

	Education in the fundamental sciences and mathematics that underline engineering with a general breadth and depth in engineering analysis and design	Awareness of current technology and the fundamental background to be able to stay informed and adept at new technologies	The ability to put ideas into practice through effective analysis, problem solving, requirements development, design, and implementation	A broad awareness of the world around them through general education so they are prepared to achieve their potential and make contributions in their professional and personal lives	The foundation of communications and teamwork skills and professional attitudes and ethics
(a) An ability to apply knowledge of mathematics, science, and engineering	2	2	2		
(b) An ability to design and conduct experiments, as well as to analyze and interpret data	2	2	1		
(c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, health and safety, manufacturability, and sustainability		2	2	2	
(d) An ability to function on multidisciplinary teams			1	1	2
(e) An ability to identify, formulate, and solve engineering problems	2	2	2		
(f) An understanding of professional and ethical responsibility				2	2
(g) An ability to communicate effectively			1	1	2
(h) The broad education necessary to understand the impact of engineering solutions in a global, economic, and societal context	2	1	1	2	2
(i) A recognition of the need for, and an ability to engage in, life-long learning		2		1	

(j) A knowledge of contemporary issues		1		2	1
(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	2	1	2		