



Institute of Highway Incorporated Engineers
Competence and Commitment

I H I E

	Engineering Technicians	Incorporated Engineers	Chartered Engineers
	<i>Chartered Engineers, Incorporated Engineers and Engineering Technicians must be competent, by virtue of their professional development and in their subsequent working life, to:</i>		
A	Use engineering knowledge and understanding to apply technical and practical skills	Use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology	Use a combination of general and specialist engineering knowledge and understanding to optimize the application of existing and emerging technology
A1	Review and select techniques, procedures and methods to undertake tasks	Maintain and extend a sound theoretical approach to the application of technology in engineering practice	Maintain a sound theoretical approach in enabling the introduction of new and advancing technology and other related developments
A2	Use appropriate scientific, technical or engineering principles	Use an evidence-based approach to problem-solving and contribute to continuous improvement 'Apply' Apply technology Sound evidence-based approach	Engage in the creative and innovative development of engineering technology and continuous systems 'Optimise the application' Introduce and exploit new and advancing technology Creative and innovative approach.

	Engineering Technicians	Incorporated Engineers	Chartered Engineers
B	Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services	Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate and maintain products, processes, equipment, systems or services	Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems
B1	Identify problems and apply diagnostic methods to achieve satisfactory solutions	Identify, review and select techniques, procedures and methods to undertake engineering tasks	Identify potential projects and opportunities
B2	Identify, organize and use resources effectively to complete tasks, with due regard to cost, quality, safety and environmental impact	Contribute to design and development	Conduct appropriate research and undertake design and development of technical solutions
B3		<p>Implement design solutions and contribute to the evaluation of them, taking cost, benefits, safety, quality, reliability, appearance and environmental impact into account.</p> <p><i>'Detailed'</i></p> <p><i>Contribute to design</i></p> <p><i>Contribute to evaluation</i></p>	<p>Implement design solutions (including considerations of cost, benefits, safety, reliability, appearance and environmental impact) and evaluate their effectiveness.</p> <p><i>'High level'</i></p> <p><i>Conduct research etc</i></p> <p><i>Evaluate</i></p>

	Engineering Technician	Incorporated Engineer	Chartered Engineer
C	Accept and exercise personal responsibility	Provide technical and commercial management	Provide technical and commercial leadership
C1	Work reliably and effectively without close supervision, to the appropriate codes of practice	Plan for effective project implementation	Plan for effective project implementation
C2	Accept responsibility for the work of self and others	Manage the planning, budgeting and organization of tasks, people and resources	Plan, budget, organize, direct and control tasks, people or resources
C3	Accept, allocate and supervise technological and other tasks	Manage teams and develop staff to meet changing technical and managerial needs	Lead teams and develop staff to meet changing technical and managerial needs
C4	Supervise	Bring about continuous improvement through quality management Manage	Bring about continuous improvement through quality management Lead

	Engineering Technicians	Incorporated Engineers	Chartered Engineers
D	Use effective communication and interpersonal skills		
D1	Use oral, written and electronic methods for the communication of technical and other information	Communicate with others at all levels	Communicate with others at all levels
D2	Work effectively as a team member with the public	Present and discuss proposals	Present and discuss proposals
D3		Build teams and negotiate	Build teams and negotiate
E	Demonstrate a personal commitment to professional standards, recognizing obligations to society, the profession and the environment		
E1	Comply with relevant codes of conduct		
E2	Manage and apply safe systems of work	Manage and apply safe systems of work	Manage and apply safe systems of work
E3	Undertake engineering work with due regard to issues of sustainable development		
E4	Carry out the continuing professional development necessary to maintain and enhance competence in own area of practice		