THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Prospectus for entry in September 1996

This Prospectus is published for the guidance of students who wish to enter the University in September 1996. 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 Prospectus and a University regulation or programme, or where an interpretation of the Prospectus is required, the decision of the University Authority shall be final. The Prospectus does not form any part of a contract between any person and the University.

An Undergraduate Prospectus in Chinese will be produced at a later date and will be available on request.

All enquiries should be addressed to:
The Director
Admissions, Registration and Records Office
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong
Telephone: (852) 2358 6622
Facsimile: (852) 2358 0769
Principal Officers of the University

Chancellor
The Right Honourable Christopher PATTEN

Chairman of the Council
Sir Sze-Yuen CHUNG, GBE, JP

Vice-Chairman of the Council
Dr. CHENG Hon-Kwan, OBE, JP

Treasurer of the University
The Honourable LAU Wah-Sum, OBE, JP

President
Professor Chia-Wei WOO, BS, MA, PhD, DLitt

Vice-President for Academic Affairs
Professor Shain-Dow KUNG, BSc, MSc, PhD

Vice-President for Administration and Business
Mr. Paul Anthony BOLTON, BA, MA

Vice-President for Research and Development
Professor Eugene WONG, BS, AM, PhD
A MESSAGE FROM THE PRESIDENT TO POTENTIAL APPLICANTS

Dear friends,

The Hong Kong University of Science and Technology is a new university dedicated to the education of Hong Kong's future leaders, and to the economic and social development of Hong Kong and her region. We have a modern campus and superior facilities, located on a magnificent site by the sea. Most important of all, we have an excellent faculty devoted to enhancing the intellectual strength of our students.

In short, we are a university built for you, our scientists, technologists, and managers of tomorrow. If you choose to join HKUST, you will spend three years in an exciting environment where the fresh spirit of young minds and the seasoned wisdom of mature scholars meet and mingle on a daily basis.

As you read through the pages of this Prospectus, you will learn about the programmes offered by our various Schools and Departments, the kinds of students we are looking for, the way our courses are taught, and the many campus activities in which you will wish to participate.

If you are curious about a wide range of topics and capable of hard work, if you are compassionate and enthusiastic about life in general, you will find the challenges you are looking for at HKUST.

As HKUST graduates, you will have your hands on the present and your eyes on the future. You will help build a better tomorrow for yourselves and for all of us - the people of Hong Kong - as we march together into the 21st century.

Chia-Wei WOO
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.

~ The University Ordinance

I. THE UNIVERSITY

The Hong Kong University of Science and Technology (HKUST) was incorporated in April 1988 and opened in October 1991, as a technological university dedicated to the advancement of learning and scholarship, with special emphasis on research, postgraduate education, and close collaboration with business and industry.

The University occupies an impressive 60-hectare site 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.

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, bringing capacity to about 7,000 FTE students, was completed in January 1993. With the completion of Phase III (contingent upon approval of funds), the University will be able to accommodate a student body of 10,000 FTE students.

The major source of financial support for the University is the Government of Hong Kong through the University Grants Committee (UGC) and its Research Grants Council (RGC). Student fees, other sources of research support and donations are also significant contributors to the University's budget, which will exceed $1.5 billion in 1995-96. Construction of Phases I and II of the campus was assisted by a grant from the Royal Hong Kong Jockey Club of almost $2 billion towards the cost of over $3.2 billion.

The 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 Vice-President. Within Academic Affairs are the four schools which comprise the academic heartland of HKUST, each school divided into departments or divisions. There are a number of academic service units and research units located administratively within the branch as well. Administration and Business is concerned with the non-academic administrative
and financial operation of the University, and Research and Development focuses on research administration and contractual and applied research relevant to Hong Kong’s technological and socio-economic development.

Three of the University’s schools - Science, Engineering, and Business and Management - provide both undergraduate and postgraduate education. The School of Humanities and Social Science offers postgraduate education and general education for all undergraduates. As the medium of instruction is English, classes aimed at improving English language skills are available to students, as needed.

To complement the schools and their constituent academic departments, the University has set up inter-disciplinary 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.

**Academic Faculty**

With a policy calling for one faculty member for every 12 students, the University recruits worldwide for faculty who have achieved excellence in their fields and are highly respected as both teachers and researchers. These include both established academics and promising younger scholars. More than 85% have experience at the world's leading research universities, either as PhD graduates, or through postdoctoral studies or teaching appointments.

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 1995 nearly 500 academics will have been appointed.

**Students**

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

Most undergraduate enter the University at age 18 or 19. In pursuing their course of study, they are able to learn interesting subjects and obtain both a good general education as well as a qualification relevant to their career. Nearly all undergraduates are Hong Kong residents whereas the number of non-local postgraduates is around 20% of the total postgraduate population.

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.

**Projected Student Numbers**

According to current plans, the University will admit approximately 1,920 full-time undergraduate students annually. Total enrolment will reach 7,000 full-time equivalent students by 1997-98, with about 20 percent of the student population engaging in postgraduate studies.

**Undergraduate Programmes**

Undergraduate programmes normally require full-time attendance for three academic years. The curriculum is founded on a credit-based system, and all undergraduate programmes lead to honours degrees. HKUST believes in total education and the credit-based structure of undergraduate academic programmes strikes a compromise between the sharp focus prevalent in traditional Chinese and British universities and the broad approach characteristic of American universities. To ensure breadth of education, undergraduates take about one-third of their credits outside their major department, with at least 12 credits in the School of Humanities and Social Science and the remaining credits spread over subjects offered by other departments. For graduation, students need to accumulate a total of 100-105 course credits, as specified for each programme.
First-degree programmes offered are:

SCHOOL OF SCIENCE

Bachelor of Science (BSc) (3 years)
- Biochemistry
- Biology
- Chemistry
- Mathematics
- Physics
- Applied Physics

SCHOOL OF ENGINEERING

Bachelor of Engineering (BEng) (3 years)
- Chemical Engineering
- Civil and Structural Engineering
- Computer Engineering
- Computer Science
- Electronic Engineering
- Industrial Engineering and Engineering Management
- Mechanical Engineering

SCHOOL OF BUSINESS AND MANAGEMENT

Bachelor of Business Administration (BBA) (3 years)
- Accounting
- Economics
- Finance
- Information and Systems Management
- Management of Organisations
- Marketing

Bachelor of Science (BSc) (3 years)
- Economics

POSTGRADUATE PROGRAMMES

The quality of work completed is recognised by the assignment of grades where:

Grade A is given for excellent performance,
Grade B is given for good performance,
Grade C is given for satisfactory performance, and
Grade D is given for a marginal pass.

Students are expected to attend classes regularly and to complete assigned work.

Postgraduate Programmes

The University offers postgraduate studies leading to master's and doctoral degrees in all four Schools. Please refer to the Postgraduate Handbook and individual departmental brochures for further details.
II. UNIVERSITY ENTRANCE REQUIREMENTS

General Undergraduate Entrance Requirements

To qualify for admission to the University, applicants must:

(a) normally be at least 17 years of age by the first day of the academic year to which they are seeking admission;

(b) meet the general entrance requirements of the University and the requirements of the particular programme or programmes for which they are applying; and

(c) apply on the prescribed form before the application deadline.

Entry to an undergraduate programme of study at the University requires prospective students to satisfy both the general University and specific departmental entrance requirements. Applicants may be requested to attend personal interviews and/or take additional tests to be administered by the University. Interviews are designed for the purpose of providing further assessment of the applicant's motivation, aptitude and overall suitability for the chosen field of study.
General University Requirements

The general University requirements for entry in the 1996-97 academic year include ALL of the following:

A. Hong Kong Certificate of Education Examination (HKCEE)
   - passes in at least seven subjects at the first and if necessary second attempt, of which
     i.  at least five must be passed at a single sitting; and
     ii. three must be Mathematics, English Language (Syllabus A or B), and either Chinese or an alternative language

B. Hong Kong Advanced Level Examination (HKALE)
   - passes at the same sitting in
     a. either one Advanced Level (AL) subject plus two Advanced Supplementary (AS) subjects, or two AL subjects; and
     b. either AS Chinese Language and Culture\(^\text{(1)}\)\(^\text{(2)}\), or AS Liberal Studies

   and

   ii. pass in AS Use of English (UE)\(^\text{(3)}\)

Entrance Requirement Equivalents

Alternatively, the general entrance requirements may be satisfied by obtaining one of the following qualifications:

(a)  i. General Certificate of Secondary Education/General Certificate of Education at Ordinary Level -
    - passes in at least seven subjects at the first and if necessary second attempt, including Mathematics, English Language and a language other than English, with five of the subjects passed at a single sitting; and
    ii. General Certificate of Education at the Advanced Level/Advanced Supplementary Level -
    - passes at the same sitting in 1 AL subject plus 3 AS subjects; or 2 AL subjects plus 1 AS subject; or at least 3 AL subjects.

(b)  at least one year's successful full-time study or equivalent in a bachelor's degree programme at a university or tertiary institution recognised by this University;

(c)  a professional diploma, higher diploma or higher certificate from a polytechnic or recognised tertiary college in Hong Kong;

(d)  an International Baccalaureate.

Notwithstanding the above, the University may recognise other qualifications, or successful study at another recognised institution. In assessing these qualifications, the University will ensure that such applicants have an educational background equivalent to that required of JUPAS candidates. Proficiency in English is also a consideration.

\(^{\text{(1)}}\) Alternatively, a pass in AL Chinese Literature is acceptable in lieu of AS Chinese Language and Culture, in which case the student is required to pass in addition either (i) two AL subjects, or (ii) one AL subject plus one AS subject; or (iii) three AS subjects.

\(^{\text{(2)}}\) For applicants who use an alternative language, rather than Chinese, to satisfy the language requirements in the HKCEE, an AS/AL subject may be used as a substitute for the Chinese Language and Culture requirement.

\(^{\text{(3)}}\) All students admitted with a UE grade below C will be required to attend and pass a non-credit bearing English language enhancement course during the first year of attendance.
Departmental Entrance Requirements

In addition to the general requirements, applicants for 1996-97 entry must also satisfy entrance requirements specific to their desired programmes of study. Unless otherwise specified, AS level subjects referred to below exclude Use of English, Chinese Language and Culture, and Liberal Studies.

SCHOOL OF SCIENCE

<table>
<thead>
<tr>
<th>Programme</th>
<th>Departmental Entrance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc in Biochemistry</td>
<td>2AL + 1AL/AS (AL Chemistry + AL/AS Biology + one other subject)</td>
</tr>
<tr>
<td>BSc in Biology</td>
<td>2AL + 1AL/AS (AL Biology + AL/AS Chemistry + one other subject)</td>
</tr>
<tr>
<td>BSc in Chemistry</td>
<td>2AL (Chemistry + one of Biology, Physics, Pure Mathematics or Applied Mathematics)</td>
</tr>
<tr>
<td></td>
<td>+ 1AL/AS (Biology, Physics, Pure Mathematics, Applied Mathematics or Mathematics and Statistics)</td>
</tr>
<tr>
<td>BSc in Mathematics</td>
<td>+ 1AL (Pure Mathematics)</td>
</tr>
<tr>
<td></td>
<td>+ 1AL/2AS</td>
</tr>
<tr>
<td>BSc in Physics BSc in Applied Physics</td>
<td>+ 1AL (Physics or Engineering Science)</td>
</tr>
<tr>
<td></td>
<td>+ 1AL/2AS</td>
</tr>
<tr>
<td></td>
<td>OR 1AL + 2AS (AS Physics + one of AL Pure Mathematics, AL/AS Applied Mathematics or AS Mathematics and Statistics + one other subject)</td>
</tr>
</tbody>
</table>

SCHOOL OF ENGINEERING

<table>
<thead>
<tr>
<th>Programme</th>
<th>Departmental Entrance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng in Chemical Engineering</td>
<td>2AL + 1AS (AL/AS subjects must be chosen from Applied Mathematics, Biology, Chemistry, Engineering Science, Physics, Pure Mathematics, and Mathematics and Statistics)</td>
</tr>
<tr>
<td></td>
<td>OR 3AL (subjects must be chosen from Applied Mathematics, Biology, Chemistry, Engineering Science, Physics and Pure Mathematics)</td>
</tr>
<tr>
<td>BEng in Civil and Structural Engineering</td>
<td>2AL (Pure Mathematics + Physics or Engineering Science)</td>
</tr>
<tr>
<td></td>
<td>+ 2AS</td>
</tr>
<tr>
<td></td>
<td>OR 3AL (Pure Mathematics + Physics or Engineering Science + one other subject)</td>
</tr>
<tr>
<td>BEng in Computer Engineering</td>
<td>2AL (Pure Mathematics + Physics or Engineering Science)</td>
</tr>
<tr>
<td></td>
<td>+ 2AS</td>
</tr>
<tr>
<td></td>
<td>OR 3AL (Pure Mathematics + Physics or Engineering Science + one other subject)</td>
</tr>
<tr>
<td>BEng in Computer Science</td>
<td>2AL (Pure Mathematics + one other subject)</td>
</tr>
<tr>
<td></td>
<td>+ 2AS</td>
</tr>
<tr>
<td></td>
<td>OR 3AL (Pure Mathematics + two other subjects)</td>
</tr>
<tr>
<td>BEng in Electronic Engineering</td>
<td>2AL (Pure Mathematics + Physics or Engineering Science)</td>
</tr>
<tr>
<td></td>
<td>+ 2AS</td>
</tr>
<tr>
<td></td>
<td>OR 3AL (Pure Mathematics + Physics or Engineering Science + one other subject)</td>
</tr>
</tbody>
</table>

(1) In the case that an applicant obtains a pass in AS Chinese Language and Culture as well as Liberal Studies, the latter may be used to satisfy departmental entrance requirements.
SCHOOL OF ENGINEERING (Continued)

<table>
<thead>
<tr>
<th>Programme</th>
<th>Departmental Entrance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng in Industrial Engineering and Engineering Management</td>
<td>1AL + 2AS (AL/AS subjects must be chosen from Applied Mathematics, Biology, Chemistry, Computer Applications, Design and Technology, Engineering Science, Physics, Pure Mathematics and Mathematics and Statistics) OR 2AL (subjects must be chosen from Applied Mathematics, Biology, Chemistry, Engineering Science, Physics, and Pure Mathematics)</td>
</tr>
<tr>
<td>BEng in Mechanical Engineering</td>
<td>1AL (Pure Mathematics) + 2AS (Physics + one other subject) OR 2AL (Pure Mathematics + Physics or Engineering Science)</td>
</tr>
</tbody>
</table>

SCHOOL OF BUSINESS AND MANAGEMENT

<table>
<thead>
<tr>
<th>Programme</th>
<th>Departmental Entrance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA programmes and BSc in Economics</td>
<td>No additional requirements other than the general requirements of the University.</td>
</tr>
</tbody>
</table>

Requirements for Mature Applicants

Applicants who do not satisfy the general or departmental entrance requirements of the University but are aged 25 or over by the first day of the academic year to which admission is sought may be granted exemption from the entrance requirements of the University provided they can demonstrate aptitude and suitability for admission to a particular programme of study.
III. APPLICATION AND SELECTION PROCEDURES

Students may enter the University through two routes. Applicants who are seeking admission on the strength of their Hong Kong Advanced Level Examination results should apply via JUPAS, as described below. All others, including applicants currently enrolled in full-time or sandwich degree programmes in one of the UGC-funded institutions, enter by direct admission.

In September of 1996 the University will admit students to the following undergraduate programmes:

<table>
<thead>
<tr>
<th>Full Title of Programme</th>
<th>Abbreviated Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School of Science</strong></td>
<td></td>
</tr>
<tr>
<td>BSc Biochemistry</td>
<td>BICH</td>
</tr>
<tr>
<td>BSc Biology</td>
<td>BIOL</td>
</tr>
<tr>
<td>BSc Chemistry</td>
<td>CHEM</td>
</tr>
<tr>
<td>BSc Mathematics</td>
<td>MATH</td>
</tr>
<tr>
<td>BSc Physics</td>
<td>PHYS</td>
</tr>
<tr>
<td>BSc Applied Physics</td>
<td>APHY</td>
</tr>
<tr>
<td><strong>School of Engineering</strong></td>
<td></td>
</tr>
<tr>
<td>BEng Chemical Engineering</td>
<td>CENG</td>
</tr>
<tr>
<td>BEng Civil and Structural Engineering</td>
<td>CIVL</td>
</tr>
<tr>
<td>BEng Computer Engineering</td>
<td>CPEG</td>
</tr>
<tr>
<td>BEng Computer Science</td>
<td>COMP</td>
</tr>
<tr>
<td>BEng Electronic Engineering</td>
<td>ELEC</td>
</tr>
<tr>
<td>BEng Industrial Engineering and</td>
<td>IEEM</td>
</tr>
<tr>
<td>Engineering Management</td>
<td></td>
</tr>
<tr>
<td>BEng Mechanical Engineering</td>
<td>MECH</td>
</tr>
<tr>
<td><strong>School of Business and Management</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Business Administration/</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>BBA/BSc</td>
</tr>
<tr>
<td>Degrees offered:</td>
<td></td>
</tr>
<tr>
<td>BBA Accounting</td>
<td></td>
</tr>
<tr>
<td>BBA or BSc Economics</td>
<td></td>
</tr>
<tr>
<td>BBA Finance</td>
<td></td>
</tr>
<tr>
<td>BBA Information and Systems Management</td>
<td>(Information Systems Stream or Management Operations Stream)</td>
</tr>
<tr>
<td>BBA Management of Organisations</td>
<td></td>
</tr>
<tr>
<td>BBA Marketing</td>
<td></td>
</tr>
</tbody>
</table>

All programmes are of three years' duration and involve full-time study at the University.

Degree Titles

Undergraduate programmes in the School of Science lead to the degree of Bachelor of Science (BSc).

Undergraduate programmes in the School of Engineering lead to the degree of Bachelor of Engineering (BEng).

Undergraduate programmes in the School of Business and Management lead to the degree of Bachelor of Business Administration - (BBA), or Bachelor of Science (BSc).

Application for Admission in 1996 Through JUPAS

The *Joint University Programmes Admissions System*(JUPAS) was introduced in the autumn of 1990. This system enables applicants to apply on the strength of their HKALE results for admission to the undergraduate programmes of the following institutions:

- City University of Hong Kong
- Hong Kong Baptist University
- Hong Kong Polytechnic University
- Lingnan College
- The Chinese University of Hong Kong
- The Hong Kong University of Science and Technology
- The University of Hong Kong

For 1996 admission through JUPAS, the JUPAS Office will, in September 1995, provide the secondary schools of Hong Kong with the appropriate application forms, copies of the JUPAS Guide and the prospectuses of the seven participating institutions. The JUPAS Guide contains detailed information on application and selection procedures and a list of programmes offered by individual institutions. It is essential that applicants study the JUPAS Guide and the prospectuses of the various institutions carefully before completing the application form. A fee of HK$350 is charged for each 1996-97 application made through JUPAS, collected by the JUPAS Office on behalf of the participating institutions.
APPLICATION AND SELECTION PROCEDURES

Timetable of the JUPAS 1996 Exercise

For reference, the following are important dates for the process of 1996 admission, although JUPAS may make adjustments to the timetable.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 December 1995</td>
<td>Closing date for applications for admission</td>
</tr>
<tr>
<td>3 January 1996</td>
<td>All applicants receive application checklists of personal data and choices of study programmes</td>
</tr>
<tr>
<td>18 January 1996</td>
<td>Final date for applicants to report errors, if any, in application checklists to the JUPAS Office</td>
</tr>
<tr>
<td>February 1996 Onwards</td>
<td>Interviews, mass sessions and tests, where appropriate</td>
</tr>
<tr>
<td>31 May 1996</td>
<td>Final date for applicants to request IN PERSON changes of their choices of study programmes to the JUPAS Office</td>
</tr>
<tr>
<td>Mid July 1996*</td>
<td>Announcement of HKALE results</td>
</tr>
<tr>
<td>12 August 1996*</td>
<td>Publication of results of the main round offer</td>
</tr>
<tr>
<td>13 - 15 August 1996*</td>
<td>Applicants to reply IN PERSON to offers in the main round to the institutions concerned</td>
</tr>
<tr>
<td>15 August 1996*</td>
<td>Notification of HKALE appeal results to applicants</td>
</tr>
<tr>
<td>15 - 17 August 1996*</td>
<td>Applicants with revised HKALE results after appeal to apply to the JUPAS Office IN PERSON if they wish to be reconsidered for offers/&quot;better offers&quot;</td>
</tr>
<tr>
<td>Mid August to September 1996</td>
<td>Subsequent rounds of selection by individual institutions, if vacancies are still available. Applicants, if selected, receive notifications direct from the institutions concerned</td>
</tr>
</tbody>
</table>

* Subject to changes

Application for Direct Admission in 1996

Applicants who are applying for admission on the basis of qualifications other than HKALE results, including applicants from overseas, should apply to the University for direct admission. Applicants who are currently enrolled as full-time or sandwich degree students in any of the seven JUPAS participating institutions should also apply through this route even if they are applying on the strength of their current and/or past HKALE results. However, in accordance with guidelines on the inter-institutional transfer of students, applicants wishing to transfer from the first year of a full-time degree programme to the first year of the same or similar discipline/study area at HKUST will be considered only in very exceptional cases.

Copies of the Undergraduate Prospectus and application forms for entry in September 1996 will be available from 2 October 1995 at:

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

Applicants for 1996-97 entry are required to pay an application fee of HK$120 using the pay-in-slip provided by the University. The completed application form should be returned to the University at the above address by 31 December 1995 together with a copy of the bank pay-in slip.

Applicants may select up to three degree programmes, to be listed in the order of their preference. Subsequent changes are not normally permitted.

Admission with Advanced Standing

Applicants from universities, polytechnics or other post-secondary institutions who have completed/are studying curriculum relevant to the programme(s) for which they are applying may choose to be admitted with advanced standing. However, applications for direct entry to the second year or later will be assessed on a case-by-case basis.

The amount of advanced credits to be granted will be determined by the major department on review of past academic records and the level of equivalence to HKUST courses required, and within the following guidelines:

(a) a minimum of one year full-time study at HKUST is required before the student is considered for award of the degree; and
(b) a minimum of 35 HKUST credits are required for graduation.

Advanced credits granted will not be included in the calculation of grade averages.
Selection Procedures

As stated earlier in this Prospectus, and it is worth repeating, the University seeks highly qualified and motivated young men and women with wide interests who have received a well-rounded secondary education; they should be active participants rather than spectators in diverse activities. They should possess great potential in addition to having achieved good grades.

To meet these aims the University will rely heavily on the information contained in the school principal's or academic referee's report and on the information provided by the applicant in the application form.

The JUPAS procedure is described in a previous section (page 15). For direct applications to the University, after a careful scrutiny of the application forms and reports, arrangements will be made for selected applicants to be interviewed between 1 March 1996 and 30 April 1996. However, not all applicants will be interviewed. The fact that some applicants may not be called for an interview does not mean that they are not being considered for admission. Firm offers and some conditional offers will be made to successful applicants. The conditional offers will specify the requirements that will need to be met to gain admission to the chosen programmes of study. Other selected applicants will be placed on a reserve list and will be reconsidered when the HKALE or other examination results are published.

Successful Applicants

Successful applicants are likely to be those who have strong support from their school principals or academic referees, have gained high examination marks over a number of years and over a wide range of subjects, and have been actively involved in extra-curricular activities.

Students from Overseas

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

Details of the application procedures are given in the section "Application for Direct Admission in 1996". However, because of differences between the educational system in Hong Kong and those in other countries, students eligible to enter undergraduate programmes in their own countries may find that their qualifications are not necessarily recognised for entry to the first year at HKUST. Prospective overseas undergraduate students should first write to the Director of Admissions, Registration and Records, providing full details of their educational qualifications so that an initial assessment may be made as to their entry qualifications.

If that assessment indicates that the requirements may be met, the appropriate application forms will be sent to the prospective students. These should be returned to the Admissions, Registration and Records Office together with a bank draft to cover the application fee of HK$120 (US$16.00). At that point the formal selection process will begin.

Certified true copies of all degrees, diplomas, certificates and other qualifications held should be submitted with the application form. Applicants accepted for admission will be required to produce the original documents on arrival at the University.

Overseas students should carefully consider the financial aspects of their studies in Hong Kong before applying for admission. The provisional tuition fee for 1996-97 will amount to $37,600 per annum and accommodation in on-campus undergraduate halls will involve approximately $7,200 per residential year (280 days). In addition monies will be needed for subsistence, text-books, local travel, sports equipment, clothing, and other personal needs. A total of at least HK$78,000 per academic year (9 months) is likely to be required for undergraduate 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, Immigration Tower, 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 and aged over 21, to whom they are known personally.
Visiting Overseas Students

Students from overseas institutions who wish to study at the University on a short-term basis, i.e., minimum of one semester and a maximum of two, may apply for admission to the University as visiting overseas students. The application fee for 1996-97 is HK$120. Visiting overseas students may take courses but are not enrolled on specific programmes of the University. Details on the application procedures for visiting overseas students can be obtained from the Admissions, Registration and Records Office.

Double Registration

Students admitted to a full-time programme of study at this University will be expected to study full-time for their degrees. They will not be permitted to register for another qualification at this University or at another tertiary institution unless they have obtained prior permission, in writing, from the Director of Admissions, Registration and Records. Students should note that student enrolment lists will be compared with those of other tertiary 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.

Admission Enquiries

Students requiring copies of the undergraduate prospectus, application forms, advice or assistance on application procedures, choice of programmes, entrance requirements or other related matters are welcome to visit, phone or write to the Admissions, Registration and Records Office (Room 1376), which is open Mondays to Fridays from 9 am to 12:30 pm and 2 pm to 5 pm, and on Saturdays from 9 am to 12 noon.

All enquiries should indicate the degree programme(s) of interest and be addressed to:

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

Telephone: (852) 2358 6622
Facsimile: (852) 2358 0769
IV. THE SCHOOL OF SCIENCE

Degree offered: Bachelor of Science (BSc) with Honours

Science is about creativity and originality, which are extremely difficult, if not impossible, to teach. The School of Science nurtures an environment that is conducive to independent, critical and original thinking.

The School of Science, which comprises five Departments, namely, Biochemistry, Biology, Chemistry, Mathematics, and Physics, enrolls about 23% of the University's undergraduates and postgraduates.

The School offers a whole spectrum of programmes in biological science, physical science and mathematical science, leading to the degree of Bachelor of Science. In response to the needs of Hong Kong and consistent with the special mission of HKUST, the Departments in the School emphasise scientific studies in areas of technological importance.

The University curriculum is founded on a credit-based system, and all undergraduate degrees are honours degrees. The undergraduate curricula in the School of Science are broad-based, and all students are required to take courses in the other three Schools: School of Engineering, School of Humanities and Social Science, and School of Business and Management, in addition to a concentration of specialist courses in their own disciplines.

Selection Criteria

Selection for admission to the University and the School is not based solely on the results of a single examination. Results of the HKALE and HKCEE are assessed together with other criteria such as progress and breadth of subjects taken throughout secondary school and participation in extra-curricular activities. Reports and recommendations from school principals and teachers are critically evaluated.

For overseas and other applicants who have not participated in Hong Kong public examinations, other equivalent examinations and/or academic qualifications are considered.

Biochemistry is the study of biological molecules such as proteins, nucleic acids and lipids, which form the morphological structures represented by the cell and cellular organelles, provide machinery for the inheritance and expression of genetic information, and energise catalytic transformations essential to cellular growth and reproduction. The study of the nature of these molecules and their reactions has brought about rapid advances in the biological and medical sciences, and has furthermore enabled the development of biotechnological industries that are playing an increasingly important role in the global economy.

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects plus one AL/AS subject. One of the AL subjects must be Chemistry, and one of the remaining AL/AS subjects must be Biology.

Candidates applying on the basis of other qualifications will also be expected to have achieved acceptable grades in examinations taken.
DEGREE STRUCTURE

The objectives of the Bachelor of Science programme are to introduce students to the basic concepts of biochemical molecules and processes, and to provide training in the methodologies used in laboratory investigations. Accordingly, the programme will emphasise both theory and experimentation.

In addition to basic chemistry and biology classes, first-year students will be introduced to the concepts of molecular biology; molecular structure and metabolism in topics such as nucleic acid structure and enzymology; DNA replication and transcription; protein structure; enzyme kinetics; and the chemistry and metabolism of carbohydrates, lipids and amino acids.

Second-year courses will include genetic engineering and protein biochemistry. In the final year, in addition to lecture courses, students may choose to conduct specialised research in a major area under the supervision of academic advisors or to participate in a seminar programme examining the current status of various areas of biotechnological development.

Practical laboratory classes corresponding to the lecture sessions will be required throughout the three years of study.

The Department of Biology

Degree offered: BSc in Biology

The study of biology covers a wide range of systems at all levels of organisation, ranging from molecules and cells to organisms and populations in both plants and animals. At HKUST, the biological teaching and research programmes reflect all levels, with emphasis on the molecular and cellular levels. Research areas within the Department include molecular biology and genetics, cell and developmental biology, plant and animal physiology, neurobiology, marine biology and environmental biology. The Department also contributes to the research and development programmes of the Biotechnology Research Institute and the Institute for Environmental Studies.

The Department of Biology is equipped with modern teaching facilities and state-of-the-art research instruments, including facilities for cell culture and hybridoma, molecular and cell biology, and modern microscopy as well as animal care and plant growth facilities. Also, faculty and students may utilise the extensive central facilities and computer network on-campus.

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects plus one AL/AS subject. One of the AL subjects must be Biology, and one of the remaining AL/AS subjects must be Chemistry.

Other candidates with equivalent qualifications may also apply.

DEGREE STRUCTURE

The three-year undergraduate programme leading to the Bachelor of Science degree provides basic training in the biological sciences through course work and laboratory studies. During the first two years of study, students take a set of core subjects in biology and biochemistry. Laboratory work associated with the core and some of the elective subjects is also required. In their second and third years of study, students may take a series of electives specialising in Cell and Developmental Biology, Molecular Biology and Genetics, Organismal Biology, Neurobiology, and Marine and Environmental Biology. These specialties reflect the current and future needs of Hong Kong and its neighbouring territories. Options for seminar courses that are designed to enhance students' communication skills and research projects to train students in laboratory research are also provided.
The Department of Chemistry

Degree offered: BSc in Chemistry

Chemistry is the science which deals with the composition and properties of substances, and with the reactions by which substances are produced or converted into other substances. It is traditionally divided into four mainstream areas: analytical chemistry, organic chemistry, inorganic chemistry, and physical chemistry. Just as in many other fields of study, the thrusts of advances in chemistry are gradually shifting to interdisciplinary areas, thus creating new opportunities for research and study.

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects (Chemistry, and one of Biology, Physics, Pure Mathematics, or Applied Mathematics) plus one AL/AS subject (Biology, Physics, Pure Mathematics, Applied Mathematics, or Mathematics and Statistics).

Candidates applying on the basis of other qualifications will also be expected to have achieved acceptable grades in examinations taken.

DEGREE STRUCTURE

The three-year programme leading to the Bachelor of Science degree is designed to provide students with a strong theoretical and practical foundation in the four mainstream areas of chemistry: analytical, organic, inorganic, and physical. Introductory courses in these areas are required of all first-degree students throughout the three years.

Students may choose a general programme tailored to their individual interests, or may specialise in one area by taking additional advanced course work and participating in approved research projects. Though this is not required for graduation, students with good records are encouraged to complete a research project under the supervision of individual academic advisors.

The Department of Mathematics

Degree offered: BSc in Mathematics

There are four options within the first-degree programmes of the Department of Mathematics: Pure Mathematics, Mathematical Sciences, Scientific Computation and Statistics. All courses of study lead to the Bachelor of Science degree in Mathematics.

Generally speaking, students in the Pure Mathematics option are interested mainly in the mathematical content of the subject matter, while students of Mathematical Sciences are more interested in the scientific content of the subject. The Mathematical Sciences option includes multidisciplinary study undertaken in conjunction with other departments of the University. The Scientific Computation option is interdisciplinary and emphasises the study of large scale computational algorithms that are reliable, accurate and economical, for the solution of complex problems in science and technology. The general theme of the Statistics option is to provide students with statistical knowledge, helping them to develop problem-solving skills for real-life situations. In both the design of interdisciplinary undergraduate programmes and in research, the Department of Mathematics collaborates closely with many departments in the University, the collaboration projects being always based on the interests of students and academic staff.
ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in AL Pure Mathematics plus one AL subject or two AS subjects.

Candidates applying on the basis of other qualifications will also be expected to have achieved acceptable grades in examinations taken.

DEGREE STRUCTURE

Rigorous course structures have been designed for the options in Pure Mathematics, Scientific Computation, Statistics and various areas of study in Mathematical Sciences. Students in all options take multivariable calculus, linear algebra and introduction to analysis in the first year.

Students in the Pure Mathematics option will specialise in three areas of study, namely three courses in analysis, two courses in algebra and two courses in geometry or topology. They will also study selected subjects in physical sciences and engineering. Students choosing options other than Pure Mathematics need to take two more courses in pure mathematics at a more advanced level.

Students in the Scientific Computation option are required to undertake a nine-credit project in the third year of study, besides other courses related to scientific computation.

Students in the Statistics option are required to study courses in probability, statistics and stochastic modelling and selected subjects in application discipline.

Three areas of study (physical and engineering science, computer science, and business and management) have been designed for the Mathematical Sciences option. In each area of study, recommended specific areas of concentration have been designed as follows:

i) Physical and Engineering Science
   Physics; Applied Mechanics; Control Systems; Signal Processing and Communication; Electromagnetics; Industrial Engineering

DEPARTMENT OF PHYSICS

ii) Computer Science
   Artificial Intelligence; Computer Systems; Data and Knowledge Base Management

iii) Business and Management
   Accounting; Business Information Systems; Economics; Finance; Management Operations; Organisation & Management; Marketing

A detailed description of these areas of concentration is available from the Department.

The Department of Physics

Degrees offered: BSc in Physics
   BSc in Applied Physics

Physics is the science that deals at the most fundamental level with matter and energy, their interactions, and their transformation. Thus, it provides the foundation for many other sciences and for engineering, in which the scientific principles and laws are applied to the development of practical problems and devices.

The programmes in the Department of Physics emphasise the study of basic laws and principles as well as practical problem solving. Students are given opportunities to engage in interdisciplinary activities in collaboration with other departments.
ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in AL Physics or Engineering Science plus one other AL subject or two AS subjects; or one AL subject plus two AS subjects (one of the subjects must be AS Physics and one other must be chosen from AL Pure Mathematics, AL/AS Applied Mathematics, and AS Mathematics and Statistics).

Candidates applying on the basis of other qualifications will also be expected to have achieved acceptable grades in examinations taken.

DEGREE STRUCTURE

The BSc programme in Physics provides a general education for students. The programme is very flexible and students can have choices of courses to broaden their scope of learning, and to tailor a programme to be a minor in another field. Students graduated in this programme could embark on a science or non-science related career, such as teaching in secondary schools, working in the technology sector or business and management sector, or pursuing further studies in physics or other fields.

The BSc programme in Applied Physics is intended for students with interest in the more applied areas of physics. Upon graduation, they may find employment in technical fields or pursue postgraduate studies. The programme offers training in the technologically demanding fields of scientific computation, lasers and optics, and materials. It also offers some flexibility with many elective courses.
V. THE SCHOOL OF ENGINEERING

Degree offered: Bachelor of Engineering (BEng) with Honours

The School of Engineering is the largest of the four Schools. When fully established, it will enrol 40% of the University's undergraduates and approximately 35% of the postgraduates. The School comprises six departments: Chemical Engineering, Civil and Structural Engineering, Computer Science, Electrical and Electronic Engineering, Industrial Engineering and Engineering Management, and Mechanical Engineering. In addition, the School offers a degree programme in Computer Engineering managed jointly by the Computer Science and Electrical and Electronic Engineering Departments.

All departments offer first-degree programmes leading to the BEng degree, and postgraduate studies leading to the master's and doctoral degrees. Undergraduate teaching in the School of Engineering is based on fundamentals in science and mathematics with strong emphasis on laboratory skills and design techniques. In addition, most undergraduate students are required to attend industrial training in an approved training centre. Practical hands-on experience gained from industrial training in an industrial-like environment is necessary for professional engineering certification. Instruction and research in all disciplines is supported by the University's state-of-the-art laboratories, computing facilities and the Library as well as the central facilities including the Mechanical Workshop, Glass Blowing Shop, CAD/CAM Centre, Centre for Advanced Engineering Materials, Microelectronics Fabrication Centre, and Materials Characterisation and Preparation Centre.

In keeping with the University's philosophy of providing professional training with a generalist outlook, engineering undergraduates take no more than two-thirds of their credits within the School of Engineering. All students are required to take at least 12 credits in the School of Humanities and Social Science, 6 credits in the School of Science, and 6 credits in the School of Business and Management. The remaining credits are spread over courses offered by departments other than the student's major department.

Selection Criteria

Selection for admission to the University and the School of Engineering is not based solely on the results of a single examination. Applicants are evaluated on a variety of characteristics. In addition to HKCEE and HKALE results, the University relies on recommendations and reports from school principals or academic referees. Applicants' progress and breadth of subjects taken throughout secondary school, and participation in extra-curricular activities are also considered.

For applicants who have not participated in Hong Kong public examinations, other equivalent examinations and/or academic qualifications are considered.

Interviews and Tests

Applicants may be requested to attend personal interviews and/or take additional tests to be administered by the University. Interviews are designed for the purpose of providing further assessment of information related to the applicant's motivation, aptitude and overall suitability for the chosen field of study.

The Department of Chemical Engineering

Degree offered: BEng in Chemical Engineering

Chemical engineering is a discipline in which the principles of mathematics, physical and natural sciences are used to solve problems in chemical systems. Chemical engineers design, develop, and optimise processes or plants, operate them, manage the individuals and capital which make them possible, and do the necessary research for new developments. These skills are critically needed in a broad range of industries, ranging from the traditional areas of petroleum refining and chemical processing to the increasingly important areas of environment, biotechnology, and microelectronics. In order to prepare the students for such a diversity of opportunities, the programme in the Department strongly emphasises the skills to solve problems, to do experimental work, and to communicate technical information effectively. The latest problem-solving tools and experimental apparatus are used to educate students to assume a leadership role in the rapidly changing technological world.
ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects and one AS subject; or three AL subjects. The AL and AS subjects should be chosen from Applied Mathematics, Biology, Chemistry, Engineering Science, Physics, Pure Mathematics, and Mathematics and Statistics.

Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

DEGREE STRUCTURE

The core of the curriculum is a series of required chemical engineering courses which cover the fundamental principles of the discipline. These courses include material and energy balances, thermodynamics, transport processes, separation processes, reactor design, and process engineering. By taking elective courses, students can build upon this foundation a specialised area of expertise. They can choose from several areas which coincide with the research strengths of the Department in advanced materials, bioprocess engineering, environmental engineering, mathematical modelling, and computer applications. Students will in their final year be required to submit a design of a chemical or biochemical process. Students, working in small teams under supervision, will be expected to exercise creative and critical powers by requiring choices and decisions to be made in areas of uncertainty.

Other than the general University requirements, the curriculum also contains science and engineering courses and humanities and social sciences electives outside of the Department.

The Department of Civil and Structural Engineering

Degree offered: BEng in Civil and Structural Engineering

Civil and structural engineering is a broad-based discipline which provides the knowledge and technical skills to solve problems related to the creation and advancement of civilisation. Civil and structural engineers are primarily responsible for the planning, design and construction of what is commonly referred to as the infrastructure of society. This includes the development, utilisation, and control of resources for the benefit of mankind. Participating in the rapid changes in the practice of the profession, the civil and structural engineering programme at HKUST emphasises the teaching of fundamental knowledge and basic technical and human skills to prepare students to meet the challenges in the development of a modern society. In particular, the programme is aimed at familiarising students with the broad and interdisciplinary nature of the profession, and its role in, and responsibility to, society.

In Hong Kong, as in many other parts of the world, the 1990's is the decade of environmental awareness and rapid development and modernisation of infrastructure. The PADS Projects to be designed for and constructed in Hong Kong present an enormous challenge to the ingenuity and creativity of civil and structural engineers. The Department, through teaching and research, is committed to motivate and equip students with superior technical competence, managerial skills and leadership quality to fulfil the present and future needs of Hong Kong.

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects (Pure Mathematics plus Physics or Engineering Science) and two AS subjects; or three AL subjects (Pure Mathematics, plus Physics or Engineering Science, and one other AL subject).

Candidates applying on the basis of other qualifications should demonstrate acceptably high grades in the equivalent subjects in examinations taken.
DEGREE STRUCTURE

Due to the broad-based nature of the discipline as well as the general practice of the profession, all undergraduate students in this programme are required to take at least 18 credits in humanities and social sciences as well as business and management, in addition to the comprehensive basic subjects covering the areas of construction engineering, environmental engineering, geotechnical engineering, structural engineering, transportation engineering, and water resources engineering. Upon completion of the first two years of his/her study, the student would normally elect to focus his or her study on one of the main areas of concentration by taking core and elective subjects containing comprehensive planning and design elements in that area. In special circumstances, students may choose to remain in a general programme with a course of study tailored to their own interests.

Because of the importance of computer use in modern engineering practice, all students in civil and structural engineering must, in the course of the three-year programme, take at least one comprehensive class in computer analysis. Each student is required to complete a major final-year project and submit a written report under the supervision of an academic advisor.

The Department of Computer Science

Degree offered: BEng in Computer Science

Computer science is the study of the structure, function and applications of computer systems. The Computer Science programmes include such topics as computer architecture, communications and networks, operating systems, programming languages and compilers, database systems, human interface, design and analysis of algorithms, and artificial intelligence.

The Department of Electrical and Electronic Engineering

Degree offered: BEng in Electronic Engineering

Electrical and electronic engineers utilise theories of electricity, electromagnetism, circuits and electronics to analyse and design devices or systems that generate or use electricity. In performing their jobs, electrical and electronic engineers today rely not only on physical principles but also on sophisticated engineering tools such as computer-aided design tools and sophisticated signal generation, test and measurement equipment. The programme in the Department emphasises electronics, signal processing, communication and microprocessor systems. The curriculum is designed to equip students with solid skills in fundamental principles and conceptualisation of the subject and to give good exposure to state-of-the-art CAD and CAE tools.

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects (including Pure Mathematics) and two AS subjects; or three AL subjects including Pure Mathematics.

Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

DEGREE STRUCTURE

All Engineering undergraduates are required to take a series of courses which provide them with basic engineering theories, concepts, and practices. Classes in the basic sciences and mathematics also form part of the curriculum. Introductions to the theory, architecture, and applications of computers are taught in the second year. In the third year, students may specialise in one of the major concentrations such as artificial intelligence, computer engineering, data and knowledge management, foundations of computer science and software technology. Alternatively, students may choose to remain in the general programme with a study plan tailored to their own interests.

A final-year project is required for graduation, under the supervision of an academic advisor.
ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects (Pure Mathematics plus Physics or Engineering Science) and two AS subjects; or three AL subjects (Pure Mathematics, plus Physics or Engineering Science, and one other AL subject).

Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

DEGREE STRUCTURE

The undergraduate programme offered by the Department of Electrical and Electronic Engineering is so structured that the student will complete the Electrical and Electronic Engineering Core Courses as well as basic mathematics, language and humanities and social science requirements during the first two years of study. The Electrical and Electronic Engineering Core Courses equip students with the basics of modern Electrical and Electronic Engineering and prepare the students for more advanced and specialised EEE elective courses during the second year of study. During the third and final year of study, each student is required to do a senior project. Students should choose an EEE faculty member appropriate to their field of interest to be their project advisor. The project advisor will help the students to define the scope of their project. The students are responsible for carrying out their project and the advisors are responsible for providing regular advice. The project advisor will work with the Department to ensure that departmental resources are available for the conduct of the project. At the end of the year, the students are responsible for the documentation and presentation of their projects.

DEPARTMENT OF INDUSTRIAL ENGINEERING AND ENGINEERING MANAGEMENT

After three semesters of study, students may specialise in a major subject area through the selection of EEE elective courses. Possible majors include analog and digital electronics, integrated circuit design, solid-state devices, telecommunication and computer networks, digital signal processing, image and video processing, robotic and control.

The Department of Industrial Engineering and Engineering Management

Degree offered: BEng in Industrial Engineering and Engineering Management

Industrial Engineering and Engineering Management is a discipline to effectively optimise resources in an organisation for continuous improvement. The degree is primarily designed to prepare students to become efficiency experts, operations managers, manufacturing engineers, technical managers and ergonomists. The primary goal of the discipline is to bring harmony between people, systems, products, and services. The programme emphasis is on design and process methodologies to meet the continuous challenges of industry while improving productivity, quality, and human well-being. Graduates of the Department are trained on state-of-the-art tools and technology to effectively perform most technical and managerial tasks in manufacturing and service industries.

Traditionally, industrial engineers and engineering managers find employment in public or private sectors of manufacturing or service industries while pursuing careers in either technical or managerial positions.
ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:


Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

DEGREE STRUCTURE

The BEng in Industrial Engineering and Engineering Management is a three-year programme to prepare students both for professional practice and for postgraduate studies. The first three semesters emphasise broad-based knowledge with courses mostly from computer science, electronic engineering, mathematics, and management. From the third semester onwards, students can build up a solid foundation on industrial engineering and management with core courses of the discipline. In their final year, students have more freedom in selecting industrial engineering and management courses; together with their final-year projects, students can specialise in one or two areas among engineering management, human factors engineering, manufacturing systems, and operations research.

The Department of Mechanical Engineering

Degree offered: BEng in Mechanical Engineering

Mechanical engineering is a broad-based discipline which applies technical skills to solving engineering problems and to creating and operating mechanical and thermal devices and systems. The undergraduate programme attempts to imbue students with the broad intellectual tools and skills which are essential for professional practice as well as for continuing study in all engineering specialties. The programme emphasises a sound understanding of fundamental principles and the behaviour of engineering systems. It trains students in experimental, computational, and analytical methods and exposes them to state-of-the-art design and technology. More importantly, the programme develops a student's self-confidence, ability of observation, analysis, decision-making, and habit of perseverance. It also teaches students the importance of continued learning and team work, and the power of a thorough and systematic approach to problem solving.

DEPARTMENT OF MECHANICAL ENGINEERING

ADMISSION REQUIREMENTS

In addition to the general entrance requirements of the University, applicants are required to satisfy the following departmental entrance requirements:

Acceptable grades in two AL subjects (Pure Mathematics, plus Physics or Engineering Science); or AL Pure Mathematics, AS Physics and one other AS subject.

Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

DEGREE STRUCTURE

The three-year Bachelor of Engineering programme in Mechanical Engineering consists of three stages. The first stage concentrates on the fundamentals of mechanical engineering in solid mechanics, dynamics, thermodynamics, fluid mechanics, heat transfer, and properties of materials. The second stage consists of integration of engineering sciences with laboratory, design, and manufacturing process. The third stage consists of electives focusing on specific professional concentrations which include: design of mechanical and thermal devices and systems, environmental studies, materials engineering, and mechatronics.
Because of the importance of electronics and computers to all future mechanical systems, all mechanical engineering students are required to take courses in electronics, microprocessor architecture, and computing.

A general programme is also available for those who elect not to specialise.

**BEng in Computer Engineering : A Joint Degree Programme**

The Bachelor of Engineering in Computer Engineering is a programme jointly administered by the Department of Computer Science and the Department of Electrical and Electronic Engineering. Computer Engineering is concerned with the design, analysis and implementation of computer systems. With the rapid advancement of microprocessors and networking technologies, numerous applications arise which require the use of computers. Design must take into consideration the requirements imposed on the system and the technology available for the implementation, while analysis is important in verifying that the requirements are met in detail. There is a need worldwide for people with skills in computer hardware and software as well as the related technologies with which to solve problems in existing applications and to develop new applications. The BEng programme in Computer Engineering is designed to prepare the students for this challenge!

**ADMISSION REQUIREMENTS**

In addition to the general entrance requirements of the University, applicants are required to satisfy the following programme entrance requirements:

Acceptable grades in two AL subjects (Pure Mathematics plus Physics or Engineering Science) and two AS subjects; or three AL subjects (Pure Mathematics, plus Physics or Engineering Science and one other AL subject).

Candidates applying on the basis of other qualifications should demonstrate acceptable grades in the equivalent subjects in examinations taken.

**DEGREE STRUCTURE**

First-year students take introductory Computer Science and Electronic Engineering courses in subjects such as computer programming, software tools, data structures and algorithms, electronics, circuit theory, and semiconductor devices. In addition to engineering courses, basic mathematics and language courses are taken during the first year. In the second year, required courses in computer organisation, programming languages and compilers, digital circuits and systems, principles of systems software, microprocessors and applications, and design and analysis of algorithms provide the students with fundamental knowledge of software and hardware aspects of Computer Engineering. In the final year, students may use technical electives to select approved courses from Computer Science and Electrical and Electronic Engineering to pursue more specialised subjects based on their interests. Each student is required to complete a final-year project under the supervision of an academic advisor from either the Department of Computer Science or the Department of Electrical and Electronic Engineering.
VI. THE SCHOOL OF BUSINESS AND MANAGEMENT

Degrees offered:
Bachelor of Business Administration (BBA) with Honours
Bachelor of Science (BSc) with Honours

The School of Business and Management comprises six Departments: Accounting, Economics, Finance, Information and Systems Management, Management of Organisations, and Marketing. When fully established, the School will enrol about 40% of the University's undergraduate students and approximately 30% of its postgraduate students.

All departments offer first-degree programmes as well as postgraduate degrees through the doctorate level.

In keeping with the University's philosophy of providing specialised training with a generalist outlook, all undergraduates take no more than two-thirds of their credits in their chosen School. All students are required to take at least 12 credits of their courses in the School of Humanities and Social Science. The remaining credits are spread over courses offered by departments in other Schools.

All students are registered in one of the departments although there are no first-degree "majors" in the traditional sense. Rather, every student, building on a strong broad-based foundation, chooses an area of concentration in which particular skills are acquired. Thus, graduates are able to enter the job market with sufficient flexibility and adaptability for future career growth. Currently, areas of concentration are being offered individually by the departments in the School. Multi-departmental concentrations are being planned and are likely to be offered in the future.

Strong emphasis is placed on the scientific and analytical methods as the fundamental pedagogical approach, supplemented by the use of case studies appropriate to Hong Kong and its region. All programmes take full advantage of the University's state-of-the-art technological facilities and capabilities in their instruction and research.

International Co-operation

The global perspective of the School of Business and Management sets it apart from competing programmes, while its Asia-Pacific focus enhances the
programme's significance in this growing region. The School of Business and Management was founded in co-operation with the Anderson Graduate School of Management of the University of California Los-Angeles (UCLA). Senior administrators and faculty members have been seconded from UCLA to advise on curriculum, to recruit, teach, and conduct research, and to offer joint executive education programmes.

In addition to the partnership with UCLA, co-operation is being established with universities in the United States, Canada and the United Kingdom. Already established for MBA students are student exchange programmes with: UCLA, UC Irvine, UC Berkeley, University of Washington, University of Southern California, University of Maryland, University of Florida, Northwestern University, University of British Columbia, and University of Toronto.

Exchange programmes at the undergraduate level have been established with top business schools around the world, including those at the University of Maryland, University of Southern California, University of Toronto, the Wharton School of the University of Pennsylvania, the University of Notre Dame, Boston College, the University of British Columbia and Yonsei University of Korea.

The School of Business and Management is thus very international in all its teaching, research, and service functions. It is mandated to become a leading business school in Asia within the University's first decade of existence.

Selection Criteria

Selection for admission to the University and the School is competitive but not based solely on the results of particular examinations. While results of the HKALE and HKCEE are important, applicants are judged on a variety of characteristics. Among these are: reports and recommendations from school principals or academic referees, depth and breadth of subjects taken throughout secondary school, and participation in extra-curricular activities. For overseas and other applicants who have credentials other than those from Hong Kong public examinations, other equivalent examinations and/or academic qualifications are considered.

Students from the arts, science and commerce streams are suitable for all of the concentrations offered.

Admission Requirements

The School has no additional minimum requirements beyond the General Entrance Requirements of the University stipulated on page 8 of the Prospectus.

Candidates applying on the basis of other qualifications will also be expected to have achieved acceptable grades in examinations taken.

Interviews and Tests

Applicants may be requested to attend interviews and/or take additional tests to be administered by the University. Interviews are designed for the purpose of providing further assessment information on the applicant's motivation, aptitude and overall suitability for the chosen field of study.

Degree Structure

Upon admission, students choose to study in one of the following areas of concentration:

- Accounting
- Economics
- Finance
- Information and Systems Management
- Management of Organisations
- Marketing

However, they are required to complete a common core of foundation subjects in the School. These include:

- Financial Accounting
- Managerial Accounting
- Microeconomics
- Macroeconomics
- Business Statistics
- Introduction to Information Systems
- Financial Management
- Organisational Behaviour
- Marketing Management
Students also have opportunities to change their areas of concentration during their course of study.

**The Department of Accounting**

Degree offered: BBA in Accounting

Accounting is fundamental to all business undertakings and has applications in many areas of business and management. Courses offered by the Department focus on concepts and theories, as well as quantitative and communication skills, providing students with a solid basis by which they can adapt to changing techniques and practices when they enter the professional world.

Students registered in the accounting concentration are able to gain maximum exemption from professional examinations and are well prepared to face professional certification after their graduation.

**The Department of Economics**

Degrees offered: BBA and BSc in Economics

Courses offered by the Department fall into two streams of specialisation: (1) Business Economics and (2) Economic Science. Specialisation in Business Economics would result in a BBA degree whereas specialisation in Economic Science would result in a BSc degree.

The main differences between these two streams are the perspectives from which problems are analysed and the applications they emphasise. In the first stream, the focus is on problems that are closely related to a company’s external economic environment and/or internal operation, and on economic reasoning which can contribute to sound business decision making. In the second stream, the focus is on the scientific basis of economics and on a wide range of economic phenomena, problems, and solutions from the perspective of social scientists and policy makers.

**The Department of Finance**

Degree offered: BBA in Finance

Courses offered by the Department aim at providing students with a working understanding of the financial decision-making process and insights into how financial markets function.

Students interested in this discipline may wish to focus on micro-finance issues, such as corporate finance and investments, or on macro-finance issues, such as financial markets and the international financial system.

**The Department of Information and Systems Management**

Degree offered: BBA in Information and Systems Management

Courses offered by the Department basically fall into two streams of specialisation: (1) Information Systems and (2) Management Operations.

**(1) INFORMATION SYSTEMS**

The vital role information technology plays in today’s business world brings about a growing demand for management-oriented and technically proficient information systems professionals. Courses offered in the IS stream aim to fulfil this demand by providing students with fundamental knowledge in major functional areas of organisation; analytical competence to design, implement and control information systems required by business; as well as skills in computer and telecommunications technologies.

**(2) MANAGEMENT OPERATIONS**

The general theme of the Management Operations stream is the development of problem-solving skills for technical problems which are useful to all managers. Management operations provide the technical skills to break work down into tasks, and evaluate the time and resources needed. This forms the basis for undertaking the work and controlling it to a successful completion. Areas of study include Operations and Technology Management, Management Science, and Statistics.
THE SCHOOL OF BUSINESS AND MANAGEMENT

The Department of Management of Organisations

Degree offered: BBA in Management of Organisations

The responsibility of managers is the effective and efficient management of individuals and groups in business firms, and non-profit organisations. Management of Organisations, therefore, deals with the many aspects of the administration of an organisation such as the formulation of goals including long- and short-term planning; the establishment of decision-making processes; the design of organisational structures, the understanding of human motivations, and the development of human resources. Courses offered cover the following areas of study: Organisational Behaviour, Organisation Theory, Human Resources Management, Strategic Management, and International Management. The programme aims to provide students with the knowledge they will need to become effective managers. They will learn to evaluate current needs of an organisation and to anticipate future needs, as well as acquire practical skills in planning, decision making, and problem solving.

The Department of Marketing

Degree offered: BBA in Marketing

Marketing is an activity that facilitates exchange. As such, the success of an organisation (whether for-profit or not-for-profit) often depends on the effectiveness of its marketing efforts. Therefore, marketing includes strategy decisions about the product or service to offer, advertising and promotional methods for communication, prices to charge, and the distribution system to utilise for delivery. Central to marketing is consumer behaviour (since consumers are why organisations exist) and marketing research (since it provides an informational link between consumers and the decision makers within an organisation).

Courses cover all aspects of marketing and provide students with knowledge of the analytical tools to understand marketing problems and the skills to solve practical problems they will encounter in the profession.

VII. THE SCHOOL OF HUMANITIES AND SOCIAL SCIENCE

Degree offered:

No undergraduate degree is offered in this School.

In addition to the Schools of Science, Engineering, and Business and Management, the University has established a School of Humanities and Social Science. The role of the School is two-fold. First, its course offerings support undergraduate students' main specialisations by illuminating the social, regional and international contexts of science, technology and business enterprise. This is crucial to the education of the region's future leaders and innovators in commerce, industry, the professions and public services. Second, the School offers studies in the Chinese cultural heritage, and in other fields, with the aim of extending students' knowledge and widening their field of vision.

The School of Humanities and Social Science does not offer undergraduate degrees. Both divisions offer postgraduate work, by means of taught Master of Arts (MA) programmes and the enrolment of research students for the degrees of Master of Philosophy (MPhil) and Doctor of Philosophy (PhD).

All undergraduate students are required to take at least 12 credits in the School of Humanities and Social Science. This usually means four courses, of which at least one must be taken from each of the two Divisions.

The school currently offers a large number of undergraduate courses in history, philosophy, religion, cultural and political anthropology, political science, sociology, economics, and the relationship between science/technology and society.
The University has established several research centres and institutes to facilitate multidisciplinary and interdisciplinary research and to better apply University research to the social and economic development of Hong Kong.

These specialised research organisations, together with the academic departments, provide undergraduate and 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, institutes and laboratories are listed below:

- Advanced Manufacturing Institute
- Advanced Materials Research Institute
- Biotechnology Research Institute
- CAE/CAD/CAM Centre (Computer Aided Engineering, Design and Manufacturing)
- Centre for Advanced Engineering Materials
- Centre for Asian Financial Markets
- Centre for Economic Development
- Hainan Institute
- Hongkong Telecom Institute for Information Technology
- Institute for Environmental Studies
- Institute for Infrastructure Development
- Institute for Microsystems
- Joyce M. Kuok Laser and Photonics Laboratory
- Materials Characterisation and Preparation Centre
- Microelectronics Fabrication Centre
- Sino Software Research Centre
- William Mong Semiconductor Clusters Laboratory
- ZhengGe Ru Thin Film Physics Laboratory

Research Centre - Responsible for the development, co-ordination and conduct of multidisciplinary and interdisciplinary applied research.

Technology Transfer Centre - Responsible for the transfer of technology to industry and government and for the commercialisation of products and processes developed in university research.
Other research centres and institutes currently under development include:

- Computation
- Energy
- 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. Undergraduate students should contact the Director if they wish to become involved in these programme areas.

IX. CENTRALISED AND ACADEMIC SUPPORT SERVICES

University Library

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 the intellectual enterprise.

The rapid development of the University requires a correspondingly rapid rate of growth in its library collection. In 1995 the Library has a collection of over 300,000 volumes of books and bound periodicals, as well as a sizable collection of non-print materials. 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 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.

An experienced staff assists users in a variety of ways, from the selection, acquisition, and cataloguing of materials to using the collection, online searches, and interlibrary loans. There is also a fully-equipped classroom and a computer laboratory for group instruction. The University Library has a strong service orientation in order to effectively meet the information needs of its academic community.
The 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 highly distributed, and is modelled after the client-server architecture. The cornerstone is an advanced, high-speed FDDI (Fibre Distributed Data Interface) network backbone, which operates at 100 million bits/second, with distributed wiring junctions from which various local area networks emanate. The network covers not only all the campus buildings but also reaches out to 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 network services will have this feature. To support computation intensive researches, CCST provides solutions in different forms. High performance computing resources include a workstation cluster, an 8-processor SGI/Onyx symmetric multi-processor machine and an 140-node Intel Paragon massively parallel machine, providing a powerful environment for supporting scientific computing.

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 those of other institutions in Hong Kong, and through the Internet, on networks of educational and research institutions worldwide.

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.

The Centre also manages the University's PABX telephone system.

The Language Centre

The Language Centre offers a wide range of language services to all undergraduate and postgraduate students.

As English is the medium of instruction in the University, the Language Enhancement programme aims to help students acquire the necessary English language skills to gain the maximum benefit from their undergraduate curriculum. The Language Centre also offers Business Communication programmes for the School of Business and Management, and a Technical Communication programme for the Schools of Science and Engineering.

Apart from English courses, the Language Centre also offers courses in Putonghua, Japanese and French, the latter in collaboration with the Institut Franco-Chinois.

The Language Centre has three 24-booth language laboratories, complete with advanced audio-visual and computer equipment, which are used by class groups to practise their listening, speaking and writing. For students who need further help with their writing, the English Writing Centre (a service offered by the Language Centre) runs workshops and gives individual consultations. The Language Centre also runs the Self-Access Centre - a well-equipped facility that provides a wide variety of materials, activities and services to aid self-directed learning of English, Putonghua and many other languages.

The Educational Technology Centre

The university is committed to high standards and up-to-date methods in undergraduate and postgraduate teaching and in research and publication. To this end the Educational Technology Centre sustains a comprehensive service for all academic and research staff. Through its Audio Visual Unit it looks after all centrally provided AV facilities in all common teaching venues including 8 lecture theatres, some 60 classrooms and 30 teaching laboratories. The unit maintains
an AV Loan Counter, and a Self Access Production area to facilitate the use of AV equipment and resources for modern teaching. The AV Production team assists in the planning, videotaping, editing and duplication of AV materials for teaching, research, evaluation or promotional purposes. The Graphics Unit assists in the graphic design and production of university publications, and research and teaching materials. Its photographic and darkroom facilities also help in producing slides, overhead transparencies and prints for academic and publicity purposes. In addition, the unit provides high-speed, high volume reprographic and offset printing services.

In addition to these production and technical services, the Educational Technology Centre organises workshops and seminars for faculty, teaching assistants, and tutors on educational issues and instructional methodologies in higher education. Topics have included learning theory, a variety of classroom delivery and management techniques, selection, utilisation and production of instructional materials, assessment of student progress and evaluation of teaching effectiveness. The Centre serves as a resource for information on teaching methods, instructional formats and materials related to research on teaching.

As part of the university’s quality assurance process, the Centre assists in collecting and processing course evaluation data for all credit courses and English language enhancement course.

Finally, the Centre takes on special editorial and translation jobs.

The Industrial Training Centre

The Industrial Training Centre (ITC) provides practical training to Engineering undergraduate students. The training programme gives students a broad and structured understanding of engineering practice. Moreover, the training also helps students satisfy the training requirements of the Hong Kong Institution of Engineers (HKIE) and the UK’s Engineering Council for certification/registration purposes.

An important aspect of this training is the integration of workshop experience with knowledge acquired in classrooms and laboratories. Through the training phase, the students’ understanding and appreciation of the knowledge acquired from the academic courses will be enhanced. This integration of workshop training with academic knowledge can be accomplished through curriculum planning and coordination between the departments and the ITC. The workshops are in modular form and each department will work with ITC staff to design and specify combinations of modules that meet the needs of its students. Training periods for students range from 6 to 12 weeks, to cater for the specific requirements of various departments. The introductory phase of training consists of basic engineering practices, safety procedures, and the handling of hand, power and machine tools in a supervised setting. Beyond the introductory phase, training is designed to arouse the interest of students in engineering practice, to stimulate their imagination, and to help them develop their talents. This can best be accomplished in a simulated industrial-like environment in which students are assigned an integrated design-and-make project requiring an intellectual level that matches their ongoing academic activities. The goal of this integrated approach is to train students to be professional engineers.

The training modules are designed to strike a proper balance between the development of skills and an appreciation of engineering processes.

Industrial training is currently conducted at the Industrial Centre of the Hong Kong Polytechnic University.

The CAD/CAM Centre

The CAD/CAM (Computer Aided Design/Computer Aided Manufacturing) Centre is a central facility to support research and teaching related areas. It will focus on multi-disciplinary and application-oriented research programmes that will create impact on the manufacturing industries in Hong Kong and the neighbouring region. The Centre will provide stimulus for collaboration and interaction between HKUST, local industries and international bodies.

The Centre maintains a range of state-of-the-art equipment to promote research in the area of design and manufacturing. These include measurement equipment such as co-ordinate measuring machine (CMM) and three dimensional laser scanning system. The Centre has a number of CNC machines and state-of-the-art CAD systems for providing a platform for CAD/CAM integration. The manufacturing facility is also enhanced by having a rapid prototyping machine. Robots are used to integrate the manufacturing and assembly operation. The Centre has a strong capability in Computer-Aided-Engineering with a full range of analysis and stimulation software.

The Centre has held two successive workshops in electronic packaging since its inception.
Other Central Support Facilities

In addition to the central academic support services, the University has many other facilities specifically designed to support the various instructional and research activities of the schools, departments, and research institutes, including the following:

- Centre for Advanced Engineering Materials
- Glass Blowing Shop
- Mechanical Workshop
- Materials Characterisation and Preparation Centre
- Microelectronics Fabrication Centre
X. STUDENT SERVICES

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 that are 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. The provision of these services, including career counselling, general counselling, student financial assistance, residential housing services, cultural, sports and physical education activities, and health services, is directed and managed by the Director of Student Affairs.

The University places great emphasis on providing a wide range of facilities that will enhance the quality of life of both resident and non-resident students. Apart from the facilities specifically created in the form of buildings, students also have the opportunity to enjoy the natural amenity of a beautiful site enhanced by landscaping, terraces, and pavilions.

Counselling Service

The Student Counselling Service offers assistance in many areas of student interests and concern, such as personal growth, adjustment to campus life, personal problems, and study-related issues.

Careers Service

The Careers Centre helps students clarify their career plans and options. To assist students in their career decisions and preparation for successful job search, the Centre organises talks, exhibitions and visits, maintains close contacts with potential employers and keeps students informed of employment opportunities and market situations. The Centre also assists students in securing full-time summer and part-time employment.

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 instruction in these activities. The University has a good provision of sports facilities. Indoor facilities are fully air-conditioned. A large multi-purpose sports hall with 1,600 square metres of floor space is designed for activities such as badminton, basketball, volleyball, handball and indoor soccer, with other areas set aside for squash, table-tennis, fencing, dance, martial arts, weight training and fitness exercises. Outdoor facilities include a 50-metre swimming pool, an Astroturf soccer pitch, a 400-metre track with 8 lanes, a hard-surface mini-soccer pitch, outdoor basketball courts and tennis courts. Facilities are also available for throwing activities such as discus, javelin and shot-put, softball and archery.

Health Service

The Student Health Service provides out-patient health and dental care for the students.

Health education workshops and seminars are also organised and presented for the benefit of students and staff alike.

Residential Halls

Housing accommodation is planned for a minimum of 30% of full-time students. There are four undergraduate halls, providing residential places to 1,722 undergraduate students. The halls are located on campus in multi-storey residence buildings. Undergraduate rooms are generally shared by two students. Most of them are air-conditioned.

Each floor of the Residential Halls has a lounge area with an adjoining pantry. Other facilities in the complex include common rooms and snack rooms where residents and guests can meet and socialise. A laundry is also provided.

Please consult the section on "Fees, Other Expenses, and Financial Assistance" (pages 65-67) for details of Residential Hall charges.

Provisions are made for students not residing on campus to actively participate in social and sports activities so as to enhance their sense of belonging to the University community.
Other Student Amenities and Services

The University provides a range of student amenity areas to enable the organisation of extra-curricular activities through which social interaction among students can be promoted and a sense of belonging cultivated. These amenities include workshops, music and television facilities, student common rooms, meeting rooms and hobby rooms for use by all students.

A Student Canteen with a seating capacity for 1,600 is available. It is centrally located and a variety of services is provided. Other catering facilities include a Chinese Restaurant, a Coffee Shop and a Snack Shop.

Commercial facilities include a bookshop, banking services, and a convenience store.

Students Activities

Extra-curricular activities are organised by the Students' Union and student societies associated with academic disciplines, arts, sports and other social interests.

The Student Affairs Office also organises extra-curricular activities and programmes such as formal dinners, competitive sports, talks and seminars.

Students are encouraged to take part in activities as organisers and/or participants. Physical accommodation is provided to house student societies. Staff from the Student Affairs Office are available to guide and assist students in the operation of their societies and the organisation of activities.

Tuition and Other Fees

XI. FEES, OTHER EXPENSES, AND FINANCIAL ASSISTANCE

Fees quoted in this section are subject to the approval of the University's Finance Committee and may be revised prior to the beginning of the 1996-97 academic year.

1. An application fee of HK$120 is charged for each application for admission made directly to the University. This fee, payable at the time of submission of the application form, is not refundable. For applications made through JUPAS, a fee of HK$350 is charged. The fee will be collected by the JUPAS Office on behalf of the participating institutions.

2. The tuition fee for undergraduate students admitted for the academic year 1996-97 is expected to be HK$37,600 per annum. The fee is to be paid in two equal instalments before the beginning of each semester.

3. Fees for visiting overseas students:
   Application fee - $120
   Tuition fee for visiting overseas undergraduate students - $1,880 per credit.

4. In addition, each new student will be required to pay a deposit of HK$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 towards the graduation fee, or refunded if the student leaves the University before graduation.

5. Students joining the Students' Union are required to pay an initial entry fee and thereafter an annual subscription. These will be set by the Union and collected by the University on behalf of the Union.

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, and overdue library books. Late charges will be levied in accordance with the rules and regulations set by the respective offices.
7. The hall charge for 1996-97 is approximately $7,200 per person in double rooms in the undergraduate halls for a residential year of 280 days from September 1996 to June 1997. Hall charges are to be paid in two instalments and do not include the cost of meals.

8. There are other fees and charges such as the graduation fees, transcript fees, and replacement charges for lost student identity card. Detailed information will be available in the Academic Calendar or from the various administrative offices concerned.

9. The total cost of living and studying at the University is expected to be about $78,000 for two semesters and the winter session from early September to early June, including the items mentioned above. This figure also includes the cost of food and drink, text books, stationery, sports equipment and clothing.

Financial Assistance

The sources of financial support for Hong Kong students 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 completed 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 are available either from the Government Student Financial Assistance Agency at 9/F, National Mutual Centre, 151, Gloucester Road, Wanchai, Hong Kong, or from the Student Affairs Office of the University.

FINANCIAL ASSISTANCE

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 from the Student Affairs Office.

SCHOLARSHIPS AND PRIZES

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

The Academic Year 1996-97

The academic year of the University begins on 1 July and ends on 30 June of the following year. It includes two semesters and two sessions. Normally, the Fall Semester commences in early September and the Spring Semester begins around early February. Each semester has fourteen weeks for scheduled classes. 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. The Winter Session is scheduled between the two semesters for special academic programmes, research symposia, and other activities. The Summer Session bridges the end of the Spring Semester and the beginning of the following Fall Semester. For most students, attendance for the Winter and Summer sessions is not required.

Semester dates for the year 1996-97 provisionally will be:

- **Fall Semester**: 2 September 1996 to 19 December 1996
- **Winter Session**: 30 December 1996 to 25 January 1997
- **Spring Semester**: 27 January 1997 to 29 May 1997

* The dates of the Spring Semester include a mid-semester break from 26 March 1997 to 1 April 1997.

The University Calendar for 1996-97

Detailed information about the University will be contained in the University Calendar for 1996-97, which will be published in Summer 1996. Each new registered student will be provided with a free copy of the Calendar.

General Enquiries

Students requiring advice or assistance on application procedures, choice of courses, entrance requirements or other related matters are welcome to visit the Admissions, Registration and Records Office from Mondays to Fridays during the following hours:

- 9am - 12:30pm
- 2pm - 5pm

and on Saturdays during the following hours:

- 9am - 12 noon

All enquiries should be addressed to:

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

Telephone: (852) 2358 6622
Facsimile: (852) 2358 0769
INDEX

A
Academic
Faculty 2
Year 68
Accommodation,
see under Residential Halls 63
Accounting, Department of 48
Admission requirements 47
Degree of 4, 14, 48
Degree structure 47-48
Admissions, Registration and Records Office 17, 20, 69
Advanced Manufacturing Institute 53
Advanced Materials Research Institute 53
Advanced Standing, Admission with 17
Application Fee 17, 19, 65
Procedures 14-20
Applied Physics 4, 14, 29-30

B
Biochemistry, Department of 23
Admission requirements 23
Degree of 4, 14, 23
Degree structure 24
Biology, Department of 24
Admission requirements 25
Degree of 4, 14, 24
Degree structure 25
Biotechnology Research Institute 53
Bursaries, University 67
Business and Management, School of 45-50

C
Calendar, University 68
Career Service 62
Caution money 65
Centralised and academic support services 55-60
Centre for Advanced Engineering Materials 32, 53, 60
Centre for Asian Financial Markets 53
Centre for Economic Development 53
Chemical Engineering, Department of 33
Admission requirements 34
Degree of 4, 14, 33
Degree structure 34
Chemistry, Department of 26
Admission requirements 26
Degree of 4, 14, 26
Degree structure 26-27
Civil and Structural Engineering, Department of 34
Admission requirements 35
Degree of 4, 14, 34
Degree structure 36
Computer Engineering, Joint degree 42
Admission requirements 42-43
Degree of 4, 14, 42
Degree structure 43
Computer Science, Department of 36
Admission requirements 37
Degree of 4, 14, 36
Degree structure 37
Computer Aided Design (CAD)/
Computer Aided Manufacturing (CAM) Centre 32, 59
Computing Services and Telecommunications Centre 56
Counselling Service 62

D
Degree titles 15
Direct Admission, Application for 16-17
Double registration 20

E
Economics, Department of 48
Admission requirements 47
Degree of 4, 14, 48
Degree structure 47-48
Educational Technology Centre, The 57-58
Electrical and Electronic Engineering, Department of 37
Admission requirements 38
Degree of 4, 14, 37
Degree structure 38-39
Engineering, School of 32-43
Enquiries, General 69
Entrance requirements Departmental 10-12
Enquiries 20
Equivalents 9
General 7-8
Expenses, General 65-66

F
Fees 65-66
Finance, Department of 49
Admission requirements 47
Degree of 4, 14, 49
Degree structure 47-48
Financial assistance 66-67

G
Glass Blowing Shop 32, 60
Government Grant and Loan Scheme, see under Financial assistance 66-67

H
Hainan Institute 53
Health Service 63
Hongkong Telecom Institute for Information Technology 53
Humanities, Division of 51
Humanities and Social Science, School of 51

I
Immigration Department, Address of 19
Industrial Engineering and Engineering Management, Department of 39
Admission requirements 40
Degree of 4, 14, 39
Degree structure 40
Industrial Training Centre, The 58-59
Information and Systems Management Department of 49
Admission requirements 47
Degree of 4, 14, 49
Degree structure 47-48
Institute for Environmental Studies 53
Institute for Infrastructure Development 53
Institute for Microsystems 53
Interdisciplinary Research Institutes 53
International cooperation 45-46
INDEX

J
Joint University Programmes Admissions System (JUPAS) 15-16
Joyce M. Kuok Laser and Photonics Laboratory 53

L
Language Centre 57
Library, University 55
Living expenses 19, 65-66
Lowns, University 67

M
Mechanical Workshop 32, 60
Management of Organisations, Department of 50
Admission requirements 47
Degree of 4, 14, 50
Degree structure 47-48
Marketing, Department of 50
Admission requirements 47
Degree of 4, 14, 50
Degree structure 47-48
Materials Characterisation and Preparation Centre 32, 53, 60
Mathematics, Department of 27
Admission requirements 28
Degree of 4, 14, 27
Degree structure 28-29
Mature applicants 12
Mechanical Engineering, Department of 40
Admission requirements 41
Degree of 4, 14, 40
Degree structure 41-42
Microelectronics Fabrication Centre 32, 53, 60
Miscellaneous fees and charges 65-66

O
Outdoor sports facilities 62-63
Overseas students 18-19

P
Physical Education 62-63
Physics, Department of 29
Admission requirements 30
Degree of 4, 14, 29
Degree structure 30
Postgraduate programmes 5
Prizes 67

R
Research Centre 53
Research Centres, Institutes and Laboratories 53-54
Residential Halls 63
Fees 66

S
Scholarships 67
Science, School of 22-30
Selection procedures 18
Sino Software Research Centre 53
Social Science, Division of 51
Sports facilities 62-63
Student Activities 64
Student Affairs, Office of 62, 64
Student Amenities and Services 64

T
Technology Transfer Centre 53
Tuition fees 65-66

U
Undergraduate programmes 3-4, 14

V
Visiting Overseas Students 20

W
William Mong Semiconductor Clusters Laboratory 53

Z
ZhengGe Ru Thin Film Physics Laboratory 53