Title	**Identify and apply ethical responsibilities relating to professional engineering practice**		
Level	**5**	**Credits**	**4**

Purpose	People credited with this unit standard are able to: identify ethical values and principles relating to professional engineering practice; apply social responsibilities of engineering professionals; and identify responsibilities towards other members of the engineering profession. This unit standard is designed for graduate professional engineers who have yet to receive the opportunity to gain professional experience.

Classification	Engineering > Generic Engineering

Available grade	Achieved

Guidance Information

1 Range
Examples of engineering situations include but are not limited to those relating to – planning, bidding, assessment of engineering problems, judging between solutions, gauging the effectiveness of the design process, engagement of suppliers and contractors, selection of materials, and handling of funds.

2 This unit standard can be assessed against using case studies, simulations, and other off-job activities.

Outcomes and performance criteria

Outcome 1

Identify ethical values and principles relating to professional engineering practice.

Performance criteria

1.1 Analysis of published codes of ethics relating to the candidate's own engineering discipline establishes the fundamental ethical values involved.

Range protection of life, safeguarding of people, sustainable management, care for the environment, community wellbeing, maintenance of personal and professional integrity, maintenance of public respect for and trust in the profession, professional competence, sustaining of engineering knowledge.

1.2 Analysis of engineering situations relating to the candidate's own engineering discipline establishes relevant ethical principles and provisions of code/s of ethics.

Range evidence is required for three situations.

1.3 Available processes by which engineering professionals accused of unethical behaviour can be brought to account are identified relative to the severity of the alleged breach.

Range peer review, professional discipline, legal process.

Outcome 2

Apply social responsibilities of engineering professionals.

Performance criteria

2.1 Analysis of engineering situations relating to the candidate's own engineering discipline identifies activities that involve ethical responsibilities relating to society.

Range ethical responsibilities – professional judgment for the benefit of clients, fairness and impartiality, personal responsibility for work done, handling of confidential information, disclosure of interest, avoidance of inducements, working within own level of experience and competence, using recognised professional practice in communicating with clients, being informed about public policies and community needs;
evidence is required for at least four ethical responsibilities, in at least two different hypothetical situations.

2.2 Professional decisions give priority to the safety and wellbeing of the community and the dignity of the individual.

Range safety and wellbeing – physical, cultural, environmental.

2.3 Professional decisions are based on assessment and minimisation of potential dangers to the community.

2.4 Means are identified for the level and significance of risk associated with professional work to be drawn to the attention of those affected.

2.5 Environmental considerations are evident in professional decisions.

Range environmental considerations may include but are not limited to – efficient use of resources; minimisation of waste; environmentally sound reuse, recycling, and disposal; avoidance or mitigation of adverse impact of work; recognition of long term sustainable resource management;
evidence is required for at least two environmental considerations.

Outcome 3

Identify responsibilities towards other members of the engineering profession.

Performance criteria

3.1 Analysis of engineering situations relating to the candidate's own engineering discipline identifies activities that involve ethical responsibilities towards other engineering professionals.

Range ethical responsibilities – professional judgment for the benefit of employers, fairness and impartiality, personal responsibility for work done under own supervision, handling of confidential information, disclosure of interest, avoidance of inducements, refraining from criticism without due cause, upholding the reputation of the profession;
evidence is required for at least four ethical responsibilities, in at least two different hypothetical situations.

3.2 Analysis of engineering situations relating to the candidate's own engineering discipline identifies opportunities for professional development and professional information-sharing.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 February 1998	31 December 2020
Revision	2	7 June 2000	31 December 2020
Revision	3	19 February 2004	31 December 2020
Revision	4	14 July 2005	31 December 2020
Rollover and Revision	5	18 December 2006	31 December 2020
Review	6	24 January 2019	31 December 2020

Consent and Moderation Requirements (CMR) reference	0101

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.