



CHARTERED ENGINEER OF SINGAPORE

APPLICATION*

Send application to:

Secretary,
CEng Accreditation Committee
The Institution of Engineers, Singapore
70 Bukit Tinggi Road
Singapore 289758

enquiry@charteredengineers.sg

For enquiries on your application:

Tel : (65) 6469 5000

Fax : (65) 6467 1108

Email : enquiry@charteredengineers.sg

*Please note that only IES members are eligible to apply

Application Fee: S\$ 107.00	Note: i) Fee is inclusive of 7% GST ii) Application Fee is non-refundable iii) Annual Renewal Fee is refundable if registration is not successful iv) Please make cheque payable to ' Engineers Singapore Pte Ltd '
Annual Renewal Fee**: S\$ 64.20	
Total Fee Payable: S\$ 171.20	
** Annual Renewal Fee is waived for FIES	

BRANCH OF ENGINEERING / DISCIPLINE

Please indicate the branch of engineering/discipline to be placed on the register of Chartered Engineers of Singapore:

Systems Engineering

SECTION A – PERSONAL INFORMATION

PART 1: PERSONAL PARTICULARS

Title Er. Prof Dr Mr Mrs Ms

Surname / Family Name

Given Name / First Name

Gender

Male Female

Date of Birth (dd/mm/yyyy)

Nationality

NRIC No. /
Passport

Copy of Photo ID attached

IES Membership No.

Membership
Grade

MIES Sr MIES
 FIES

SECTION A

PART 2: CONTACT DETAILS

Name of Employer

Job Designation

Business Address

Postal Code

Office Phone

Mobile phone

Fax

Email

Home Address

Postal Code

Home Phone

PART 3: ACADEMIC QUALIFICATIONS

Undergraduate degree in engineering

Certificate attached

Name of University

Campus

Full title of degree

Program duration

Mode of delivery

Full Time Part Time Others

Other please specify

Date of graduation (mm/yyyy)

Systems Engineering Curriculum (check box if applicable¹)

SECTION A

Postgraduate degree in engineering (if applicable)

Certificate attached

Name of University

Campus

Full title of degree

Program duration

Mode of delivery

Coursework with Dissertation Research Others

Other please specify

Date of graduation (mm/yyyy)

Systems Engineering Curriculum (check box if applicable¹)

Other engineering qualifications (if applicable)

Certificate attached

PART 4: PROFESSIONAL QUALIFICATION (if applicable)

Certificate attached

PEng (Singapore) Reg No

Others

¹Check box if your degree is recognised by IES as having an established Systems Engineering Curriculum

SECTION A

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.

Period from (mm/yy) to (mm/yy)	Name of Organisation	Position or Title; Nature of project, its significant, your functions/responsibilities, achievements

This is a true account of the candidate's working experience and professional competence.

Surname/ Family Name		Given Name / First Name		Title	
Contact Number					
Email Address					
Professional qualification(s)					
Current Job Title					
Relationship to candidate					
Signature				Date verified	

SECTION A

Period from (mm/yy) to (mm/yy)	Name of Organisation	Position or Title; Nature of project, its significant, your functions/responsibilities, achievements

This is a true account of the candidate's working experience and professional competence.

Surname/ Family Name		Given Name / First Name		Title	
Contact Number					
Email Address					
Professional qualification(s)					
Current Job Title					
Relationship to candidate					
Signature		Date verified			

SECTION A

Period from (mm/yy) to (mm/yy)	Name of Organisation	Position or Title; Nature of project, its significant, your functions/responsibilities, achievements

This is a true account of the candidate's working experience and professional competence.

Surname/ Family Name		Given Name / First Name		Title	
Contact Number					
Email Address					
Professional qualification(s)					
Current Job Title					
Relationship to candidate					
Signature		Date verified			

SECTION A

Period from (mm/yy) to (mm/yy)	Name of Organisation	Position or Title; Nature of project, its significant, your functions/responsibilities, achievements			
This is a true account of the candidate's working experience and professional competence.					
Surname/ Family Name		Given Name / First Name		Title	
Contact Number					
Email Address					
Professional qualification(s)					
Current Job Title					
Relationship to candidate					
Signature		Date verified			

SECTION A

Period from (mm/yy) to (mm/yy)	Name of Organisation	Position or Title; Nature of project, its significant, your functions/responsibilities, achievements

This is a true account of the candidate's working experience and professional competence.

Surname/ Family Name		Given Name / First Name		Title	
Contact Number					
Email Address					
Professional qualification(s)					
Current Job Title					
Relationship to candidate					
Signature		Date verified			

SECTION A

PART 6: DECLARATION BY APPLICANT

I confirm that all statements on this application form are true and correct and I have made claims of competency in good faith.

I agree that in the event of my registration as a Chartered Engineer of Singapore, I will be governed by the IES's Rules for Professional conduct and obligations expected of Chartered Engineers of Singapore.

I understand that I have an obligation to inform the Chartered Engineer Assessment Committee 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 IES ("THE INSTITUTION OF ENGINEERS, SINGAPORE") 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.

Signature

Date

SECTION B – PROFESSIONAL COMPETENCE REPORT

Section B is to provide evidence that you have attained the required level of professional competency to support your application for Chartered Engineer in Singapore. You can either use this Section to report your professional competence or you prepare a separate report of approximately 2,000 words that details your achievement of the elements of Systems Engineering and professional competency.

PART A

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 (Refer to appendix A).

A minimum of four (4) years² of experience³ in SE functional areas is required. Additionally, one must possess at least three (3) SE functional areas.

[Add SE functional areas as you document your experience. Provide detailed description of your experience. The size of the empty box is not an indication that limited input is expected.]

Role 1

Organisation Name:

Title:

1. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

2. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

3. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

² 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.

³ Experience in SE functional areas can be tallied concurrently. For example, experience in "Requirements Engineering" and "Systems Integration" experience can be counted in the same window if one can document the evidence of such an occurrence.

SECTION B

Role 2

Organisation Name:

Title:

1. **Functional Header:**

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

2. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

3. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

² 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.

³ Experience in SE functional areas can be tallied concurrently. For example, experience in "Requirements Engineering" and "Systems Integration" experience can be counted in the same window if one can document the evidence of such an occurrence.

SECTION B

Role 3

Organisation Name:

Title:

1. **Functional Header:**

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

2. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

3. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

² 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.

³ Experience in SE functional areas can be tallied concurrently. For example, experience in "Requirements Engineering" and "Systems Integration" experience can be counted in the same window if one can document the evidence of such an occurrence.

SECTION B

Role 4

Organisation Name:

Title:

1. **Functional Header:**

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

2. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

3. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

² 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.

³ Experience in SE functional areas can be tallied concurrently. For example, experience in "Requirements Engineering" and "Systems Integration" experience can be counted in the same window if one can document the evidence of such an occurrence.

SECTION B

Role 5

Organisation Name:

Title:

1. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

2. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

SECTION B

3. Functional Header:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Years/months of Experience

From:

To:

Description of Experience:

² 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.

³ Experience in SE functional areas can be tallied concurrently. For example, experience in "Requirements Engineering" and "Systems Integration" experience can be counted in the same window if one can document the evidence of such an occurrence.

SECTION B

Summary of SE Domain Experience for Part A (in months)

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

SECTION B

Top 3 SE Functional Areas

SE Functional Area 1:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Experience (YY/MM):

SE Functional Area 2:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Experience (YY/MM):

SE Functional Area 3:

- | | | |
|---|--|---|
| <input type="checkbox"/> Requirements Engineering | <input type="checkbox"/> Architecture/Design Development | <input type="checkbox"/> System Integration |
| <input type="checkbox"/> Qualification, Verification and Validation | <input type="checkbox"/> Technical Planning | <input type="checkbox"/> Quality Assurance |
| <input type="checkbox"/> Technical Effort Assessment | <input type="checkbox"/> Risk and Opportunity Management | <input type="checkbox"/> Baseline Control |
| <input type="checkbox"/> Specialty Engineering | <input type="checkbox"/> Process Definition | <input type="checkbox"/> Training |
| <input type="checkbox"/> Tool Support | <input type="checkbox"/> Others | |

Experience (YY/MM):

Total SE Domain experience (YY/MM):

Degree with recognized Systems Engineering Curriculum:

SECTION B

PART B

Social Responsibility: Evidence that you have recognized the implications of your work as an engineer – taking into account foreseeable social, cultural and environmental effects of complex activities; having regard to the need for sustainability; recognizing the need to protect public health and safety.

1. Ability to handle health, hazard and safety aspects, understanding and work within all relevant legislation and regulatory frameworks.

2. Ability to handle sustainability aspects. This could include environmental, public concern and other societal issues, recognition of risks, et cetera.

3. Ability to handle commercial and economic aspects.

SECTION B

PART C

Leadership and Communication: Evidence of interpersonal, leadership and communication skills.

1. Demonstrating leadership in a professional role:

2. Managing interpersonal relationships:

3. Communicating ideas and plans by report writing and oral presentation

SECTION B

PART D

Professionalism: Evidence to show that you are committed to high standards of professional conduct. Ability in meeting ethical, legal and regulatory requirements in the course of the complex activities.

Empty rectangular box for providing evidence of professionalism.

SECTION B

PART E
CPD Commitments: Commitment to continuing professional development. [Refer to the IES Competency Standard and Assessment Statement for the type of CPD].

1. Report of CPD already undertaken.

Period from (mm/yy) to (mm/yy)	Description	Type of CPD	CPD Hours

2. Future CPD Plans

Period from (mm/yy) to (mm/yy)	Description	Type of CPD	CPD Hours

SECTION B

PART 6: DECLARATION BY APPLICANT

The competence and commitment report presents a true account of my professional working experience.

Signature

Date

SECTION B

APPENDIX A: SYSTEMS ENGINEERING FUNCTIONAL AREAS

SE Functional Areas	Description
Requirements Engineering	Analyze 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, analyze, 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, prioritize 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 system engineering activities.