

IEng Competence Statement

PRIVATE AND CONFIDENTIAL WHEN COMPLETE
STATEMENT OF COMPETENCES TO BE FILLED IN BY CANDIDATES FOR IEng
TO BE RETURNED WITH YOUR APPLICATION FORM

The following information provides examples showing how you consider that you meet the competences for Incorporated Engineer as set out in the ENGINEERING COUNCIL Standard for Professional Competence.

You may use a few or as many words as you feel are appropriate to convey your evidence for each competency. However, it would be appreciated if you could keep it short and concise at under 300 words per competence

Incorporated Engineers must be competent throughout their working life, by virtue of their education, training and experience, to:

A. Use of combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology

A1. Maintain and extend a sound theoretical approach to the application of technology in engineering practice.

This could include an ability to:

- Identify the limits of own personal knowledge and skills
- Strive to extend own technological capability
- Broaden and deepen own knowledge base through new applications and techniques

Please type your responses below:

A2. Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.

This could include an ability to:

- Use market intelligence and knowledge of technological developments to promote and improve the effectiveness of engineering products, systems and services
- Contribute to the evaluation and development of continuous improvement systems
- Apply knowledge and experience to investigate and solve problems arising during engineering tasks and implement corrective action.

Please type your responses below:

B. Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and re-cycle engineering processes, systems, services and products.

B1. Identify, review and select techniques, procedures and methods to undertake engineering tasks.

This could include an ability to:

- Establish users' requirements for improvement
- Select a review methodology
- Fully exploit and implement current technology
- Review the potential for enhancing engineering products, processes, systems and services, using evidence from best practice
- Establish an action plan to implement the results of the review

Please type your responses below:

B2. Contribute to the design and development of engineering solutions.

This could include an ability to:

- Contribute to the identification and specification of design and development requirements for engineering products, processes, systems and services
- Identify potential operational risks and evaluate possible engineering solutions, taking account of cost, quality,

safety, reliability, appearance, fitness for purpose, security, intellectual property (IP) constraints and opportunities, and environmental impact

- Collect and analyse results
- Carry out necessary tests

Please type your responses below:

B3. Implement design solutions and contribute to their evaluation.

This could include an ability to:

- Secure the resources required for implementation
- Implement design solutions, taking account of critical constraints, including due concern for safety and sustainability
- Identify problems during implementation and take corrective action
- Contribute to recommendations for improvement and actively learn from feedback on results

Please type your responses below:

C. Provide technical and commercial management

C1. Plan for effective project implementation

This could include an ability to:

- Systematically identify the factors affecting the project implementation including safety and sustainability considerations
- Carry out a holistic and systematic approach to risk identification, assessment and management
- Prepare and agree implementation plans and methods statements
- Ensure that the necessary resources are secure and confirm roles in the project team
- Apply the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc)

Please type your responses below:

C2. Plan, budget, organise, direct and manage tasks, people and resources.

This could include an ability to:

- Operate up appropriate management systems
- Work to quality standards, programme and budget within legal and statutory requirements
- Manage work teams, coordinating projects activities
- Identify that variations from quality standards, programme and budgets are identified, and that corrective action is taken
- Evaluate performance and recommend improvements

Please type your responses below:

C3. Manage teams and develop staff to meet changing technical and managerial needs

This could include an ability to:

- Agree objectives and work plans with teams and individuals
- Identify team and individual needs, and plan for their development
- Reinforce team commitment to professional standards
- Manage and support team and individual development
- Assess team and individual performance, and provide feedback

Please type your responses below:

C4. Bring about continuous improvement through quality management.

This could include an ability to:

- Promote quality throughout the organisation and its customer and supplier networks
- Develop and maintain operations to meet quality standards

- Direct project evaluation and propose recommendations for improvement

Please type your responses below:

D. Demonstrate effective interpersonal skills

D1. Communicate in English with others at all levels.

This could include an ability to:

- Contribute to, chair and record meeting and discussions
- Prepare letters, documents and reports
- Exchange information and provide advice to technical and non-technical colleagues

Please type your responses below:

D2. Present and discuss proposals.

This could include an ability to:

- Prepare and deliver appropriate presentations
- Manage debates with audiences
- Feed the results back to improve the proposals
- Contribute to the awareness of risk

Please type your responses below:

D3. Demonstrate personal and social skills.

This could include an ability to:

- Know and manage own emotions, strengths and weaknesses
- Be aware of the needs and concerns of others, especially where related to diversity and equality
- Be confident and flexible in dealing with new and changing interpersonal situations
- Identify, agree and lead work towards collective goals
- Create, maintain and enhance productive working relationships, and resolve conflicts

Please type your responses below:

E. Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

E1. Comply with relevant codes of conduct.

This could include an ability to:

- Comply with the rules of professional conduct of own professional body
- Manage work within all relevant legislation and regulatory frameworks, including social and employment legislation

Please type your responses below:

E2. Manage and apply safe systems of work.

This could include an ability to:

- Identify and take responsibility for own obligations for health, safety and welfare issues
- Manage systems satisfy health, safety and welfare requirements
- Develop and implement appropriate hazard identification and risk management systems and culture
- Manage, evaluate and improve these systems
- Apply a sound knowledge of health and safety legislation

Please type your responses below:

E3. Undertake engineering activities in a way that contributes to sustainable development.

This could include an ability to:

- Operate and act responsibly, taking account of the needs to progress environmental, social and economic outcomes simultaneously
- Provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives
- Understand and encourage stakeholder involvement in sustainable development
- Use resources efficiently and effectively

Please type your responses below:

E4. Carry out continuing professional development necessary to maintain and enhance competence in own area of practice.

This could include an ability to:

- Undertake reviews of own development needs
- Plans how to meet personal and organisational objectives
- Carry out planned, and unplanned, CPD activities
- Maintain evidence of competence development
- Evaluate CPD outcomes against the plans made
- Assist others in their own CPD

Please type your responses below:

E5. Exercise responsibilities in an ethical manner.

This could include an ability to:

- Give an Example of where you have applied ethical principles as described in the Statement of Ethical Principles
- Give an example of where you have applied/upheld ethical principles as defined by your organisation or company, which may be in its company or brand

Please type your responses below: