

**THE UNIVERSITY OF HONG KONG  
FACULTY OF ENGINEERING**

**Bachelor of Engineering in Biomedical Engineering [BEng(BME)]: Curriculum Level Learning Outcomes**

<b>Curriculum Level Outcomes</b>	<b>University Educational Aims</b>
<p><b>Curriculum-level Intended Learning Outcome 1.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to apply knowledge of mathematics, science, and engineering appropriate to the biomedical engineering (BME) discipline</li> <li>• an ability to design and conduct experiments, as well as to analyse and interpret data</li> <li>• an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the BME discipline</li> <li>• an ability to recognise the need for, and to engage in life-long learning</li> <li>• an ability to use the computer/IT tools relevant to the BME discipline along with an understanding of their processes and limitations</li> </ul>	<p><b>University Educational Aim 1.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in pursuit of academic/professional excellence, critical intellectual enquiry and life-long learning</li> </ul>
<p><b>Curriculum-level Intended Learning Outcome 2.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to design a system, component or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability</li> <li>• an ability to identify, formulate and solve engineering problems</li> </ul>	<p><b>University Educational Aim 2.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in tackling novel situations and ill-defined problems</li> </ul>
<p><b>Curriculum-level Intended Learning Outcome 3.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public</li> <li>• an ability to understand professional and ethical responsibility</li> </ul>	<p><b>University Educational Aim 3.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in critical self-reflection,</li> </ul>

Curriculum Level Outcomes	University Educational Aims
	greater understanding of others, and upholding personal and professional ethics
<p><b>Curriculum-level Intended Learning Outcome 4.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to stay abreast of contemporary issues</li> <li>• an ability to understand professional and ethical responsibility</li> <li>• an ability to design a system, component or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability</li> </ul>	<p><b>University Educational Aim 4.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in intercultural communication and global citizenship</li> </ul>
<p><b>Curriculum-level Intended Learning Outcome 5.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to function on multi-disciplinary teams</li> <li>• an ability to communicate effectively</li> </ul>	<p><b>University Educational Aim 5.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in collaboration and communication</li> </ul>
<p><b>Curriculum-level Intended Learning Outcome 6.</b></p> <p><b>Upon successful completion of the curriculum, students should be able to possess:</b></p> <ul style="list-style-type: none"> <li>• an ability to design a system, component or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability</li> <li>• an ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public</li> </ul>	<p><b>University Educational Aim 6.</b></p> <ul style="list-style-type: none"> <li>• Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in leadership and advocacy for the improvement of the human condition</li> </ul>