

Knowledge Profile	Area [Hamzah and Pao 2019]	Attribute
K1	Natural Sciences	A systematic theory-based understanding of the natural sciences applicable to the discipline
K2	Mathematics	Conceptually based mathematics, numerical analysis, statistics and the formal aspects of computer and information science to support analysis and modeling applicable to the discipline
K3	Engineering fundamentals	A systematic theory-based formulation of engineering fundamentals required in the engineering discipline
K4	Specialist Knowledge	Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much is at the forefront of the discipline
K5	Engineering Design	Knowledge that supports engineering design in a practice area
K6	Engineering Practice	Knowledge of engineering practice (technology) in the practice areas in the engineering discipline
K7	Comprehension	Comprehension of the role of engineering in society and identified issues in engineering practice in the discipline: ethics and the engineer's professional responsibility to public safety; the impacts of engineering activity; economic, social, cultural, environmental and sustainability
K8	Research Literature	Engagement with selected knowledge in the research literature of the discipline