Principal Officers of the University

The Chancellor : His Excellency the Right Honourable Christopher PATTEN
The Chairman of the Council : Sir Sze-yuen CHUNG, GBE, JP
The Vice-Chairman of the Council : The Honourable CHENG Hon-kwan, OBE, JP
The Treasurer of the Council : The Honourable LAU Wah-sum, OBE, JP
The Vice-Chancellor and President : Professor Chia-Wei WOO, BS, MA, PhD
The Pro-Vice-Chancellor for Academic Affairs : Professor Shain-Dow Kung, BS, MS PhD
The Pro-Vice-Chancellor for Administration and Business : Mr. Ian F.C. MACPHERSON, CBE, MA
The Pro-Vice-Chancellor for Research and Development : Professor Thomas E. STELSON, BS, MS, DSc

Handbook for Prospective Postgraduate Students for entry in September 1994

This Handbook is published for the guidance of postgraduate students who wish to enter the University in September 1994. The information herein may be changed from time to time by the appropriate University Authority. In the event of inconsistency between information contained in the Handbook and a University regulation or programme, or where an interpretation of the Handbook is required, the decision of the University Authority shall be final. The Handbook does not form any part of a contract between any person and the University.

All enquiries should be addressed to:

The Director of Admissions, Registration and Records
The Hong Kong University of Science and Technology
Clear Water Bay
Kowloon
Hong Kong

Telephone: 358-6646
Facsimile: 358-0769
A MESSAGE FROM THE VICE-CHANCELLOR AND PRESIDENT

There are two kinds of ongoing transitions in Hong Kong. A political transition is taking place to prepare Hong Kong for self governance after 1997. At the same time, an economic transition has been occurring quietly, to advance Hong Kong from a labour intensive economy to a technology based society. These two transitions promise great opportunities to people who are highly motivated, well educated, and caring.

Hong Kong has very little in the way of natural resources. Our greatest asset is our people - an intelligent, hard-working, and versatile people, a people perfectly placed to take advantage of higher education.

Over the last two decades, the meaning of "higher education" has changed in Hong Kong. A baccalaureate degree provides a young person with a licence, so to speak, to enter the world of high technology and modern management. To become truly competitive and to contribute in leadership roles, however, a strong postgraduate education may soon become a prerequisite. This has been the common experience of economically advanced countries, and is becoming increasingly evident in all the newly industrialised economies - notably Singapore, South Korea, and Taiwan.

The Hong Kong University of Science and Technology (HKUST) has been created to help meet Hong Kong's needs for economic development in and beyond these times of transition. The University comprises four Schools and, immediately upon opening in October 1991, courses for master's and doctoral degrees began in all four. Eventually some 30% of the University enrolment will be at postgraduate levels.

All the leading academic staff appointed at HKUST so far have served as senior professors in major research universities around the world, or in equivalent posts in industrial laboratories. HKUST's staff possess rich experience in directing postgraduate and postdoctoral studies, have published extensively in professional journals, and are highly respected internationally. They are precisely the kind of scholars under whose direction numerous students from Hong Kong have pursued advanced study overseas. In support of their efforts, both the Government and the private sector have been generous in ensuring that this new technological University is well equipped for state-of-the-art research work.

We welcome applications from graduates of our fine sister institutions in Hong Kong, and graduates of strong institutions elsewhere. To the latter, I wish to add that Hong Kong is a great place to live, and a land of opportunities. In return, international students will help to broaden our vistas, and enhance Hong Kong's position as one of the world's great metropolises.

We also invite applications from those who are currently employed, to come either full-time or part-time. These mature and already contributing members of Hong Kong's society are an important component of HKUST's postgraduate student body. The real-life experience they bring enrich the everyday education of their fellow students. Also, they serve as links to industry, commerce, the professions, and public services, with which the University's academic staff expect to collaborate closely.

The coming decade will see great moments in the history of Hong Kong. Great moments have always been made by ordinary people. We in Hong Kong are fortunate to be the ordinary people who can, with vision and determination, capture these great moments and make them our own. To do so hand in hand with people of like mind, to do so while creating a world-class university, and to do so in an idyllic environment, is to live life to its fullest.

Friends, if you share our love for learning, our faith in the people of Hong Kong, and our sense of mission and excitement, join us.

HANDS ON THE PRESENT AND EYES FOR THE FUTURE

Chia-Wei WOO
Vice-Chancellor and President
The objectives of the University are—

(a) to advance learning and knowledge through teaching and research, particularly—

(i) in science, technology, engineering, management and business studies; and

(ii) at the postgraduate level; and

(b) to assist in the economic and social development of Hong Kong.

from The Hong Kong University of Science and Technology Ordinance, 1987

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**THE UNIVERSITY**

**Introduction**

The Hong Kong University of Science and Technology (HKUST) was incorporated in April 1988, and opened in October 1991, as a publicly funded technological university dedicated to the advancement of learning and scholarship, with special emphasis on research, postgraduate education, and close collaboration with business and industry. Its seeks to educate men and women who will contribute to Hong Kong’s economic and social well-being, and to promote research, development, and entrepreneurship in the Asian-Pacific region.

To accomplish these goals, HKUST stresses teaching - the dissemination of knowledge, research - the creation of knowledge, and service - the application of knowledge.

The University comprises four Schools. Three of the Schools - Science, Engineering, and Business and Management - provide both undergraduate and postgraduate education through to the doctorate. The School of Humanities and Social Science offers postgraduate education to the doctoral level, and provides general education for all undergraduates.

In addition, the University has set up interdisciplinary research institutes, the Research Centre and the Technology Transfer Centre to facilitate collaboration among the different schools and partnerships between the University and the public and private sectors.

The medium of instruction is English.

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**The Campus**

The campus occupies a 60-hectare site of sweeping beauty on the northern end of Clear Water Bay Peninsula at Tai Po Tsai. Situated on the slopes along the shore, the campus grounds are terraced to afford buildings on all levels with unobstructed panoramic views of the sea, looking east and northeast towards Port Shelter and the Sai Kung area. The main
academic complex is situated on the highest level of the slope, while student residential halls, outdoor sports facilities, and other student amenities are close to the water and the natural marina.

The campus is being built in three phases. Phase I was completed in July 1991 and has a capacity of 2,000 full-time equivalent (FTE) undergraduate and postgraduate students. Phase II, to bring capacity to about 7,000 FTE students, was completed in January 1993. Construction costs were $3.598 billion, of which the Royal Hong Kong Jockey Club generously donated a total of $1.926 billion, and it was also responsible for managing the overall construction project. The remaining cost was provided by the Government of Hong Kong. With the completion of Phase III (contingent upon the Government's approval of construction funds), the University will be able to accommodate a student body of 10,000 FTE students and will have about 9.3 million square feet of indoor academic space.

University and Polytechnic Grants Committee

The major source of financial support for the University is the Government of Hong Kong through the University and Polytechnic Grants Committee (UPGC) and its Research Grants Council (RGC). Student fees, other sources of research support and donations are also significant contributors to the University's budget.

University Organisation

At the head of The Hong Kong University of Science and Technology is the Chancellor, the Governor of Hong Kong, with the University Council as the supreme governing body. The University Senate is the supreme academic body, and has a number of standing committees.

Administratively, the Vice-Chancellor/President is the chief executive officer and the three principal branches of the University are Academic Affairs, Administration and Business, and Research and Development, each headed by a Pro-Vice-Chancellor.

Within the Academic Affairs Branch are the four schools which comprise the academic heartland of HKUST, each school being divided into departments or divisions. As well, there are a number of academic service units and research units located administratively within the branch.

The Administration and Business Branch is concerned with the non-academic administrative and financial operation of the University.

The Research and Development Branch focuses on research administration and, particularly, on undertaking contractual and applied research relevant to Hong Kong's technological and socio-economic development. This branch of HKUST is unique in Hong Kong's universities and demonstrates the strong research focus of the institution.

Further information on these units of the University, as well as the University Ordinance and the Statutes of the University which provide the legal basis for HKUST, is found elsewhere in the Calendar.

Academic Faculty

The University recruits worldwide for faculty who have achieved excellence in their respective fields and are highly respected as both teachers and researchers. They include both established academics and promising younger scholars who have demonstrated a high degree of professional competence. More than 85% have earned doctorates, pursued postdoctoral studies, or taught at the world's leading research universities.

These men and women care about Hong Kong, its people and its future. They have broad intellectual interests, and wish to work collaboratively with colleagues in other fields and interact with professionals in industry, commerce and the public services. Most importantly, they care about their students.

The University began instruction in 1991 with some 100 faculty, a large percentage of whom were in senior positions.
By the end of 1994 about 350 academics will have been appointed. Presently at a lower level, the steady-state student-faculty ratio should be 11:1.

Students

The University seeks highly qualified and motivated young men and women who have wide interests and have received a well-rounded secondary education. They should be active participants rather than spectators in diverse activities, and possess great potential in addition to having achieved good grades.

The University’s goal is to engage its students in a continuous dialogue, to challenge them intellectually, and to encourage them to think on their own and to learn how to learn. Thus the University’s graduates will become competent professionals, innovative leaders in their fields, adaptable and versatile generalists, and sensitive, caring citizens.

Postgraduate Programmes

The University offers postgraduate programmes leading to master’s and doctoral degrees in all four Schools, as indicated below:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Abbreviated Title</th>
<th>Code</th>
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<tbody>
<tr>
<td>SCHOOL OF SCIENCE</td>
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<td>Master of Science (MSc)</td>
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<td>Mathematics</td>
<td>MATH</td>
<td>M141</td>
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<tr>
<td>Physics</td>
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<td>M151</td>
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<td>Master of Philosophy (MPhil)</td>
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<td>Biochemistry</td>
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<td>Biology</td>
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<td>Chemistry</td>
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<td>M130</td>
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<tr>
<td>Mathematics</td>
<td>MATH</td>
<td>M140</td>
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<tr>
<td>Physics</td>
<td>PHYS</td>
<td>M150</td>
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<tr>
<td>SCHOOL OF ENGINEERING</td>
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<td>Master of Science (MSc)</td>
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<td>Chemical Engineering</td>
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<td>M251</td>
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<tr>
<td>Mechanical Engineering</td>
<td>MECH</td>
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<td>Master of Philosophy (MPhil)</td>
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<td>Civil and Structural Engineering</td>
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<td>M220</td>
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<td>Computer Science</td>
<td>COMP</td>
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<td>Electrical and Electronic Engineering</td>
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<td>M240</td>
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<tr>
<td>Industrial Engineering</td>
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<td>M250</td>
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<td>Mechanical Engineering</td>
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<td>M260</td>
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<tr>
<td>Doctor of Philosophy (PhD)</td>
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<td>Chemical Engineering</td>
<td>CENG</td>
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<td>Civil and Structural Engineering</td>
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<td>D220</td>
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<tr>
<td>SCHOOL OF BUSINESS AND MANAGEMENT</td>
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<tr>
<td>Master of Business Administration</td>
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<td>M300</td>
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<td>Doctor of Philosophy (PhD)</td>
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<td>Accounting</td>
<td>ACCT</td>
<td>D310</td>
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<td>Business Information Systems</td>
<td>BINF</td>
<td>D320</td>
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<tr>
<td>Economics</td>
<td>ECON</td>
<td>D330</td>
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II. ADMISSION OF STUDENTS

Postgraduate Admission Requirements

Applicants seeking admission to a postgraduate degree programme should have:

1. obtained a first degree from this University or an approved institution, or obtained an approved equivalent qualification;

2. satisfied the School and Department concerned as to their fitness to pursue the postgraduate programme; and

3. satisfied the School and Department concerned as to their English language ability to undertake the postgraduate programme.

To be accepted directly as candidates for the PhD degree, applicants should normally have:

1. obtained a master’s degree from this University or an approved institution, or presented evidence of satisfactory work at the postgraduate level on a full-time basis for at least one year, or on a part-time basis for at least two years;

2. satisfied the School and Department concerned as to both their chosen subject of research and their fitness to undertake research into it; and

3. satisfied such other requirements as may have been established by the School and Department concerned, which may include qualifying examinations, both written and oral.
III. POSTGRADUATE APPLICATIONS

Application for admission to postgraduate programmes requires prospective students to satisfy the entrance requirements of both the University and the postgraduate programme selected.

Application for Admission

Application forms are available directly from:

Admissions, Registration and Records Office
The Hong Kong University of Science and Technology
Clear Water Bay
Kowloon
Hong Kong

The closing date for the return of the application forms is 15 March 1994, but late applications may be considered.

Applicants must submit the following documents:

1. a completed application form, including a one-page statement on study plans and career goals;

2. two letters of recommendation mailed directly to the Director of Admissions, Registration and Records;

3. officially certified academic transcripts of undergraduate studies (and postgraduate studies, if any); and

4. a copy of the bank pay-in slip confirming that the application fee of HK$120 has been paid into the bank account of "The Hong Kong University of Science and Technology" through a branch of one of the following banks: Bank of China - Hong Kong Branch or Hang Seng Bank Ltd.

For overseas applicants, if official transcripts are in a language other than English or Chinese, a certified translation into English must be provided. In lieu of the bank pay-in slip confirming payment of application fee, overseas applicants may submit a bankdraft or certified bank cheque of an amount
POSTGRADUATE APPLICATIONS

may submit a bankdraft or certified bank cheque of an amount equivalent to US$16.00 with the completed application form.

Selection Procedures

Selected applicants may be invited for interview. Successful applicants will receive an offer of admission from the School or Department concerned, and may be required to satisfy specified conditions. Candidates receiving an offer will be expected to accept or decline by a specified date.

Students from Overseas

The University welcomes applications from overseas students who are seeking admission to full-time studies at the postgraduate level. Applicants should be aware, however, that competition for admission is such that only very well-qualified candidates will gain admission.

Overseas students should carefully consider the financial aspects of their studies in Hong Kong before applying for admission. In 1994-95, fees amount to $24,000 and accommodation in on-campus postgraduate halls involves approximately $9,600 per residential year (280 days). In addition monies are needed for subsistence, textbooks, local travel, sports equipment, clothing, and other personal needs. A total of at least $59,000 per academic year (9 months) is likely to be required for postgraduate study.

Students from overseas must obtain a visa in order to study in Hong Kong. Applications should be made well in advance at a British Consulate or High Commission or Visa Office, or by writing directly to The Hong Kong Immigration Department, 2/F, Tower II, 7 Gloucester Road, Wanchai, Hong Kong. Applicants will be required to show sufficient financial resources to cover expenses for their period of study. Applicants must also nominate a sponsor who is resident in Hong Kong, aged over 21, to whom they are known personally. Postgraduate applicants who have difficulty in nominating a sponsor in Hong Kong may indicate on their visa applications that the University's Director of Admissions, Registration and Records is willing to act in this capacity.

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

IV. REGISTRATION, FEES AND FINANCIAL ASSISTANCE

This section deals with the registration process, tuition and other fees, and financial assistance available for students.

Registration

Registration is in two parts: programme registration and course registration. Programme registration confirms students' enrolment at the University and payment of tuition and other prescribed fees where appropriate. It also allows for application for hall residence and financial aid, as well as the acquisition of information about the University and student life. At course registration students and their academic departments select appropriate courses for the coming semester.

Fees

There are a variety of fees as described below. Except for caution money, fees are not refundable.

1. An application fee of $120 is charged for each application for admission in 1994-95 to the University, payable at the time of submission of the application form.

2. The tuition fee for postgraduate students (except for those in the MBA programme) admitted for the academic year 1994-95 is $24,000 for full-time students and $6,000 per semester for part-time students. The fee may be paid at the beginning of the academic year at programme registration or in equal instalments for each semester.

3. The fee structure for full-time and part-time MBA students is described in the School of Business and Management brochure.

4. In addition, each new student is required to pay a deposit of $300 as caution money on first registration. Charges will be made against this deposit if there are any unpaid claims against the student, such as outstanding library dues. The balance will be transferred to the graduation fee,
or refunded if the student leaves the University before graduation.

5. Students joining the Students' Union are required to pay entry fee and annual subscription. These fees will be set by the Union and collected by the University on behalf of the Union. In 1994-95, the entry fee, applicable to students admitted for the first time, is approximately $100 and the annual subscription is also approximately $100.

6. Students may be required to pay late charges for failure to complete certain University procedures by stipulated deadlines. These will include delays in paying tuition fees and completing registration procedures, overdue library books, etc. Late charges will be levied in accordance with the rules and regulations set by the respective offices.

7. The residential hall charge for 1994-95 is approximately $9,600 per person in the single air-conditioned rooms at the postgraduate hall for a residential year of 280 days. Hall charges are to be paid in two instalments and do not include the cost of meals.

8. Other small fees and charges:
   - Transcript fee (first copy free) $30
   - Replacement of Student I/D Card (free if replaced after reasonable wear and tear) $30
   - Application fee for retention of place (deferred entry) $200
   - Graduation fee $300
   - Late registration (waived at the University's discretion) $100
   - Testimonial fee $10

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**Financial Assistance**

The sources of financial support for students of the University include the following:

**Government Grant and Loan Scheme**

Full-time students at publicly funded tertiary institutions who have the right of abode in Hong Kong or have resided or have had their home in Hong Kong continuously for three complete years immediately prior to the commencement of their programme of study are eligible to apply for financial aid under a Government student finance scheme. The scheme is administered by the Government Student Financial Assistance Agency.

Financial assistance is offered in the form of grants and/or loans. Grants are given for tuition fee and academic expenses; loans are approved for living expenses. Awards are means-tested so that the amount awarded is related to family disposable income. Students are expected to repay their loans at an interest rate of 2.5% per annum within a specified period after graduation or upon leaving the University.

Application forms may be obtained from the Government Student Financial Assistance Agency at 9/F, National Mutual Centre, 151, Gloucester Road, Wan Chai, Hong Kong, and from the Student Affairs Office of the University.

Students with financial difficulties are urged to apply for assistance under this scheme at the beginning of the academic year. Further details are available at the Student Affairs Office.

**University Loans and Bursaries**

Students with additional financial needs may apply for loans and bursaries administered by the University. In general, these funds are used to supplement, but not substitute for, Government financial assistance. Details of loans and bursaries are available at the Student Affairs Office.
Scholarships and Prizes

The University administers a number of scholarships and prizes on behalf of individual and corporate donors. Most are awarded to students, without application, on the strength of academic merit and the recommendations of a school or department. Other scholarships may have conditions specified by the donor. Further details are available at the Student Affairs Office.

Postgraduate Studentships

The University awards Postgraduate Studentships to full-time MPhil and PhD students who are required to engage in ancillary teaching and/or research duties. In 1993-94, these were at the rates of $9,500, $4,750 or $2,375 per month.
V. ACADEMIC REGULATIONS

The academic regulations define the structure of the programmes of study at the University and govern each student's academic progress. All students are responsible for their individual conduct and for their adherence to the regulations.

Each student is enrolled in a specific programme offered by an academic unit referred to as the student’s major department, and is subject to the requirements of both that department and the University. The term major department includes all academic departments, the two divisions in the School of Humanities and Social Science, and the units administering joint programmes. Exemptions from specific requirements are possible, but only in well justified circumstances. Written permission must be obtained from the major department.

Postgraduate programme requirements comprise semester course credits, thesis residency and special examinations. Master of Science, Arts, and Business Administration degrees (MSc, MA, and MBA) are earned primarily through course credits in taught programmes. The Master of Philosophy and Doctor of Philosophy degrees (MPhil and PhD) are earned through research programmes in which the primary activity is research leading to an acceptable thesis. These programmes may also include course credit requirements and special examinations.

Courses and Credits

The basic unit of instruction at the University is a course. Courses usually take place in either the Fall or Spring Semester, and each course has a specified credit value 0, 1, 2, 3, 4, etc. All courses are designated in the format of the following example:

CIVL 371 Geotechnical Engineering [3-1-3:4]

in which CIVL denotes the Department of Civil and Structural Engineering, 371 is the course number with the first digit
denoting the usual programme year in which the course is taken:

- 0 = introductory
- 1 = year 1
- 2 = year 2
- 3 = year 3
- 5 = postgraduate courses
- 6 = special topic courses, seminars, independent studies, reading courses and master’s research
- 7 = doctoral seminars and research

and the second and third digits follow a departmental code.

The course vector [3-1-3:4] gives the number of instructional hours required and the course credits using the code

1st digit = lecture hours per week
2nd digit = tutorial, seminar or recitation hours per week
3rd digit = laboratory hours per week
4th digit = number of course credits

The credit value of a course depends on both the required scheduled hours of instruction and the additional non-scheduled hours of work expected of students. Normally one lecture hour per week equals one credit, one seminar hour per week one credit, and three laboratory hours per week one credit. As in the example, some sessions may be given less credit per hour if some scheduled hours such as tutorials reduce non-scheduled work by students.

Courses are offered by the following departments:

**SCHOOL OF SCIENCE**
- Biochemistry: BICH
- Biology: BIOL
- Chemistry: CHEM
- Mathematics: MATH
- Physics: PHYS

**SCHOOL OF ENGINEERING**
- Chemical Engineering: CENG
- Civil and Structural Engineering: CIVL
- Computer Science: COMP
- Electrical and Electronic Engineering: ELEC
- Industrial Engineering: INDE
- Mechanical Engineering: MECH

**SCHOOL OF BUSINESS AND MANAGEMENT**
- Accounting: ACCT
- Business Information Systems: BINF
- Economics: ECON
- Finance: FINA
- Management: MGMT
- Marketing: MARK

**SCHOOL OF HUMANITIES AND SOCIAL SCIENCE**
- Division of Humanities: HUMA
- Division of Social Science: SOSC

**Registration**

Each student must enrol in an approved programme of study in each semester. This approval should be obtained from the student's major department during the period specified for course registration.

**Study Commitment**

Students admitted to a full-time programme of study are expected to study full-time for their degrees, and are cautioned that outside work commitments may impede their academic performance.

Unless prior permission from the Director of Admissions, Registration and Records is obtained, students are not permitted to register for another programme at this University or at another post-secondary institution. Student enrolment lists are compared with those of other post-secondary institutions from time to time. If students are found to be registered
elsewhere, they will normally be required to discontinue their studies at this University.

Course Prerequisites and Exclusions

Permission of the department offering the course is an alternative to the stated prerequisites, and this is a requirement for all courses for which prerequisites are not stated. Unless an exemption is granted by the department in which the course is given, all prerequisite courses should have been passed before a student registers in a course. It is the students' responsibility to ensure that they have the necessary background to undertake a course, although their departmental advisors may provide assistance. In some cases, 'background' courses are identified in order to indicate the general level of desirable prior knowledge.

Students should also take care not to enrol in courses for which they have already obtained an equivalent qualification. These are denoted as "exclusions" in the course description. In such cases, any credits earned will not count towards degree requirements.

Course Enrolment Changes

The schedule for course registration includes a one-week "add-drop" period at the beginning of each semester. Changes made in this period will not be reflected in the student's record.

A student who wishes to withdraw from a course after the "add-drop" period may do so up to six weeks before the end of classes. Such late withdrawals may affect a student's academic progress and are entirely the student's responsibility, although advice must be sought from the student's major department. The Withdrawal without Penalty (W) grade will be recorded as the course grade. Withdrawals after the deadline will not be accepted. Special arrangements pertain to half-semester courses in the Master of Business Administration (MBA) programme.

Course Auditor

A student may register, with the permission of the course instructor, in a course as an auditor. Subject to satisfying requirements set at registration by the instructor, the course will be designated AU on the student's transcript. No course credit is given for audited courses.

Course Grading

Grades given in each course are based on student performance in the final examination, tests, essays and reports, presentations and other forms of classroom participation, assignments, and laboratory exercises, although not all these elements may be present in each course. A failing grade in the laboratory component, if any, of a course may result in a failure in the whole course. The instructor in each course will discuss the course grading scheme with the class in the first week of lectures.

Final Examinations

Final examinations are scheduled following the end of lectures after a short study break. Failure to take the examination as scheduled without prior permission for exemption from the department offering the course results in automatic course failure although the student may appeal to the department within two weeks for special consideration, giving well-enculturated reasons. When a student is exempted from writing the regular final examination, the department may decide that the student (1) repeat the course, (2) take a special make-up examination for which a grade is assigned, (3) take a graded supplementary examination, or (4) be granted pass standing in the examination. In this last case the course grade is based on the grades obtained in the other course components excluding the final examination. Medical reasons, authenticated by a physician's certification that the student was unable to take the examination, will normally result in the selection of option (2), (3) or (4) above.
Grade Reports

Grades will be posted in departments as soon as they become available. On posted grade lists, students are identified only by their student numbers. Individual grade reports are sent to students approximately four weeks after the end of each semester.

Grade Review

A student may apply for a grade review in a course in which the student was enrolled in the semester just completed. This request should be made to the department offering the course. If a review is granted, the grading will be reviewed by the course instructor or another member of the departmental faculty. Reviews must be requested within two weeks from the day on which grades are posted in the department. Any subsequent appeals against the department's decision must be made within two weeks of receiving the decision to the dean of the school concerned. The dean's decision is final.

Grade Averages

Postgraduate course grades are defined on page 36.

A grade average (GA) is the average weighted grades obtained in a group of courses where each course is given a weight equal to its credit value. Courses graded P, I, W, PP and AU are omitted from this calculation. All GA's are reported using the closest letter grade.

There are three grade averages. The semester grade average (SGA) is the combined grade average covering all courses taken in both the semester and the session immediately following. The cumulative grade average (CGA) is based on all the courses taken by the student which are expected at the time of calculation to be applied towards the degree requirements in the current programme. At graduation, a graduation grade average (GGA) will be calculated from the courses that are presented for the award of a degree.

Continuation of Study

Students are admitted to a specific programme to commence study in a specific semester. Failure to enrol in the first or any subsequent semester results in automatic withdrawal from their programme of study and suspends registration at the University unless a formal Leave from Study has been obtained. Leave from Study is possible only on application to and with the approval of the student's major department.

Students who withdrew or were required to withdraw from the University may formally apply for admission following the application procedures described earlier in the Handbook.

Interdepartmental Transfer

A student may change from one programme of study to another with the permission of the major department into which the student wish to transfer. If a transfer is approved, that department will determine which credits from the student's former programme apply to the new programme. Normally, the transfer will not be effected until the following semester.

Appeals

Requests for a variance to the academic regulations should be made in the first instance to the student's major department. Any subsequent appeals against a departmental decision must be made within two weeks of receiving notice of the decision. Such appeals should be well documented and addressed to the dean of the school in which the student is enrolled. The dean's decision is final.

Student Conduct

The University expects good conduct from all students, and actively discourages undesirable behaviour. Rules and regulations are formulated and enforced to ensure the effective operation of the University, and the well-being of students and staff.
Students should acquaint themselves with the University's policy on academic discipline, as described in the following section.

**Academic Integrity and Discipline**

Academic integrity is basic to the work of all students at the University, and for scholarly and scientific work generally. Central to academic integrity is the presentation of one's own work as one's own, the acknowledgement of others' work, and the truthful reporting of results obtained.

**Academic Dishonesty**

There are a number of ways in which the tenets of academic integrity may be violated. The offences below are by no means exhaustive and the determination of academic dishonesty will be based on the broader context of the students' possible intent to mislead an instructor or the University as to their academic achievement, status, or qualifications. "Students" as used here includes currently registered students as well as those who have graduated or left the University.

Plagiarism is defined as the presentation of work which actually originates from other sources as one's own, for credit in a course or programme of study or towards the fulfilment of degree requirements. It includes the presentation in theses, examinations, tests, term papers, and other assignments, of someone else's work without attribution, including the presentation of someone else's argument in one's own words without acknowledgement.

Cheating is defined as the unauthorised giving or receiving or utilising, or any attempt to do so, of information or assistance during a test or examination. Also included are the unauthorised receipt or conveyance, or the attempt to do so, of test or examination questions; giving or receiving assistance on an essay or assignment beyond what is approved by the instructor; impersonating someone else or causing or allowing oneself to be impersonated by someone else in writing or participating in a test or examination; the submission of any academic work containing a purported statement of fact, or reference to a source, which has been concocted; presenting for credit in any course or programme of study, without the permission of the instructor concerned, academic work for which credit has previously been obtained or is being sought in another course or programme of study in the University or elsewhere; and any other conduct designed to provide a misleading basis for judgement of the student's performance or academic standing.

**Procedures in Case of Academic Dishonesty**

If an instructor suspects that an act of academic dishonesty has been committed, he or she may choose in the first instance to discuss the matter privately with the student concerned to arrive informally at a mutually acceptable resolution. However, in cases when such agreement is not possible and in which the instructor has strong reasons to believe that a breach of academic integrity has occurred, the instructor may wish to begin a formal process of enquiry by calling a meeting with the student according to the procedures outlined below. If the offence relates to the activities of an academic department, division, centre or a similar unit, rather than a specific course, an appropriate member of the University staff arranges the meeting. In all cases, the student is informed of the purpose of the meeting in advance and the discussion is on record.

If, after the meeting, the instructor, or other appropriate individuals as noted, is satisfied that no academic dishonesty has been committed, no further action is taken. The decision is conveyed to the student. If the student admits the alleged offence, the instructor may recommend an appropriate sanction and the student is informed accordingly. A report is made to the student's major department. If, however, the student denies the charge, or disputes the sanction, or fails to attend the meeting, and the instructor decides that an act of academic dishonesty has been committed, the instructor forwards the case to the department head for further action.

**Sanctions**

The following sanctions may be imposed, singly or in combination, and will be noted in the student's file: verbal or written warning or reprimand; lower grade or failure on the
assignment or test or examination, which may result in a lower course grade including failure in the course; make-up assignment or test or examination; a reduction of the final grade or a failure in the course as a penalty exclusive of any reduced grade; withdrawal of eligibility for future scholarships and other academic awards; ineligibility for honours upon graduation; suspension from the University for a set period or indefinitely; cancellation of academic standing or academic credits obtained thus far; withholding or rescinding a HKUST degree; any other sanctions, as deemed appropriate for certain offences.

Student Rights and Obligations

Students have the right to be informed that an academic offence is suspected, to defend themselves against the charges and present evidence, and to meet with the authority imposing a sanction for this latter purpose. They should be informed of the verdict, the sanction, and the appeal procedures and should also be advised to approach the Director of Student Affairs for advice and guidance.

An appeal may be made against either the verdict or the sanction(s) imposed. This must be made in writing within fourteen days of receiving the decision and should state the grounds on which it is made. Normally, appeals will be considered only on the grounds of procedural irregularity or new evidence.

In some cases appeal decisions can be appealed against. At each stage the student is informed if further appeal is possible and any conditions which may pertain.

Examination Guidelines

Examinees may be asked to show their identity cards for verification purposes.

Normally, no examinees will be allowed to enter the examination room later than thirty minutes after the start of the examination, and no examinees will be permitted to leave the examination room within the first thirty minutes of the examination. An invigilator or examiner may waive this time limit under special circumstances, such as sickness.

Examinees must hand in their answer books on leaving the examination room. However, examinees may not be allowed to leave the examination room during the last fifteen minutes of the examination and must remain seated until all the examination answer books have been collected by an invigilator.

Examinees who fail to attend an examination without prior approval of the examiner will be deemed to have failed the examination. Examinees who are taken ill during the examination and have to leave the examination room are advised to proceed immediately to the Student Health Services on campus, if possible, or seek other appropriate medical assistance as soon as possible. Appeals for special consideration, for example, for medical reasons, are described in the Academic Calendar.

Examinees are not allowed to bring into or remove from the examination room any printed or written matter save with the express permission of an examiner or invigilator. Unless expressly permitted by the examiner, no books, paper, calculators, or any information storage and retrieval device will be allowed.

Examinees should write only on their answer books or on any supplementary answer books and sheets provided for the purpose and shall surrender all such materials in good order on leaving the examination room. Answers should be written on the right hand page only, with the left hand page used for rough work. The examiners may read only the right hand page material.

No conversation will be allowed during the examination and questions about the examination should be addressed to an invigilator. Any irregularity of conduct in the examination room will be reported and examinees causing disturbance in the examination room will be expelled from the examination room and may face disciplinary action.

In the event of cancellation of examinations as a result of Storm Warning Signal No. 8 or above being hoisted or Rainstorm Black Warning being issued, arrangements will be
made for the examinations affected to be held as soon as practicable after the official examination period and candidates will be notified accordingly through public announcements, etc.

Examinees should be aware of the University's policy on academic discipline, as described in the Academic Calendar, and cannot claim innocence due to ignorance.

**Intellectual Property Rights**

The University has established policies with respect to intellectual property rights which apply, generally, to all faculty, staff and students. In particular, the provisions of the University patent policy are applicable to students and adherence thereto is a condition of continued enrolment.

Further information on the patent, copyright, software, and trade and service marks management policies may be obtained from the Office of the Pro-Vice-Chancellor for Research and Development. The University may make changes to these policies from time to time.

**Postgraduate Programmes**

The Master of Science (MSc), Master of Arts (MA) and Master of Business Administration (MBA) degrees are basically course work degrees, although project work and a report may also be required. The Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) degrees are basically research degrees, although usually course work is also required.

**Full-time and Part-time Study**

Most postgraduate degrees are available on a part-time or full-time basis. The taught programmes leading to the MSc, MA and MBA degrees may be the most suitable for students interested in part-time study. The MPhil and PhD are research degrees, and students in some disciplines may be required to participate in research on a full-time basis.

Postgraduate students may apply to their department, prior to the beginning of any semester, for transfer from full-time to part-time status or from part-time to full-time status. When such a transfer is allowed, the remaining degree requirements will be determined.

Full-time students in taught programmes are expected to be in attendance during those semesters and sessions for which their programmes are scheduled. In many programmes, research students may be expected to be in attendance on a year-round basis. For part-time students, attendance shall be as above except on a part-time basis as defined by the requirements of their programmes.

**Duration of Study**

For full-time students, the normal periods for the completion of MSc, MA, and MPhil degrees are one and a half years, and two years for the MBA. For the PhD degree it is four years after the first degree with a reduction of one and a half years if a relevant Master's degree is earned prior to entering the PhD programme. Part-time students may expect to take about twice the time of full-time students. Students may apply for reductions to these periods.

The maximum time for degree completion is five years for a Master's degree and eight years for a PhD degree (with a one and a half years' reduction in the circumstances noted in the preceding paragraph), and this holds whether or not the student is in continuous registration. The time limits for part-time study are the same as for full-time study.

**Course Requirements**

Credit requirements for postgraduate degrees apply only to course and project work, not to thesis research. For the MSc, MA, MPhil and PhD programmes, the normal full course-load is 10 credits per semester, and the minimum part-time load is 6 credits per semester. Unless restricted by departmental regulations, a maximum of two undergraduate courses may be used for postgraduate degree credit, and these should be at the 300 level. Of the two, only one may be from the student's
major department. For the corresponding MBA requirements, see the entry for the School of Business and Management.

For all postgraduate programmes, no course with a grade less than C may be counted towards a degree, and the average grade obtained in the courses used to satisfy degree requirements must at least be B. Only two courses in a degree programme may be retaken, and each may be repeated only once.

### Postgraduate Grades

Students receive a letter grade in each course in which they are enrolled. Grades range in equal increments from A+ to F, with F carrying zero credit. The grades C- to D-, and E, are not used in postgraduate courses. The grades used are shown in the following table.

<table>
<thead>
<tr>
<th>Letter Grades</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>Excellent Performance</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>Good Performance</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>Marginal Performance</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
</tr>
<tr>
<td>P</td>
<td>Pass, ungraded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Designations</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Audited</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal without Penalty</td>
</tr>
<tr>
<td>PP</td>
<td>Permitted to Proceed</td>
</tr>
</tbody>
</table>

The Audited (AU) designation will be assigned when an auditing student has completed, to the satisfaction of the instructor, any conditions established at registration as an auditor. If the conditions are not met, the course will be deleted from the student's record.

An Incomplete (I) grade must be converted to a regular grade at the beginning of the next semester, otherwise it is converted to F. This grade is used when work is necessarily delayed through no fault of the student, such as a medical problem or an equipment breakdown.

The Withdrawal without Penalty (W) grade is given when a student withdraws from a course after the “add-drop” period and prior to six weeks before the end of classes.

When progress on thesis or project work is satisfactory but not scheduled for completion at the end of a semester, the Permitted to Proceed (PP) grade is utilised.

### Academic Standing

The academic standing of all postgraduate students is periodically reviewed by their departments. Unsatisfactory performance can result in students being denied the opportunity to continue their studies.

### Residence Requirements

Normally, a full-time research student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the University activities associated with the programme. Residence provides the student with an opportunity to become immersed in the intellectual environment of the University. Also included in residency are periods during which the student's research requires off-campus field or non-HKUST laboratory work.

Normally, the residence requirement for an MPhil degree is three full-time semesters and that for a PhD degree is eight. In many departments, the semester may include all or part of the subsequent session. A semester of residency of a part-time student counts as a one-half semester of residency. Students who have not completed their thesis work should continue...
their registration on a full or part-time basis, without interruption.

These residence requirements do not apply to taught postgraduate programmes which are defined by the semesters and sessions in which the programmes are scheduled.

**MSc and MA Programmes**

These are course work degrees for which students must fulfil a minimum credit requirement of 30. Students may also undertake a project which requires the submission of a written report and carry credit, as specified by the department, to a maximum of nine. The reports will be read by two faculty members, one of whom is the supervisor, and are graded “Pass” or “Fail”. A “Pass” grade may be denoted “Pass with Distinction” when appropriate.

**MBA Programme**

The requirements for the full-time and part-time MBA programme are described in the MBA brochure of the School of Business and Management.

**MPhil Programmes**

In addition to course work requirements, if any, MPhil students will undertake a programme of thesis research under the direction of a supervisor appointed by the department.

Each MPhil student is, on the commencement of study, assigned an interim supervisor. This supervisor works with the student to map out a tentative programme of study and research, and to identify a research supervisor. The research supervisor, when appointed, replaces the interim advisor.

MPhil research is conducted under the general supervision of a thesis committee of at least three faculty members, one of whom is the designated thesis supervisor and committee chairman.

When the thesis is ready for examination, to the satisfaction of both the student and the supervisor, the department head appoints an examination committee consisting of three faculty members. One is the supervisor and another is appointed as chairman. The committee examines the thesis and conducts an oral thesis examination. Theses are graded Pass or Fail. A Pass grade may be denoted Pass with Distinction when appropriate.

**PhD Programmes**

PhD Programmes focus on original research by the student, but most also require course work. Doctoral students proceed from admission to the programme, to candidacy for the degree, and then to defence of the thesis. Each has a thesis supervisor who oversees the student’s research. Candidacy is obtained by the successful completion of qualifying examinations specified by the department.

PhD research is conducted under the general supervision of a thesis committee of at least three faculty members, one of whom is the designated thesis supervisor.

The thesis examination committee is appointed by the Senate Committee on Postgraduate Studies on the recommendation of the department. The five-member examination committee is chaired by an individual from outside the school, and is appointed by the Committee on Postgraduate Studies upon recommendation by the dean. This person presides over the examination, but is not one of the five members who are: the thesis supervisor, two academic staff members from the department, one academic staff member from outside the department or discipline, and one additional member from outside the department. Theses will be graded Pass or Fail. A Pass grade may be denoted Pass with Distinction when appropriate.
Conduct of Thesis Examinations

A student wishing to appear before a thesis examination committee must so indicate to the major department at least six weeks before the examination, and have delivered to the department a sufficient number of examination copies at least four weeks before the examination. For a PhD thesis, the number of copies is six, and for the MPhil three.

The examination takes place in a single session and comprises three parts, the first two of which are open to all members of the University and to departmental guests, and the third closed to all but the student and the committee. The first part is an oral presentation by the student emphasising the major elements of the research and the results obtained. Next is an open question period, led by any external examiners present followed by other members of the examining committee, and ended by the thesis supervisor. Finally, others in attendance may also ask questions. During this portion of the examination, all questions are addressed via the chairman and any dialogue limited to the student and individual questioner. The third, and closed, part of the examination is reserved for a less formal examination of the student and thesis by the examining committee.

The thesis examination can have one of several results:

- Passed (or Passed with Distinction)
- Passed (or Passed with Distinction) with minor corrections
- Passed with major corrections
- Failed but may be resubmitted
- Failed

Minor corrections must be made to the satisfaction of the supervisor, but major corrections require the approval of the full examining committee, or a designated sub-committee. The result "Failed but may be resubmitted" requires that the entire examination process be repeated, including the re-establishment of an examination committee. At least six months must pass before re-submission of the thesis. A grade of "Failed" results in the automatic withdrawal of the student from the programme of study and terminates registration at the University.

University Policy on the Use of Human and/or Animal Subjects in Educational, Research or Service Programmes

There are complex legal, regulatory and operational standards applicable to the care and use of human and/or animal "subjects" in educational, research programs. The term "subject" means that the person or animal is subjected to some planned program activity for the purpose of effecting response or developing new understanding related to programme or project objectives.

Comprehensive policies are currently under development. Until such policies are reviewed and approved, an interim policy is in effect, and researchers plan on a minimum delay of at least one month before approval can be arranged.
VI. RESEARCH CENTRE, INSTITUTES AND CENTRAL RESEARCH FACILITIES

The University has established a number of research institutes and centres to identify and provide focus for research at HKUST. All operate across traditional disciplinary boundaries, and provide a full range of research and specialised research services from developmental and applied activities to basic investigations.

Together with disciplinary research in academic departments, these specialised research organisations provide undergraduate as well as postgraduate students with a wide range of opportunities for participation in exciting programmes and projects that deal with the extension and application of knowledge. Several hundred research projects have been funded and are in operation.

Research Centres and Institutes are listed below:

- Asian Financial Markets Centre
- Biotechnology Research Institute
- CAE/CAD/CAM Centre (Computer Aided Engineering, Design and Manufacturing)
- Economic Development Centre
- Institute For Environmental Studies
- Hong Kong Telecom Institute of Information Technology
- Infrastructure System Studies Centre
- Materials Research Centre
- Zheng Ge Ru Thin Film Physics Laboratory
- Joyce M. Kuok Laser and Photonics Laboratory
- William Mong Semiconductor Clusters Laboratory
- Sino Software Research Centre

Some other research centres and institutes currently under development include:

- Computation
- Energy
- Manufacturing
- Microsystems
- Textile and Apparel Technology
- Transportation
Each of these research centres, institutes and laboratories is managed by a Director who is responsible for programmes, projects, facilities and personnel. Faculty, staff, students and visitors should contact the Director if they wish to become involved in these programme areas.

Some comprehensive research and research support organisations are described below:

**Research Centre**

The Research Centre has been established to encourage and conduct multidisciplinary, contractual and applied research, the results of which may lead more directly and quickly to implementation and economic benefit. Some of its objectives are to conduct mission-oriented scientific, engineering, industrial, and management research relevant to Hong Kong's technological and socio-economic development; to establish and manage research facilities that are critical to the need for development of technology in Hong Kong; to incubate critical technologies required by government and industry; to establish research and scientific databases; to provide institutional management and planning support for research to faculty members; to co-ordinate collaborative overseas research programmes; and to develop and maintain research sponsorship and contractual relationships.

The Research Centre has a programme of wide-ranging R&D initiatives to maintain its research vitality and to inject cutting-edge technology into its research. Research topics and projects are chosen with the collaboration and assistance of faculty and staff members. The selection process gives consideration to the impact of research results on the local community, availability of the University's skills for conducting outstanding research, involvement of postgraduate students and academic faculty, and potential to strengthen existing areas of activity or to build areas of future research strength.

The following list provides a few examples of technology and research initiatives in current operation in addition to the more focused activities conducted in the research centres and institutes listed in the previous section:

- A Hong Kong ecosystems databank and processing centre
- Hong Kong/Pearl River Delta contaminated sediment research
- Satellite remote sensing technology on environmental studies
- Pollutant source identification; air quality index and prediction
- Productive electrochemical desulphurisation of fuel gas
- Abatement of diesel air pollution and clean technology
- Biological wastewater treatment - using immobilised microalgae and mangrove wetland system
- Heavy metal toxicity and its resistance in plants
- Ecotoxicology on assessment of pollution
- Landfill modelling
- Software and instrumentation for power plants
- Effect of electromagnetic fields on humans
- Revegetation of pulverised fly-ash lagoons
- Building systems
- Geotechnical engineering
- Bridge engineering
- Coastal engineering
- Transportation systems
- Airports and harbours
- Plastics
- Herbal medicines
- Science Park development
- Geographical information
- Shock and vibration
**Institute for Environmental Studies**

Environmental science and technology has been identified as one of the applied research subjects which offers opportunity for HKUST to contribute immediately and significantly to Hong Kong. In 1989, Hong Kong Government published a white paper which described the state of the environment and its deterioration. Major environmental projects needed in the next ten years are described. Advanced technologies will be required for these projects to improve environmental conditions of air and water quality, solid waste management, and other health threatening problems. Since 1990, the Research Centre has conducted a wide-range of R & D programmes in environmental studies, particularly in air pollution and biological wastewater treatment. It has also organised several international symposia and workshops on environmental issues. The newly established Institute for Environmental Studies will conduct faculty-driven applied R & D projects. The principal investigators of these projects are faculty or research staff from Departments of Biochemistry, Biology, Chemical Engineering, Chemistry, Civil and Structural Engineering, Research Centre, and Mechanical Engineering.

The research programmes of the Institute will focus on the following areas:

- Water pollution and marine environment
- Air quality studies
- Studies of contaminated sediment in Victoria Harbour/ Pearl River Delta
- Particulates and aerosols
- Application of biological and chemical technology to environment
- Wastewater and solid waste treatment
- Noise and dust abatement
- Environment monitoring technology
- Micrometeorology

**Office of Contract and Grant Administration**

This Office helps University faculty and staff in the development and operation of research and development contracts and grants sponsored by industrial, governmental, business and philanthropic organisations. Information about potential sources of funding is distributed and assistance provided in the preparation of proposals that meet established criteria for review and evaluation. When sponsored funds are obtained, budgets are established and assistance supplied to assure that contract and grant requirements are satisfied. Complex issues of intellectual property development, proprietary rights, contractual restrictions, and operational coordinations are administered to support faculty, staff, and students in achieving maximum scholarly benefit from available funds.

**Technology Transfer Centre**

The Technology Transfer Centre is dedicated to bringing new and better technology to accelerate the social and economic development of Hong Kong. The involvement of University faculty, staff and facilities to evaluate, develop, commercialise, produce and market new products and processes is the goal. The creation and licensing of patents, software and copyrights is part of the process. The expansion of existing industries and the incubation and support of new industries to produce and market new products is another part of the process. The economic utilisation of technical achievements of the University for the benefit of Hong Kong is the organisational goal of the Technology Transfer Centre. Bringing the newest and the best of global technology to Hong Kong for the support of local industry is another goal.
Biotechnology Research Institute

The mission of the Biotechnology Research Institute (BRI) is to assist Hong Kong in its economic development, and in so doing contribute to the economic well-being of the Asia-Pacific region, through the research, development and training of specialists in biotechnology.

The biotechnological industry worldwide is entering into a period of unprecedented growth opportunities. Besides the rapid scientific advances that are bringing a constant stream of new processes and products, the business environment of the industry is also undergoing dramatic changes in the form of increasing globalisation, as new entrants, both national governments and corporations, seek participation. The founding of BRI could not have come at a more opportune time, to help Hong Kong strive to become one of the important centres of biotechnology in the world.

Biotechnology covers a wide range of fast-growing areas of economic importance. The seven research areas that have been targeted for development by BRI are:

1. Biomedical instrumentation and diagnostics
2. Drug delivery and development
3. Agricultural and environmental bioengineering
4. Genetic engineering of biomacromolecules
5. Biosensor
6. Immunology
7. Molecular genetics of plants

The activities of BRI include the recruitment of biotechnology related faculty, the purchase of equipment, the planning and construction of facilities, and the support of research projects in the targeted areas.

Hong Kong Telecom Institute of Information Technology

This Institute has been founded with a grant of $100 million from Hong Kong Telecommunication Limited. The concept of the Institute is based on the recognition that in future there will be no economic development, no industry or commerce, no service or manufacturing capability of any significance without the full utilisation of telecommunication and information technology. All Schools at the University are involved in the research activity of this Institute. At present, the Institute is sponsoring four major research programmes, namely Lightware Technology, Network Technology, Wireless Communication, and Video Technology.

Undergraduate scholarships and postgraduate research studentships are also offered through the Institute, and certain members of the academic faculty are designated as Institute Fellows.

Materials Characterisation and Preparation Centre

The Materials Characterisation and Preparation Centre is a central facility for the synthesis, study and testing of new materials and materials needed for in-house or collaborative research projects. The Centre constitutes an important resource which provides state-of-the-art instrumentation, organises workshops and training, and is a focal point for interdisciplinary research. The facility serves academics in all the Science and Engineering departments and is also available to external clients from other tertiary institutions, government bodies, and private industry. During 1993 the Centre moved to larger premises in the Phase II building, thus enabling the scope of facilities to be expanded to meet more fully the needs of the growing research community of staff and graduate students.
Microelectronics Fabrication Centre

The mission of the MFC is to provide capabilities for the fabrication of microelectronic devices and integrated circuits in support of undergraduate and postgraduate teaching and research. Particular objectives for technology development include novel semiconductor devices, higher speed transistors and ICs, innovative microsensors and microactuators, and application specific integrated circuits (ASICs).

To achieve the objectives, half of the phase I 495-square metre-Centre is devoted to Class 1,000 clean rooms (containing less than 1,000 particles larger than a half micrometre per cubic foot of air) where state-of-the-art microelectronic processing equipment is located. The Centre’s clean rooms are divided into four basic fabrication modules, namely, photolithography, thermal diffusion/thin-film deposition, dry/wet etching and metallisation.

While the centre is closely associated with electronics engineering, researchers in other disciplines have also found microfabrication techniques highly valuable for various applications. Research projects from Physics, Chemistry, Biology, Biochemistry, Mechanical Engineering and other engineering fields have also been utilising the facility of the Microfabrication Centre.

Sino Software Research Centre

The Sino Software Research Centre (SSRC) was established in July 1992 with a $20 million grant from the Sino Land Co., Ltd. It has the dual aim of supporting software research that can lead to practical applications, and providing assistance in transforming those applications into useful products.

The Centre sees its primary role as that of a catalyst, helping software research projects reach the critical phase in which ideas may be translated into prototypes that can be evaluated using large-scale trials. Projects led by HKUST faculty members from any department are eligible for support.

The Centre particularly encourages research and development in areas that are relevant to the economic and social development of Hong Kong. Current areas of activity include:

- Chinese language software interface support
- Heterogeneous database management technology
- Intelligent video manipulation tools
- Commerical INTERNET access in Hong Kong
- Software reuse in-the-small
- System requirements modelling

Beyond its interest in software research and development, the SSRC also provides technical and consultative help to local businesses as they seek to implement the latest software technologies. As part of this effort, the Centre sponsors workshops, seminars and lectures on software topics related to the needs of businesses and public institutions. In August 1992, for example, it organised a well-attended UNIX Security Workshop, which offered practical advice, specific solutions, and hands-on experience in safeguarding UNIX operating systems.

As an integral part of HKUST's Research and Development Branch, the SSRC is dedicated both to advancing the state of the art in software technologies and to serving the needs of Hong Kong.
VII. ACADEMIC SERVICES

University Library

The University Library occupies a central location close to the University's entrance Piazza, covering five floors and commanding a spectacular sea view.

As an integral component of the academic programme, the Library supports the University's teaching and research in science, engineering, business and management, the humanities and social sciences. There are seminar rooms for meetings and instruction, areas for group discussion, and study carrels for individual use. Audio-visual materials, both educational and recreational, are available for use in specially equipped facilities. The Library is much more than a repository for the accumulated knowledge of civilisation; it serves as the heart of our intellectual enterprise.

The rapid development of the University requires a correspondingly rapid rate of growth in its library collection. The Library opened in 1991 with a collection of approximately 120,000 books, bound periodicals and non-print materials. During the 1991-94 triennium, and thereafter, the Library plans to add about 60,000 items per year to provide support for the University's programme development. Reaching beyond local holdings, the Library has made extensive provisions for automation. The Library Online System forms a part of the campus-wide network, and is therefore accessible from every part of the campus. Through the Online System users are able to consult a broad range of bibliographic and full-text information as well as to search CD-ROM databases. The University Library is linked via telecommunications to libraries and databases in institutions locally and overseas.

In 1993, the Library occupied four levels with over 8,000 square metres of floor space and 1,000 seats. A fifth floor opens in the Fall of 1994 with another 2,000 square metres floor space and 160 seats. Phase III construction of the University
campus would see the Library expand horizontally at the second and third levels to a total space of 13,000 square metres with a capacity for 1.2 million volumes.

An experienced staff assists patrons in a variety of ways, from the selection, acquisition, and cataloguing of materials to using the collection, online searches, and interlibrary loans. There are also a fully equipped classroom and a computer laboratory for group instruction. The Library has a strong service orientation in order to effectively meet the information needs of its academic community.

Centre of Computing Services and Telecommunications

The Centre of Computing Services and Telecommunications develops and manages the computing and networking infrastructure of the University. It provides computing support to undergraduate and postgraduate teaching, and research applications in science, engineering, business and management, and humanities and social science. Besides, the Centre serves the University's administrative needs by providing an integrated information system to support the day-to-day routines as well as to satisfy the need for information in management decision making.

The HKUST computing environment is modelled after the distributed client-server architecture. The network backbone is a collection of advanced, high-speed FDDI (Fibre Distributed Data Interface) rings, each running at 100 megabits per second. The FDDI rings are interconnected by a gigaswitch, which gives an aggregate network bandwidth of 3.6 gigabits per second. The campus network is connected to Harnet (The Hong Kong Academic & Research Network) via a 1.544 megabits per second T1 circuit, and to Internet via a 64 kilobits per second circuit to the United States. Network services are available not only in offices and laboratories but also in staff quarters and student dormitories.

The Centre operates powerful server computers to provide campus-wide network services such as network printing, e-mail and electronic notice board. One important characteristic of the University's computing environment is its Chinese-English bilingual capability. Increasingly, more applications will have this dual support.

All microcomputers and powerful scientific workstations are connected to the campus network, providing desktop computing power as well as serving as windows to a vast array of information and computing resource, such as the library system and various scientific and business packages, on the University's own network or that of other institutions in Hong Kong, and through the Internet, on networks of educational and research institutions worldwide.

To support scientific computing and visualisation, CCST has developed a high performance, distributed and parallel computing environment composing of high-end computation and graphics workstations with FDDI interface and interconnected by a super highspeed gigaswitch.

In addition to the central facilities, the Centre also manages a number of "computer barns" in various locations of the academic buildings, providing PC, Macintosh and Unix workstation facilities for undergraduate teaching and student use. Each academic department also has one or more computing facility rooms for use by postgraduate students and academic staff.

Apart from computing services, the Centre also operates the campus-wide PABX system.

Language Centre

The Language Centre has a pan-University role in the provision of language courses, both as academic disciplines and as a support service. English is the medium of instruction in the University, and a priority of the Language Centre is to assist students in all Schools to acquire the necessary language skills for them to gain the maximum benefit from their subject courses.

The Language Centre has two 24-booth audio-visual language laboratories (for oral/aural work), and one 24-booth
computerised language laboratory (for oral/aural work as well as text processing and editing).

The Language Centre also runs a Self-Access Centre, a purpose-built facility that contains audio, video computer and multimedia equipment, along with a variety of Language-learning materials. The Self-Access Centre is open on weekdays and Saturday mornings. Its aim is to help staff and students to improve their skills in English and other languages through independent learning.

**Educational Technology Centre**

The University is committed to high standards and up-to-date methods in postgraduate teaching and in the communication of research results. To this end, the Educational Technology Centre sustains a comprehensive service for all academic and research staff. It provides and maintains a wide range of instructional media resources for academic purposes. It assists academic staff in producing teaching and learning materials, including those generated with computer graphics technology, as well as slide presentations, overhead transparencies, video tapes and print materials. In addition, the Centre provides highspeed, high-volume reprographic and off-set printing services.

To underpin these production and technical services, the Educational Technology Centre organises workshops and seminars for faculty, teaching assistants, and tutors on educational issues and instructional practices in higher education, including selection and use of mediated instructional materials, production of teaching and learning packages and methods for student feedback of teaching effectiveness. The Centre also serves as a resource for information on teaching methods, instructional formats and materials related to research on teaching.
STUDENT SERVICES

Through the Student Affairs Office, the University offers a range of services to students for the purpose of promoting the quality of campus life and assisting students in solving problems affecting their studies. Extra-curricular educational activities are also organised with the aim of broadening students' cultural and intellectual outlook as well as enhancing their social and interpersonal skills.

Counselling Service

Staff of the Student Affairs Office offer assistance in many areas of student concern, such as adjustment to a new environment, financial hardship, personal problems and study-related problems.

Physical Education and Sports

Developing physical health and fitness is as important as broadening the mental capacity and horizons of students. To this end, the University expects all students to participate in at least one organised sport or physical education activity during their years at the University. Professional coaches are available to organise and provide instructions in these activities. A large multi-purpose sports hall with 1,600 square metres of floor space is available for such sports as badminton, volleyball, basketball, tennis, indoor soccer, and table tennis, with other areas set aside for fencing, martial arts, aerobics, and other exercises. Outdoor facilities include a 50-metre swimming pool, an all-weather pitch, a 400-metre athletics track as well as basketball and tennis courts. Expansion of the indoor sports hall is being planned to include a number of squash courts and other exercise facilities.

Health Service

The Student Health Service provides out-patient health and dental care for students. Health education programmes are organised and presented for the benefit of students and staff alike.
Residential Halls

There are two on-campus postgraduate Residential Halls, providing accommodation for 356 postgraduate students. Allocation of student housing is organised by the Student Affairs Office.

Residents are housed in furnished single rooms. There are no facilities for married students with or without children. Neither are there cooking facilities. Meals are to be taken at the central dining facilities on campus.

Please consult the section on ‘Registration, Fees, and Financial Assistance’ for details of Residential Hall charges.

The Student Affairs Office operates an accommodation service on a limited scale to assist students who wish to seek off-campus accommodation near the University.

Student Amenities

Amenities for personal as well as organised student activities are provided in a central location. These include facilities for the pursuit of hobbies such as photographic dark rooms, music rooms and studios, for the organisation of activities such as meeting rooms, workshops, office space and exhibition areas, and leisure activities for individual students and interaction among students such as common rooms, TV rooms and reading rooms.

A Student Canteen with a seating capacity for 1,800 is available. It is centrally located and a variety of services is provided. Commercial facilities include a bookshop, banking services, and a convenience store.

The campus itself, on a site of great beauty enhanced by landscaping, terraces, and pavilions, has been designed with great emphasis on the quality of life for both resident and non-resident students.

Student Activities

Extra-curricular activities are organised by the Students' Union and student societies associated with academic disciplines, residential halls, sports, arts and other social interests. Students are encouraged to take part in activities as organisers and/or participants. The Student Affairs Office of the University also organises extra-curricular activities and programmes such as formal dinners, competitive sports, talks and seminars.

Careers Service

The Careers Centre helps students clarify their career plans and options. To assist students in their career decisions, this centre collects career information for consultation by students and links students with potential employers.
VII. ADDITIONAL INFORMATION

Academic Year 1994-95

The academic year of the University begins on 1 July and ends on 30 June the following year. It normally includes a Fall Semester commencing in early September and running for 15 weeks of classes and examinations, and a 15-week Spring Semester beginning after Chinese New Year. Immediately following the end of the 14th week there is a short study break followed by a week devoted to examinations. There is a one-week break in the Spring Semester around Easter. A Winter Session is held between the two semesters for special academic programmes, research symposia, and other activities. For most students, attendance is not required. A Summer Session bridges the end of the Spring Semester and the beginning of the following Fall Semester.

Important dates for the 1994-95 academic year will be:

- **Fall Semester 1994**: 5 September 1994 - 20 December 1994
- **Winter Session**: 3 January 1995 - 11 February 1995
- **Spring Semester 1995**: 13 February 1995 - 6 June 1995
- **Mid-semester break**: 12 April 1995 - 18 April 1995
- **Summer Session 1995**: Mid-June 1995 - Mid-August 1995
- **Study breaks**: 12 - 13 December 1994 & 29 - 30 May 1995

University Calendar for 1994-95

Detailed information about the University will be contained in the University Calendar for 1994-95 which will be published in summer of 1994. Students accepted for admission to the University in September 1994 will be able to purchase a copy of the Calendar from the University at that time.

Admission Enquiries

Students requiring copies of the postgraduate handbook, School/departmental brochures, application forms, advice or assistance on application procedures, admission requirements or other related matters are welcome to visit, telephone or write to the Admissions, Registration and Records Office (Room
1376), which is open Mondays to Fridays:

9 a.m. - 12:30 p.m.
2 p.m. - 5 p.m.

and on Saturdays during the following hours:

9 a.m. - 12 noon

All enquiries should be addressed to:

The Director of Admissions, Registration & Records
The Hong Kong University of Science and Technology
Clear Water Bay
Kowloon
Hong Kong

Telephone No.: (852) 358-6646
Facsimile No.: (852) 358-0769
INDEX

A
Academic
  Faculty 9
  Integrity and Discipline 30
  Regulations 23
  Academic Standing 37
  Services 53
  Year 63
  Enquiries 63

Admission of Students 13

Admissions Office, University 15

Appeals 29

Application for Admission 15
  Admission 15
  Fee 17
  Selection Procedures 16

Assistance, Financial 19

B
Biotechnology Research Institute 48

Bursaries, University 19

C
Calendar, University 63

Campus
  Map 70
  Plan 71

Careers Services 61

Caution Money 17

Centre of Computing Services and
  Telecommunications 54

Computer Aided Engineering, Design and
  Manufacturing Centre 43

Continuation of Study 29

Counselling Service 59

Course
  Auditor 27
  Enrolment Changes 26
  Credits 23
  Grading 27
  Prerequisites and Exclusions 26

Duration of Study 35

Economic Development Centre 43

Educational Technology Centre 56

Examination Guidelines 32

Enquiries, Admission 63

F
Fees 17

Financial Assistance 19

G
Government
  Grant and Loan Scheme, see under
    Financial Assistance 19
  Student Financial Assistance Agency 19

Grade
  Averages 28
  Review 28

Health Service 59

Hong Kong Ecosystem Databank and
  Processing Centre 45

Hong Kong Telecom Institute of
  Information Technology 49

I
Immigration Department, Address of 16

Infrastructure System Studies Centre 43

Institute for Environmental Studies 46

Intellectual Property Rights 34

Interdepartmental Transfer 29

Joint Degree Programmes 12

L
Language Centre 55

Library, University 53

Loans, University 19

MA and MPhil Programmes Study
  Requirements, see under Academic
  Regulations 38

Materials Characterisation and Preparation
  Centre 49

Materials Research Centre 43

Microelectronics Fabrication Centre 50

Miscellaneous Fees and Charges 17

O
Office of Contract and Grant Administration 47

Outdoor Sports Facilities 59

Overseas Students 16

P
PhD Programmes Study Requirements, see under
  Academic Regulations 39

Physical Education and Sports 59

Postgraduate
  Admission Requirements 13
  Applications 15
  Studentships 20
  Degrees 10
INDEX

Grades 36
Programmes 10

Prizes 20

Registration 17
Registration Fees 17

Regulations, Academic 23
Research Centre 44
Residence Requirements 37
Residential Hall Charges 18

Sanctions 31
Scholarships 20
Selection Procedures 16
Services, Academic 53
Sino Software Research Centre 50
Sports Facilities 59

Student 10
Affairs, Office of 19
Activities 61
Amenities 60
Conduct 29
Rights and Obligations 32
Services 59
Union 61

T
Technology Transfer Centre 47
Thesis Examinations 40
Tuition Fees 17

U
University 7
Organisation 8
Policy on the Use of Human/Animal Subjects 41
The Campus
Main Entrance
Mass Transit Railway (MTR)
Road/Highway
KMB Bus Route to Campus

SAI KUNG

KOWLOON

PORT SHelter

HONG KONG

SAI KUNG

TSEUNG KWAN O
(JUNK BAY)

CAMPUS PLAN
THE HONG KONG UNIVERSITY
OF SCIENCE AND TECHNOLOGY

completed by 1991
completed by 1993
completed by 1996

To Kowloon/ Sai Kung

To Clear Water Bay

Staff Housing

Student Housing

Amphitheatre

Liberty

Indoor Sports Hall

Commercial Complex

Footbridge Link

Entrance Plaza

Academic Building

Staff Housing

Student Housing

Student Housing

Student Housing

Island Highway Corridor

Lung Cheung Rd

Prince Edward Rd East

Choi Hung Rd

Airport

Kowloon

HONG KONG

ISLAND

KMB 91
KMB 91M

KMB 91
KMB 91M

KMB 296

Clear Water Bay Rd

Lei Yue Mun Rd

Tung Chung O Tunnel

Po Fung Rd

Lam Tin MTR

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