



## **ABC LIVE – attributes of HKUST graduates**

The starting point for the University's plans for undergraduate education is to define learning outcomes for graduates that reflect the strengths and values of the University: firstly, a passion for learning and the advancement of knowledge; secondly a commitment to the international free exchange of ideas, tolerance, personal integrity, partnerships with others to achieve common purposes; and thirdly a commitment to the transfer of knowledge for social and economic benefit.

These outcomes are based on the aspirations of the talented, hard-working young people who join the University seeking to realize their full potential.

The desired attributes for our graduates may be summarized as **ABC** for academic and **LIVE** for personal development, as defined below:

### **Academic excellence**

- An in-depth grasp of at least one area of specialist or professional study, based on a forward-looking and inquiry-driven curriculum

### **Broad-based education**

- Intellectual breadth, flexibility, and curiosity, including an understanding of the role of rational, balanced inquiry and discussion, and a grasp of basic values across the core disciplines of science, social science, engineering and the humanities

### **Competencies and capacity building**

- High-end, transferable competencies, including analytical, critical, quantitative and communications skills

### **Leadership and teamwork**

- A capacity for leadership and teamwork, including the ability to motivate others, to be responsible and reliable, and to give and take direction and constructive criticism

### **International outlook**

- An international outlook, and an appreciation of cultural diversity

### **Vision and an orientation to the future**

- Adaptability and flexibility, a passion for learning, and the ability to develop clear, forward-looking goals, and self-direction and self-discipline

### **Ethical standards and compassion**

- Respect for others and high standards of personal integrity
- Compassion and a readiness to contribute to the community

## ***Realizing students' potential for success***

As this template is built out into a full program of undergraduate education, the overarching concern is to create a learning environment that underpins the ABC – LIVE outcomes expected of the HKUST graduate.

### **Academic Excellence**

- *An in-depth grasp of at least one area of specialist or professional study, based on a forward-looking and inquiry-driven curriculum*

HKUST has placed academic achievement first among student learning outcomes. Mastery of a subject area. Mastery is the source of the passion for learning that underpins intellectual adaptability and the capacity to recognize and grasp the significance of new ideas.

Well-structured Majors and complementary studies are the key component of our academic programs. HKUST already provides highly regarded academic programs across its areas of focus. Section 3 of this Submission describes the exciting new developments being planned to enhance the specialist curriculum.

### **Broad-based education**

- *Intellectual breadth, flexibility and curiosity, including an understanding of the role of rational, balanced inquiry and discussion, and a grasp basic values across the core disciplines of science, social science, engineering and the humanities*

All students will take 18 credits in the “general education” component of the University Core. In year one, students will complete 12 credits: three credits in social science; three credits in the humanities; and a six-credit introduction to science and technology. These are not designed as “survey” courses. The general education program will showcase the scholarship and talent of HKUST’s international faculty, and introduce problems and cases around which projects and small-group learning tasks can be developed and assessed. Learning outcomes will emphasize the intellectual development of year-one students making a transition to higher education.

A further six credits in humanities and social science must be taken after year one.

### **Competence and capacity building**

- *High-end, transferable competencies, including analytical, critical, quantitative and communication skills*

An emphasis on academic excellence does not mean that “knowing what” has priority over “knowing how”. Learning-oriented courses and academic programs will challenge students’ creativity, and provide opportunities to develop higher-order thinking and experience the excitement of discovery.

The four-year program provides greater scope for extra-curricula activities that enrich undergraduate education. All students will be involved in credit-earning research projects and attachments, work-place internships, or equivalent high value activities. An Undergraduate Research Opportunities Program (UROP) has already been introduced to develop a research culture at the undergraduate level. The program will be extended to about 25% of students by 2012.

Students will be required to take courses in English and Chinese before graduation. A scheme for evaluating proficiency will be implemented, geared to the new senior-secondary curriculum, but based on a broad assessment model through portfolios.

Proficiency in mathematics will also be made a graduation requirement.

All students will complete courses in year one to build competence in both IT literacy and information literacy to equip them for the on-going revolution in digital resources for learning and communication.

Students will be given adequate support, both in-class and through self-study, to achieve these graduation requirements. Opportunities for competency building in communications, especially writing, and quantitative methods will be integrated with other academic work, including the year-one, general education sequence.

### **Leadership and teamwork**

- *A capacity for leadership and teamwork, including the ability to motivate others, to be responsible and reliable, and to give and take direction and constructive criticism*

The key to success in any program of studies is forming effective learning partnerships with peers and teachers. Good team work, looking for advice, mentoring and being mentored, and involvement in student clubs and societies are all part of this process, and are built into the undergraduate experience at HKUST.

Relationships with senior undergraduates and research students have a special role in forming productive relationships with others. This linkage will be facilitated by schemes for student mentoring and “peer-assisted instruction”, where senior students work with their juniors to overcome problems and enhance learning.

An important element in achieving an ambience on campus that encourages and facilitates group work and peer learning will be new capital developments. The University will create a center for student study and socializing with an interface to the Library and reconfigure existing space to encourage interaction around the academic life of students and faculty.

### **International outlook**

- *An international outlook, and an appreciation of cultural diversity*

Internationalizing the University has been an on-going process. Some 10% of HKUST full-time undergraduates are already “non-local”. The long-term goal of the University is to increase the ratio of non-local, full-time undergraduates to 20%. In-coming student exchange further enriches the international mix of students on campus, a situation matched by the large number of international faculty and research students at HKUST. A focus on campus life, especially student residency on campus is a priority in creating a stimulating, cross-cultural experience.

To equip graduate with a global perspective, we will increase opportunities for quality experience overseas. At present, 20% of HKUST students go on exchange for at least one semester. The Language Immersion by Residence Abroad (LIBRA) program sends about 200 students each year for intensive summer-school experiences in English-speaking and more recently Putonghua-speaking locations. Under the four-year degree the long-term goal of the University is to provide 50% of undergraduates with opportunities to study overseas.

## Vision and an orientation to the future

- *Adaptability and flexibility, a passion for learning, and the ability to develop clear, forward-looking goals, and self-direction and self-discipline*

For graduates to build successful careers in a competitive global environment, we will provide an educational experience that is flexible enough to allow personal interests to develop, to motivate students, and to allow students to build self-confidence. This begins with making a successful transition from high school to the freedom and demands of university education. By the end of year one, students must come to terms with these new circumstances. By the end of year two, they will need to have set out an academic path for themselves, geared to their own goals. By graduation, experience of success and of occasional failure must have produced men and women with the maturity to manage their own futures.

## Ethical standards and compassion

- *Respect for others and high standards of personal integrity*

High standards of academic integrity and personal conduct are essential to academic life. The value placed by HKUST on academic honesty and personal integrity is communicated to students on entry and reinforced at every stage of their academic work.

The University also strives to ensure that engagement with others, in-class and on-campus, provides a foundation for a life-long capacity to form and maintain ethical professional relationships as productive members of society.

- *Compassion, and a readiness to contribute to the community*

An ongoing priority is to bring the community into the life of the campus, to enable and encourage students to serve the community. The four-year degree provides more opportunities for these activities, and more scope for them to be built into the undergraduate experience.