* 2. *how you have applied engineering principles when carrying out technical review, evaluation or optimization of codes, standards, specifications, product, process, equipment, method, project, etc,* 3. *[EPM sector] how you have applied project management principles in actual projects, e.g., PMBOK 9 knowledge areas, etc* |
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| **Part 2: Evidence of your ability to –**   * **define, investigate and analyse complex problems** * **design or develop solutions to complex problems; and** * **evaluate the outcomes and impacts of these solutions.** |
| *You may demonstrate your ability using the following guiding pointers:*   1. *how you have identified your involvement in projects and opportunities that involve complex issues/problems to be defined, investigated or analysed* 2. *how you have developed own ideas or sought out best practices from elsewhere or through multi-disciplinary practices to arrive at appropriate complex engineering/technical solutions* 3. *how you have implemented complex engineering solutions in your projects and evaluate their effectiveness.* 4. *[EPM Sector] how you have identified project problems and used both project management and engineering skills to overcome it. What lesson you have learnt from failure in projects?* |
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| **Part 3: Evidence that you have –**   * **managed and are responsible for making decisions on a part of, or all of, one or more complex activities;** * **recognised complexity and assesses alternatives in light of competing requirements and incomplete knowledge; and** * **exercised sound judgment** |
| *You may demonstrate your ability using the following guiding pointers:*   1. *how you have developed/provided creative or innovative approaches, or technical and business leadership in the projects you handled* 2. *how you have planned, budgeted, organised, led and managed projects taking into account constraints on manpower, equipment, etc* 3. *how you have identified continuous improvements through quality management that you have planned and implemented* 4. *how you have led and managed changing technical, business and environmental constraints and apply sound judgement to make the necessary adjustments* |
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| **SECTION B: REPORT ON PROFESSIONAL COMPETENCE** |
| **Part 1A: This part 1A is only for applicants in Systems Engineering (SE), in lieu of Parts 1, 2 and 3.** |
| **SE Domain Experience: Evidence that you have applied SE Knowledge and understanding to practical situation in your area of practice. You should include your achievements according to the 14 Systems Engineering Functional areas listed in Appendix 1).**  **A minimum of four (4) years**[**1**](#_bookmark0) **of experience**[**2**](#_bookmark1) **in SE functional areas is required. Additionally, one must possess at least three (3) SE functional areas.**  *Describe at least 3 SE functional areas as you document your experience in each role. Provide sufficient details under Description of Experience (note: the size of the empty box is not an indication that limited input is expected).*  *Please also complete the summary in Appendix 2* |

|  |  |  |
| --- | --- | --- |
| **Role 1** | | |
| Organisation Name: | | Click or tap here to enter text. |
| Title |  | Click or tap here to enter text. |
| 1. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

|  |  |  |
| --- | --- | --- |
| 2. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

|  |  |  |
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| 3. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

|  |  |  |
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| **Role 2** | | |
| Organisation Name: | | Click or tap here to enter text. |
| Title |  | Click or tap here to enter text. |
| 1. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 2. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 3. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

1 For applicants with relevant Systems Engineering education, a minimum of two (2) years of experience in SE functional areas is required. Such applicant should still possess at least three (3) SE areas.

2 Experience in SE functional areas can be tallied concurrently. For example, experience in “Requirements Engineering” and “Systems Integration”

experience can be counred in the same window if one can document the evidence of such an occurrence.

## SECTION B: REPORT ON PROFESSIONAL COMPETENCE

**Part 1A: For applicants in Systems Engineering (SE) only**

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| **Role 3** | | |
| Organisation Name: | | Click or tap here to enter text. |
| Title |  | Click or tap here to enter text. |
| 1. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 2. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 3. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| **Role 4** | | |
| Organisation Name: | | Click or tap here to enter text. |
| Title |  | Click or tap here to enter text. |
| 1. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 2. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 3. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| **Role 5** | | |
| Organisation Name: | | Click or tap here to enter text. |
| Title |  | Click or tap here to enter text. |
| 1. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 2. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| 3. | Functional Header: | Click or tap here to enter text. |
|  | Duration of experience: | From: MM / YYYY To: MM / YYYY |
|  | Description of Experience: | Click or tap here to enter text. |

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| **SECTION B: REPORT ON PROFESSIONAL COMPETENCE** |
| **Part 1A – For applicants in Systems Engineering (SE) Only** |
| **APPENDIX 1: SYSTEMS ENGINEERING FUNCTIONAL AREAS** |

|  |  |
| --- | --- |
| **SE Functional Areas** | **Description** |
| **Requirements Engineering** | Analyse customer and stakeholder needs, generate/develop requirements, perform  functional analyses, derive requirements, ensure requirements quality, allocate requirements, control requirements, maintain requirements database, develop and implement Requirements Management Plans, develop measures of effectiveness and performance. |
| **Architecture / Design Development** | Identify baseline and alternate candidate concepts and architectures, prepare Trade Study Plans, conduct and document trade studies, evaluate and optimize candidate concepts and architectures, prepare system/solution description documents. |
| **System Integration** | Define technical integration strategy, develop Integration Plans, develop integration test scripts, develop and implement integration test scenarios, conduct and document integration tests, track integration test results and retest status. |
| **Qualification, Verification and Validation** | Develop and implement Qualification, Verification, and Validation Plans; develop verification requirements and pass/fail criteria; conduct and record results of qualification, verification, and validation efforts,and corrective actions; prepare requirements verification matrix and qualification certificates. |
| **Technical Planning** | Identify program objectives and technical development strategy; prepare Systems Engineering Management Plans, program Work Breakdown Structures, product Breakdown Structures, Integrated Master Plans, and Integrated Master Schedules; identify program metrics including product technical performance measures and key performance parameters, identify program resource needs in terms of equipment, facilities, and personnel capabilities. |
| **Technical Effort Assessment** | Collect, analyse, track, and report program metrics including product technical performance measures and key performance parameters; conduct audits and reviews; assess process and tool usage compliance; conduct capability assessments; recommend and implement process and product improvements. |
| **Risk and Opportunity Management** | Develop and implement Risk and Opportunity Management Plans, identify risk issues and opportunities, assess risk issues and opportunities, prioritise risks and opportunities, develop and implement risk mitigation and opportunity achievement plans, track risk reduction and opportunity achievement activities. |
| **Baseline Control** | Develop and implement Configuration Management Plans, establish and update baselines for requirements and evolving configurations/products, establish and implement change control processes, maintain traceability of configurations, participate in Configuration Control Boards, participate in configuration item identification and status accounting, participate in functional and physical configuration audits. |
| **Specialty Engineering** | Develop and implement Specialty Plans as part of, or an addendum to, the Systems Engineering Management Plan to cover such specialties as reliability, maintainability, supportability, survivability, logistics support, security, safety, human factors, electromagnetic environmental effects, environmental engineering, packaging and handling, etc. |
| **Process Definition** | Define enterprise processes and best practices, tailor enterprise processes for program/project applications. |
| **Training** | Develop and implement Training Plans, develop and give training courses on processes and tools. |
| **Tool Support** | Specify requirements for, evaluate, select, acquire, and install SE computer programs/tools. |
| **Quality Assurance** | Develop and implement a Quality Assurance Plan, perform quality audits, report quality audits, define and track quality corrective actions. |
| **Others** | Describe other functions that you have performed and can justify as systems engineering activities. |

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| **SECTION B: REPORT ON PROFESSIONAL COMPETENCE** |
| **Part 1A – For applicants in Systems Engineering (SE) Only** |
| **APPENDIX 2: Summary of SE Domain Experience for Part 1A (in months)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SE Functional Areas** | **Work in Months** | | | | | **Total** |
| **Role 1** | **Role 2** | **Role 3** | **Role 4** | **Role 5** |
| Requirements Engineering | MM | MM | MM | MM | MM | MM |
| Risk and Opportunity Management | MM | MM | MM | MM | MM | MM |
| Baseline Control | MM | MM | MM | MM | MM | MM |
| Technical Planning | MM | MM | MM | MM | MM | MM |
| Technical Effort Assessment | MM | MM | MM | MM | MM | MM |
| Architecture/ Design Development | MM | MM | MM | MM | MM | MM |
| Qualification, Verification & Validation | MM | MM | MM | MM | MM | MM |
| Process Definition | MM | MM | MM | MM | MM | MM |
| Tool Support | MM | MM | MM | MM | MM | MM |
| Training | MM | MM | MM | MM | MM | MM |
| Systems Integration | MM | MM | MM | MM | MM | MM |
| Quality Assurance | MM | MM | MM | MM | MM | MM |
| Specialty Engineering | MM | MM | MM | MM | MM | MM |
| Others: | MM | MM | MM | MM | MM | MM |
| **Total per role:** | MM | MM | MM | MM | MM | MM |

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| --- | --- | --- | --- |
| **Top 3 SE Functional Areas** | | | |
| SE Functional Area 1: | Click or tap here to enter text. | Experience | YY / MM |
| SE Functional Area 2: | Click or tap here to enter text. | Experience | YY / MM |
| SE Functional Area 3: | Click or tap here to enter text. | Experience | YY / MM |

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| **PART 4: Evidence that you have recognised and handled the wider implications of your work as an engineer through –**   * **taking into account foreseeable social and cultural effects of complex activities;** * **having regard to the need for sustainability and environmental aspects;** * **recognising the need to protect public health and safety; and**   + **meeting ethical, legal and regulatory requirements in the course of the complex activities.** |
| *You may demonstrate your ability using the following guiding pointers:*   1. *how you have handled complex activities which have an impact on societal issues* 2. *how you have taken into account sustainability and environmental aspects in the course of participating in complex activities;* 3. *how you have recognised and managed risks associated with health, hazard and safety aspects, and worked to ensure a safe and conducive environment for staff and users* 4. *how you have applied appropriate principles and good practice to meet ethical, legal and legislative requirements* |
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| **Part 5: Evidence of Interpersonal, leadership and communication skills in your activities.** |
| *You may demonstrate your ability using the following guiding pointers:*   1. *how you have managed interpersonal relationships* 2. *how you have demonstrated leadership in a professional role* 3. *how you have communicated ideas and plans effectively through report writing and persuasive presentations* 4. *how you have communicated effectively in multi-disciplinary teams* |
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| **Part 6: Evidence of personal commitment to professional standards and high standards of professional conduct.** | | | |
| *You may demonstrate your ability using the following guiding pointers:*  *a) how you have managed issues pertaining to professional conduct and ethics that you have encountered in your project* | | | |
|  | | | |
| *b) how you have participated in Continuing Professional Development (CPD) to maintain and enhance competence in your areas of practice* | | | |
| [i] Report of CPD already undertaken | | | |
| **Period** | **Description** | **Type of CPD** | **CPD Hours** |
| From: MM / YYYY To: MM / YYYY |  |  |  |
| From: MM / YYYY To: MM / YYYY |  |  |  |
| [ii] Future CPD Plans | | | |
| **Period** | **Description** | **Type of CPD** | **CPD Hours** |
| From: MM / YYYY To: MM / YYYY |  |  |  |
| From: MM / YYYY To: MM / YYYY |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part 7: DECLARATION BY APPLICANT** | | | |
| **The competence and commitment report in Part 1 to 6 above present a true account of my professional working experience.** | | | |
| **Signature:** |  | **Date:** | DD / MM / YYYY |

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| **SECTION C: FEES PAYABLE** |
| Refer website for details : <https://cebsg.org/becoming/chartered-engineers/fees-payable/> |

**ANNEX A**



# THE INSTITUTION OF ENGINEERS, SINGAPORE RULES FOR CODE OF PROFESSIONAL CONDUCT AND ETHICS

**[25TH JANUARY 2016]**

1. These Rules shall apply to all Chartered Engineers and any other professionals registered under the Institution of Engineers, Singapore (IES) professional registries and engaged in any professional work.
2. Every registered professional shall observe and be guided by Parts I and II of the Code of Professional Conduct and Ethics set out in the Rules.

### PART I

1. In this Part, unless the context otherwise requires -

“Board” means IES professional registration board, setting rules and policy includes disciplinary enquiry panel across all registries to ensure consistency and maintain professional standard of practice.

"professional" and any associated pronoun means a registered chartered engineer or any other professional registered under IES professional registry;

“professional services” means operation, maintenance, consultancy or advisory services that require a person to engage in professional work;

“professional work” includes any professional service, consultation, investigation, evaluation, planning, design, or responsible supervision of construction or operation in connection with any public or privately owned public utilities, buildings, machines, equipment, processes, works or projects wherein the public interest and welfare, or the safeguarding of life, public health or property is concerned or involved, and that requires the application of engineering or other technical principles and data;

"publicity" means any form of advertisement and includes any advertisement –

* 1. printed in any medium for the communication of information;
  2. appearing in, communicated through or retrievable from, any mass medium, electronic or otherwise including but not limited to the internet, and its derivatives, and “publicise”, “publicised” and “publicising” shall be construed accordingly.

1. **–** (1) A professional shall uphold the dignity, standing and reputation of the profession.
2. A professional may, subject to these Rules, publicise his or her practice or allow his or her employee or agents to do so.
3. A professional shall not publicise his or her professional practice in a manner which —
   1. is likely to diminish public confidence in the engineering or the relevant technological profession that the professional is registered under or to otherwise bring the profession into disrepute;
   2. may reasonably be regarded as being misleading, deceptive, inaccurate, false or unbefitting the dignity of the profession; or
   3. the Board may determine to be an undesirable manner of publicising his or her practice.

(3A) For the purposes of these Rules, publicity shall be considered to be misleading, deceptive, inaccurate or false if it -

1. contains a material misrepresentation;
2. omits to state a material fact;
3. contains any information which cannot be verified; or
4. is likely to create an unjustified expectation about the results that can be achieved by the professional. (3B) In publicising his or her practice, a professional shall ensure that —
5. any claim to expertise or specialisation can be justified;
6. the publicity does not make any direct or indirect mention of past projects in which, or clients for whom, the professional or any of his or her firm or company had acted where the provision of such information will involve a breach of confidentiality owed to any client or former client; and
7. the publicity does not make any comparison or criticism in relation to the quality of the professional services provided by any other professional or allied professional.

(3C) For the purpose of sub-paragraph (3B) (*a*), the following factors shall be taken into account in justifying any claim to expertise or specialisation:

1. academic qualifications;
2. experience;
3. facilities;
4. personnel; and
5. capacity to render professional service.
6. A professional shall refrain from expressing publicly an opinion on an engineering or technological project or product unless the professional is informed of the facts relating thereto.
7. A professional shall —
   1. exercise due restraint in criticising the professional work of another professional; and
   2. not maliciously or recklessly injure or attempt to injure, directly or indirectly, the professional reputation, prospects or business of another professional.
8. Sub-paragraph (4) shall not affect any moral obligation to expose unethical conduct before the proper authorities or preclude a frank but private appraisal of employees or of professional being considered for employment.
9. A professional shall not endorse engineering or technological product, system or process in any commercial advertisement.
10. – (1) A professional shall discharge his or her duties to his or her employer or client with complete fidelity.
11. A professional shall not accept remuneration for professional services rendered from any person other than his or her employer or client except with the knowledge and approval of his or her employer or client.
12. A professional shall not, without disclosing the fact to his or her employer in writing, be a director of or have a substantial financial interest in, or be an agent for, any company, firm or person carrying on any business which is or may be involved in the professional work to which his or her employment relates.
13. A professional shall not accept any trade commission, discount, allowance or indirect payment or other consideration in connection with any professional work in which he or she is engaged.
14. A professional shall not receive, directly or indirectly, any royalty, gratuity or commission in respect of any patented article or process used in or for the purpose of the professional work in respect of which he or she is acting as a professional for an employer unless and until the receipt of such royalty, gratuity or commission by the professional has been authorised in writing by such employer.
15. Subject to the provisions of these Rules, a professional shall not hold, assume or intentionally accept a position in which his or her interest is in conflict with his or her professional duty to his or her client or employer.
16. A professional shall not disclose confidential information concerning the business affairs or technical processes of his or her client or employer without the consent of the client or employer.
17. A professional shall not use information which is obtained confidentially in the course of his or her assignment for the purpose of making personal profit.
18. A professional shall not divulge any confidential findings or studies or actions of an engineering or technical or scientific commission or board of which he or she is a member without the consent of the commission or board.
19. A professional shall not give professional advice which does not fully reflect his or her best professional judgment.
20. A professional shall engage, or advise engaging, experts and specialists when in his or her opinion and judgment such services are in the interest of his or her client or employer.
21. A professional shall not supply professional services in respect of any project in which he or she is acting as a developer of an engineering work or product that the project is aimed to develop or construct.
22. Notwithstanding the responsibility to his or her employer and to his or her profession, a professional shall act with prime regard to the public interest.
23. A professional shall not knowingly attempt to supplant another professional, nor shall he or she intervene or attempt to intervene in or in connection with professional work of any kind which to his or her knowledge has already been entrusted to another professional.
24. (1) A professional shall not knowingly undertake a commission from any person while any claim for compensation or damages or both by another professional previously employed by that person and whose employment has been terminated remains unsatisfied unless security for the due satisfaction of any award or judgment has been given.
25. The professional previously employed may report the matter to the Board if he or she has reasonable grounds for not being satisfied with the security, and the Board may forbid the first- mentioned professional in sub-paragraph
    1. from proceeding with the professional work.
26. A professional shall not canvass or solicit professional employment or offer to make payment for the introduction of such employment.
27. A professional shall not be the medium of any payment made on behalf of his or her employer unless so requested by his or her employer and he or she, in connection with any professional work in which he or she is employed, shall not place any contract or order except with the authority of or on behalf of his or her employer.
28. A professional shall not take part in a competition involving the submission of any proposal and design for professional work unless the assessor to whom such proposal and design is to be submitted for adjudication is a person of acknowledged engineering or technical standing.
29. (1) A professional who is engaged in the construction or in the design and construction of engineering or technical work or in the manufacture or in the design and manufacture of articles of commerce, whether on his or her own account or as a technical adviser or employee or a partner or director of a firm or company so engaged, shall not prepare or submit to a client or customer or prospective client or prospective customer a design for engineering or technical works or articles unless accompanied by an offer on behalf of himself or his or her firm or company to construct the work or supply the articles, and a proviso that if the design of the professional, the corporation of which he or she is a director or partnership of which he or she is a member is accepted, he or she shall be given the contract for the work or supply of the articlewith such variation (if any) as to design and with such arrangements as to remuneration as may be mutually agreed.
    1. A professional shall not prepare or submit or offer to prepare or submit a design without informing the client or customer or prospective client or prospective customer as to the nature of his or her connection with the construction or manufacture of the work or articles in question.
    2. Except at the request of the client or customer, a professional shall not offer, directly or indirectly, on behalf of himself or his or her firm or company, to design, or to design and construct, any engineering or technical work,

the design of which to his or her knowledge has already been entrusted to another professional, who is acting as a consultant, unless with the approval of such professional.

1. A professional shall —
   1. exercise due diligence to ensure that there is no contravention of or failure to comply with any written law by any person in the carrying out of any project or works of which the professional is the consultant or engineer; and
   2. report to the appropriate authority any contravention of or failure to comply with any written law by any person in the carrying out of any project or works of which the professional is the consultant or engineer, if such contravention or failure comes to his or her knowledge.

### PART II

1. – (1) A professional shall not use the advantage of a salaried position to compete unfairly with other professionals.
   * 1. He or she shall not accept any professional commission from persons other than his or her employers to an extent prejudicial to his or her salaried position or detrimental to established professional services or which would result in a conflict of interest.
     2. If permitted by his or her employer any professional commission from persons other than his or her employers shall be confined to consultation on phases of engineering or technology for which he or she has special qualifications not inherently available in usual professional practice, except that he or she shall not establish an office for the purpose of conducting such outside activities.
     3. He or she shall not use the influence of a salaried position to direct clients to another professional, or other engineering or technological firm in which he or she has a financial interest.
2. A professional shall not, for the purpose of obtaining any permit, licence or approval of any public

authority, sign any plans or calculations which neither he or she nor any member of his or her staff under his or her supervision verified, checked or prepared.

By

IES Professional Registration Board