

## CORE COMPETENCE STANDARDS

### **Core Competence Standard 1.0 – Knowledge and understanding of engineering principals**

The *first* Core Competence Standard of the IESL Registration Board requires the Professional Engineer must be competent, by virtue of their initial formation and throughout their working life, to

**Use a combination of specialist and general engineering knowledge and understanding to optimize the application of existing and emerging technologies.**

- Maintain and extend a sound theoretical approach in enabling the introduction and exploitation of new and advancing technology and other developments
- Engage in the creative and innovative development of engineering technology and continuous improvement systems

### **Core Competence Standard 2.0 – Practical application knowledge and understanding of engineering principals**

The *second* Core Competence Standard of the IESL Registration Board requires the Professional Engineer must be competent, by virtue of their initial formation and throughout their working life, to

**Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems**

- Identify potential projects and opportunities
- Conduct appropriate research and undertake design and development of engineering solutions
- Implement design solutions and evaluate their effectiveness.

### **Core Competence Standard 3.0 – Leadership and Management skills**

The *third* Core Competence Standard of the IESL Registration Board requires the Professional Engineer must be competent, by virtue of their initial formation and throughout their working life, to

**Provide technical, commercial and managerial leadership**

- Plan for effective project implementation
- Plan, budget, organize, direct and control task, people and resources
- Lead teams and develop staff to meet changing technical and managerial needs
- Bring about continuous improvement through quality management

### **Core Competence Standard 4.0 – Communication and Interpersonal skills**

The *fourth* Core Competence Standard of the IESL Registration Board requires the Professional Engineer must be competent, by virtue of their initial formation and throughout their working life, to

### **Demonstrate effective interpersonal skills**

- Effective use of oral and written communication skills in English
- Present and discuss proposals
- Demonstrate personal and social skills

### **Core Competence Standard 5.0 – Professional Conduct**

The *fifth* Core Competence Standard of the IESL Registration Board requires the Professional Engineer must be competent, by virtue of their initial formation and throughout their working life, to

#### **Demonstrate a personal commitment to the IESL Code of Ethics and Professional Standards, recognising obligations to society, the profession and the environment.**

- Comply with relevant codes of conduct
- Apply and manage safe systems of work
- Undertake engineering activities in a way that contributes to sustainable development
- Carry out CPD necessary to maintain and enhance competence in own area of practice

### **Assessment of Competence**

The Assessor should grade each section using the following competence level.

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|-----------|---|
| Level 1 – | performs activity with significant supervision; little or no individual responsibility  |
| Level 2 - | performs activity in a range of situations; supervision required in more complex situations; some individual responsibility or autonomy.                        |
| Level 3 - | performs activity in some complex and non-routine situations; significant responsibility or autonomy; can oversee the work of others                            |
| Level 4 - | performs activity in a wide range of complex and non-routine situations; significant individual responsibility or autonomy; can involve others in the activity. |