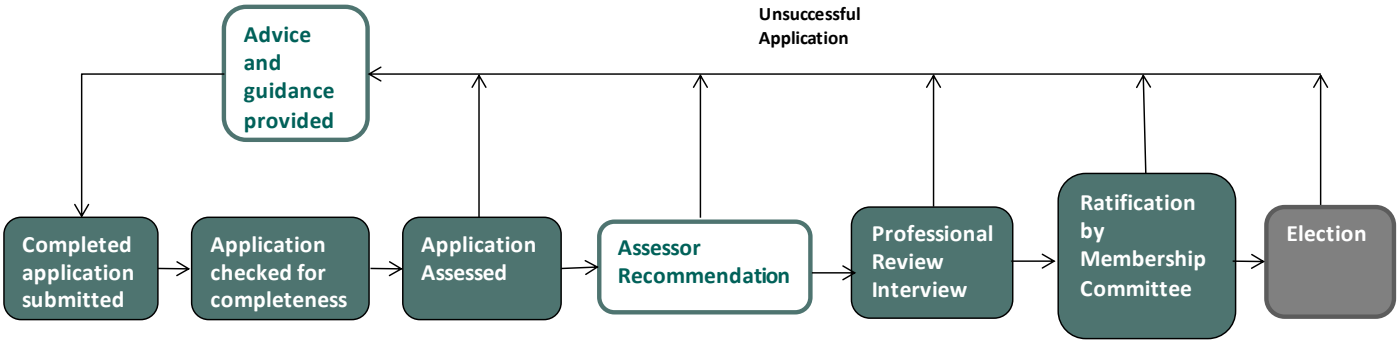
This guidance sets out the process and requirements that you have to follow when submitting your application to the Nuclear Institute.

The process of becoming a Fellow, Member, Associate Member and Technician Member, including registration with the Engineering or Science Council as appropriate, is through a professional review by trained nuclear professionals.



Applicants will be assessed by the Nuclear Institute through a process known as professional review, which is carried out by trained practising nuclear professionals who form the Membership Committee. Applicants must demonstrate that they have the relevant qualification (or equivalent), work experience, Nuclear Delta® and competencies for the grade, as well as the registration level if applicable. Applicants must also demonstrate a commitment to maintain their competence, work within professional codes and participate actively within the nuclear profession.

For registration with the Engineering Council, applicants are also assessed against the competence standards listed in UK-SPEC, as adapted by the Nuclear Institute to relate specifically to the nuclear industry. For registration with the Science Council, applicants are also assessed against the competence standards designated by the Science Council.

Note: All applications for membership and/or registration that involve the assessment of technical reports and/or the conduct and assessment of interviews that may have a national or military security caveat will be carried out by appropriate security cleared members of the Membership Committee.

Please read the relevant section of the below as applicable:

A. Membership application only (Fellow, Member, Associate, Technician)
B. Membership and Engineering Council applications (Fellow, Member, Associate, Technician/Chartered Engineer, Incorporate Engineer, Engineering Technician).
C. Membership and Engineering Council applications (Fellow, Member, Associate, Technician/Chartered Scientist).

A. Application for membership only

Applicants must submit the following documentation:

1. Application Form
2. Nuclear Delta section
3. CV
4. Copies of relevant certificates
5. Copies of Professional membership/s or qualification/s (if appropriate)
6. Payment information for application fee

1. Application Form

You should complete the application form in full and ensure that both you and your referees and your sponsors have signed the appropriate sections. One proposer and two referees are required for direct entry Fellow applications. For a transfer to Fellow or an application for Member, Associate Member or Technician Member one proposer and one referee is required.

Your proposers and referees should have known you for at least three years and may be Fellows, Members, Associate Members or Technician Members of the Nuclear Institute, or chartered members of equivalent bodies. They must be at or above the registration grade applied for. In signing this form your proposers and referees declare that they consider you suitable for election to membership.

2. Nuclear Delta® Section

It is important that you are aware of the need to demonstrate that you satisfy the Nuclear Delta® (http://www.nuclearinst.com/The-Standard), which will form a key part of the professional review interview. This section is where you must demonstrate knowledge of the requirements of the Nuclear Delta® applicable to your role and responsibility. This includes the following areas:

1. Nuclear Safety and Security Culture

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of the terms 'Nuclear Safety Culture' and 'Nuclear Security Culture'. As a Member of the Nuclear Institute you are able to demonstrate that you can:

- explain what is meant by Nuclear Safety Culture[1]
- explain what is meant by Nuclear Security Culture[2]

2. Personal Behavioural Standards

The Nuclear Delta® requires an accredited nuclear professional to demonstrate a commitment to 'personal behavioural standards'.

As a Member of the Nuclear Institute you are able to demonstrate that you:

- challenge unsafe acts and behaviour and reinforce safe practice appropriately and effectively.
- challenge acts which could undermine security and reinforce security practice appropriately and effectively.
- apply nuclear safety principles to check that your decisions and work activities support safe nuclear operations.

[1] INSAG 15 defines safety culture as "that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance.

[2] IAEA Nuclear Security Series No 7 & ONR TAG CNS-TAST-GD-002 (Rev 0) defines Nuclear Security Culture as 'The assembly of characteristics, attitudes and behaviour of individuals, organisations and institutions which serve as a means to support and enhance nuclear security'

- apply human performance and error-reduction tools within your role.
- work against complacency, maintaining and encouraging a questioning attitude.
- contribute to continuous improvement, maintaining an 'it can happen here' attitude.
- use organisation and/or site reporting systems effectively to learn from experience.
- accurately and factually represent the pros and cons of nuclear technology, when called upon to do so.

As a Member of the Nuclear Institute you know and understand:

- your role, responsibilities, boundaries of your authority and reporting lines in respect of nuclear safety and security.
- the roles and responsibilities for safety of others within your organisation and/or site including, where applicable, the roles and responsibilities of Site Licensees/Authorisees and Contractors.
- how human error has contributed to previous nuclear industry accidents, and recognise how avoidance of human error contributes to future safe operation.
- the principles of nuclear safety, how these apply to your work and their importance as a foundation for sound decisions and actions.
- the contribution you, your activities and/or the products of your work make to maintaining nuclear safety and security.
- how to apply human performance and error-reduction tools within your role
- the safety track record of the nuclear industry, including awareness of key incidents, identified causes, contributory factors and resulting lessons learned.
- the importance of employee vigilance and reporting to maintaining an effective nuclear safety and security culture.
- the range of public opinion regarding nuclear sector operations.
- how to present a high level of personal professional responsibility for nuclear safety and security.

Additionally, Members of the Nuclear Institute who are leaders are expected to promote behaviours which support Nuclear Safety and Security and encourages effective safety and security behaviours. In particular, these members should demonstrate that they:

- practice visible leadership by observing, coaching, mentoring, and reinforcing standards and commitment to policies and procedures.
- consider the employee's perspective in understanding and analysing issues.
- provide appropriate oversight during safety-significant work or where there is the potential for an impact on security.
- are appropriately involved in high-quality nuclear safety and security training that consistently reinforces expected behaviours.
- provide clear and consistent messages to all staff that recognises the importance of nuclear safety and security.

3. Nuclear Safety and Technology

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of 'nuclear safety'. As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade you are able to demonstrate that you:

- discharge your role responsibilities for safety, within the limits of your authority.
- accept accountability for maintaining safety standards within your area of responsibility, contributing to identifying and resolving any shortfall in meeting standards.
- identify and understand the potential consequences arising from planned activities and their implications for safety and security.
- take appropriate action when faced with unexpected or uncertain conditions to prevent or minimise the risk of a safety incident, unsafe action or other unintended consequence of your work (or work product).
- recognise what is safety critical.
- understand and comply with nuclear and environmental regulatory requirements to protect people, property and the environment from hazards (accidents, malfunctions and natural events).
- apply operating procedures and safe systems of work to meet organisational and regulatory requirements and minimise risk of exposure to radiation.
- work activity to minimise potential for contamination, as applicable to your role.

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Safety[3]
- The regulatory regime within which the nuclear industry operates, as applicable to the organisation, sub-sector and national context in which you work.
- The fundamentals of heat removal and containment relating to nuclear safety, including the need for reactor post shut-down cooling and decay heat removal.
- The principles of nuclear science and engineering, at a level, breadth and depth applicable to your role and working environment, drawn from the following areas;
    - Structure of the atom e.g. characteristics of electrons, neutrons and protons; mass number, atomic number and isotopes.
    - Nature and effect of radiation, e.g. sources, applications of radioisotopes
    - Types of radiation, including, radioactive decay; half-life; ionising radiation - interaction with matter.
    - Methods of reducing exposure to radiation - reducing exposure; equivalent dose; time; distance and shielding.
    - Control of contamination – definition of contamination; control methods; contamination monitoring.
    - Science and engineering of the nuclear fuel cycle including:.
        - Criticality.
        - Nuclear Reactors.
        - Reactor Safety and Hazards.
        - Nuclear Weapons.
- Defence-in-Depth, including redundancy, diversity and segregation.
- Emergency procedures, potential emergency situations, alarms and appropriate responses.
- Awareness of legal requirements for handling radioactive waste and how these apply to your work role and activities.

[3] IAEA in their Safety Glossary define Nuclear Safety as "The achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards

4. Nuclear Security

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of *'nuclear security'* in the nuclear industry.

As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade, you are able to demonstrate that you:

- discharge your role responsibilities for nuclear security, within the limits of your authority;
- accept accountability for maintaining nuclear security within your area of responsibility, contributing to identifying and resolving any shortfall in complying with requirements;
- identify and understand the potential consequences arising from planned activities and their implications for nuclear security.
- take appropriate action to prevent or minimise the risk of a security incident or other unintended consequence of your work (or work product).
- recognise what is security critical for their role.
- comply with nuclear security and environmental regulatory requirements to protect people, property and the environment from threats (malicious acts)

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Security.
- The nature of potential security threats and the reasons why controls are required.
- Work place access and restrictions, including:
  - personal access to site and restricted areas, including use and protection of security passes.
  - restrictions on items brought onto, removed or used on site.
  - general security principles and practices (need to know; steps to avoid accidental security breaches; complacency; vigilance; commitment to following specific policies, procedures and good practices).
- Management of sensitive information, including:
  - local policy, requirements and procedures, including document classification system.
  - correct handling and storage of information, as it applies to your job role.
  - correct IT security practices (locking PCs; password strength and protection; use of laptops, especially off-site).
- Risks of transmission of sensitive safety and security information and precautions when using electronic communications (telephones, mobiles; email, fax and social media).
- Response procedures, alarms and appropriate responses to nuclear security incidents and events.

3. CV

A copy of your CV updated to the present.

4. Copies of relevant certificates

A4 black and white photocopies of all relevant qualifications signed by your proposer/sponsor/referee must accompany your application.

5. Copies of Professional membership/s or qualification/s (if appropriate)

If you already hold membership of any professional body, you should provide copies of certificates and/or supporting documentation, signed as authentic by at least one of your sponsors.

6. Payment information of application fee

Please include a cheque made out to 'The Nuclear Institute' or inform us of your credit or debit card details. If your membership is approved, you can pay the joining fee and subscription by direct debit, credit or debit card or cheque.

A **hard copy** of your complete application is required and this must contain original signatures. A soft copy must also be submitted by email. We will not begin processing applications until receipt of the hard copy and payment of application fee.

B. Application for membership and registration with the Engineering Council

Applicants must submit the following documentation:

1. Application Form
2. Nuclear Delta® section
3. CV
4. Competence & Commitment Form (as appropriate to registration applied for)
5. Copies of relevant certificates
6. Copies of Professional membership/s or qualification/s (if appropriate)
7. Payment information for application fee

1. Application Form

You should complete the application form in full and ensure that both you and your referees and your sponsors have signed the appropriate sections. One proposer and two referees are required for direct entry Fellow applications. For a transfer to Fellow or an application for Member, Associate Member or Technician Member one proposer and one referee is required.

Your proposers and referees should have known you for at least three years and may be Fellows, Members, Associate Members or Technician Members of the Nuclear Institute, or chartered members of equivalent bodies. They must be at or above the registration grade applied for. In signing this form your proposers and referees declare that they consider you suitable for election to membership.

2. Nuclear Delta Section

It is important that you are aware of the need to demonstrate that you satisfy the Nuclear Delta® (http://www.nuclearinst.com/The-Standard), which will form a key part of the professional review interview. This section is where you must demonstrate knowledge of the requirements of the Nuclear Delta applicable to your role and responsibility. This includes the following areas:

1. Nuclear Safety and Security Culture

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of the terms 'Nuclear *Safety Culture'* and 'Nuclear *Security Culture'*. *As a Member of the Nuclear Institute you are able to demonstrate that you can:*

- explain what is meant by Nuclear Safety Culture[4]
- explain what is meant by Nuclear Security Culture[5]

2. Personal Behavioural Standards

The Nuclear Delta® requires an accredited nuclear professional to demonstrate a commitment to *'personal behavioural standards'.*

As a Member of the Nuclear Institute you are able to demonstrate that you:

- challenge unsafe acts and behaviour and reinforce safe practice appropriately and effectively.

[4] INSAG 15 defines safety culture as "that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance.

[5] IAEA Nuclear Security Series No 7 & ONR TAG CNS-TAST-GD-002 (Rev 0) defines Nuclear Security Culture as 'The assembly of characteristics, attitudes and behaviour of individuals, organisations and institutions which serve as a means to support and enhance nuclear security'

- challenge acts which could undermine security and reinforce security practice appropriately and effectively.
- apply nuclear safety principles to check that your decisions and work activities support safe nuclear operations.
- apply human performance and error-reduction tools within your role.
- work against complacency, maintaining and encouraging a questioning attitude.
- contribute to continuous improvement, maintaining an 'it can happen here' attitude.
- use organisation and/or site reporting systems effectively to learn from experience.
- accurately and factually represent the pros and cons of nuclear technology, when called upon to do so.

As a Member of the Nuclear Institute you know and understand:

- your role, responsibilities, boundaries of your authority and reporting lines in respect of nuclear safety and security.
- the roles and responsibilities for safety of others within your organisation and/or site including, where applicable, the roles and responsibilities of Site Licensees/Authorisees and Contractors.
- how human error has contributed to previous nuclear industry accidents, and recognise how avoidance of human error contributes to future safe operation.
- the principles of nuclear safety, how these apply to your work and their importance as a foundation for sound decisions and actions.
- the contribution you, your activities and/or the products of your work make to maintaining nuclear safety and security.
- how to apply human performance and error-reduction tools within your role
- the safety track record of the nuclear industry, including awareness of key incidents, identified causes, contributory factors and resulting lessons learned.
- the importance of employee vigilance and reporting to maintaining an effective nuclear safety and security culture.
- the range of public opinion regarding nuclear sector operations.
- how to present a high level of personal professional responsibility for nuclear safety and security.

Additionally, Members of the Nuclear Institute who are leaders are expected to promote behaviours which support Nuclear Safety and Security and encourages effective safety and security behaviours. In particular, these members should demonstrate that they:

- practice visible leadership by observing, coaching, mentoring, and reinforcing standards and commitment to policies and procedures.
- consider the employee's perspective in understanding and analysing issues.
- provide appropriate oversight during safety-significant work or where there is the potential for an impact on security.
- are appropriately involved in high-quality nuclear safety and security training that consistently reinforces expected behaviours.
- provide clear and consistent messages to all staff that recognises the importance of nuclear safety and security.

3. Nuclear Safety and Technology

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of 'nuclear safety'. As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade you are able to demonstrate that you:

- discharge your role responsibilities for safety, within the limits of your authority.
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- identify and understand the potential consequences arising from planned activities and their implications for safety and security.
- take appropriate action when faced with unexpected or uncertain conditions to prevent or minimise the risk of a safety incident, unsafe action or other unintended consequence of your work (or work product).
- recognise what is safety critical.
- understand and comply with nuclear and environmental regulatory requirements to protect people, property and the environment from hazards (accidents, malfunctions and natural events).
- apply operating procedures and safe systems of work to meet organisational and regulatory requirements and minimise risk of exposure to radiation.
- work activity to minimise potential for contamination, as applicable to your role.

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Safety[6]
- The regulatory regime within which the nuclear industry operates, as applicable to the organisation, sub-sector and national context in which you work.
- The fundamentals of heat removal and containment relating to nuclear safety, including the need for reactor post shut-down cooling and decay heat removal.
- The principles of nuclear science and engineering, at a level, breadth and depth applicable to your role and working environment, drawn from the following areas;
    - Structure of the atom e.g. characteristics of electrons, neutrons and protons; mass number, atomic number and isotopes.
    - Nature and effect of radiation, e.g. sources, applications of radioisotopes
    - Types of radiation, including, radioactive decay; half-life; ionising radiation - interaction with matter.
    - Methods of reducing exposure to radiation - reducing exposure; equivalent dose; time; distance and shielding.
    - Control of contamination – definition of contamination; control methods; contamination monitoring.
    - Science and engineering of the nuclear fuel cycle including:.
        - Criticality.
        - Nuclear Reactors.
        - Reactor Safety and Hazards.
        - Nuclear Weapons.
- Defence-in-Depth, including redundancy, diversity and segregation.
- Emergency procedures, potential emergency situations, alarms and appropriate responses.
- Awareness of legal requirements for handling radioactive waste and how these apply to your work role and activities.

[6] IAEA in their Safety Glossary define Nuclear Safety as "The achievement of proper *operating conditions*, prevention of *accidents* or mitigation of *accident* consequences, resulting in *protection* of *workers*, the public and the environment from undue *radiation* hazards.

4. Nuclear Security

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of *'nuclear security '*in the nuclear industry.

As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade, you are able to demonstrate that you:

- discharge your role responsibilities for nuclear security, within the limits of your authority;
- accept accountability for maintaining nuclear security within your area of responsibility, contributing to identifying and resolving any shortfall in complying with requirements;
- identify and understand the potential consequences arising from planned activities and their implications for nuclear security.
- take appropriate action to prevent or minimise the risk of a security incident or other unintended consequence of your work (or work product).
- recognise what is security critical for their role.
- comply with nuclear security and environmental regulatory requirements to protect people, property and the environment from threats (malicious acts)

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Security.
- The nature of potential security threats and the reasons why controls are required.
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  - restrictions on items brought onto, removed or used on site.
  - general security principles and practices (need to know; steps to avoid accidental security breaches; complacency; vigilance; commitment to following specific policies, procedures and good practices).
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  - local policy, requirements and procedures, including document classification system.
  - correct handling and storage of information, as it applies to your job role.
  - correct IT security practices (locking PCs; password strength and protection; use of laptops, especially off-site).
- Risks of transmission of sensitive safety and security information and precautions when using electronic communications (telephones, mobiles; email, fax and social media).
- Response procedures, alarms and appropriate responses to nuclear security incidents and events.

3. CV

A copy of your CV updated to the present.

4. Competence and Commitment Form

You should complete the C&C form in full to demonstrate the competencies for the relevant registration. Please read the relevant sections of the Engineering Council's requirements, known as the UK Spec (*www.engc.org.uk/ukspec*) before completing the form.

Please complete each section in full; you should not refer to any other document. This form must be totally free-standing as it will be the only document used in your assessment. As general guidance you will need about 2,500 words in total. Ensure that the information provided on the form is verified by someone familiar with your work (these do not have to be your proposer or referee). If this covers more than one employment then each section should be initialled by someone familiar with it and all should sign at the end.

5. Copies of relevant certificates
A4 black and white photocopies of all relevant qualifications signed by your proposer/sponsor/referee must accompany your application.

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If you already hold membership of any professional body, you should provide copies of certificates and/or supporting documentation, signed as authentic by at least one of your sponsors.

7. Payment information of application fee
Please include a cheque made out to 'The Nuclear Institute' or inform us of your credit or debit card details. If your membership is approved, you can pay the joining fee and subscription by direct debit, credit or debit card or cheque.

Submitting an application
A **hard copy** of your complete application is required and this must contain original signatures. A soft copy must also be submitted by email. We will not begin processing applications until receipt of the hard copy and payment of application fee.

C. Application for membership and registration with the Science Council
Applicants must submit the following documentation:

1. Application Form
2. Nuclear Delta section
3. Competence & Commitment Form
4. Extended CV
5. Copies of relevant certificates
6. Copies of Professional membership/s or qualification/s (if appropriate)
7. Payment information for application fee

1. Application Form
You should complete the application form in full and ensure that both you and your referees and your sponsors have signed the appropriate sections. One proposer and two referees are required for direct entry Fellow applications. For a transfer to Fellow or an application for Member, Associate Member or Technician Member one proposer and one referee is required.

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- explain what is meant by Nuclear Safety Culture[7]
- explain what is meant by Nuclear Security Culture[8]

2. Personal Behavioural Standards

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[8] IAEA Nuclear Security Series No 7 & ONR TAG CNS-TAST-GD-002 (Rev 0) defines Nuclear Security Culture as 'The assembly of characteristics, attitudes and behaviour of individuals, organisations and institutions which serve as a means to support and enhance nuclear security'

- apply nuclear safety principles to check that your decisions and work activities support safe nuclear operations.
- apply human performance and error-reduction tools within your role.
- work against complacency, maintaining and encouraging a questioning attitude.
- contribute to continuous improvement, maintaining an 'it can happen here' attitude.
- use organisation and/or site reporting systems effectively to learn from experience.
- accurately and factually represent the pros and cons of nuclear technology, when called upon to do so.

As a Member of the Nuclear Institute you know and understand:

- your role, responsibilities, boundaries of your authority and reporting lines in respect of nuclear safety and security.
- the roles and responsibilities for safety of others within your organisation and/or site including, where applicable, the roles and responsibilities of Site Licensees/Authorisees and Contractors.
- how human error has contributed to previous nuclear industry accidents, and recognise how avoidance of human error contributes to future safe operation.
- the principles of nuclear safety, how these apply to your work and their importance as a foundation for sound decisions and actions.
- the contribution you, your activities and/or the products of your work make to maintaining nuclear safety and security.
- how to apply human performance and error-reduction tools within your role
- the safety track record of the nuclear industry, including awareness of key incidents, identified causes, contributory factors and resulting lessons learned.
- the importance of employee vigilance and reporting to maintaining an effective nuclear safety and security culture.
- the range of public opinion regarding nuclear sector operations.
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- practice visible leadership by observing, coaching, mentoring, and reinforcing standards and commitment to policies and procedures.
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- provide appropriate oversight during safety-significant work or where there is the potential for an impact on security.
- are appropriately involved in high-quality nuclear safety and security training that consistently reinforces expected behaviours.
- provide clear and consistent messages to all staff that recognises the importance of nuclear safety and security.

3. Nuclear Safety and Technology

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of *'nuclear safety'*. *As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade you are able to demonstrate that you;*

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- accept accountability for maintaining safety standards within your area of responsibility, contributing to identifying and resolving any shortfall in meeting standards.
- identify and understand the potential consequences arising from planned activities and their implications for safety and security.
- take appropriate action when faced with unexpected or uncertain conditions to prevent or minimise the risk of a safety incident, unsafe action or other unintended consequence of your work (or work product).
- recognise what is safety critical.
- understand and comply with nuclear and environmental regulatory requirements to protect people, property and the environment from hazards (accidents, malfunctions and natural events).
- apply operating procedures and safe systems of work to meet organisational and regulatory requirements and minimise risk of exposure to radiation.
- work activity to minimise potential for contamination, as applicable to your role.

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Safety[9]
- The regulatory regime within which the nuclear industry operates, as applicable to the organisation, sub-sector and national context in which you work.
- The fundamentals of heat removal and containment relating to nuclear safety, including the need for reactor post shut-down cooling and decay heat removal.
- The principles of nuclear science and engineering, at a level, breadth and depth applicable to your role and working environment, drawn from the following areas;
    - Structure of the atom e.g. characteristics of electrons, neutrons and protons; mass number, atomic number and isotopes.
    - Nature and effect of radiation, e.g. sources, applications of radioisotopes
    - Types of radiation, including, radioactive decay; half-life; ionising radiation - interaction with matter.
    - Methods of reducing exposure to radiation - reducing exposure; equivalent dose; time; distance and shielding.
    - Control of contamination – definition of contamination; control methods; contamination monitoring.
    - Science and engineering of the nuclear fuel cycle including:.
        - Criticality.
        - Nuclear Reactors.
        - Reactor Safety and Hazards.
        - Nuclear Weapons.
- Defence-in-Depth, including redundancy, diversity and segregation.
- Emergency procedures, potential emergency situations, alarms and appropriate responses.

[9] IAEA in their Safety Glossary define Nuclear Safety as "The achievement of proper *operating conditions*, prevention of *accidents* or mitigation of *accident* consequences, resulting in *protection* of *workers*, the public and the environment from undue *radiation* hazards.

- Awareness of legal requirements for handling radioactive waste and how these apply to your work role and activities.

4. Nuclear Security

The Nuclear Delta® requires an accredited nuclear professional to demonstrate an understanding of 'nuclear security 'in the nuclear industry.

As a Member of the Nuclear Institute, at a level appropriate to their responsibilities and grade, you are able to demonstrate that you:

- discharge your role responsibilities for nuclear security, within the limits of your authority;
- accept accountability for maintaining nuclear security within your area of responsibility, contributing to identifying and resolving any shortfall in complying with requirements;
- identify and understand the potential consequences arising from planned activities and their implications for nuclear security.
- take appropriate action to prevent or minimise the risk of a security incident or other unintended consequence of your work (or work product).
- recognise what is security critical for their role.
- comply with nuclear security and environmental regulatory requirements to protect people, property and the environment from threats (malicious acts)

As a Member of the Nuclear Institute you know and understand at a level appropriate to your responsibilities and grade the following topics:

- What is meant by Nuclear Security.
- The nature of potential security threats and the reasons why controls are required.
- Work place access and restrictions, including:
  - personal access to site and restricted areas, including use and protection of security passes.
  - restrictions on items brought onto, removed or used on site.
  - general security principles and practices (need to know; steps to avoid accidental security breaches; complacency; vigilance; commitment to following specific policies, procedures and good practices).
- Management of sensitive information, including:
  - local policy, requirements and procedures, including document classification system.
  - correct handling and storage of information, as it applies to your job role.
  - correct IT security practices (locking PCs; password strength and protection; use of laptops, especially off-site).
- Risks of transmission of sensitive safety and security information and precautions when using electronic communications (telephones, mobiles; email, fax and social media).
- Response procedures, alarms and appropriate responses to nuclear security incidents and events.

3. Competence and Commitment Form

You should complete the Competence & Commitment form in full to demonstrate the competencies for the relevant registration. Please read the relevant sections of the Science Council's requirements (*www.charteredscientist.org/PDFs/CSciCompetencies.pdf*) before completing the form.

Please complete each section in full; you should not refer to any other document. This form must be totally free-standing as it will be the only document used in your assessment. As general guidance you will need about 2,500

words in total. Ensure that the information provided on the form is verified by someone familiar with your work (these do not have to be your proposer or referee). If this covers more than one employment then each section should be initialled by someone familiar with it and all should sign at the end.

4. Extended CV

This is required for all applications for Chartered Scientist. The NI does not stipulate a set format for the extended curriculum vitae, but in order to provide the Membership Committee with sufficient information to make their decision; all applicants are strongly advised to include the following:

- Demonstrate depth, breadth, and application of subject-specific knowledge to the academic level required for the category of registration being sought.
- Involvement in design, development, and or use of new or emerging technologies
- Further professional development or significant additional training
- Level of responsibility and autonomy with the organisation; how current role fits within programmes and/or organisation
- Level of design signatory approval and context
- Leadership skills exercised and level of influence in design, development, policy making, and management of the organisation
- Involvement in developing capability (people, process, tools, etc)
- Responsibilities for planning or budgetary control
- Involvement in identifying environmental risks and dealing with health and safety issues
- Role in communications/presentations to suppliers, customers, et al
- Involvement in conferences, seminars and/or publications on specialist subjects where recognised as expert in a specialist field
- Academic Qualifications
    - Qualification (e.g. HND, BSc, etc)
    - Subject/Discipline (course titles must be the precise title, e.g. 'Nuclear Reactor Technology)
    - Duration of Study (years and months) and Year of Award
    - Nature of Study (full-time, part-time, sandwich)
    - Academic Establishment (title at the time of award, e.g. University of Exeter, etc)
    - Award level (if applicable) i.e. BEng (Hons) 2.1

5. Copies of relevant certificates

A4 black and white photocopies of all relevant qualifications signed by your proposer/sponsor/referee must accompany your application.

6. Copies of Professional membership/s or qualification/s (if appropriate)

If you already hold membership of any professional body, you should provide copies of certificates and/or supporting documentation, signed as authentic by at least one of your sponsors.

7. Payment information of application fee

Please include a cheque made out to 'The Nuclear Institute' or inform us of your credit or debit card details. If your membership is approved, you can pay the joining fee and subscription by direct debit, credit or debit card or cheque.

Submitting an application

A **hard copy** of your complete application is required and this must contain original signatures. A soft copy must also be submitted by email. We will not begin processing applications until receipt of the hard copy and payment of application fee.