## THE UNIVERSITY OF HONG KONG FACULTY OF ENGINEERING Department of Computer Science

## Bachelor of Engineering in Computer Science [BEng(CompSc)]: Curriculum Level Learning Outcomes

Curriculum Level Outcomes	University Educational Aims
	Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in:
Upon successful completion of the curriculum, students should be able to: (a) apply knowledge of computing and mathematics appropriate to the programme outcomes and to the discipline (b) apply knowledge of a computing specialization, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models (c) analyze a problem, and identify and define the computing requirements appropriate to its solution (d) design, implement, and evaluate a computer-based system, process, component, or programme to meet desired needs with appropriate consideration for public health and safety, social and environmental considerations (i) recognize the need for and an ability to engage in continuing professional development (j) use current techniques, skills, and tools necessary for computing practice with an understanding of the limitations	<ul> <li>University Educational Aim 1.</li> <li>Pursuit of academic/professional excellence, critical intellectual inquiry and life-long learning</li> </ul>
Upon successful completion of the curriculum, students should be able to: (c) analyze a problem, and identify and define the computing requirements appropriate to its solution (j) use current techniques, skills, and tools necessary for computing practice with an understanding of the limitations	<ul> <li>University Educational Aim 2.</li> <li>Tackling novel situations and ill-defined problems</li> </ul>

Upon successful completion of the curriculum, students should be able to: (f) demonstrate an understanding of professional, ethical, legal, security and social issues and responsibilities (h) analyze the local and global impact of computing on individuals, organizations, and society	<ul> <li>University Educational Aim 3.</li> <li>Critical self-reflection, greater understanding of others, and upholding personal and professional ethics</li> </ul>
Upon successful completion of the curriculum, students should be able to: (f) demonstrate an understanding of professional, ethical, legal, security and social issues and responsibilities (g) communicate effectively with a range of audiences (h) analyze the local and global impact of computing on individuals, organizations, and society	University Educational Aim 4.     Intercultural communication, and global citizenship
Upon successful completion of the curriculum, students should be able to: (e) function effectively on teams to accomplish a common goal (g) communicate effectively with a range of audiences	University Educational Aim 5.     Communication and collaboration
Upon successful completion of the curriculum, students should be able to: (d) design, implement, and evaluate a computer-based system, process, component, or programme to meet desired needs with appropriate consideration for public health and safety, social and environmental considerations (e) function effectively on teams to accomplish a common goal (h) analyze the local and global impact of computing on individuals, organizations, and society	<ul> <li>University Educational Aim 6.</li> <li>Leadership and advocacy for the improvement of the human condition</li> </ul>