香港科技大學

Handbook for Prospective Postgraduate Student

1998-99

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

This online Handbook for Prospective Postgraduate Student is in PDF file format which requires Acrobat Reader to view. Please download Acrobat Reader by clicking HERE if your browser is NOT downloaded from CCST's server.

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A MESSAGE FROM THE PRESIDENT

Over the last two decades, the meaning of "higher education" has changed in Hong Kong. Today, a baccalaureate degree gives a young person entry into the business and professional world, but a strong postgraduate education is fast becoming a necessity for those who wish to be truly competitive. This has been the experience in economically advanced countries, and it is becoming increasingly evident in all the newly industrialized economies, notably Singapore, South Korea, and Taiwan.

For Hong Kong, the first decade of the next century will be a time of great opportunity. As a postgraduate student at the Hong Kong University of Science and Technology, you can prepare yourself to take on a leadership role in a world of high technology and global management. And with an advanced degree, you will be ready to help as Hong Kong builds the dynamic, technologically advanced economy that will carry it into the 21st century.
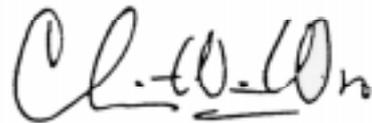
The Hong Kong University of Science and Technology was created to assist Hong Kong in this transition. The University awards postgraduate degrees in four schools—Science, Engineering, Business and Management, and Humanities and Social Science—and can accommodate all full-time postgraduate students in residential halls on our beautiful, state-of-the-art campus. In a review of faculty quality and research activities and facilities at Hong Kong universities, a group of independent scholars has concluded that "HKUST sits securely in first place."

We are justifiably proud of our academic staff—all of whom possess the doctoral degree, an overwhelming majority from the best universities in North America and Europe. This outstanding concentration of talent is led by distinguished scholars who have served as senior professors in major research universities worldwide, or in equivalent posts in industry. They all possess rich experience in directing postgraduate and postdoctoral studies, they have published extensively in leading professional journals, and they are highly respected internationally. They are precisely the kind of teachers and mentors sought by Hong Kong students who have gone overseas to study through the years.

We welcome applications from graduates of our fine sister institutions in Hong Kong, as well as from graduates of strong institutions elsewhere. International students help not only to broaden our vistas, but to enhance the intellectual and cultural blend that makes Hong Kong one of the great cities of the world.

We also invite applications from those who are currently employed. Mature and already contributing members of society are an important component of our postgraduate student body, bringing real-world experience to enrich the perspective of their fellow students. At HKUST, postgraduate degrees can be earned through part-time, as well as full-time, study.

Friends, if you share our faith in the future of Hong Kong as we move into an era of self-governance as a Special Administrative Region of China, our love for learning, and our sense of mission and excitement, please join us.

Chia-Wei WOO
President

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I. THE UNIVERSITY

Introduction

The Hong Kong University of Science and Technology (HKUST) 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 has been built in two 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.

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 $1.6 billion in 1996-97. Construction of Phases I and II of the campus was assisted by a grant from the 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

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 1996, more than 500 academics had 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.

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

Postgraduate Programs

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

Program   **Code**

SCHOOL OF SCIENCE

Master of Science (MSc)
Biotechnology#	M511
Environmental Science	M521
Materials Science and Engineering#	M517
Mathematics	M141
Physics	M151

Master of Philosophy (MPhil)
Biochemistry	M110
Biology	M120
Chemistry	M130
Mathematics	M140
Physics	M150

Also available to students in the School of Engineering.

Doctor of Philosophy (PhD)
Biochemistry	D110
Biology	D120
Chemistry	D130
Mathematics	D140
Physics	D150

SCHOOL OF ENGINEERING

Master of Science (MSc)

Chemical Engineering	M211
Civil and Structural Engineering	M221
Computer Science	M231
Electrical and Electronic Engineering	M241
Environmental Engineering	M519
Industrial Engineering and Engineering Management	M252
Mechanical Engineering	M261

Master of Philosophy (MPhil)

Chemical Engineering	M210
Civil and Structural Engineering	M220
Computer Science	M230
Electrical and Electronic Engineering	M240
Industrial Engineering and Engineering Management	M253
Mechanical Engineering	M260

Doctor of Philosophy (PhD)

Chemical Engineering	D210
Civil and Structural Engineering	D220
Computer Science	D230
Electrical and Electronic Engineering	D240
Industrial Engineering and Engineering Management	D251
Mechanical Engineering	D260

SCHOOL OF BUSINESS AND MANAGEMENT

Executive Master of Business Administration (EMBA)	A300
Master of Business Administration (MBA)	M300

Master of Science (MSc)
Economics	M331
Investment Management	M341
Information Systems Management	M321

Master of Philosophy (MPhil)
Accounting	M310
Economics	M330
Finance	M340
Information Systems	M320
Operations Management*	M373*
Management of Organizations	M350
Marketing	M360

Doctor of Philosophy (PhD)
Accounting	D310
Economics	D330
Finance	D340
Information Systems	D321
Operations Management*	D323*
Management of Organizations	D351
Marketing	D360

SCHOOL OF HUMANITIES AND SOCIAL SCIENCE

Master of Arts (MA)
Chinese Studies	M513
Humanities	M413
Social Science	M423

Master of Philosophy (MPhil)
Humanities	M410
Social Science	M420

Doctor of Philosophy (PhD)
Humanities	D410
Social Science	D420

*Subject to Senate Approval

II. ADMISSION OF STUDENTS

Postgraduate Admission Requirements

Applicants seeking admission to a master's degree program should have obtained a first degree from this University or a recognized institution, or obtained an approved equivalent qualification; and satisfied the school and department concerned as to their fitness as well as their English ability to pursue the postgraduate program.

To be eligible for admission to a PhD degree program, applicants should normally have obtained a master's degree from this University or an approved institution, or presented evidence of satisfactory work at the postgraduate level on a full-time basis for at least one year, or on a part-time basis for at least two years; and satisfied the school and department concerned as to their chosen subject of research, as well as their fitness and English ability to undertake the research.

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

Application for Admission

Application forms for admission to postgraduate programs are available directly from :

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

Applicants can also download the application form from the University's homepage on the World Wide Web at address : " *http:// www.ab.ust.hk/arr* " under the topic "Postgraduate Studies - How to Apply".

The application fee for 1998-99 is HK$120. Applications for admission to postgraduate programs in September are invited from January onwards. Interested persons are strongly advised to apply well before the program closing dates. In order to allow sufficient time to obtain a visa to study in Hong Kong, non-local applicants are encouraged to submit their applications as early as possible and not to delay submission until the closing date. Late applications may be considered if places are still available.

Items to be submitted with the completed application form include a one-page statement on study plans and career goals; two letters of recommendation mailed directly to the Director of Admissions, Registration and Records; and officially certified academic transcripts of undergraduate studies (and postgraduate studies, if any); and a copy of the bank pay-in-slip confirming that the application fee of the HK$120 has been paid into the University bank account.

For non-local applicants, if official transcripts are in a language other than English or Chinese, a certified translation into English must be provided. In lieu of the bank pay-in slip confirming payment of application fee, non-local applicants may submit a bankdraft of an amount equivalent to US$16.00 with the completed application form.

Students from Outside Hong Kong

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

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.

Non-local students should carefully consider the financial aspects of their studies in Hong Kong before applying for admission. Non-local students should note that they are not allowed to work in Hong Kong, part-time or full-time. The provisional tuition fee for 1998-99 (except for MBA program) will amount to HK$44,500 per annum and accommodation in on-campus postgraduate housing will involve approximately HK$15,400 - HK$26,730 per residential year (278 days). In addition monies will be needed for subsistence, textbooks, local travel, sports equipment, clothing, and other personal needs. A total of at least HK$107,000 - HK$120,000 per academic year (9 months) is likely to be required for postgraduate study.

Non-local students, including those from the Mainland must obtain a student visa in order to study in Hong Kong. Applications should be made well in advance at a Chinese Embassy or Consulate, 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, aged over 21, to whom they are known personally. Applicants who have difficulty in nominating a sponsor in Hong Kong may indicate on their visa applications that the University's Director of Admissions, Registration and Records is willing to act in this capacity.

Visiting Overseas Students

Students from overseas institutions who wish to study at the University on a short-term basis, i.e. a minimum of one semester and a maximum of two, may apply for admission to the University as visiting overseas students. The application fee for 1998-99 is HK$120. Visiting overseas students may take courses but are not enrolled on specific programs of the University. Details on the application procedures for visiting overseas students can be obtained from the Admissions, Registration and Records Office.

III. FEES, SCHOLARSHIPS AND FINANCIAL ASSISTANCE

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

Fees for 1998-1999 Academic Year

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

1. **Application Fee**
   An application fee of HK$120 is charged for each application for admission in 1998-99 to the University. This fee, payable at the time of submission of the application form, is not refundable.

2. **Tuition Fee**
   The tuition fee for postgraduate students admitted for the academic year 1998-99 (except for those in the MBA program) is expected to be HK$44,500 per annum for full-time students and HK$22,250 per annum for part-time students. The fee is to be paid in two equal installments before the beginning of each semester.

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

4. **Fees for visiting overseas postgraduate students**

Application fee	HK$120
Tuition fee for visiting overseas postgraduate students	HK$22,250 (to be confirmed) for one semester of full-time mode of study; or HK$1854 per credit (to be confirmed) for studies during the Winter or Summer Session.

5. **Partial fees**

Taught postgraduate students studying beyond the normal duration	HK$1854 per credit (to be confirmed)
Research postgraduate students studying beyond the normal period	50% of the tuition fee paid for that semester will be refunded if all program and residency requirements of the University have been met within the first three calendar months of a semester.

6. **Caution money**

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

7. **Students' Union fee**

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

8. **Late charges**

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

9. **Charges per person for on-campus student accommodation**

Postgraduate Halls :
   Single rooms; $15,400 per residential year*

University Apartments :
   Single rooms; $2,970 per calendar month (excluding utility charges)

All rooms are air-conditioned and the charges do not include electricity charges for air-conditioning. All charges are paid in advance by installments.

(*The 1998/99 residential year covers 278 days from 27 August 1998 to 31 May 1999.)

10. **Other small fees and charges**

Transcript fee per copy# (excluding registration mail charges)	$50
Replacement of Student I/D Card	$50
Graduation fee	$300
Testimonial fee	$20

(# A free copy will be issued to students upon graduation or withdrawal from the University.)

Scholarships

Scholarships and Prizes

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

Postgraduate Studentships

The University awards postgraduate studentships (PGSs) to selected full-time research postgraduates who consequently engage in ancillary teaching and/or research duties. In 1997-98, the rate of PGSs was $14,840 per month.

Financial Assistance

Government Student Financial Assistance

Full-time students who have the right of abode in Hong Kong or have resided or have had their home in Hong Kong continuously for three complete years immediately prior to the commencement of their year of study are eligible to apply to the Government Student Financial Assistance Agency for financial aid. 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 five years after graduation or upon leaving the University.

Application forms and further details may be obtained from the Government Student Financial Assistance Agency at 9/F, National Mutual Center, 151, Gloucester Road, Wanchai, Hong Kong, or from the Student Affairs Office of the University. Students with financial difficulties are urged to apply for assistance under this scheme as soon as it is open for application.

University Loans and Bursaries

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

IV. ACADEMIC REGULATIONS

All students are responsible for their individual conduct and for adherence to the regulations.

A. TERMINOLOGY

1. Program

A program is an official degree program recognized by UGC. Each program is given a unique program code; e.g. the Master of Philosophy program in Biochemistry bears the code M110.

2. Department

The term "department" is used in the Academic Calendar to include all academic departments, the two divisions in the School of Humanities and Social Science, and any other academic units administering programs.

3. Major Department

A student's major department is the academic unit which offers the specific program in which the student is enrolled.

4. Course

A course is the basic unit of instruction at the University and is usually taught in either the Fall or Spring Semester. Courses are offered by all academic departments, the two divisions in the School of Humanities and Social Science as well as the Language Centre. All courses are designated by a course code, title and vector; e.g. CIVL 571 Advanced Soil Mechanics [3-0-0:3].

5. Course Code

Each course is identified by a course code which comprises a four-letter code followed by a three-digit number code. The letter code denotes either the area of study or the course offering department. The 23 letter codes currently in use are:

ACCT	Accounting
BICH	Biochemistry
BIOL	Biology
BTEC	Biotechnology
CENG	Chemical Engineering
CHEM	Chemistry
CIVL	Civil and Structural Engineering
COMP	Computer Science
ECON	Economics
ELEC	Electrical and Electronic Engineering
ESCE	Environmental Science and Engineering
FINA	Finance
HUMA	Humanities
IEEM	Industrial Engineering and Engineering Management
ISMT	Information and Systems Management
LANG	Language
MARK	Marketing
MATH	Mathematics
MATL	Materials Science and Engineering
MECH	Mechanical Engineering
MGTO	Management of Organizations
PHYS	Physics
SOSC	Social Science

The last two digits of the number code represent a departmental coding series while the first digit indicates the course level :

0= Introductory courses which are designed for undergraduate students without an advanced level (AL) background in the subject area.
1= Undergraduate first-year level courses
2= Undergraduate second-year level courses
3= Undergraduate third-year level courses
5= Postgraduate courses

6= Postgraduate courses usually in the form of seminars, independent studies, reading courses or master research

7= Postgraduate courses usually in the form of doctoral seminars or research

For example, CIVL 571 denotes that it is a postgraduate course offered by the Department of Civil and Structural Engineering.

6. Course Vector and Credits

Each course is assigned a course vector which indicates the number of instructional hours required and credits to be earned. The course vector is presented in the form of [L-T-Lab:C] where

L	=	lecture hours per week
T	=	tutorial, seminar or recitation hours per week
Lab	=	laboratory or field study hours per week
C	=	number of course credits

For example, a course vector of [3-1-2:3] denotes a course that requires 3 lecture hours, 1 tutorial/seminar/recitation hour, and 2 laboratory/field study hours each week, and carries 3 credits.

The credit value of a course depends on the required scheduled hours of instruction. Normally, one credit is designated for one lecture hour, one tutorial hour or three laboratory hours per week. Some sessions will be given less credit per hour if certain scheduled hours such as tutorials reduce the non-scheduled work expected of students.

B. GENERAL REGULATIONS

Regulations described in this section apply to all students.

1. Student Conduct

The University expects good conduct from all students. Rules and regulations are formulated and enforced to ensure the effective operation of the University, and the well-being of students and staff.

2. Regulations for Student Discipline

2.1 The University may take disciplinary action against a student of the university who violates any rules or regulations and/or commits any misconduct such as:-

a.   defamation of or assault on or battery against the person of any member of the University, including conduct which leads to the physical or emotional injury or which threatens the physical or emotional well-being of any member of the University;

b.   theft, fraud, misapplication of University funds or property of any kind;

c.   falsification or serious misuse of University documents or records;

d.   misrepresentations or false statements made in any application or document submitted to the University.

e.   willful damage to or defacement of any property of the University.

f.   plagiarism in written assignments or cheating in tests or examinations;

g.   an offense in connection with examinations or violation of any of the regulations governing conduct at examinations;

h.   refusal to comply with any regulations or orders by authorized persons and bodies prohibiting any conduct which disrupts teaching, study, research or administration of the University;

2.2   Complaints against a student will be brought before the Student Disciplinary Committee by either the Vice-President for Academic Affairs, or the Vice-President for Administration and Business, and the Committee shall investigate and make findings upon them.

2.3   The Committee may order the imposition upon any student found to be guilty of any of the offenses specified in 2.1, any of the following penalties:-

a.   reprimand;

b.   fine (not exceeding one thousand Hong Kong dollars);

c.   University community service

d.   withdrawal of any academic or other University privileges, benefits, rights or facilities, other than the right to follow courses of instruction and present him or herself at examinations;

e.   suspension of all academic or other privileges, benefits, rights or facilities; or

f.   expulsion from the University;

and where applicable may require such student to make good any damage to property or premises caused by him/her.

2.4 The Committee, in addition to or as an alternative to imposing any of the penalties set out in 2.3, may report to the Council via the Senate the offense of which the student has been found guilty. The Council may if it thinks fit recommend to the Chancellor the deprivation of any degree, diploma, certificate or other academic distinction conferred upon such person.

2.5 An appeal against any finding or a penalty imposed by the Committee may be made within fourteen days to the Chairman of the Senate. Appeals shall be in writing.

3. Academic Integrity and Discipline

Academic integrity is basic to the work of all students at the University, and to scholarly and scientific work generally. Central to academic integrity is the presentation of one's own work as one's own, the acknowledgment of others' work, and the truthful reporting of results obtained. Students should acquaint themselves with the University's policy on academic integrity and discipline.

3.1 Academic Dishonesty

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

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

Cheating is defined as the unauthorized giving, receiving or utilizing, or any attempt to do so, of information or assistance during a test or examination. Also included are the unauthorized receipt or conveyance, or the attempt to do so, of test or examination questions; giving or receiving assistance on an essay or assignment beyond what is approved by the instructor; impersonating someone else or causing or allowing oneself to be impersonated by someone else in writing or   participating

in a test or examination; the submission of any academic work containing a purported statement of fact, or reference to a source, which has been concocted; presenting for credit in any course or program of study, without the permission of the instructor concerned, academic work for which credit has previously been obtained or is being sought in another course or program of study in the University or elsewhere; and any other conduct designed to provide a misleading basis for judgment of the student's performance or academic standing.

3.2 Procedures in Case of Academic Dishonesty

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

If, after the meeting, the instructor, or other appropriate individuals as noted, is satisfied that no academic dishonesty has been committed, no further action will be taken. The decision is conveyed to the student. If the student admits the alleged offense, the instructor may recommend an appropriate sanction and the student is informed accordingly. A report will be made to the student's major department.

If, however, the student denies the charge, or disputes the sanction, or fails to attend the meeting, and the instructor decides that an act of academic dishonesty has been committed, the instructor forwards the case to the department head for further action.

3.3 Sanctions

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

3.4 Student Rights and Obligations

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

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

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

4.   Examination Regulations for Students

4.1   Students are not allowed to sit for a course examination if their names are not on the class enrollment list of the specific course concerned, and they will not be awarded any grades for the course.

4.2   Examinees will be asked to show their student identity cards for verification purposes. Students who are unable to present their cards will not be allowed to write the examination.

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

4.4   Normally, no examinees will be allowed to enter the examination room later than thirty minutes after the start of the examination, and no examinees will be permitted to leave the examination room within the first thirty minutes of the examination. An invigilator or examiner may waive this time limit under special circumstances, such as sickness. Late comers will not be given any extra time for the examination.

4.5   Examinees who are taken ill during the examination and have to leave the examination room are advised to proceed immediately to the Student Health Services on campus, if possible, or seek other appropriate medical assistance as soon as possible.

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

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

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

4.9   Examinees who fail to attend a scheduled examination will be given zero mark for that examination. Appeals for special consideration on the grounds of special circumstances such as medical reasons are described in the Academic Calendar.

4.10   All examinations will be canceled when the Storm Warning Signal No.8 is to be hoisted within two hours. When the Rainstorm Red Warning Signal is in effect, all scheduled examinations will be held as usual. If the Storm Warning Signal No. 8 or the Rainstorm Black Warning Signal is lowered on or before 6:30 am, all examinations starting from 8:30 am and onwards will be held as scheduled. If the Warning Signal is lowered by 12 noon, all examinations will resume from 2 pm onwards.

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

5. Intellectual Property Rights

The University has established policies defining the characteristics, development, procedures, responsibilities, and ownership of intellectual property for students, faculty and staff. The policies are organized into four different areas of interests: Copyright, Patents, Software, and Trade and Service Marks. A booklet dealing with each area is available from the Office of Contract and Grant Administration. As part of university policy, all students, faculty and staff are required to agree to and abide by these policies as a condition of admission or employment. The University may make changes to these policies from time to time.

6. Use of Human or Animal Subjects

There are complex legal, regulatory and operational standards applicable to the care and use of human and animal "subjects" in educational, research and service programs. The term "subject" means that the person or animal is subjected to some planned activity for the purpose of effecting response or developing new scientific understanding. The Committee on Research Practices monitors the implementation of policies in this area.

7. Variance from Regulation

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

C. REGULATIONS GOVERNING POSTGRADUATE STUDIES

1. Program Registration

Program registration involves payment of tuition and other prescribed fees where appropriate and confirms students' enrollment at the University. Failure to enroll in the program in any one semester will result in automatic withdrawal from the program and the University, unless a formal approval of Leave from Study has been obtained from the student's major department. Moreover, a student must be officially registered in the program in the semester when he/she is being considered for graduation from that program.

Each student enrolled in a specific program is subject to the requirements of the major department and the University. Exemption from specific requirements is possible, but only in well justified circumstances and with written permission from the major department.

As a registered full-time student, one may apply for hall residence and financial aid, as well as acquire information about student life and the University.

1.1 Study Commitment

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

1.2 Double Registration

Unless prior permission from the Director of Admissions, Registration and Records is obtained, students are not permitted to concurrently register for another program at this University or at another tertiary institution. Student enrollment lists are 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.

1.3 Late Registration

Non-local postgraduate students admitted to the University in a particular academic year must complete registration in their programs by the end of the add-drop period in the Fall or Spring Semester. The period of deferment for admission is granted for a maximum of two semesters, but this would still be subject to the approval of the major department. The admission offers made to prospective students who are not able to adhere to the above deadlines will become void. They will have to re-apply for admission to the University as new applicants.

1.4 Full-time and Part-time Study

Most postgraduate degrees are available on both part-time and full-time basis. The taught programs leading to the MSc, MA and MBA degrees are suitable for students interested in part-time study. The MPhil and PhD are research degrees, and students in some disciplines may be required to participate in research on a full-time basis. Postgraduate students may apply to their department, prior to the beginning of any semester, for transfer from full-time to part-time status or from part-time to full-time status. When such a transfer is allowed, the remaining degree requirements will be determined.

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

1.5 Adherence to the Curriculum

Beginning 1996-97 academic year, all new postgraduate students must adhere to the curriculum of the year of entry throughout their program of study.

1.6 Duration of Study

Taught master's programs

For full-time MSc and MA students, the normative periods for completing the degrees may be one or one and a half years as specified by individual programs. Part-time students may expect to take twice the time of full-time students. The normal period for completing the MBA program is two years for full-time students and three for those in part-time mode.

Research degree programs

The normal period for completing the PhD degree in full-time mode is four years after the first degree with a reduction of one and a half years if a relevant master's degree is earned prior to entering the PhD program. For MPhil degree in full-time mode, the normal period of study is two years.

Time restrictions on degree completion

The maximum time allowed for degree completion is five years for the master's degree and eight years for a doctoral degree, with a one-and-a half-year reduction if a relevant master's degree is earned prior to entering the PhD program. These time limits are in effect whether or not the student is in continuous registration. Time limits for part-time study are the same as for full-time study.

1.7 *Students Studying Taught Programs Beyond the Normal Duration of a Program*

Students on taught postgraduate programs who have to extend their enrollment beyond their normative period of study are allowed to pay a partial fee, based on the number of credits they enroll for. The partial fee system is restricted to only one semester of study beyond the normal period of study for the program the student is enrolled in. Details of the per credit charge can be found on page 10.

1.8 *Tuition Fee for Research Postgraduates Studying Beyond the Normal Period*

To encourage postgraduate research students to complete their studies at the earliest possible time, a refund mechanism has been introduced so that those who have met their program and residency requirements within the first three calendar months of the start of a semester are entitled to a partial refund of the tuition fee paid for that semester. Details of the refund arrangements can be found on page 10.

2. Course Registration

Course registration deals with the selection of and enrollment in appropriate courses for a specific semester. Course registration for a semester requires approval from the major department. The student's program registration will be revoked without formal course registration. Students should ensure that they have properly registered in the courses specified for a semester. Students whose names are not on the class enrollment list will not be allowed to sit for examination(s) of the specific course(s) concerned and will not be awarded any grades for the course(s).

Students should acquaint themselves with the general rules for postgraduate course registration and departmental course requirements for the program. They should also read the course description and requirements carefully before selecting a course.

Other than courses that are graded Pass or Fail as indicated in the course description, students from the School of Engineering may make request at course registration time (up to the end of add/drop period) for a course to be graded Pass or Fail provided that the course is not counted towards their graduation requirements. Special approval must be obtained from the major department and the course instructor concerned.

2.1 Course Requirements

Credit requirements for postgraduate degrees apply only to courses and project work, not to thesis research. Unless restricted by departmental regulations, a maximum of two undergraduate courses at the 300-level may be used for postgraduate degree credit. Of the two courses, only one may be from the student's major department. Additional stipulations on the use of 300-level courses to gain advanced standing credits can be found under Section 4.

For all postgraduate programs, the average course grade obtained for satisfying degree requirements must at least be 'B'. The study load requirements for postgraduate programs are as follows:

Taught master's programs

The normal study load for full-time students on taught master's programs is twelve credits per semester, with nine credits being the minimum. The MBA and the MSc programs offered by the School of Business and Management, however, have a heavier study load than other taught postgraduate programs.

For part-time students, the maximum study load is eight credits per semester.

Research degree programs

The normal study load of full-time research degree students is ten credits per semester whereas the maximum study load for those in part-time mode is eight credits per semester.

2.2 Course Repeats

A course with a grade less than C shall not be credited towards a degree although it will be reflected in the student's record. Only two courses (excluding audited courses) in a degree program may be retaken, and each may be repeated only once. The new grade obtained after repeating a course will replace the previous grade in the calculation of the cumulative and graduation grade averages.

2.3 Course Registration Changes

(a) Course add/drop

Students may make changes to their course enrollment during the "add/drop" period which is scheduled at the beginning of each semester. Changes made in this period will not be reflected in the student's record. Requests for adding courses after the "add/drop" period will not be accepted except under extenuating circumstances.

(b) Course withdrawal

A student who wishes to withdraw from a course after the "add/drop" period may do so up to six weeks before the commencement of the examination period. Withdrawal beyond the six-week deadline will not be accepted except when the application is made due to medical reasons or withdrawal from the University. Students are cautioned that late withdrawal may affect their academic progress and result in less than the specified credits being earned in the semester. Such withdrawal is entirely the responsibility of the student who should seek advice from the major department. The Withdrawal without Penalty (W) grade will be recorded as the course grade. Special arrangements pertain to half-semester courses in the Master of Business Administration (MBA) program.

2.4 Corequisites, Prerequisites, Exclusions and Background

For a course with a corequisite designated, both courses should be taken concurrently; alternatively the corequisite may be taken and passed previously.

If a course designates other courses as its prerequisites, students must have taken and passed the prerequisite(s) before they may register in the course, unless exemption is granted by the department offering the course.

If a course has exclusions specified, students are not allowed to register in the course if they have already taken and passed any of the stated exclusions. Also students are not allowed to enroll in a course together with any of its stated exclusions in the same semester.

A course may require a certain general level of desired prior knowledge as background. Students should ensure that they have the necessary background to undertake a course, and may seek help from their departmental advisors.

2.5 Co-listed Course

A co-listed course is a course offered under more than one course code. There may be different assessment schemes or assignments for the different course registration, which will be explained to students at the beginning of the semester. Students may only register for one of the co-listed versions of the courses, and can only earn the credits of the course for which they are registered.

2.6 Course Auditing

With the permission of the course instructor, a full-time student may register in a course as an auditor, that is, to attend a course and to participate in activities up to and including writing the final examination but not receiving a formal grade. Subject to satisfactory completion of requirements set at registration by the instructor, the course will be designated AU on the student's transcript. Otherwise the course will be removed from the registration record. No course credit is given for audited courses.

3. Course Exemption

Course exemption may be granted if the student can produce evidence, such as a transcript and course syllabus, that a course is equivalent in content to another course taken elsewhere, for which a satisfactory grade has been obtained. No credits will be given for the exempted course, and the student may be required to take an approved alternative course.

4. Advanced Standing

Advanced standing may be granted to students in recognition of studies completed successfully elsewhere. Application must be made to their major department during their first semester after admission. Late applications will not be considered. Conditions on the granting of advanced standing credits are as follows :

  a. No more than one-third of the required course work for students on taught postgraduate programs can be granted advanced standing credits;

  b. Credits earned at the undergraduate level can only be used for advanced standing purpose if the credits had not been used for the award of another academic qualification and that the course must be at the 300-level, and

  c. Advanced standing credits cannot be granted in recognition of non-course work experience or research work completed either at the University or at other institutions.

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.

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

5   Transfer of Course Grade and Credits on Resumption of Studies

Students who had previously withdrawn from their program of study at the University but who, after a period of time, are re-admitted to a program of study at the University, may be allowed to transfer their previous course grades and credits to the new program of study. Such a transfer of course grades and credits is restricted to courses which had been completed within five years prior to the resumption of studies at the University. In addition, these credits must not have been used to earn any academic qualifications either at the University or elsewhere.

6.   Assessment

6.1 Course Grading

Grades given in each course are based on student performance in the final examination, tests, essays and reports, presentations and other forms of classroom participation, assignments, and laboratory exercises, although not all these elements may be present in each course. A failing grade in the laboratory component, if any, of a course may result in a failure in the whole course. The instructor in each course will announce the course grading scheme to the class in the first week of lectures. Students will not be given any grades for the course nor be allowed to sit for the examination of that course if their names are not on the class enrollment list. Final examinations are scheduled following the end of lectures.

6.2 Absence From Final Examinations

Students who fail to attend a final examination as scheduled will be given zero mark for that examination. If the absence is due to extenuating circumstances beyond the student's control, such as medical emergencies, he/she may apply to the Admissions, Registration and Records Office (ARRO) within one week from the missed examination for a make-up examination to be held. For absence due to medical reasons, the student is required to submit certification issued by a registered medical practitioner. Appropriate documentation would be required for absences
due to other reasons.

The ARRO will decide, in consultation with the Office of Academic Programme Administration (OAPA) and the Department/Course Instructor concerned, whether or not the student's application should be approved. The student will be notified of the result of the application within one week from the date the application is lodged with ARRO. The make-up examination will be held within five weeks after the regular examination period. The format of the make-up examination will be decided by the course instructor concerned.

6.3 Postgraduate Grades

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

Letter Grades	Definitions
A+, A, A-	Excellent Performance
B+, B, B-	Good Performance
C+, C	Marginal Performance
F	Failure

Other Designations	Definitions
AU	Audited
I	Incomplete
W	Withdrawal without Penalty
P	Pass, Ungraded
PP	Permitted to Proceed

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

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

The Withdrawal without Penalty (W) grade is given when a student withdraws from a course after the "add-drop" period and prior to the prescribed deadline for course withdrawal.

The Pass, Ungraded (P) grade is given for courses which are indicated in the course description in the Academic Calendar that they will be graded as such.

A failed course (graded F) cannot be credited towards a degree.

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

6.4 Grade Reports

Grades will be posted in the course-offering departments as soon as they become available but not later than six working days from the last day of the examination period for the semester. On posted grade lists, students are identified only by their student numbers. Individual grade reports are sent to students approximately four weeks after the end of each semester.

6.5 Grade Review

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

6.6 Grade Averages

A grade average (GA) is the average weighted grades obtained in a group of courses where each course is given a weight equal to its credit value. Advanced credits, exchange credits and courses graded P, I, W, PP and AU are omitted from this calculation.

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

All GAs are reported using the closest letter grade, including C- to D- although they are not course grades.

7. Thesis Format

The thesis shall conform in layout, binding and presentation to the requirements prescribed by the Department. General University guidelines require that a thesis should :

- be written in English;
- have a title page giving the thesis title, the student's name and academic degree(s), the name of the department, the name of the degree for which the thesis is presented, and the month and year of submission;
- contain a paginated table of contents and a list of references;
- be printed on one side only of international size A4 80 to 90gsm woodfree paper (297mm x 210mm);
- have all textual materials double-spaced, although long quotations, references and footnotes may be single-spaced;
- be adequately referenced and clearly punctuated; and
- include an abstract of not more than 300 words summarizing the content of the thesis.

Students in the School of Humanities and Social Science who are pursuing research work in the areas of Chinese Studies, and who can demonstrate a need to use Chinese to write their thesis should seek prior approval from the Committee on Postgraduate Studies of Senate via their supervisors and the divisional head. If approved, students are also required to produce a translation of the abstract into English.

8. Conduct of Thesis Examinations

A student wishing to appear before a thesis examination committee must so indicate to the major department at least six weeks before the examination, and have delivered to the department a sufficient number of examination copies at least four weeks before the examination. For a PhD thesis, the number of copies is seven, and for the MPhil four. One of these copies will be put on display prior to the examination for perusal by departmental faculty and students and other members of the University community and members of the public.

The thesis examination takes place in a single session and comprises four parts, the first two of which are open to all members of the University and to departmental guests. The third part is closed to all but the student and the committee, and the fourth is a closed session of the examiners in the absence of the candidate.

The first part is an oral presentation by the student, emphasizing the major elements of the research and the results obtained. Next is an open questioning period, involving first members of the thesis examination committee, and subsequently, others in attendance. During this part of the examination, all questions are addressed through the chairman and any dialogue limited to the student and the individual questioner. The third is a closed session involving a less formal discussion between the student

and the examination committee on his research. At the end of this part of the examination, the candidate must leave the examination venue.

The fourth and final part is a closed session involving only the committee to assess the thesis, and the performance of the candidate. In arriving at a decision, the votes of members of the thesis committee carry equal weight. The chairman is responsible for advising the committee the vote of the external examiner in absentia, if applicable. A report on the thesis examination is then prepared by the chairman, together with members of the thesis examination committee.

9.   Outcome of Thesis Examination

A thesis examination can have one of the following results :

> Passed*
> Passed* subject to minor corrections
> Passed subject to major corrections
> Failed but may be resubmitted
> Failed

> * The 'Passed with Distinction' category is no longer used from Spring   Semester 1995/96 onwards.

10.   Post-thesis Examination Arrangements

If a thesis has been graded 'Passed subject to minor corrections', the corrections are to be made to the satisfaction of the supervisor. The final version of the thesis should be submitted to the supervisor for checking and verification before it is submitted to the department to complete the degree requirements.

A thesis graded 'Passed subject to major corrections' when re-submitted, requires the approval of the full examination committee. The result 'Failed but may be re-submitted' requires that the entire examination process be repeated, including the re-establishment of an examination committee. At least six months must pass before the thesis can be re-submitted for examination. Students can apply for transfer to part-time mode of study during the re-writing process of the thesis.

A 'Failed' grade results in the automatic withdrawal of the student from the program of study and the termination of registration at the University.

11.   Submission of the Final Thesis

On successful completion of the thesis examination, an MPhil student must, within one week, submit three clean unbound original copies of the thesis to the department, which will arrange for the appropriate signatures of approval, and forward the signed copies to the Admissions, Registration and Records Office for their action. When bound, two copies will be retained by the Library and one by the department.

For PhD students, the arrangement is the same as that for MPhil students, except that four original copies of the thesis are required, instead of three.

12. Academic Standing - Progress of Postgraduate Students

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

In order for postgraduate students to attain good academic standing, they must (i) obtain a cumulative grade average (CGA) of B or better, and (ii) show a reasonable progress towards degree completion at the end of each semester.

Students who fail to maintain good academic standing in a semester will be issued a letter of warning by the Head of Department. Students who fail to maintain this standing in two consecutive semesters will have their records reviewed by the Department and may be required to take academic leave and have their study at the University suspended. The suspension period will last from one to three semesters during which students may apply for re-enrollment in their program of study at the end of their suspension. If this application is approved, certain conditions may apply and the student must regain good academic standing in the semester immediately following re-enrollment. Students will be required to withdraw from the University if the conditions are not met. If re-enrollment in the program is not granted by the expiry of the suspension period, the suspension will be converted to a required withdrawal from the University.

13. Residency Requirements

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

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

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

14. General Requirements of Taught Master's Programs

14.1 MSc and MA Programs

These are course work degrees for which students must fulfill a minimum course requirement of 30 credits. Students may also undertake a project described in the departmental Calendar entries. Projects require the submission of a written report, as specified by the department, and carry a maximum of nine credits. Each report will be read by two faculty members, one of whom is the supervisor. Letter grades instead of 'Pass' or 'Fail' grades are used for grading projects from Fall Semester, 1996/97 onwards.

14.2 MBA Program

Requirements for the full-time and part-time MBA program are described in the MBA brochure of the School of Business and Management.

14.3 EMBA Program

An EMBA degree awarded jointly by Northwestern University and the Hong Kong University of Science and Technology. It is a one-and-a-half-year part-time program for executives at leadership positions with at least 10 years of work experience. Further details of the program are described in the Kellogg-HKUST EMBA brochure.

15. General Requirements of Research Degree Programs

15.1 MPhil Programs

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

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

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

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

15.2 PhD Programs

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

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

The five-member thesis examination committee is appointed by the Senate Committee on Postgraduate Studies on the recommendation of the department. The committee is chaired by an individual from outside the school, who is appointed by the Committee on Postgraduate Studies upon recommendation by the dean. This person presides over the examination, but is not one of the five members who are: the thesis supervisor, two academic staff members from the department, one academic staff member from outside the department, and one member external to the University who has expertise in the field being examined. Theses will be graded Pass or Fail.

16. Inter-departmental / Program Transfer

A student may change from one program of study to another with the permission of the major department to which the student wishes to transfer. If a transfer is approved, that department will determine which credits from the student's former program apply to the new program. Normally, the transfer will not be effected until the following semester. Students who wish to transfer to another program of study in the middle of a semester should obtain the prior approval of the major department and the relevant Dean's Office. Unless there are extenuating circumstances, requests for program transfers to be effected in the middle of a semester are not supported.

17. Program Withdrawal

Students who withdraw or are required to withdraw from the University must complete the clearance procedures with the Admissions, Registration and Records Office, the Library, the Student Affairs Office, the Finance Office and the department.

V. ACADEMIC SERVICES

Teaching and research at the University are supported by a number of academic service units.

University Library

The Library is an integral component of the academic programs, supporting the University's teaching and research in science, engineering, business and management, the humanities and social sciences. As of 1997, the Library's book, periodical, and microform collections total approximately 450,000 volumes, plus 23,000 media materials. Its electronic collections contain over 9,000 discs, including thousands of full-image journal subscriptions and conference proceedings.

In addition, the Library offers its users a learning environment rich in electronic information and services. In a sense the Library is always open in that its extensive array of electronic resources can be accessed from every corner of the campus, including all student and staff housing, twenty-four hours a day. Users can search the Library's catalog of holdings in both English and Chinese using a telnet or Web interface. The Library Web server (*http://library.ust.hk*) has developed into a central information hub for access to Library information, services, and resources; instructional materials; pathfinders; and Internet sites.

An experienced library staff assists users in a variety of ways, from the selection, acquisition, and cataloging of materials to making use of the collection, online searches, and interlibrary loans. There are 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.

Language Centre

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

The Language Centre has one 18-booth and three 24-booth computerized language laboratories, for oral/ aural work as well as text processing, editing and computerized assessment.

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

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 all Schools.

The HKUST computing environment is based on a distributed client-server architecture. The cornerstone is an advanced high-speed switched FDDI (Fiber Distributed Data Interface) network backbone, with maximum aggregate throughput of 3.6 gigabits per second. International Internet connection is provided via multiple high speed links. A growing number of laboratories and offices are provided with switched Ethernet or fast Ethernet connections. The network covers not only all the academic buildings but also reaches out to staff quarters and student halls. Staff and students can also get access to network services via a number of *Express Stations* in various campus locations, or they can connect their home computer to the campus network via dialup modem pools.

The Centre operates powerful servers to provide campus-wide network services such as e-mail, network printing, World-Wide Web and electronic notice board. One important characteristic of the University's computing environment is its multimedia and Chinese-English bilingual capability. Increasingly, more network services will have these features. To support computation intensive research, the Centre provides various solutions including parallel processors, graphic processors and high-end computational workstations. All microcomputers and scientific workstations are connected to the campus network, providing desktop computing power as well as windows to a vast array of information and computing resources such as Library systems, administrative systems, academic software packages and audio/video broadcasting programs.

The Centre also manages a number of central computing laboratories, providing PC, Macintosh and Unix workstation facilities for teaching and students use. Extensive

software training programs are also provided to assist users to get the most out of their computers.

Educational Technology Centre

The University is committed to high standards and up-to-date methods in undergraduate and postgraduate teaching, research and publication. To this end, the Educational Technology Centre (ETC) sustains a comprehensive service for all academic and research staff.

The Audio Visual Unit looks after all centrally provided AV facilities in all common teaching venues including 8 lecture theaters, some 70 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, video-taping, 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, as well as research and teaching materials. Its photographic and darkroom facilities help in producing slides, overhead transparencies and prints for academic and publicity purposes. In addition, the unit also provides high-speed, high volume reprographic and offset printing services.

In addition to these production and technical services, our Instructional Development Unit organizes workshops and seminars for faculty, teaching assistants, and tutors on educational issues and instructional methodologies in higher education. Topics have included learning theory, classroom delivery and management techniques, utilization and production of instructional materials, assessment of student progress and evaluation of teaching effectiveness.

The Unit 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 Unit also assists in collecting and processing course evaluation data for all credit courses and English language enhancement courses.

VI. CENTRAL AND INTERDEPARTMENTAL RESEARCH UNITS

To both support and supplement research based in academic departments, the University has established a number of research institutes and centers to identify and provide focus for research at HKUST. All operate across traditional disciplinary boundaries, and provide a full range of research and specialized research services from developmental and applied activities to basic investigations. Together with disciplinary research in academic departments, these specialized research organizations provide undergraduate and postgraduate students with a wide range of opportunities for participation in exciting programs and projects that deal with the extension and application of knowledge. Several hundred research projects have been funded and are in operation.

These research units are described briefly in this section of the Handbook in three groupings: the Research Centre, Research Institutes and Central Research Facilities.

RESEARCH CENTRE

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

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

Examples of technology and research initiatives in current operation are :

- operational windshear warning system at Chek Lap Kok Airport
- Hong Kong/Pearl River Delta contaminated sediment research
- satellite remote sensing technology on environmental studies
- pollutant source identification; air quality index and prediction
- productive electrochemical desulphurisation of fuel gas
- abatement of diesel air pollution and clean technology
- biological wastewater treatment - using immobilized microalgae and mangrove wetland system
- heavy metal toxicity and tolerance in plants
- conservation and utilization of mangrove stands in Hong Kong
- environmental ecotoxicology
- database on technological manufacturing resources in Hong Kong and South China

RESEARCH INSTITUTES

Each research institute is managed by a Director who is responsible for programs, projects, facilities and personnel. Faculty, staff, students and visitors should contact the director if they wish to become involved in a particular program. At present, the following institutes have been established or are being established:

Advanced Manufacturing Institute

The mission of the Institute is to advance the state of knowledge of manufacturing systems and to promote industry-university cooperation in advanced manufacturing technology. Emphasis is placed on the methodologies for the design, development, implementation, management and improvement of manufacturing systems to attain the goals of quality, schedule and cost. There are four sub-areas: manufacturing management, manufacturing process technology, manufacturing control and manufacturing system design.

At present in the formative stage, the Institute plans to maximize its impact on the local manufacturing sector by working closely with industry in textile and garments, electronics, plastics, and machinery.

Advanced Materials Research Institute

The Institute aims to promote and enable basic and applied research in advanced materials, and to provide for postgraduate degree programs and the incorporation of materials science into the undergraduate curriculum. Its research emphasis is on materials performance, structure and composition, properties, and synthesis and processing in

(a)   thin-film science, solid state clusters, laser and photonic materials, and magnetic materials;
(b)   liquid crystals, ceramics and polymers; and
(c)   composites and biomedical materials.

Included within the scope of the Advanced Materials Research Institute are the Magnetic Materials Laboratory, the Materials Modeling Laboratory, the Zheng Ge Re Thin Film Science Laboratory, the Joyce M. Kuok Laser and Photonics Laboratory and the William Mong Solid State Clusters Laboratory. A proposed Composite and Synthetic Materials Center will be concerned with the design and synthesis of entirely new materials with enhanced properties, and with the development of new processes to produce existing materials. It will include a Polymer Synthesis Laboratory, Composites Laboratory and Biomaterials Laboratory with emphasis on biomedical materials.

Biotechnology Research Institute

The biotechnology industry is one of the fastest growing industries in the last decade. Biotechnology products have revolutionized the health care, food, agricultural and environmental management industries. While it requires highly trained work force, biotechnology does not need huge capitals or large manufacturing plants. For these reasons, biotechnology is considered as one of several high-tech industries which can provide Hong Kong with a competitive edge in economic growth. From its inception, HKUST has made biotechnology one of the main research and development efforts of its faculty. With the donation of $130 million from the Hong Kong Jockey Club, HKUST established the Biotechnology Research Institute (BRI) in 1990.

The mission of the BRI is to assist Hong Kong in developing biotechnology through recruitment of highly qualified faculty, establishment of state-of-the-art research facilities, support of up- and mid-stream research in targeted areas and the down-stream development of products, and training of specialists in biotechnology. The strategic areas of research focus for BRI include :

- Neuro-Proteins
- Protein Engineering and Design
- Plant Biotechnology
- Traditional Chinese Medicine

Besides providing common equipment for biochemical and biological laboratories, BRI also sponsors several research facilities essential for biotechnology research :

- Animal Care Facility
- Plant Growth Facility
- Cell Culture Laboratory
- Fermentation Laboratory
- Molecular Structure Laboratory
- Nuclear Magnetic Resonance Laboratory

Hainan Institute

The Institute has been established to use Hainan Province in China as a base for academic work and applied research and development, in order to strengthen these areas of activity at the University, contribute to the economic development of Hong Kong and its region, and enhance Hong Kong's involvement in the development of Hainan. Its objectives are:

(a)   to obtain a profound understanding of the natural, social, technological, and economic conditions and prospects of Hainan; and

(b)   to undertake applied research and executive education in: agriculture and mariculture, behavioral sciences, environmental studies, finance and economics, infrastructure development, and technology transfer.

The Institute was established in January 1994. A liaison office in Haikou and a joint laboratory in Sanya have been set up. Projects being pursued include applications of biotechnology in mariculture, air pollution monitoring, satellite monitoring of the marine environment, collaborative research on economic and socio-cultural development, and joint organization of international conferences; and, to a lesser extent, infrastructure system consultations and technology transfer in industrial development zones. Many executive education programs for government and business leaders have been carried out successfully and are being continued.

Hong Kong Telecom Institute of Information Technology

This Institute was founded with a $100 million grant from Hong Kong Telecommunication Limited. The concept of the Institute is based on the recognition that in future there will be no economic development, no industry or commerce, no service or manufacturing capability of any significance without the full utilization of telecommunication and information technology. All Schools at the University are involved in the research activities

of this Institute. At present, the Institute is sponsoring four major research programs, namely lightwave technology, network technology, wireless communication, and video technology.

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

Institute for Environment and Sustainable Development

Hong Kong has made the improvement of its environment a high priority to ensure sound future development. HKUST has contributed to this effort over the past four years through its Institute for Environmental Studies and through the collaborative efforts of the staff and students in the participating departments. Over 30 projects have been carried out for a total funding of over $25 million in collaboration with governments and industries in Hong Kong, China and Southeast Asia. The projects cover air and water pollution, marine coastal zone management, cleaner production for Hong Kong and China's industries, eco-labelling for Hong Kong, remote sensing and environmental GIS studies, to name but a few.

The change of name to "Institute for Environment and Sustainable Development" as of April 1, 1997 is deliberate. It emphasizes that the philosophy of the Institute is to support development necessary for a growing population and an increasing standard of living, but to ensure as much as possible that such development is carried out in a "sustainable" way, that is, in harmony with our environment.

Institute for Infrastructure Development

The Institute for Infrastructure Development was established to accomplish one of the institutional objectives to assist the social and economic development of Hong Kong. Infrastructure development is a familiar aspect of modern life which fosters human settlement, societal interaction and economic progress. It embraces the entire conceptualization, creation, use, operation and support of large-scale structures and systems -- roads, harbors, drainage, slopes, airports, bridges, terminals, water resources, energy supply, telecommunications, sanitation, railroads and the like. The Institute plays a facilitative role in matching the talents of faculty and research staff with the need for acceptable solutions to problems outside. It seeks to address infrastructure issues which lie unattended and where new efforts can add value. While it helps to link outside needs to the research interests of the University and to add to a growing, local technology base of new applications in satisfaction of societal needs, it also strengthens the University's internal research capacities.

The Institute aims not only to support the effective design and delivery of new facilities with new applications of knowledge, but also to strengthen their use, operation, maintenance and support; and to assist with clarifications of the needs, justifications of specific forms of response, and valid commitments of societal resources.

Institute for MicroSystems

The Institute has been formed to promote research in crucial areas of microelectronics and to transfer the technologies developed to the local electronic industry to raise its competitive edges, and to spawn new business. At present, six areas will receive emphasis :

> Micro Electro Mechanical Systems
> Circuits and Systems
> Nano Devices and Technology
> Advanced Display Technology
> Microelectronics Materials and Technology
> Electronic Packaging

The University's facilities for the fabrication of electronic devices, the Microelectronics Fabrication Center, is central to the activity of the Institute.

More than 40 faculty members from the Departments of Electrical and Electronic Engineering, Physics, Chemistry, Mechanical Engineering, and Chemical Engineering participate in research projects under the Institute.

Sino Software Research Institute

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

The Institute sees its primary role as that of a catalyst, helping software research projects reach the critical phase in which ideas may be translated into prototypes that can be evaluated using large-scale trails. The Institute also encourages development efforts in areas that are relevant to the economic and social development of Hong Kong. One such project is the "Hong Kong SuperNet", which makes full Internet access available to the public, an important step to maintaining Hong Kong's status as a regional communications center.

Beyond its interest in software research and development, the SSRI also provides technical and consultative help to local businesses as they seek to implement the latest software technologies. As part of this effort, the Institute sponsors conferences, workshops, seminars and lectures on software topics related to the needs of businesses and public institutions.

One such example was the 16th IEEE International Conference on Distributed Computing Systems, which was held in Hong Kong in May 1996. This is IEEE's flagship conference in distributed computing. Some two hundred researchers from local and international organizations attending the conference.

CENTRAL RESEARCH FACILITIES

Advanced Engineering Materials Facility

Established in 1994, the Advanced Engineering Materials Facility is a multi-disciplinary central research facility located at Hong Kong University of Science and Technology. Its mission is to provide state-of-the-art research equipment and technical expertise for HKUST as well as Hong Kong industries to develop advanced engineering materials technology and their applications. Research areas of the Facility include processing, microstructural design and new materials development, non-destructive testing and failure analysis, applied mechanics and testing methodology.

The Facility engages in the training of graduate students and researchers in advanced materials technology, and in international exchanges. It also organizes seminars, workshops and conferences to disseminate knowledge of recent development in the latest materials technology to the industry.

Animal Care Facility

Animal Care Facility (ACF) is located on the seventh floor of the Laboratory Wing occupying a total area of about 600 square meters. It is a facility for breeding conventionally reared laboratory animals and holding of these animals for experiments. The air-conditioned Facility contains ten animal holding rooms, an operation theater, a quarantine room, a nude mice room, a procedure room, a cage washing room, a bedding dispensing room and a diet store. ACF provides professional and humane handling of animals selected for biomedical research activities at HKUST. The animals held in ACF are receiving the highest standard of health care and compassionate treatment, and all the experimental protocols on animals are approved by the Animal Care Advisory Committee of the University. ACF supplies and maintains several common strains of mice, rats, rabbits, chicks and piglets. ACF's technical staff are well trained and they are prepared to provide support and advice to researchers on their animal experiments including surgery, drug administration, antigen immunization and antibody production.

China Light and Power Wind/Wave Tunnel Facility

The Wind/Wave Tunnel Facility was established with a substantial donation from China Light and Power. The Facility will be operational in mid-1998. Its mission is to provide a physical modeling capability to Hong Kong for designing tall buildings and bridges against wind induced effects; prediction of air pollutant dispersion in complex terrains and studies of wind/wave effects on off-shore structures.

The tunnel consists of two main sections: high speed and low speed sections. The high speed section will be used for wind engineering work. The maximum wind speed attainable is 25 m/s. The dimensions of the test section are 29.2m X 2m X 3m (length x height x width) with computer controlled turntable and roughness elements. The low speed section is to be used for atmospheric dispersion studies, in addition to wind engineering studies on long structures such as bridges. The dimensions are 41m X 4m X 5m. The lowest steady wind speed attainable is less than 1 m/s. By raising the tunnel floor of the low speed section, the tunnel is converted to a wind-wave facility. The water tank has the same length and width as the low speed section while the water depth is 3m. Wave makers will be installed. An up-to-date array of flow velocity, pressure, force, concentration and wave measurement equipment are available. With a long test section the behavior of a neutral atmospheric boundary layer wind can be accurately simulated.

The Facility will also be used to train undergraduate and postgraduate students for use of physical modeling techniques in the field of wind, environmental and off-shore engineering. Fundamental research on generic (as opposed to site specific) problems in the above areas will also be engaged by faculty and postgraduate students. Workshops and seminars will be organized to train practicing engineers in using physical modeling to assist their planning and development of infrastructures.

Computer Aided Design and Manufacturing Facility

The Computer-Aided Design and Manufacturing Facility (CAD/CAM Facility) is a central unit to support research and teaching related activities.

It focuses on multi-disciplinary and application-oriented research programs that will create impact on the design and manufacturing industries in Hong Kong and the neighboring region. The Facility provides stimulus for collaboration and interaction between HKUST, local industries and international bodies.

The Facility 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 Facility has a number of Computer Numerical Control (CNC) machines and state-of-the-art CAD systems to provide a platform for CAD/ CAM integration. Manufacturing facility is also enhanced by a rapid prototyping machine. Robots are used to integrate the

manufacturing and assembly operation. The Facility has a strong capability in Computer-Aided-Engineering (CAE) with a full range of analysis and simulation software.

Electrical and Mechanical Services Facility

On 1st January 1997, Instrumentation Maintenance and Repair Shop combined with Mechanical Workshop to form the Electrical and Mechanical Services Facility. Its mission is to provide technical support to the equipment used in teaching, research and operational activities of the University.

EMSF performs repair and maintenance of scientific apparatus, educational equipment, audio/visual equipment and building services related electronic systems. Staff are trained in repairing all common electronic equipment, and selected staff have received specialized training in more sophisticated apparatus. Preventive maintenance programs on some equipment are developed to optimize and extend their lifetime. The unit works closely with the Safety and Environmental Protection Office to provide the necessary engineering to ensure safe operation of equipment within the University. A reporting system for repair and maintenance has been set up under the campus computer network. All requests for service are logged and followed through to completion by appropriate technical staff.

EMSF also fabricates special mechanical parts/items and special-purpose circuits for both teaching and research activities, which are not commonly available in the market. The Mechanical Workshop of EMSF has a number of manual and computer controlled machines for fabricating high precision mechanical parts. The requests for fabrication are arranged on job queue basis. The staff of the unit will interact with the users to arrive at the final design so that their needs can be met.

Geotechnical Centrifuge Facility

The Geotechnical Centrifuge Facility (GCF) is a unique facility in Hong Kong. It is built and established partly through funding by a UGC Central Allocation grant and partly through funding from the University. Therefore, this Facility is dedicated to serve not only the University but also the geotechnical community at large in Hong Kong.

Centrifuge modeling is a powerful research tool to study geotechnical problems such as rain-induced landslides in Hong Kong, consolidation settlement of reclaimed land, pollutant transport in porous media, tunneling, deep excavation, liquefaction, and many other soil-structure interaction problems under both static and dynamic loading conditions.

Geotechnical related research can be carried out, using a large centrifuge which has a rotating arm of approximately 9 meters in diameter, and is capable of creating an elevated gravity field 150 times that of the Earth's gravity. Geotechnical structures are built in model

boxes with maximum dimensions of 1.5m X 1.5m on plan, and 1.0m high. The maximum payload capacity of the model package is 400 g-ton. More importantly, the centrifuge is equipped with a bi-axial (2-D) shaking table so that models can be tested dynamically in flight. This 2-D shaking table is a unique feature and it is the only one in the world.

Demands from the industry (oil companies, major consulting firms, water resources agencies, etc.) are anticipated to take advantage of the newest and the unique geotechnical centrifuge to perform applied research. It is also expected that this Facility will be visited by researchers from all over the world to conduct state-of-the-art research, particularly by those who are interested in earthquake related areas.

Glassblowing Facility

The Glassblowing Facility (GBF) is a central facility to provide glassblowing services to all units of the University. The services offered include design, fabrication and repairing of glassware and custom apparatus. In addition, technical advice on the design of special glass apparatus pertaining to research projects is provided by the glassblowers. A good stock of common glassware, glass and quartz tubings and spare-parts, which can be checked out by all users of the University, is maintained at the GBF.

The GBF is equipped with a range of equipment and tools and has a capability for glassblowing at temperature up to 3000°C. These include temperature-programmed annealing ovens, grinding mills, belt linishers, diamond sanders and glassblowing lathes with various types of burners.

Liquid Helium Facility

The Facility is established by the University to provide liquid helium to academics and research units to obtain low temperature environments (4°K and below) that are required for research and/or operation of specialized equipment. The Facility has a state-of-the-art computer controlled helium liquefier module equipped with a built-in automatic purification system and two compressors. It has a total liquefying capacity of 240 liters of liquid helium per day without using liquid nitrogen for pre-cooling (480 liters with pre-cooling). The Facility also operates a helium gas recovery system for retrieving helium boil-off from user's instruments for recycling.

Materials Characterisation and Preparation Facility

The Materials Characterisation and Preparation Facility (MCPF) is a central facility for the synthesis, study and testing of new materials and materials needed for in-house or collaborative research projects. The Facility constitutes an important resource which houses state-of-the-art instrumentation, organizes workshops and training, and is a focal point for

interdisciplinary research. The Facility serves academics in all the science and engineering departments and is also available to external clients from other tertiary institutions, government bodies, and private industry. The MCPF occupies about 4000 square meters of purpose-built laboratories and offers a wide range of sophisticated multi-disciplinary equipment needed for in-house and collaborative materials research projects, and for performing materials analysis. Laboratories dedicated to particular facilities and processes are accessible to authorized clients of the MCPF. Tasks requested by occasional users are served by the Facility's own trained staff.

The scope of the facilities in the MCPF is sufficiently broad to meet many of the demands of the still-growing community of staff and postgraduate students. For example, instrumentation is available for various types of thermal, spectroscopic and electrical characterization, and for the preparation of materials by sputtering and evaporation. Equipment for microanalysis includes a field emission scanning electron microscope, a dedicated high-resolution transmission electron microscope, a time-of-flight and imaging SIMS system, and a multitechnique surface analysis system (XPS, Auger, SIMS, etc.). These are supported by more standard types of electron-beam analytical instrumentation. The Facility makes such equipment available to other tertiary institutions and local industries either by offering analytical and failure analysis services at prescribed cost or, where appropriate, through collaborative research projects.

Microelectronics Fabrication Facility

The Microelectronics Fabrication Facility (MFF) provides functional fabrication laboratories for teaching and research, particularly in new semiconductor devices, novel microsensors and microactuators, advanced microelectronics process technology and high performance application specific integrated circuits (ASICS).

The MFF phase I laboratory provides about 247 square meters with Class 1,000 clean rooms (containing fewer than 1,000 particles per cubic foot of air larger than a half micrometer) and basic fabrication modules which provide photolithography, thermal diffusion, thin-film disposition, dry/wet etching and metallisation. The laboratory has also developed MOS and bipolar base line processes to provide microelectronics fabrication at the discrete device and small scale integrated (SSI) circuits level, with the possibility to upgrade to LSI and VLSI level in its phase II development.

The technical capabilities of MFF has recently been upgraded with the completion of its Phase II laboratory, which occupies an area of 750 square meters with some sections providing Class 100 environment. State-of-the-art microelectronics processing equipment has been installed. These include an E-beam Direct Write System which facilitates sub-quarter-micron patterning and enables nano-structure research. The new laboratory also provides support to the newly established Centre for Display Research. With the additional capabilities and capacity, MFF will extend its service to other tertiary institutions and the private sector through various technical collaborations.

Plant Growth Facility

The Plant Growth Facility provides support for various research project using plants or components derived from plants. It will be used for growing and conditioning of whole plants, tissues or cells in research as well as teaching. The Facility has a greenhouse with a total covered area of 538 square meters and twelve environmental chambers of various sizes.

The greenhouse was specially designed and built to meet the local weather conditions in providing a suitable environment for plant growth. There are five individual compartments of 6.4 X 10 square meters equipped with rolling benches to maximize growing area for potted plants. Each compartment has its own separate control for shading screen, ventilation, lighting and watering systems. In addition, the environmental chambers with sophisticated control and regulation systems will provide a range of plant growth environments to meet the critical requirement of different research projects.

Overall, the Facility will serve areas of research and teaching in plant biotechnology, plant diversity, plant physiology, botany, environmental studies, and ecology. The full commissioning of the Facility will be around the end of 1997.

VII. STUDENT SERVICES

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

Student Counselling Service

The Student Counselling Service offers assistance in many areas of student interests and concern, such as personal growth, campus life, personal problems and study-related issues. It also operates a Careers Centre which provides students with guidance and assistance in job search and career development.

Physical Education and Sports

Developing physical health and fitness is as important as broadening one's mental capacity and horizons. The University expects all students to participate in at least one organized sport or physical education activity during their years at the University. Professional coaches are available to organize and provide instructions in these activities. Indoor facilities include a large multi-purpose sports hall with 1,600 square meters of floor space for such sports as badminton, volleyball, basketball, handball and indoor soccer, four squash courts, fitness room, weight-training room, table-tennis room, and other areas for fencing, martial arts, aerobics, and other exercises. Outdoor facilities include a 50-meter swimming pool, an Astroturf soccer pitch, a 400-meter track with eight 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-putt, softball and archery.

Student Health Service

The Student Health Service provides out-patient health and dental care for students. Health education workshops and seminars are organized and presented for the benefit of students and staff.

Student Housing

Currently, on-campus accommodation is sufficient to meet the needs of all full-time postgraduate students.

Postgraduate students live in University Apartments which can accommodate up to 756 students. Each apartment comprises 4 single rooms, a sitting rooms, a kitchenette, and toilet

and shower facilities. The apartments are fully furnished and the kitchenettes are equipped with gas stoves, refrigerators and micro-wave ovens. All bedrooms and living rooms are provided with air-conditioners.

There are also two postgraduate halls of residence which have 356 air-conditioned rooms. The rooms are designed for single occupancy. Common facilities on each floor of the halls include shower and toilet facilities, and a lounge area with an adjoining pantry. Other facilities in the hall include common rooms and snack rooms where residents and guests can meet and socialize. A laundry is also provided. There are no cooking facilities. Hall residents may use the central dining facilities on campus.

There are no facilities in the apartments or halls for married students with or without children.

Student Activities

Extra-curricular activities are organized by the Students' Union and student societies associated with academic disciplines, sports, arts and other social interests. Students are encouraged to take part in activities as organizers and/or participants. The Student Affairs Office also organizes extra-curricular activities and programs such as formal dinners, competitive sports, talks and seminars.

Student Amenities

The campus, on a site of great beauty enhanced by landscaping, terraces, and pavilions, has been designed with great emphasis on the quality of life of both resident and non-resident students. Amenities for personal as well as organized student activities are provided. These include facilities for (i) the pursuit of hobbies such as photographic dark rooms and music rooms, (ii) the organization of activities such as conference room, meeting rooms, workshop, office space and exhibition areas, and (iii) leisure activities for students such as common rooms and quiet room. Catering facilities include self-service cafeterias, restaurants serving Chinese and Western cuisine, a food court, a coffee shop and a snack shop. Commercial facilities include a bookstore, banking services and a convenience store.

VIII. ADDITIONAL INFORMATION

Academic Year 1998-99

The academic year of the University begins on 1 September and ends on 31 August 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 programs, 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.

Provisional dates for the 1998-99 academic year are:

Fall Semester	1 September 1998 - 19 December 1998
Winter Session	4 January 1999 - 30 January 1999
Spring Semester	1 February 1999 - 28 May 1999
Mid-semester Break in Spring	1 - 7 April 1999
Summer Session	7 June 1999 - 14 August 1999
Study breaks	8 - 9 December 1998 and 17 - 18 May 1999

Academic Calendar for 1998-99

Detailed information about the University will be contained in the Academic Calendar for 1998-99 which will be published in Summer of 1998. Each newly-registered student will be provided with a free copy of the Calendar.

Admission Enquiries

Students requiring copies of the postgraduate handbook, School/ departmental brochures, application forms, advice or assistance on application procedures, admission requirements or other related matters are welcome to visit the Admissions, Registration and Records Office, Rm 1376 during the following hours :

Mondays - Fridays	9 am - 12:30 pm
	2 pm - 5 pm
Saturdays	9 am - 12 noon

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

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

Telephone	:	(852) 2623-1120
Facsimile	:	(852) 2358-2463
E-mail Address :		*gradmit@usthk.ust.hk*

Information on the University can also be found at the following address on the World Wide Web :

http://www.ust.hk

while information related to postgraduate admissions can also be found at :

http://www.ab.ust.hk/arr

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