

Revised HKIE Graduate Attributes for Higher Diploma and Equivalent Programmes (Approved by the Council in November 2023)

- (a) select and apply knowledge of mathematics, natural science, computer science and engineering, to broadly-defined^ activities and defined engineering procedures, processes, systems or methodologies
- (b) identify, formulate, research literature and analyse broadly-defined^ engineering problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialisation
- (c) design solution for broadly-defined^ engineering technology problems and contribute to the design of systems, components or processes to meet identified needs with appropriate consideration for public health and safety, whole-life cost, net zero carbon as well as resource, cultural, societal, and environmental considerations
- (d) conduct investigations of broadly-defined^ engineering problems; locate, search and select relevant data from codes, data bases and literature; design, conduct, analyse, and interpret experiments; and apply experimental results to provide valid conclusions and improve processes
- (e) select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to support detailed consideration of broadly-defined^ engineering problems, and recognise limitations of such techniques, resources and tools
- (f) analyse and evaluate sustainable development impacts* to the society, economy, sustainability, health and safety, legal frameworks, and the environment when solving broadly-defined^ engineering problems
- (g) understand and commit to fulfil professional and ethical responsibilities, and norms of engineering technology practice including compliance with national and international laws and respect for diversity and inclusion
- (h) function effectively as an individual, and in different roles of diverse and inclusive teams and in various settings as needed
- (i) communicate effectively and inclusively on broadly-defined^ engineering technology activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, taking into account cultural, language, and learning differences
- (j) apply knowledge of engineering management principles to one's own work and to manage projects in multidisciplinary environments
- (k) recognise the need for and have the ability for i) independent and lifelong learning, and ii) critical thinking in the face of new specialist technologies

Broadly-defined^ activities are those that involve a variety of resources, that involve the use of new processes, materials, or techniques in innovative ways, and that require a knowledge of standard operating procedures.

*Represented by the 17 UN Sustainable Development Goals (UN-SDG)