



annual report laporan tahunan

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

'09



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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

'09

Ketua Sidang Pengarang

Prof. Madya Mohd Rahimi bin Yusoff

Sidang Pengarang Bahasa Melayu

Abd Aziz bin Mustapa
Marshita Mohd Taib
Faradila binti Md Yusof
Mohd Azmi bin Mat Said
Nor-Aliza binti Ibrahim
Mohd Amin bin Mohamad
Mahathir bin Mazizan
Ir. Mohd Rayme bin Anang Masuri
Mohd Shahar bin Akashah
Shamsul bin Samdin
Wahi bin Nordin

Sidang Pengarang Bahasa Inggeris

Encik Ramachandran A/L M.P.R Nair (Ketua)
Muliati binti Hj. Sidek
Prof. Madya Md. Zawawi bin Shamroz @ Shamroz
Sharimllah A/P Ramachandran
Mariana binti Yusoff
Subatira A/P Balakrishnan
Indradevi A/P Subramaniam
Teh Zanariah binti Mohd Raus
Nor Hazlen Niza binti Hussein
Noraini binti Husin

Reka Letak & Grafik

Aziza binti Md Buang
Shahril Hazizi bin Abu Bakar
Norhayati binti Yaakob

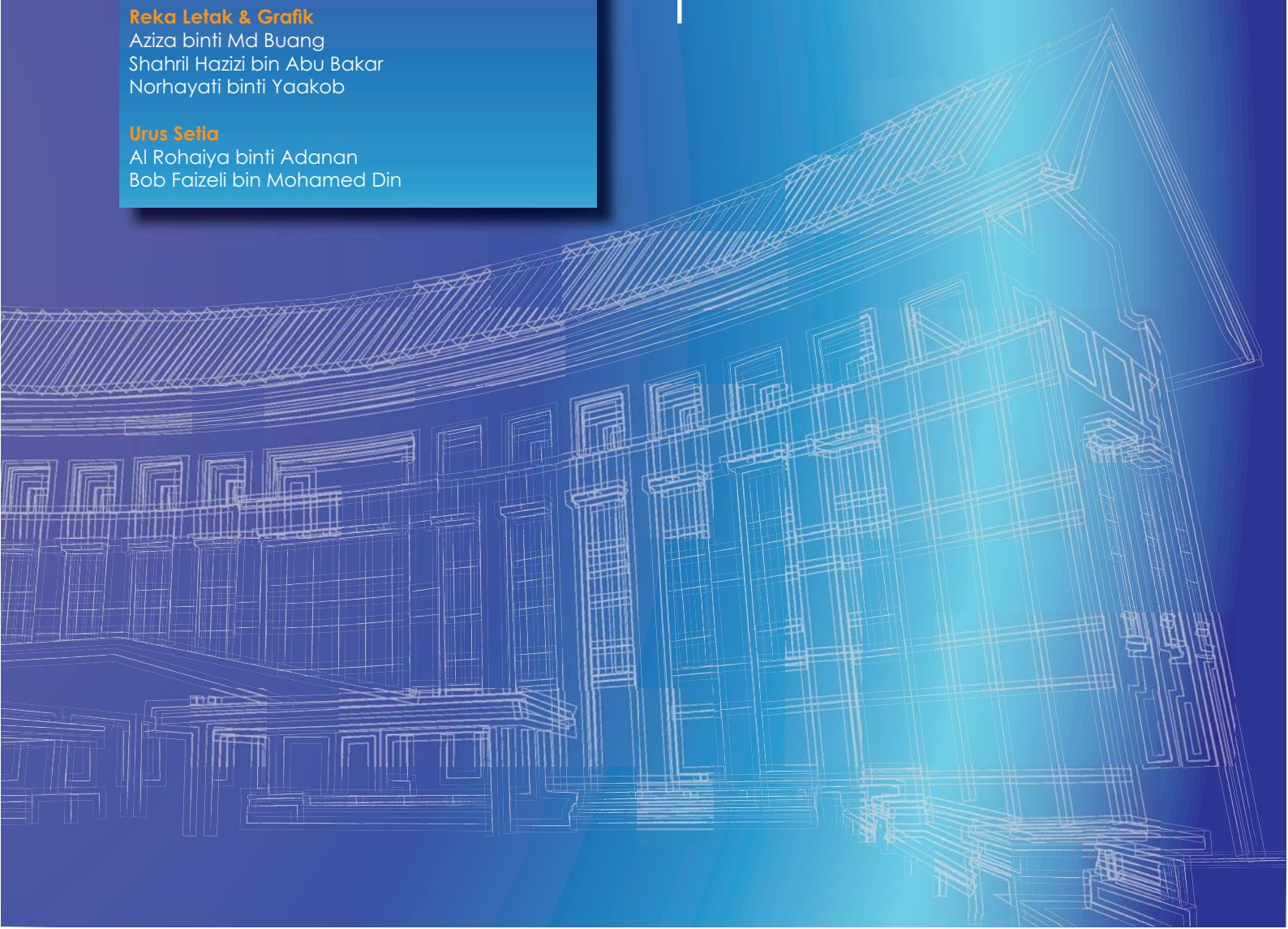
Urus Setia

Al Rohaiya binti Adanan
Bob Faizeli bin Mohamed Din

Sidang Pengarang

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maklumat korporat & latar belakang PROFIL UTeM *corporate information & background* UTeM Profile



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VISI

MENJADI UNIVERSITI TEKNIKAL YANG KREATIF
DAN INOVATIF TERKEMUKA DI DUNIA

MISI

MELAHIRKAN AHLI PROFESIONAL YANG
BERSAHSAIAH MURNI, KOMPETEN DAN
BERKETRAMPILAN TINGGI MELALUI PENDIDIKAN
UNIVERSITI TEKNIKAL BERKUALITI DAN BERTARAF
DUNIA. BERTERASKAN PENGAJARAN,
PEMBELAJARAN DAN PENYELIDIKAN
BERORIENTASIKAN APLIKASI DENGAN
PERKONGSIAN PINTAR UNIVERSITI-INDUSTRI
SEJAJAR DENGAN ASPIRASI NEGARA

MOTO

KOMPETENSI TERAS KEGEMILANGAN

VISION

TO BE ONE OF THE WORLD'S LEADING INNOVA-
TIVE AND CREATIVE TECHNICAL UNIVERSITIES

MISSION

TO PRODUCE HIGHLY COMPETENT
PROFESSIONALS THROUGH QUALITY AND
WORLD CLASS TECHNICAL UNIVERSITY
EDUCATION BASED ON APPLICATION-ORIENTED
TEACHING, LEARNING AND RESEARCH WITH
SMART UNIVERSITY INDUSTRY PARTNERSHIP IN
LINE WITH NATIONAL ASPIRATIONS

MOTTO

EXCELLENCE THROUGH COMPETENCY

Objektif Strategik Universiti

1. Mengendalikan program akademik dan profesional berasaskan aplikasi yang sesuai dengan industri untuk melahirkan graduan dengan pengetahuan berkaitan, kemahiran teknikal dan kemahiran insaniah.
2. Membangunkan staf yang kompeten dan profesional-berilmu (k-Profesional).
3. Memacu aktiviti penyelidikan dan pembangunan yang berteraskan industri strategik untuk menjana kekayaan nasional.
4. Menyediakan persekitaran yang kondusif dan mesra pelajar.
5. Memperkasa kepimpinan dan pentadbiran yang berkesan.
6. Memperkukuh kerjasama dan usaha sama dengan organisasi dan institusi antarabangsa.
7. Mempertingkatkan aktiviti menjana pendapatan untuk mengurangkan kebergantungan kewangan.
8. Menawarkan program berasaskan pengetahuan, profesional dan akademik ke arah pembudayaan pembelajaran berterusan.

Strategic Objectives of The University

1. To conduct academic and professional programmes relevant to industries and to produce graduates who are adept in technical and soft skills.
2. To develop competent and knowledge-based professionals (k-Professionals).
3. To spur research and development supported by strategic industries to generate wealth for the nation.
4. To provide a student friendly environment.
5. To reinforce effective leadership and administration.
6. To consolidate collaboration and joint-ventures with organizations and international institutions.
7. To activate revenue generating activities to reduce financial dependency.
8. To offer knowledge, professional and academic based programmes for life-long learning.

CANSELOR CHANCELLOR

6

**TUN DATUK SERI UTAMA
MOHD KHALIL BIN YAAKOB**
TUAN YANG TERUTAMA YANG DI-PERTUA
NEGERI MELAKA



PRO CANSELOR
PRO CHANCELLOR

Y.BHG. TAN SRI DATUK
DR. JOHARI BIN MAT



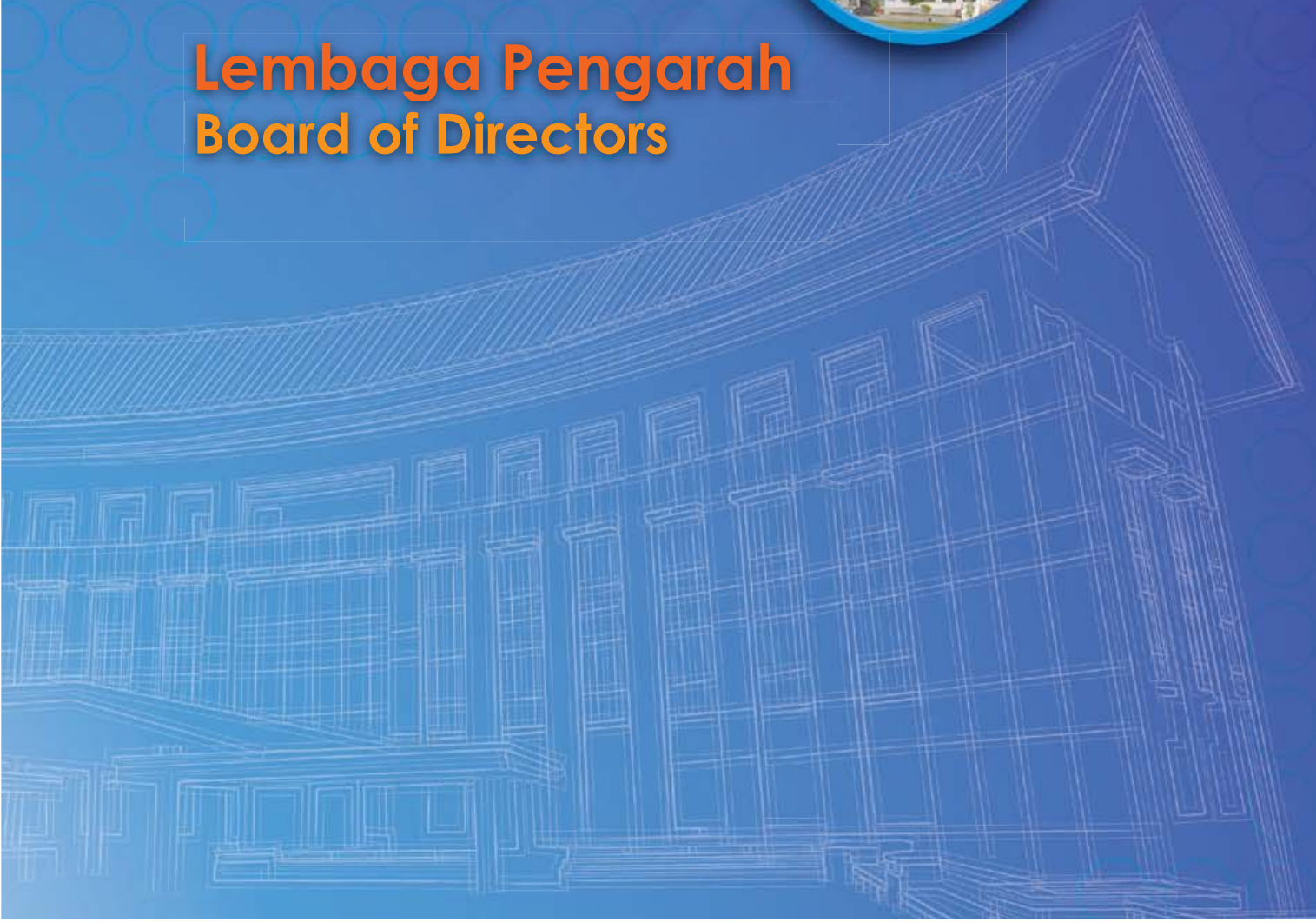
NAIB CANSELOR
VICE CHANCELLOR

Y.BHG. PROF.
DATUK DR. AHMAD YUSOFF
BIN HASSAN





Lembaga Pengarah Board of Directors



Lembaga Pengarah Board of Directors



Y.Bhg. Dato' Dr. Mohd Taib bin Hashim
Pengerusi
Lembaga Pengarah UTeM



Y.Bhg. Prof. Datuk Dr. Ahmad Yusoff bin Hassan
Ahli Lembaga Pengarah UTeM /
Naib Canselor UTeM



Y.B. Datuk Wira Omar bin Kaseh
Ahli Lembaga Pengarah UTeM /
Setiausaha Kerajaan Negeri Melaka



Y.Bhg. Datuk Dr. Hj. Abdul Raman bin Hj. Saad
Ahli Lembaga Pengarah UTeM /
Managing Partner
Abdul Raman Saad & Associates



Y.Bhg. Datuk Hj. Hazizah binti Hj. Mohd Sultan
Ahli Lembaga Pengarah UTeM /
Pengarah Syarikat Zaris Sdn. Bhd.
15 Disember 2009 - Tamat



Cik Ku Maharum binti Ku Yaacob
Ahli Lembaga Pengarah UTeM /
Setiausaha Bahagian, Bahagian Pengurusan
Sumber Manusia, KPT



Encik Tajol Azhar bin Md. Tahir
Ahli Lembaga Pengarah UTeM /
Timbalan Setiausaha,
Bahagian Kawalan dan Pemantauan



Y.Bhg. Dr. Naimah binti Md. Khalil
Ahli Ganti Lembaga Pengarah UTeM /
Pengarah Bahagian Pendaftaran & Inspektorat



Y.B. Datuk Ir. Hj. Idris bin Hj. Haron
Ahli Lembaga Pengarah UTeM /
Ahli Parlimen Kawasan Tangga Batu
16 Oktober 2009 - Mula

Lembaga Pengarah
Board of Directors

Pengurusan Universiti/ University Management

Y.Bhg. Prof. Datuk Dr. Ahmad Yusoff bin Hassan
Naib Canselor / Vice Chancellor



Y.Bhg. Dato' Prof. Dr. Mohd Nor bin Husain
Timbalan Naib Canselor
(Akademik dan Antarabangsa) /
Deputy Vice Chancellor
(Academic & International)



Y.Bhg. Datuk Prof. Madya
Dr. Abu Bakar bin Mohamad Diah
Timbalan Naib Canselor
(Penyelidikan & Inovasi) /
Deputy Vice Chancellor
(Research & Innovation)

Y.Bhg. Prof. Dr. Zolkepli bin Buang
Dekan
Pejabat Hal Ehwal Pelajar & Alumni /
Dean
Students Affairs & Alumni



Encik Hasan bin Sirun
Pendaftar / Registrar





Encik Khairul bin Taib
Bendahari / *Bursary*



Puan Hjh. Faridah binti Hj Md Amin
Ketua Pustakawan / *Chief of Librarian*



Y.Bhg. Prof. Madya Muhammad Syahrir bin Johal
Dekan
Fakulti Kejuruteraan Elektronik & Kejuruteraan Komputer/
Dean
Faculty of Electronics and Computer Engineering

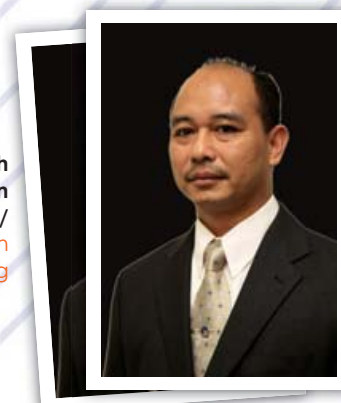


Y.Bhg. Engr. Prof. Dr. Marizan bin Sulaiman
Dekan
Fakulti Kejuruteraan Elektrik /
Dean
Faculty of Electrical Engineering

13



Y.Bhg. Prof. Dr. Md. Razali bin Ayob
Dekan
Fakulti Kejuruteraan Mekanikal /
Dean
Faculty of Mechanical Engineering



Y.Bhg. Dr. Rizal bin Salleh
Dekan
Fakulti Kejuruteraan Pembuatan/
Dean
Faculty of Manufacturing Engineering



Y.Bhg. Prof. Dr. Shahrin bin Sahib @ Sahibuddin
Dekan
Fakulti Teknologi Maklumat & Komunikasi /
Dean
Faculty Of Information & Communication Technology



Y.Bhg. Prof. Dr. Salleh bin Yahya
Dekan
Fakulti Pengurusan Teknologi dan Teknousahawanan/
Dean
Faculty of Technology Management & Technopreneurship



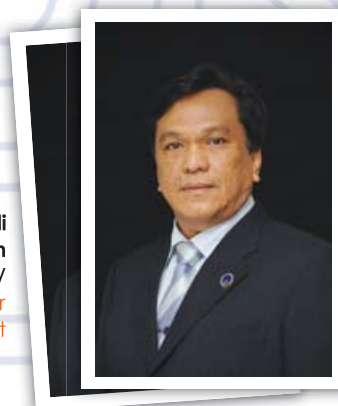
Y.Bhg. Prof. Dr. Hj. Mohd Taib bin Dora
Dekan
Pusat Bahasa & Pembangunan Insan/
Dean
Centre for Language and Human Development



Puan Hj. Noraida binti Attan
Pengarah
Pejabat Pembangunan & Pengurusan Aset/
Director
Development & Asset Management



Encik Mohd Isa bin Mohd Dom
Pengarah
Pusat Komputer/
Director
Computer Centre



Y.Bhg. Prof. Dr. Mohamad Kadim bin Suaidi
Pengarah
Pusat Pengurusan Penyelidikan dan Inovasi/
Director
Centre for Research & Innovation Management



Y.Bhg. Prof. Madya Shahdan bin Md. Lani
Pengarah Pusat Jaminan Kualiti & Akreditasi/
Director
Centre for Quality Assurance and Accreditation



Y.Bhg. Dr. Syed Najmuddin bin Syed Hassan
Pengarah Pusat Pengajaran & Pembelajaran/
Director
Centre for Teaching & Learning



Y.Bhg. Prof. Dr. Mohd Razali bin Muhamad
Dekan
Pusat Pengajian Siswazah/
Dean
Centre for Graduate Studies



Y.Bhg. Dr. Hazmilah binti Hasan
Pengarah Penerbit Universiti/
Director
University Press



Y.M Prof. Madya Dr Raja Roslan bin Raja Abd Rahman
Pengarah Pusat Pembelajaran Berterusan/
Director
Centre for Continuous Learning



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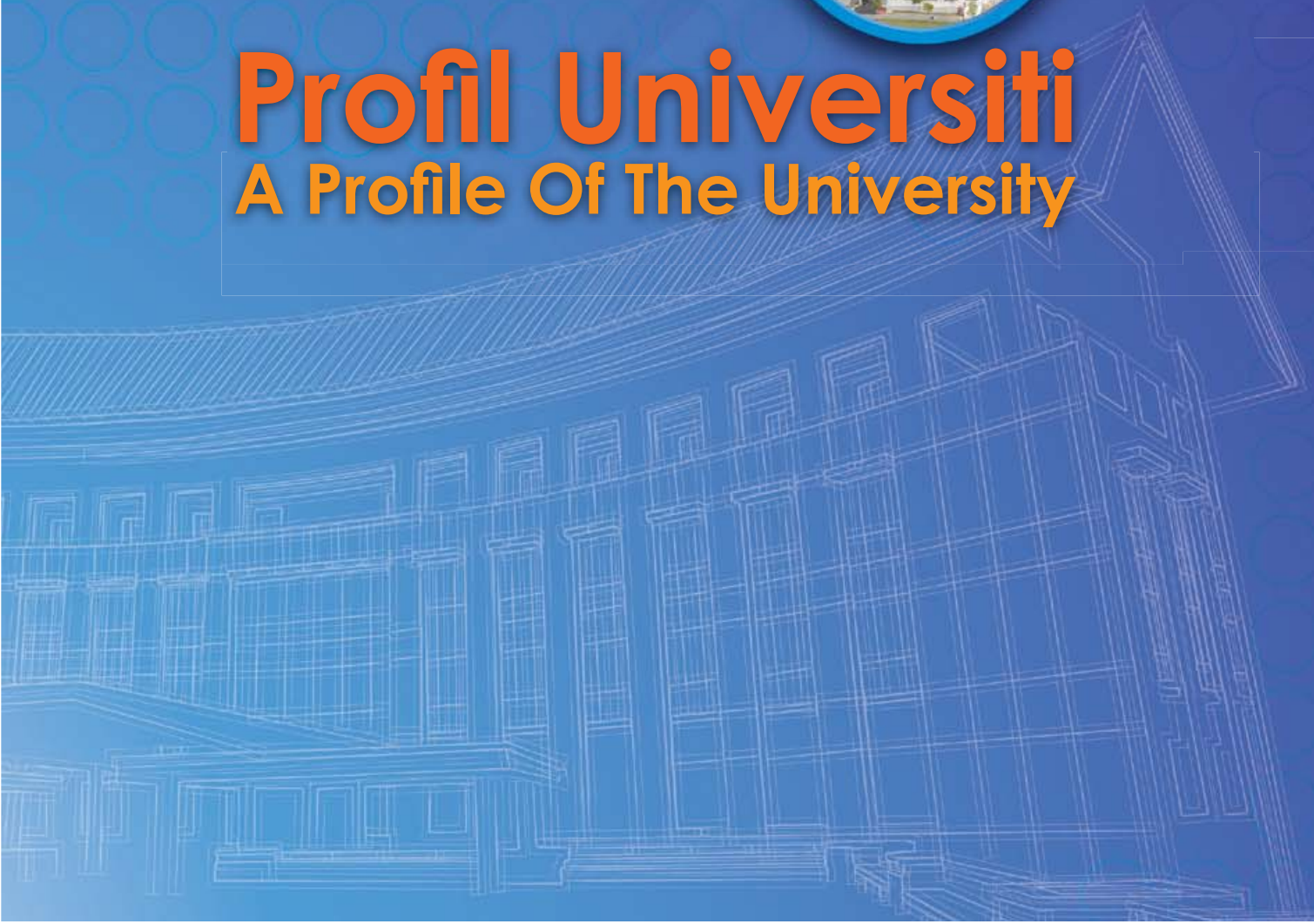
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

'09



Profil Universiti

A Profile Of The University



Profil Universiti

Universiti Teknikal Malaysia Melaka (UTeM) telah ditubuhkan pada 1 Disember 2000 di bawah Seksyen 20 Akta Universiti dan Kolej Universiti 1971 dengan nama Kolej Universiti Teknikal Malaysia Melaka (KUTKM). Pada 1 Februari 2007 telah berlaku penstrukturan semula menjadikan nama KUTKM ditukarkan kepada UTeM.

Pada awal penubuhannya, UTeM beroperasi di lot-lot rumah kedai Taman Tasik Utama Ayer Keroh, Melaka. UTeM menerima pelajar perintis pada tahun 2001 dengan kemasukan seramai 348 orang pelajar. Majlis pecah tanah Kampus Induk telah dilakukan pada 25 Januari 2002 oleh Datuk Seri Dr. Mahathir Mohamad yang menjadi Perdana Menteri Malaysia ketika itu. Kampus Induk UTeM ini terletak di kawasan tanah seluas 726.77 ekar dalam Mukim Durian Tunggal, Alor Gajah, Melaka. Bermula detik itu, pembangunan kampus dimulakan dengan mengambil kira pelbagai aspek bagi menyediakan sebuah kampus yang kondusif untuk pendidikan yang berasaskan teknikal. Kampus Induk telah mula diduduki pada 3 Mei 2005 dengan siapnya pembinaan Fakulti Kejuruteraan Elektrik di situ. Pada masa yang sama, operasi UTeM telah berpindah dari lot-lot rumah kedai Taman Tasik Utama ke Kampus Industri Ayer Keroh yang terletak di Bangunan CUBIC Electronics, Ayer Keroh, Melaka pada tahun 2006 sementara menanti Kampus Induk siap untuk diduduki.

Tahun 2008 menjadi tahun yang bersejarah bagi seluruh warga UTeM dengan siapnya pembinaan Kampus Induk dan UTeM mula beroperasi sepenuhnya di situ. Ia diikuti dengan penutupan Kampus Industri di Ayer Keroh pada tahun 2009. UTeM merupakan Institusi Pengajian Tinggi Awam yang ke-14 dibina di Malaysia dan merupakan universiti teknikal yang pertama di Malaysia. UTeM menjadi perintis kepada program pengajian bidang teknikal berasaskan aplikasi dan amalan.



A Profile Of The University

Universiti Teknikal Malaysia Melaka was established on 1 December 2000 under Section 20 of the University and College University Act. It was first named National Technical University College of Malaysia. However, after undergoing some restructuring, the name National Technical University College of Malaysia was changed to Universiti Teknikal Malaysia Melaka on 1 February 2007. Initially, UTeM operated from shoplots at Taman Tasik Utama Ayer Keroh, Melaka. UTeM received her first batch of 348 students in 2001.

The ground breaking ceremony of the main campus was held on 25 January 2002 and officiated by the former Prime Minister of Malaysia, Datuk Seri Dr. Mahathir Mohamad. The main campus of UTeM is located at Mukim Durian Tunggal, Alor Gajah, Melaka with a ground area of 726.77 acres. In the development of the main campus, technical based disciplines were taken into consideration in setting up an environment conducive to technical teaching and learning. The first phase of the main campus was ready for occupancy on 3 May 2005 with the completion of the Faculty of Electrical Engineering. Simultaneously, operations previously located at the shoplots at Taman Tasik Utama, moved to the Industrial Campus at CUBIC Electronics in Ayer Keroh, Melaka in 2006 while waiting for the completion of the main campus.

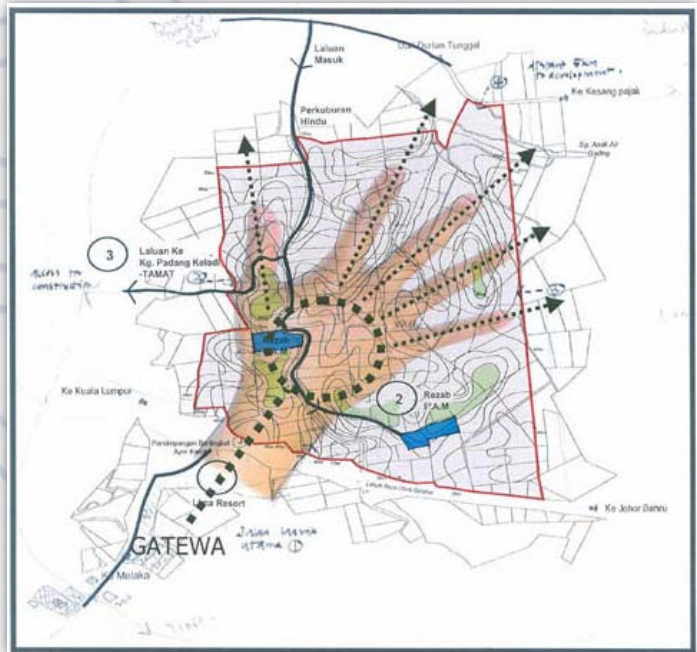
The year 2008 was a significant year for the UTeM community as with the completion of the main campus, all operations successfully shifted there. UTeM ceased all its operations at the Industrial Campus in 2009. UTeM is the fourteenth public university, but it is the first technical university in Malaysia. UTeM is a pioneer in the application and practice oriented approach to technical studies.

Konsep Pembangunan Kampus

Konsep pembinaan Kampus Induk UTeM berteraskan 'The Hand' ataupun tangan. Ia melambangkan bahawa institusi ini adalah faktor pemangkin dalam pembangunan kawasan sekitar. Tangan juga signifikan kepada peranan UTeM yang mengamalkan proses pengajaran dan pembelajaran berasaskan aplikasi dan amalan (*hands-on*).

Campus Development Concept

The development of the main campus of UTeM is based on "The Hand". It signifies that an institution is the catalyst for the development of its surrounding areas. The hand is also significant in that UTeM plays the role of teaching and learning which reflects the application and practice oriented approach.



Transisi Pembangunan

Pembangunan Kampus Induk UTeM dibahagikan kepada enam segmen utama yang selaras dengan yang dapat ditafsirkan sebagai lima jari dan tapak tangan.

Tapak Tangan (Utama)

Menempatkan bangunan pentadbiran, masjid, pusat komersial, perpustakaan, klinik, Bangunan Persatuan Pelajar dan Pusat Komputer.

Jari Jemari (satelit)

Menempatkan bangunan fakulti, penempatan pelajar, pusat penyelidikan serta bangunan perkhidmatan dan sokongan.

Development Transition

The development of the Main campus is divided into six main segments which is parallel to the palm and five fingers.

The Palm (Main)

Houses the administrative offices, mosque, commercial centre, library, clinic, student centre as well as the Computer Centre.

The Fingers (Satellite)

Houses the faculties, student hostels, research centres as well as service and support centres.

LAPORAN NAIB CANSOLOR

Bismillahirrahmanirrahim.

Assalamualaikum wrt. wbt., salam sejahtera dan salam 1 Malaysia.

Syukur ke hadrat Allah SWT yang telah memberikan keizinan kepada saya untuk melaporkan perkembangan Universiti Teknikal Malaysia Melaka (UTeM) bagi tahun 2009. Tahun 2009 telah mencatat sejarahnya yang tersendiri dan merakamkan pelbagai peristiwa penting untuk dikongsi bersama oleh semua pihak.

Tahun 2009 berlalu dengan banyak catatan pencapaian dan kejayaan. Kini UTeM telah mencapai usia sembilan tahun dan semakin menghampiri satu dekad penubuhannya tidak lama lagi. Dari tahun ke tahun UTeM telah memperlihatkan perkembangan yang cukup pesat dari segi prasarana serta perkembangan akademik. Saya mengambil kesempatan mengucapkan jutaan terima kasih kepada seluruh warga Universiti yang telah berusaha gigih membangunkan Universiti ini.

Tema bagi Perutusan Tahunan Naib Canselor 2009 iaitu "Menghayati Perubahan untuk Kecemerlangan" merupakan ajakan yang sengaja menuntut keluar dari tahap yang biasa ke peringkat yang lebih tinggi dan terpuji, sama ada secara individu atau organisasi, seterusnya beriltizam untuk mengangkat martabat Universiti ke tahap cemerlang.

Universiti telah menghasilkan dokumen Pelan Strategik UTeM 2009-2010 yang menyasarkan lapan objektif utama meliputi pembangunan program akademik dan staf, penyelidikan, kepemimpinan, kesejahteraan pelajar, kerjasama antarabangsa, pembelajaran berterusan dan penjana pendapatan Universiti sebagai panduan memacu Universiti ke arah kecemerlangan bagi tempoh dua tahun. Tindakan ini selaras dengan objektif memperkasakan Universiti dalam memenuhi tuntutan perkembangan mutakhir dunia akademik dan keilmuan negara. Ia juga selaras dengan hasrat yang terkandung dalam Pelan Strategik Pengajian Tinggi Negara (PSPTN) dan agenda Kementerian Pengajian Tinggi terutamanya dalam memenuhi Bidang Keberhasilan Utama (KRA) bagi melahirkan masyarakat minda kelas pertama.

Berdasarkan 110 KPI yang telah dirancang dalam pelan Strategik UTeM 2009 - 2010, 32 daripadanya telah mencapai sasaran lebih daripada 100% berbanding target tahun 2009, manakala 32 KPI lagi masih dalam peringkat pencapaian 50% - 99%. Justeru, pencapaian KPI ini amat baik dan UTeM berjaya dalam tahun pertama penyemakan KPI secara objektif daripada pihak Agensi Pusat.



VICE CHANCELLOR'S REPORT

Bismillahirrahmanirrahim.
Assalamualaikum wrt. wbt. and Greetings 1 Malaysia.

It is by the grace of Allah SWT that I am given the blessing to report on the development of Universiti Teknikal Malaysia Melaka (UTeM) in 2009. The year 2009 charted its own history by recording various important events to be shared with one and all.

The year 2009 was characterised by a number of momentous events and successes. The establishment of UTeM was just a year short of a decade. UTeM has grown rapidly from strength to strength with each passing year in terms of infrastructure and academic expansion. I take this opportunity to express my appreciation and gratitude to the citizens of the University who have worked incredibly hard to advance the development of this University.

"Appreciation of Change for Excellence" was the 2009 theme of the Vice Chancellor's speech calling for a paradigm shift from the ordinary to the extraordinary, be it an individual or organisation, which in turn will drive the University towards excellence.

The 2009-2010 UTeM Strategic Plan focuses on eight main areas: development of academic programmes for staff, research, leadership, student welfare, international relations, life-long learning, and income generation in order to propel the University to excellence within two years. This move is parallel to the objective of strengthening and fulfilling the recent academic and knowledge development. Furthermore, this shift is in line with the aspirations of the Ministry of Higher Education Strategic Plan and the agenda of the Ministry of Higher Education in meeting the Key Result Areas (KRA) to produce a community of first class minds.

Based on the 100 KPIs planned in the 2009-2010 UTeM Strategic Plan, 32 of them have recorded achievements of more than 100% compared to the target set for the year 2009. In addition, 32 KPIs are in the process of reaching the 50%-99% achievement index. Consequently, the achievement of the KPIs was beyond our expectation and UTeM was successful in its first year KPI objective assessment by the members of the Central Agency.



Kualiti, Akreditasi & Pengiktirafan Program Akademik

Jaminan kualiti bagi proses penyampaian perkhidmatan merupakan aspek yang diberikan keutamaan, iaitu berdasarkan Lawatan Audit Pemantauan telah meletakkan pencapaian UTeM dengan berjaya mengekalkan Pensijilan MS ISO 9000 (bagi skop Pengajaran & Pembelajaran) yang telah diperolehi sejak 2005.

Dalam tahun 2009, sebanyak lima (5) program Diploma dan empat (4) kursus Sarjana Muda Teknologi Maklumat dan Komunikasi, UTeM mendapat pengiktirafan Jabatan Perkhidmatan Awam (JPA). Manakala bagi program Sarjana Muda Kejuruteraan, 14 kursus telah mendapat akreditasi dari Lembaga Jurutera Malaysia (BEM). Pencapaian UTeM melalui penganugerahan status MSC oleh MDEC memberikan keistimewaan iaitu membawa kepada pengiktirafan 14 program akademik dari Fakulti Teknologi Maklumat & Komunikasi, Fakulti Pengurusan Teknologi dan Teknousahawanan serta Fakulti Kejuruteraan Elektrik.

Pengajaran & Pembelajaran

Dari masa ke semasa negara semakin memerlukan rakyat yang mempunyai pengetahuan luas, iaitu akses kepada pengetahuan dan maklumat tidak boleh dijadikan halangan. Untuk mengisi keperluan ini Universiti perlu bergerak pantas memberikan peluang kepada masyarakat yang berkecenderungan meneruskan pengajian di UTeM sehingga peringkat Doktor Falsafah (Ph.D). Sebagai menyokong teras pertama PSPTN iaitu meluaskan akses dan meningkatkan ekuiti, UTeM telah berjaya meningkatkan pengambilan pelajar melalui penubuhan fakulti dan program akademik baru.

Pada tahun 2009, UTeM telah menubuhkan sebuah (1) fakulti baru iaitu Fakulti Pengurusan Teknologi dan Teknousahawanan (FPTT) serta tiga (3) program baru di peringkat Ijazah Sarjana Muda dan 11 program baru di peringkat pasca siswazah. Penubuhan FPTT menjadikan kesemua enam (6) fakulti telah ditubuhkan sehingga kini dengan pengambilan pertama pelajarinya seramai 173 orang.

Jumlah keseluruhan pelajar UTeM sehingga Disember 2009 ialah 6,227 orang yang terdiri daripada 898 pelajar peringkat Diploma, 4,934 pelajar Sarjana Muda, 334 pelajar Sarjana dan 61 pelajar Doktor Falsafah yang secara puratanya merupakan peningkatan kira-kira 5% kepada jumlah pelajar berbanding 5,919 pada tahun 2008.

Konvokesyen

Universiti telah mencatat sejarahnya yang tersendiri apabila buat pertama kalinya Majlis Konvokesyen pada 3 - 4 Oktober lalu telah dapat diadakan di bangunan sendiri iaitu di Dewan Besar, Kampus Induk UTeM. Majlis ini bertambah serinya dengan pengurniaan Ijazah Kehormat Doktor Pembangunan & Pengurusan Teknologi kepada Tun Dr. Mahathir bin Muhammad, mantan Perdana Menteri Malaysia dan Ijazah Kehormat Doktor Pembangunan Komuniti kepada isteri beliau iaitu Tun Dr. Siti Hasmah Mohd Ali. Penganugerahan ini adalah sebagai pengiktirafan kepada negarawan terbilang yang signifikan dalam pembangunan negara. Konvokesyen Ke-5 ini telah menyaksikan seramai 1591 orang pelajar bergraduasi iaitu terdiri daripada 230 graduan Diploma, 1336 graduan Ijazah, 22 graduan Sarjana dan tiga (3) graduan Doktor Falsafah.

Quality, Accreditation and Recognition of Academic Programmes

The quality endorsement by the Audit Visit acknowledged the achievements of UTeM for successfully retaining its MS 190 9000 Certification (For the Teaching and Learning Scope) which was granted in 2005.

In 2009, the Public Services Department recognised five (5) Diploma and four (4) Bachelor of Information Technology and Communications programmes. Furthermore, the Board of Engineers, Malaysia accredited 14 programmes of the Bachelor of Engineering. The achievement of UTeM in securing the MSC status by MDEC paved the way for the recognition of 14 academic programmes of the Faculty of Information Technology and Communications, Faculty of Technology Management and Technopreneurship, and Faculty of Electrical Engineering.

Teaching and Learning

From time to time, the country needs knowledgeable human capital so that access to knowledge and information does not pose a hindrance. The University has to act quickly to provide opportunity for eligible candidates to further their studies at PhD level to meet its needs. The first thrust of the Ministry of Higher Education Strategic Plan support is to widen access and increase equity, and in this area UTeM has succeeded in increasing the intake of students with the establishment of a new faculty and academic programmes.

In 2009, UTeM established one new faculty, which is the Faculty of Technology Management and Technopreneurship and introduced three programmes at undergraduate and eleven at postgraduate levels. The establishment of the Faculty of Technology Management and Technopreneurship now brings the number of faculties at UTeM to six, with its first intake of 173 students.

The total number of students at UTeM until December 2009 was 6,277 compared to 5,919 in 2008. Out of the total number of students, 898 were Diploma students, 4,934 Bachelor Degree students, 334 Masters students and 61 PhD students. On the whole, there was an increase of 5% compared to the year 2008.

Convocation

The University created history by hosting the Convocation Ceremony for the first time in its own premises, the Main Hall (Dewan Besar), Main Campus on 3-4 October 2009. The ceremony was distinctly special by the conferment of the Honorary Doctorate of Development and Technology Management to Tun Dr. Mahathir bin Muhammad, former Prime Minister of Malaysia and Honorary Doctorate of Community Development to his wife, Tun Dr. Siti Hasmah Mohd Ali. The honorary doctorates were an acknowledgement to individuals who had contributed much to the development of the nation. The Fifth Convocation witnessed 1591 graduates of whom 230 were Diploma, 1336 Degree, 22 Masters and 3 PhD holders.

Pengantarabangsaan

Globalisasi akademik perlu dimanfaatkan sepenuhnya oleh Institusi Pengajian Tinggi negara. UTeM tidak terkecuali mengambil kesempatan ini untuk memperluaskan peranannya seiring visi pengantarabangsaan Universiti iaitu, "Membina Reputasi Global". Peletakan Universiti di negeri Melaka Bersejarah yang telah mendapat pengiktirafan sebagai Bandar Raya Warisan Dunia oleh UNESCO merupakan antara faktor kekuatan dalam menarik pelajar mahupun pensyarah antarabangsa untuk menyambung pengajian atau berkhidmat di sini.

Sehingga Disember 2009, jumlah staf antarabangsa yang berkhidmat di Universiti sebagai pensyarah kontrak adalah seramai 24 orang. Statistik pelajar antarabangsa pula seramai 52 orang melibatkan 10 negara asal iaitu 35 dari Indonesia, lima (5) dari India, empat (4) dari Iraq, dua (2) dari Pakistan dan selebihnya dari negara-negara lain. Bilangan ini membuktikan bahawa UTeM mempunyai daya saing atau kompeten untuk menjadi destinasi pilihan pelajar asing menyambung pengajiannya di sini. Dalam konteks ini, aspek kecemerlangan akademik dan pengiktirafan yang dinyatakan terhadap program-program akademik menjadi asas utama yang mendorong serta memberikan kepercayaan yang menggalakkan berbanding usia muda penubuhan Universiti.

Hubungan erat antara sesebuah Universiti dengan Institusi Pengajian Tinggi antarabangsa amat penting untuk meningkatkan keyakinan masyarakat tempatan dan dunia terhadap kualiti dan pengiktirafan program akademik yang ditawarkan. UTeM telah mula mengorak langkah dengan bergiat aktif menjadi ahli bagi badan-badan antarabangsa seperti *Universities Mobility in the Asia and The Pacific* (UMAP) selain mempunyai hubungan yang baik dengan beberapa pertubuhan antarabangsa yang lain, antaranya *German Academic Exchange Services/ Deutscher Akademischer Austausch Dienst* (DAAD), *British Council* dan sebagainya.

Pada tahun 2009, UTeM telah menandatangani dua (2) Memorandum Persefahaman (MoU) iaitu dengan Lancaster University dan University of Hertfordshire, United Kingdom. Bidang persefahaman yang dipersetujui merangkumi aspek pertukaran staf dan pelajar untuk tujuan pembangunan akademik yang berkaitan kejuruteraan dan sains komputer, penawaran program *split Ph.D*, penyelidikan bersama dan kolaborasi dalam penganjurkan seminar antarabangsa yang boleh memberikan manfaat kepada kedua-dua pihak. Manakala dua (2) Memorandum Perjanjian (MoA) ditandatangani dengan Universitas Dian Nuswantoro (UDINUS) masing-masing dalam *Joint Research in Information Technology and Communication* dan penawaran *Dual Master Degree Program in Computer Science*.

Persidangan Antarabangsa dan Penerbitan

Dalam usaha meningkatkan tahap profesionalisme staf akademik, Universiti sentiasa menyokong staf terutamanya Pensyarah muda untuk menghadiri dan membentangkan kertas kerja di persidangan antarabangsa yang berprofil tinggi. Sebanyak 49 persidangan antarabangsa yang telah dihadiri oleh staf pada tahun 2009 dengan 52 daripadanya sebagai pembentang kertas kerja. Penulisan dan penerbitan merupakan salah satu cara untuk berkomunikasi dan menyebarkan idea baru serta hasil daripada penyelidikan yang akhirnya menjurus kepada kemajuan pengetahuan. Bagi tahun 2009, empat (4) jurnal telah diterbitkan dan telah dimuat naik ke dalam pengkalan data *MyAIS* seterusnya sedang dalam tindakan untuk memuatkan jurnal-jurnal UTeM ke dalam pengkalan data *Scopus Elsevier*.

Internationalization

It is necessary for all Institutions of Higher Learning in Malaysia to be fully immersed in academic globalisation. UTeM has made every effort to widen its role in line with the vision of the University, which is "Building Global Reputation". The University is located in the historical state of Melaka which gained the recognition of UNESCO World Heritage status. This status is a plus factor in pulling international lecturers and students to work or pursue their studies here.

Up to 2009, the total number of international staff working at the University as contract staff reached 24. The 52 international students have come from 10 countries: Thirty-five (35) from Indonesia, five (5) from India, four (4) from Iraq, two (2) from Pakistan and the rest from various countries. This number proves that UTeM has its own competitive advantage in drawing international students. In this context, the aspect of academic excellence and acknowledgement of the academic programmes is an encouraging one to the students, given the infancy of the University. Close partnership between local and international universities is vital for building confidence in the quality and recognition of the academic programmes offered. UTeM has been actively involved in international bodies like Universities Mobility in Asia and the Pacific (UMAP). UTeM enjoys good working relationship, among others, with the German Academic Exchange Services/ Deutscher Akademischer Austausch Dienst (DAAD) and British Council.

In 2009, UTeM signed two (2) Memorandums of Understanding with Lancaster University and the University of Hertfordshire, United Kingdom. The field of understanding involves student and staff exchange for academic development relating to engineering and computer science, split PhD programmes, joint research as well as collaboration in the organisation of international seminars for mutual benefit. Another two Memorandums of Agreement were signed with Universitas Dian Nuswantoro (UDINUS) for Joint Research in Information Technology and Communication and Dual Masters Degree Programme in Computer Science.

International Conferences and Publications

In an effort to improve the professionalism of academic staff, the University has been very supportive of young lecturers in particular, attending and presenting papers at high profile international conferences. Our staff attended 49 international conferences and 52 presented papers. Writing and publishing is one of the ways to communicate and disseminate new research ideas and results that will lead to the advancement of knowledge. In 2009, four journals were published and uploaded onto the database MyAIS, and the next step is to have them onto the UTeM database Scopus Elsevier.

Penyelidikan dan Inovasi

Pendekatan UTeM terhadap penyelidikan dan inovasi tahun 2009 adalah berfokus kepada penjana nilai dengan pembangunan kejuruteraan dan teknologi ke dalam aktiviti ekonomi negara yang menjana kekayaan dengan impak yang ketara. Pelbagai aktiviti yang dirangka bagi menyokong Teras 3 PSPTN serta Objektif 3 Pelan Strategik UTeM 2009-2010 termasuklah penyertaan penyelidik ke pameran dan pertandingan penyelidikan di peringkat kebangsaan dan antarabangsa, mengadakan bengkel dan seminar pendedahan kepada geran-geran tajaan penyelidikan, inovasi dan pengkomersialan serta aktiviti-aktiviti perundingan melibatkan perkhidmatan perundingan kepakaran staf UTeM dengan pihak industri.

Melalui beberapa pendekatan baru untuk menyelaraskan aktiviti penyelidikan dan mengukuhkan hubungan antarabangsa, UTeM berupaya meningkatkan produktiviti penyelidikan, meningkatkan pengiktirafan luar terhadap kualiti dan nilai penyelidikan, mengukuhkan penyelidikan yang sedia mantap serta mempelbagaikan sumber penyelidikan. Berasaskan kepakaran sedia ada serta jangkaan masa depan industri maka Teknologi Pembuatan Termaju (AMT) dikenal pasti sebagai bidang tujuan penyelidikan di UTeM. Selaras dengan hasrat memperteguh penyelidikan dan inovasi, UTeM telah menubuhkan dua (2) Pusat Kecemerlangan Universiti iaitu *Centre for Telecommunication Research and Innovation (CeTRI)* dan *Advanced Manufacturing Centre (AMC)* bagi menyokong bidang tujuan AMT. Kedua-dua Pusat Kecemerlangan ini melaksanakan aktiviti penyelidikan dalam pelbagai disiplin, menyokong di bawahnya pelbagai kluster penyelidikan yang telah dikenal pasti. Pusat Kecemerlangan Universiti menjadi pusat penyelidikan bersama rakan industri secara interaktif, agar menjamin penghasilan produk yang mempunyai nilai komersial yang tinggi. Bidang tujuan AMT ini akan terus diperkasakan ketika UTeM berusaha untuk menambah lima (5) lagi Pusat Kecemerlangan iaitu *Automotive Technology and Design Centre*, *Centre for Robotics & Industrial Automation*, *Centre of Advanced Computing Technologies*, Institut Pengurusan Teknologi & Keusahawanan, dan Institut Pengajian Komuniti & Insaniah Tun Ghafar Baba (IKKIN).

UTeM komited terhadap memperkayakan aktiviti dan meningkatkan mutu penyelidikan strategik Universiti dalam penghasilan produk yang inovatif dan bermutu tinggi. Usaha ke arah itu dilaksanakan melalui beberapa strategi seperti kolaborasi erat bersama rakan industri serta memperbanyak geran-geran penyelidikan tajaan Universiti mahupun agensi luar seperti MOSTI, KPT dan MOF. Pengaktifan aktiviti penyelidikan akan membantu menggalakkan kemasukan pelajar pasca siswazah seterusnya meningkatkan profil UTeM.

Pada tahun 2009, UTeM telah mengeluarkan dana sebanyak RM2.93 juta bagi memenuhi permohonan penyelidikan jangka pendek (PJP) yang berjumlah 122 projek. Jumlah ini menunjukkan kenaikan agihan dana sebanyak 27.58% berbanding tahun 2008. Bagi *Fundamental Research Grant Scheme (FRGS)*, UTeM telah mendapat kelulusan hanya dua (2) projek yang berjumlah RM70,000.00. UTeM juga telah memperoleh sebanyak 83 projek berjumlah RM5.09 juta daripada KPT serta satu (1) projek melalui *Science Fund* berjumlah RM221,800.00 daripada MOSTI. Tidak terhad setakat perolehan dana yang dinyatakan, UTeM terus berusaha mencari sumber daripada pihak industri serta dana daripada luar negara. Sehingga kini, dua (2) dana telah diperolehi daripada industri iaitu daripada Ritz Power dan Enelectronic (M) Sdn. Bhd. Ritz Power telah mengeluarkan dana berjumlah RM80,000.00 manakala hasil perjanjian (MoA) dengan Enelectronic, UTeM telah menerima dana *Techno Fund* sebanyak RM1.5 juta.

Sepanjang tahun 2009, sebanyak 9 projek penyelidikan telah dipatenkan terdiri daripada hasil dana penyelidikan jangka pendek. Dari masa ke semasa kesedaran hak harta intelek di kalangan para penyelidik telah diadakan bertujuan memastikan segala produk yang dihasilkan diberi perlindungan di mana terdapat 9 permohonan pemfailan bagi perlindungan harta intelek telah diterima pada 2009. Tahun ini merupakan tahun paling cemerlang bagi penyelidik UTeM dengan memenangi sebanyak 38 pingat sama ada di peringkat kebangsaan mahupun antarabangsa. Pengiktirafan ini bukan sahaja membuktikan hasil penyelidikan UTeM bermutu dan berkualiti malah ia mampu memenuhi keperluan dan kehendak industri serta komuniti. Teknologi dan inovasi yang digarap mampu melahirkan produk yang memacu perkembangan ekonomi negara.

Senario sosioekonomi dunia telah berubah ke arah ekonomi berasaskan pengetahuan sebagai enjin pertumbuhan. Senario ini dapat dilihat apabila pelaburan yang besar telah mula beralih kepada aktiviti berintensif pengetahuan seperti R&D, pelesenan dan harta intelek. Sebanyak 7 projek perundingan kendalian Universiti telah mencapai kejayaan sepanjang 2009. Projek-projek ini melibatkan pelbagai peringkat staf menggambarkan jalinan hubungan interaktif yang efektif di semua peringkat dalam menyumbangkan idea dan kepakaran dalam pelbagai bidang.

Research and innovation

The approach to research and innovation in 2009 is based on placing value to activities in engineering and technology development that would have a significant impact on generating wealth. Various activities were organised to support the Third PSPTN Thrust as well as the third objective of the University 2009-2010 Strategic Plan. The activities included the participation of researchers in exhibitions and competitions at national and international levels, holding workshops and seminars related to sponsored research grants, innovation and commercialization as well as consultation involving the University expertise for industry.

A number of new approaches were used to co-ordinate research activities and strengthen international relations, increase research productivity, increase external recognition of quality and value of research, strengthen existing research, and diversify sources of sound research. Based on the existing expertise with the future of industry in mind, Advanced Manufacturing Technology (AMT) has been identified as one of the thrust areas of research at UTeM.

The strength of research and innovation is further enhanced at UTeM with the establishment of two centres of excellence: the Centre for Telecommunication and Research and Innovation (CeTRI), and the Advanced Manufacturing Centre (AMC) in support of the AMT thrust. The two centres of excellence have undertaken research activities in various disciplines, and supported various research clusters that have been identified. The centres of excellence build smart partnerships with industries to ensure production of high commercial value. The AMT line of thrust will continue to be empowered by the upcoming five Centres of Excellence; The Automotive Technology and Design, Robotics and Industrial Automation, Advanced Computing Technologies, Technology Management and Entrepreneurship Institute, and Tun Ghafar Baba Institute of Community Studies and Generic (IKKIN).

UTeM is committed to enriching activities and improving the quality of its strategic research in the production of innovative and high quality products. Thus, several strategies have been implemented, such as collaboration with industries and establishing research grants sponsored by the University or outside agencies such as MOSTI, MOHE and MOF. Robust research activities will help to promote the enrolment of post-graduate students in strengthening the profile of the University.

In 2009, UTeM released funds amounting to RM2.93 million to meet short-term research grants (STL) for 122 projects. The increase in the total allocation of fund was 27.58% compared to the year 2008. In the Fundamental Research Grant Scheme (FRGS), only two UTeM projects amounting to RM70,000.00 were approved. UTeM also received RM5.09 million from the CTR and RM221,800.00 from the Science Fund, MOSTI for 83 projects. Without limiting itself to the specified funds available, UTeM continued to seek resources from local and international industries. This initiative resulted in receiving funds from two industries: Ritz Power and Enelectronic (M) Sdn. Ltd. Ritz Power released RM80,000.00 while the agreement (MoA) with Enelectronic, UTeM Techno generated RM1.5 million.

In 2009, nine research projects from short-term research grants were patented. From time to time, researchers are made aware of intellectual property rights to ensure that all products produced are protected and as a result nine applications for patenting were received in 2009.

The year 2009 was an unusually good one for UTeM researchers as they won 38 medals nationally and internationally. Winning medals of this nature reflects the quality of research at UTeM and shows that the University is in a position to meet the needs of the industry and community. It is clear that the way to spur economic growth is the creation of products via Technology and innovation.

The world socio-economic scenario has shifted towards a knowledge-based economy. This is evident from the move major investments are making towards intensive knowledge-based activities which encompass Research and Development, Licensing and Intellectual Properties. In 2009, the University succeeded in managing seven Consultancy Projects. These projects involved staff from all levels. Such kinds of projects shed light on the commitment of the staff, close interactive relationship as well as expertise in contributing towards the various fields.

Pembangunan Kampus

Pembangunan Kampus Induk UTeM di Durian Tunggal di bawah RMKe-9 telah terlaksana sebagaimana perancangan. Pada tahun ini beberapa pembangunan fizikal meliputi infrastruktur asas, bangunan akademik, bangunan sokongan serta bangunan gunasama telah siap dibina dan beroperasi agar menjadi sebuah Universiti yang kondusif kepada warganya terutama kepada pelajar selaku klien utama sesebuah IPT. Bangunan yang telah siap dan diduduki pada tahun 2009 termasuklah Pusat Komputer, Fakulti Teknologi Maklumat & Komunikasi, Perpustakaan, Pusat Bahasa & Pembangunan Insan, Pusat Pengajian Siswazah dan Pusat Persatuan Pelajar.

Melihat kepada pembangunan yang menggalakkan maka pihak Pengurusan Universiti berpandangan ia perlu dimanfaatkan secara wajar supaya memberikan impak yang maksimum terhadap kesejahteraan warganya. Tahun 2009 menyaksikan pemusatan pentadbiran Universiti dengan rasionalnya untuk mewujudkan penampilan imej dan konsep kampus yang jelas serta unggul ke arah mengoptimumkan penggunaan ruang dan sumber manusia. Untuk itu pada tahun ini kampus UTeM telah distruktur semula dengan hanya beroperasi di dua (2) buah kampus iaitu Kampus Induk dan Kampus Bandar berbanding tiga kampus sebelumnya iaitu termasuk Kampus Industri. Penumpuan di kedua-dua kampus telah memberikan sepenuh manfaat khususnya dalam bentuk penjimatan kos, memudahkan urusan pengajaran dan pembelajaran, meningkatkan kecekapan pentadbiran, keselamatan serta memberi keselesaan kepada warga Universiti dengan logistik yang munasabah. Kampus Induk telah difokus kepada bidang kejuruteraan dan teknologi maklumat manakala kampus bandar terarah kepada bidang pengurusan serta pembelajaran sepanjang hayat. Penstrukturan semula kampus ini juga telah menyumbang kepada limpahan pembangunan serta peluang-peluang perniagaan di kawasan sekitar kedua-dua kampus.

Pembangunan ICT

Kejayaan usaha ke arah penyediaan persekitaran ICT terutama dalam membentuk kecemerlangan akademik dan kecekapan pentadbiran amat bergantung kepada kelicinan penyelarasan pengurusan yang rapi dan berterusan. Justeru, setiap perancangan harus dinilai serta perlu bersifat realistik, boleh dicapai dan mesra pengguna. Sistem aplikasi-aplikasi utama telah dibangunkan secara in-house yang merangkumi Sistem Maklumat Pelajar, Sistem Maklumat Sumber Manusia, Sistem Maklumat Kewangan Bersepadu, Sistem Maklumat Pasca Siswazah, dan Sistem Maklumat Penyelidikan Universiti. Semua sistem ini dibangunkan secara berperingkat mengikut keutamaan.

Secara keseluruhan, pada tahun 2009 terdapat sejumlah 23 modul baru yang berjaya dilaksanakan di samping penambahbaikan sebanyak 18 modul yang sedia ada. Dalam melaksanakan mesyuarat secara atas talian tanpa menggunakan kertas maka pada tahun ini sebanyak 12 sistem mesyuarat baru telah dibangunkan.

Modul E-Perjawatan merupakan salah satu modul terkini bagi Sistem Maklumat Sumber Manusia bagi tahun 2009. Modul ini dibangunkan dalam dua (2) jenis persekitaran iaitu persekitaran web dan persekitaran client. Pembangunan modul ini telah menyediakan persekitaran teknologi maklumat dalam urusan pengambilan dan pengurusan sumber manusia, menyediakan ruang simpanan data secara digital, menyediakan kemudahan kawalan tempoh masa saringan melalui sistem seterusnya membantu Universiti ke arah paperless government.

Laman web baru UTeM telah siap dibangunkan pada penghujung tahun 2009. Isi kandungan laman web telah disusun dan distrukturkan semula berdasarkan kajian modul-modul mengikut kriteria yang ditentukan MDEC dan KPT. Pembinaan laman web ini berlaku serentak dengan kerja-kerja pembangunan laman web khas untuk Naib Canselor yang merangkumi modul-modul seperti Profil NC, Perutusan Tahunan NC, Dari Meja NC, Pelan Strategik, Koleksi Ucapan NC serta Aktiviti-aktiviti NC yang termuat di dalam akhbar, galeri foto dan galeri video.

Dalam usaha memberikan perkhidmatan terbaik untuk semua warga Universiti, kerjasama telah dijalin dengan pihak Microsoft di bawah program Microsoft Live@edu yang menyediakan fasiliti Windows Live ID. Akaun email Windows Live ID adalah akaun e-mail rasmi bagi setiap staf dan pelajar serta boleh digunakan sepanjang hayat. Pelajar masih dapat menggunakan akaun e-mail ini walau setelah tamat belajar dan akan memasuki akaun e-mail alumni pelajar UTeM. Dengan kaedah ini, hubungan komunikasi antara semua pihak tidak akan terhenti. Menerusi program Outlook Live, pengguna akan menikmati 10GB e-mail mailbox, 25GB simpanan secara online Windows Live Skydrive, kalendar, blogging tools dan pengguna juga boleh melayari perkhidmatan ini menggunakan telefon mudah alih secara percuma.

Campus Development

Under the 9th Malaysia Plan, the campus development progressed as planned. The construction of most of the physical facilities including basic infrastructure, academic and other essential buildings were completed and ready for student use. The buildings which were fully operational in 2009 were the Computer Centre, Faculty of Information and Communication Technology, Library, Centre for Languages and Human Development, Centre for Graduate Studies and Student Centre.

Looking at the rapid development of the campus, the University planned to make the maximum impact on the campus community. The management of the University utilised the spaces and resources fully to project images suitable to the concept of a campus. Consequently, UTeM restructured the campus operations from three campuses to two. The Main Campus and City Campus; the Industrial Campus ceased operation. The University benefited from the restructuring plan in terms of costs, teaching and learning, management efficiency, security, amenities and logistics. The focus on the two fields at the Main Campus was Engineering and Communication Technology, while at the City Campus Management and Life-Long Learning. The restructuring plan has also contributed to the flow of development which indirectly provided business opportunities to those in the vicinity of these two campuses.

ICT Development

The successful preparation of the ICT environment, especially in producing academic excellence and efficient administration, depends to a large extent on the continuous efficiency and consistency of the management. In order to achieve this and at the same time be user-friendly, every aspect of planning should be evaluated realistically. The main application systems have been developed in-house including student information system, human resource information system, post graduate information system and also the University research information system. All these systems have been developed in stages according to priority.

Overall, in 2009, besides further improving the existing 18 modules, 23 new modules were successfully implemented. For the purpose of implementing paperless meetings, 12 new online meeting systems have been developed.

One of the latest modules developed for the Human Resource Information System in 2009 is E-staffing. This module has been developed to deal with two types of environment: web environment and client environment. This module facilitates digital data storage, the control of the screening system, and assists the University to move towards a paperless government. The new UTeM website was fully developed by the end of 2009. The contents have been compiled and structured according to the criteria specified by MDEC and KPT. The VC's website has also been completed and provides such modules as the Vice Chancellor's profile, annual message, strategic planning, speeches and activities in the press, photo and video galleries.

In an effort to provide the best service to all, UTeM entered partnership with Microsoft Live @ edu programme, where UTeM citizens can network using the established Microsoft Windows Live ID facility. E-mail account Windows Live ID is the official e-mail for staff and students which can be utilised throughout life. Students can still use their e-mail even after completing their studies which will then be directed to the UTeM alumni account. In this way, communication between the students and the University will never be severed. Through the Outlook Live program, Users will enjoy 10GB e-mail mailbox, 25GB of online storage Windows Live Skydrive, calendars, blogging tools through the Outlook Live program. Furthermore, users can also access this service via mobile phone for free.

Pembangunan Pelajar

Dalam era globalisasi, cabaran utama bagi pengajian tinggi adalah untuk menjana pelajar yang cemerlang bukan sahaja dalam akademik malah berdaya saing dalam pasaran global. Penglibatan pelajar dalam kokurikulum dijangka mampu untuk meningkatkan kemahiran insaniah yang amat penting dalam dunia pekerjaan. Pembangunan modal insan yang holistik menuntut Universiti menyediakan pengalaman pembelajaran yang bermakna dan seimbang agar kehidupan di kampus dapat melonjakkan kecemerlangan akademik dan juga perkembangan sahsiah pelajar.

Penubuhan sebanyak 26 kelab dan persatuan, SUKSiS serta Majlis Perwakilan Pelajar (MPP) banyak menyumbang kepada aktiviti bagi merealisasikan hasrat tersebut. Setiap aktiviti ini sentiasa berkaitan dengan tujuh kemahiran insaniah serta lapan teras aktiviti kokurikulum yang telah dikenal pasti oleh KPT merangkumi kepimpinan, daya usaha & inovasi, pengucapan awam, kebudayaan, kesukarelawan, khidmat komuniti dan sukan.

Sepanjang tahun 2009, Hal Ehwal pelajar & Alumni (HEPA) bersama-sama persatuan, kelab, kolej kediaman serta MPP telah melaksanakan sejumlah 107 aktiviti menyeluruh yang berlandaskan 8 teras kokurikulum yang dinyatakan. Pencapaian terbaik Universiti berdasarkan teras iaitu bagi Teras Sukan termasuklah seperti mendapat tempat ke-9 dari 20 IPTA dalam Kejohanan Sukan MASUM 2009, memperoleh 3 emas, 2 perak dan 2 gangsa di Kejohanan Tekwando (WTF) Jemputan antara Kelab-Kelab Kuala Muda 2009, Juara kategori kumpulan peserta ke laluan Tjjarah, Catur Bestari Terbuka IPT Peringkat Kebangsaan serta tempat kelima daripada 120 pasukan di Kejohanan Catur Bestari Terbuka IPT peringkat kebangsaan. Bagi penyertaan di bawah Teras Pengucapan Awam, pelajar UTeM telah memenangi tempat pertama bagi kategori Qari dan keempat bagi kategori Qariah pada Majlis Musabqah tilawah Al-Quran Jemputan IPTA kali ke-2. Bagi Teras Keusahawanan pula, UTeM telah memenangi tempat kedua Gerai Terbaik Karnival Keusahawanan Siswa IPTA.



Pembangunan Staf

Jumlah staf pada tahun 2009 ialah 1628 orang dengan pecahan 712 staf akademik serta 916 staf pentadbiran dan sokongan. Dalam mencapai objektif mempunyai staf yang kompeten dan berilmu, Pembangunan Profesional Berterusan (CPD) telah diperkenalkan iaitu satu sistem pembelajaran sepanjang hayat yang berpusatkan keperluan staf bagi menyokong hala tuju organisasi. Semua staf bertanggungjawab merancang dan menentukan aktiviti untuk meningkatkan kompetensi diri masing-masing dengan menggunakan electronic-CPD sebagai medium perantara.

Program Integrasi Insan Terbilang (PINTAR) telah dimulakan pada tahun 2009, hasil daripada inti pati Amanat Naib Canselor dan direka cipta bagi memenuhi Pelan Strategik UTeM. Objektif PINTAR iaitu untuk mengukuhkan penghayatan visi dan misi Universiti, memantapkan aspek kepimpinan dan kerja berpasukan seterusnya mengukuhkan nilai dan budaya kerja cemerlang dalam kalangan warga UTeM. PINTAR merupakan usaha mentransformasikan keunggulan jati diri sumber manusia menerusi program-program latihan yang membangunkan sinergi dari kecerdasan intelektual, emosional dan spritual secara bersepadu.

Pada tahun 2009, sebanyak 20 kursus pengajaran dan pembelajaran (P&P) telah dijalankan sebagai usaha murni ke arah memantapkan staf akademik yang berkompentensi, membangunkan ketrampilan serta akauntabiliti. Latihan dan kursus-kursus ini penting bagi mempertingkatkan kemahiran dan pengetahuan para pensyarah sejajar dengan usaha ke arah melahirkan graduan yang mempunyai pencapaian akademik yang tinggi serta berdaya saing dalam pasaran kerja.

Student Development

In the era of globalisation, one of the main challenges for institutions of higher learning is not only to produce academic graduates of excellence, but also competitive graduates for the global market. By being involved in co-curriculum activities, students are expected to improve their soft skills, one of the key elements needed in the job market. The University is impelled towards a holistic approach to human capital development by providing a meaningful and balanced learning experience of campus life. This in turn will boost student academic performance as well as student personality development.

In order to fulfil the aspirations of the students, a total of 26 clubs and societies, SUKSiS and Student Representatives Council (MPP) have been established. Each activity is relevant to the development of the seven soft skills as well as eight other core skills of the co-curriculum. These skills encompass leadership, effort and innovation, public speaking, culture, volunteers, community service and sports. Based on these skills, the performance of the University has been impressive.

In 2009, the Department of Student Affairs & Alumni organised 107 activities in collaboration with various societies, clubs and residential colleges including the Student Representative Council resulting in a number of accomplishments. For example, in the Malaysian University Sports Council (MASUM) 2009, the University was ranked ninth out of the 20 Higher Learning Institutions (HLIs). It also won 3 gold, 2 silver and 2 bronze medals in the Invitational Taekwondo Championship among the clubs of Kuala Muda. In the Laluan Tijarah Open Chess tournament, UTeM Destari Chess team came first. At the national level the University was ranked fifth out of 120 teams. In the public speaking arena, UTeM students won first and fourth places in the Qari and Qariah categories respectively at the Invitational 2nd Musabaqah Al-Quran Recitation. In the area of entrepreneurship, UTeM won second place for the best booth in the Undergraduate Entrepreneurship Carnival.

Staff Development

In 2009, the total number of staff was 712 academic and 916 non-academic staff (administrative and support). Continuous Professional Development (CPD) was introduced as a life-long learning system with focus on staff-centred needs in line with the objective of the University to have competent and knowledgeable staff to support the mission of the organization. All staff are expected to use the electronic-CPD device to plan and decide on activities that would elevate their competencies.

The Integration of Human Excellence (PINTAR) programme was created in 2009 to fulfil the Strategic Plan of the University. The main aim of PINTAR is to accomplish the mission and vision of the University, establish leadership skills and team working as well as to strengthen good values and work culture among the UTeM staff. PINTAR organises activities in its strenuous effort to transform the inherent core values of human capital in terms of intellectual, emotional and spiritual dimensions.

Twenty teaching and learning courses were held for the academics to develop their skills and knowledge in order to strengthen their competencies. These courses were in line with the mission of the University to produce well-rounded graduates who need to be competitive in the challenging job market.



Prestasi Kewangan

Pengurusan kewangan Universiti sepanjang 2009 membuktikan pematuhan kepada peraturan kewangan menjadi agenda utama dalam kebanyakan urusan harian khususnya yang berhubung dengan kawalan ke arah mempertingkatkan kecekapan sistem penyampaian perkhidmatan awam. Keputusan Universiti dalam menstrukturkan semula penempatan kampus-kampus yang ada secara langsung telah banyak memberikan faedah khususnya dari segi penjimatan kos serta faedah-feadah lain, iaitu kesan yang paling ketara ia telah mengurangkan impak terhadap perjalanan operasi Universiti berikutan pengurangan geran mengurus bagi tahun-tahun berikutnya.

Antara kejayaan pengurusan kewangan yang dapat dibanggakan adalah peratus pembayaran keseluruhan bil yang disasarkan 100% untuk diselesaikan dalam tempoh 14 hari telah mencapai 95.8% daripada sasaran. Selain itu, Universiti telah mencapai sifar kelewatan dengan kejayaan mengemukakan beberapa dokumen kewangan dalam tempoh masa yang ditetapkan antaranya iaitu Penyata Kewangan kepada Ketua Audit Negara, Penyediaan Cadangan Perbelanjaan Tahun 2010 & 2011 termasuklah Pemakluman mengenai Pengagihan Bajet Mengurus kepada kesemua PTJ.

Komitmen padu dalam kalangan staf bagi mengekalkan pensijilan yang diperoleh telah membuahkan hasil apabila Malaysia Productivity Corporation (MPC) meluluskan Pensijilan Semula Program Kualiti 5S di Pejabat Bendahari mulai 20 Oktober 2009 untuk tempoh setahun.

Rumusan

Untuk mencapai cita-cita menjadi Universiti Teknikal yang kreatif dan inovatif terkemuka di dunia memerlukan kita berganding bahu, tampil dengan penghayatan kerja sebagai satu pasukan yang mantap, terancang dan bersistem serta menganggap pekerjaan itu sebagai anugerah dan nikmat. Sebagai sebuah institusi pengajian tinggi, kita perlu mengamalkan pengurusan ilmu dalam pekerjaan mahupun kehidupan seharian. Semoga setiap orang daripada kita terpenggil kepada ajakan untuk melakukan perkara dengan cepat, tidak bertangguh, peka dan bertindak segera terhadap perkara-perkara yang menuntut pembaharuan demi amanah yang dipikul dalam mendidik anak bangsa ke arah menghasilkan modal insan kelas pertama.

Sekian, terima kasih.

Financial Performance

The adherence to the financial guidelines is important in the financial management of the University. This adherence has led to greater efficiency in its services to the public. The decision to restructure the existing campuses benefited the University in terms of minimising costs and other related matters. The most significant impact was on the operational services which will have a direct effect on the University due to the reduction of management grants in the years ahead.

One of the financial management successes was in the overall payment target. The ideal clearing payment target was 100% within 14 days. However, the University managed to achieve 95.8%. Besides that, the University achieved the Zero Delay payment by managing to submit all the necessary documents on time for example, the Financial Report to the Auditor General, Budget Proposals for 2010 and 2011 including acknowledgement of management budget vote to all centres of responsibility.

The Malaysian Productivity Corporation (MPC) has approved the re-certification of the 5S Quality Programme for another year to the Bursary with effect from 29 October 2009. This was possible because of the strong commitment among the staff to maintain the standard expected of the certification.

Conclusion

In order to be a world renowned technical university, we have to be creative and innovative. We need to appreciate the work we do by working together as a team and to be supported by a well planned systematic strategy. Today, it is crucial for our lecturers to practice knowledge management in every aspect of work. The need for a mental paradigm shift is imperative to the development of efficient performance, especially in the area of decision making. This paradigm shift is indispensable if we are going to be responsible for producing graduates of excellence to be leaders of tomorrow.

Thank you.



annual report laporan tahunan

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

'09



PENCAPAIAN DAN PENGIKTIRAFAN

ACHIEVEMENT AND RECOGNITION



PENCAPAIAN DAN PENGIKTIRAFAN

A. MAJLIS KONVOKESYEN KELIMA DAN PENGANUGERAHAN DOKTOR KEHORMAT

Majlis Konvokesyen UTeM Ke-5 mencatatkan sejarah tersendiri dengan penganugerahan Ijazah Kehormat kepada mantan Perdana Menteri dan isteri. Majlis yang berlangsung buat pertama kalinya di Dewan Besar UTeM menyaksikan Tuan Yang Terutama Datuk Seri Utama Mohd Khalil bin Yaakob, Canselor UTeM menganugerahkan Ijazah Kehormat Doktor Pembangunan dan Pengurusan Teknologi kepada Tun Dr. Mahathir bin Mohamad manakala Tun Dr. Siti Hasmah Mohd Ali dianugerahkan Ijazah Kehormat Doktor Pembangunan Komuniti. Pada konvokesyen kali ini juga seramai 1591 orang graduan dari peringkat Diploma sehingga Doktor Falsafah telah diraikan. Para graduan yang cemerlang juga diberikan penghargaan dengan penganugerahan Anugerah Pelajaran Diraja kepada dua graduan, Hadiah Canselor kepada dua orang graduan, Hadiah Naib Canselor kepada 19 orang graduan dan Hadiah Industri kepada lima orang graduan.

B. AKADEMIK

i. Fakulti Baru

Sebuah fakulti baru telah ditubuhkan iaitu Fakulti Pengurusan Teknologi dan Teknousahawanan pada 4 Februari 2009. Selaras dengan penubuhan ini juga, tiga program akademik baru telah ditawarkan iaitu Sarjana Muda Teknousahawanan dengan Kepujian, Sarjana Muda Pengurusan Teknologi dengan Kepujian (Inovasi Teknologi) dan Sarjana Muda Pengurusan Teknologi dengan Kepujian (Pemasaran Teknologi Tinggi).

ii. Penambahan Program Baru

Sejajar dengan pembangunan pesat universiti, beberapa fakulti telah menambah penawaran program akademik di peringkat pasca siswazah. Program yang baru ditawarkan pada tahun 2009 ialah:

ACHIEVEMENT AND RECOGNITION

A. THE FIFTH CONVOCATION CEREMONY AND AWARD OF HONORARY DOCTORATES

UTeM's fifth convocation ceremony made history with the conferment of honorary doctorates to the former Prime Minister of Malaysia and his wife. The event was held for the very first time at the UTeM Main Hall. The Chancellor of UTeM, Tuan Yang Terutama Datuk Seri Utama Mohd Khalil bin Yaakob, conferred the Honorary Doctorate of Development and Technology Management to Tun Dr. Mahathir bin Mohamad and the Honorary Doctorate of Community Development to Tun Dr. Siti Hasmah Mohd Ali.

The convocation was celebrated by 1,591 graduates ranging from Diploma to Postgraduates courses. Two graduate students of excellence were honoured with the Royal Education Award and two others the Chancellor's award. The Deputy Vice Chancellor's Award was presented to 19 graduates and the Industrial Award to five.

B. ACADEMIC

i. New Faculty

The Faculty of Technology Management and Entrepreneurship was established on 4 February 2009. The establishment of the new faculty paved the way for three new academic programmes: Bachelor of Technopreneurship with Honours, Bachelor of Technology Management with Honours (Technology Innovation) and Bachelor of Technology Management with Honours (Commercialisation of Advance Technology).

ii. Additional Programmes

Parallel to the rapid development of the University, several faculties increased the number of courses offered at postgraduate level. The list of programmes offered for the year 2009 is as follows:



Fakulti Kejuruteraan Elektrik

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Elektrik

Secara Mod Campuran

Industrial Power
Power Electronics and Drives
Robotic and Control

Secara Penyelidikan

High Voltage Technology

Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Elektronik

Secara Kerja Kursus

Telecommunication Systems
Computer Engineering
Electronic Systems

Secara Penyelidikan

Optoelectronics
RF & Microwave Engineering
Broadband & Multimedia Communications
Computer Engineering
Embedded Systems
Electronics Instrumentation
Consumer Electronics

Fakulti Kejuruteraan Pembuatan

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Pembuatan

Secara Kerja Kursus

Manufacturing Systems Engineering

- Industrial Engineering
- Quality Systems Engineering
- Precision Engineering

Faculty of Electrical Engineering

Doctor of Philosophy and Master of Science (Electrical Engineering).

Mix mode

Industrial Power
Power Electronics and Drives
Robotic and Control

By Research

High Voltage Technology

Faculty of Electronic and Computer Engineering

Doctor of Philosophy and Master of Science (Electronic Engineering)

By Coursework

Telecommunication Systems
Computer Engineering
Electronic Systems

By Research

Optoelectronics
RF & Microwave Engineering
Broadband & Multimedia Communications
Computer Engineering
Embedded Systems
Electronics Instrumentation
Consumer Electronics

Faculty of Manufacturing Engineering

Doctor of Philosophy and Master of Science (Manufacturing Engineering).

By Coursework

Manufacturing Systems Engineering

- o Industrial Engineering
- o Quality Systems Engineering
- o Precision Engineering

C. PENYELIDIKAN DAN INOVASI

Secara keseluruhan sebanyak 37 pingat telah diraih sepanjang tahun 2009 dari pelbagai pameran atau ekspo penyelidikan yang disertai di dalam dan luar negara.

- i. Penyelidik UTeM memenangi tujuh pingat di Malaysian Technology Expo 2009 (MTE 2009) yang berlangsung pada 19 hingga 21 Februari 2009. Pingat-pingat yang dimenangi itu terdiri daripada satu emas, satu perak dan lima gangsa.
- ii. UTeM telah memenangi 14 pingat yang terdiri daripada tiga emas, enam perak dan lima gangsa di International Invention, Innovation and Technology Exhibition (ITEX 2009) yang berlangsung pada 15 hingga 17 Mei 2009.
- iii. Pasukan penyelidik UTeM telah meraih tujuh pingat di Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa 2009 (PECIPTA 2009) yang diadakan pada 8 hingga 10 Oktober 2009. Pingat-pingat yang dimenangi ini terdiri daripada satu emas, tiga perak dan tiga gangsa.
- iv. Kemenangan tiga pingat emas, satu perak dan satu gangsa serta satu Anugerah Khas semasa World Exhibition on Innovation, Research and New Technologies (INNOVA 2009) meninggalkan kenangan manis buat warga UTeM. INNOVA 2009 telah berlangsung di Brussels Expo, Belgium pada 19 hingga 21 November 2009 yang lalu.
- v. UTeM turut memenangi satu pingat emas, tiga perak dan satu gangsa di International Trade Fair Ideas-Invention-New Products (IENA 2009) yang telah diadakan di Nuremberg Exhibition Center, Jerman pada 5 hingga 8 November 2009 yang lalu.

D. PELAJAR

- i. Dua kumpulan pelajar UTeM telah mengharumkan nama universiti dengan memenangi Pertandingan IHL Business Plan Competition anjuran MDeC. Rentetan daripada kejayaan ini, kedua-dua kumpulan tersebut sekali lagi telah berjaya memperoleh geran daripada MDeC iaitu "Pre-Seed Fund" yang berjumlah RM150,000.00 untuk merealisasikan projek impian mereka.
- ii. Pelajar UTeM telah dinobatkan sebagai Johan (Bahagian Qari) dan tempat keempat (Bahagian Qariah) semasa pertandingan Musabaqah Tilawah Al-Quran Jemputan IPT Malaysia Kali Kedua.
- iii. Pasukan UTeM telah berjaya memperoleh pingat gangsa bagi kategori Nyanyian Irama Malaysia, kategori Akustik Orkestra dan kategori Permainan Rakyat (Galah Panjang) dalam Festival Kebudayaan Universiti-universiti Malaysia (FESTKUM 09).
- iv. Pasukan atlet UTeM telah berjaya memenangi lapan pingat di Temasya Sukan Majlis Sukan Universiti Malaysia 2009 yang berlangsung pada 13 hingga 28 Mei 2009.
- v. Sewaktu Karnival Keusahawanan Siswa IPTA (KARNIAWAN '09) pula, pasukan UTeM telah berjaya mendapat tempat ke-2 bagi Anugerah Gerai Terbaik dan salah seorang graduan UTeM pula telah berjaya menggondol Anugerah Usahawan Siswazah 2009.

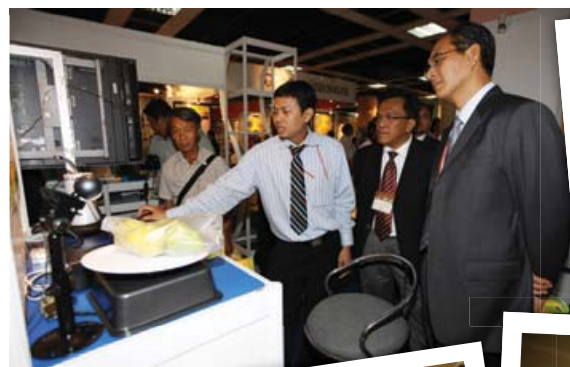
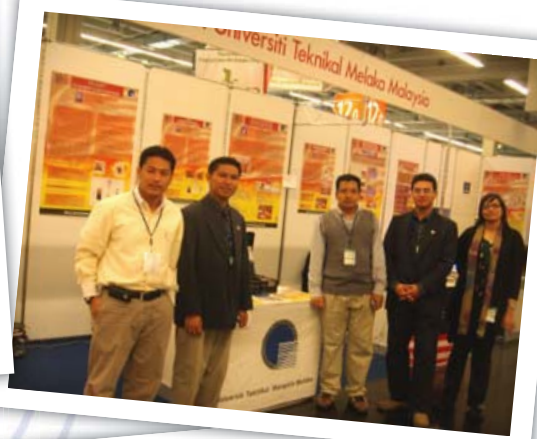
C. RESEARCH AND INNOVATION

In 2009 UTeM attained 37 medals at various local and international exhibitions and expos.

- i. *UTeM researchers won one gold, one silver and five bronze medals at the Malaysian Technology Expo 2009 (MTE 2009) held from 19 to 21 February 2009.*
- ii. *UTeM won three gold, six silver and five bronze medals at the International, Innovation and Technology Exhibition (ITEX 2009) held from 15 to 17 May 2009.*
- iii. *The UTeM research team won one gold, three silver, and three bronze medals at the International Higher Education Design Conference Expo 2009 (PECIPTA 2009) held from 8 to 10 October 2009.*
- iv. *The success of securing three gold, one silver and one bronze medals as well as a Special Award during the World Exhibition on Innovation, Research and New Technologies (INNOVA 2009) inspired pride among the citizens of UTeM. INNOVA 2009 was held in Brussels Expo, Belgium from 19 to 21 November 2009.*
- v. *UTeM also won a gold, three silver and a bronze medals at the International Trade Fair Ideas-Invention-New Products (IENA 2009) held in the Nuremberg Exhibition Centre in Germany from 5 to 8 November 2009.*

D. STUDENTS

- i. *Two groups of students did the University proud by winning the IHL Business Plan Competition organised by MdeC. Consequently, these students went on to secure the "Pre-Seed Fund" grant of RM 150,000.00 from MdeC to bring their project to fruition.*
- ii. *In the second Musabaqah Tilawah Al-Quran invitational competition for Higher Education, the students of UTeM was placed first (Qari Division) and fourth (Qariah Division).*
- iii. *At the University Cultural Festival (FESTKUM 09), the UTeM team won bronze medals in the Malaysia Rhythm Song, Acoustic Orchestra and Folk Game (Long Pole) categories*
- iv. *The UTeM athletes won eight medals at the Malaysian University Sports Carnival 2009 which was held from 13 to 28 May 2009.*
- v. *During the IPTA Undergraduate Entrepreneurship Carnival (KARNIAWAN '09), the UTeM team secured second place for the Best Stall Award. One of the UTeM graduates also went on to win the Undergraduate Entrepreneur Award*



E. KOLABORASI MoU

i. UTeM menandatangani Memorandum Persefahaman dengan Universiti Dian Nuswantoro, Semarang Indonesia pada 26 Februari 2009 yang melibatkan program pengajian Ijazah Sarjana dalam bidang Sains Komputer serta penyelidikan dalam Teknologi Maklumat.

ii. Memorandum Persefahaman (MoU) antara tiga pihak iaitu antara UTeM dengan Advance Pact Sdn. Bhd. dan Melaka Biotech Sdn. Bhd. telah ditandatangani pada 28 April 2009. MoU yang disokong oleh kerajaan Negeri Melaka ini bertujuan untuk meningkatkan bidang kejuruteraan dan teknologi penjagaan kesihatan, pusat pakar penyelenggaraan kejuruteraan bioperubatan dan lain-lain lagi.

iii. UTeM menandatangani Memorandum Persefahaman (MoU) dengan enam syarikat yang memiliki kepakaran dalam bidang robotik dan automasi industri, pembangunan mesin, bidang telekomunikasi dan kejuruteraan komputer pada 9 Oktober 2009. Enam syarikat berkenaan ialah Kuka Robot Automation, Robomatics (S.E.A) Sdn. Bhd., MRJ Technologies Sdn. Bhd., Ritz Power Mechanics Sdn. Bhd., Orionplex Sdn. Bhd. dan Significant Technologies Sdn. Bhd.

E. MoU Collaboration

i. UTeM signed a Memorandum of Understanding with the University of Dian Nuswantoro, Semarang Indonesia on 26 February 2009. This memorandum involves masters studies in the area of Computer Science as well as research in Information Technology.

ii. Memorandum of Understanding among three parties; UTeM, Advance Pact Sdn. Bhd. and Melaka Biotech Sdn. Bhd. was signed on 28 April 2009. The MOU which is supported by the Melaka State Government aims to boost the engineering and technology for health maintenance, centre for expert administration of biomedical engineering and others.

iii. UTeM signed the Memorandum of Understanding on 9 October 2009 with six companies possessing distinctive expertise in the fields of robotic and automation industry, machine development, telecommunication and computer engineering. The six companies are Kuka Robot Automation, Robomatics (S.E.A) Sdn. Bhd., MRJ Technologies Sdn. Bhd., Ritz Power Mechanics Sdn. Bhd., Orionplex Sdn. Bhd. and Significant Technologies Sdn. Bhd.





PENCAPAIAN KEY PERFORMANCE INDICATORS (KPI) DAN KEY RESULT AREAS (KRA)

ACHIVEMENT OF KEY PERFORMANCE INDICATORS (KPI) AND KEY RESULT AREAS (KRA)

4. PENCAPAIAN KEY PERFORMANCE INDICATORS (KPI) DAN KEY RESULT AREAS (KRA)

Pengenalan enam teras Bidang Keberhasilan Utama Negara (NKRA) oleh Perdana Menteri Malaysia, Datuk Seri Najib Tun Razak pada 27 Julai 2009 bertujuan mewujudkan budaya kerja berasaskan prestasi tinggi bagi mentransformasikan pembangunan negara agar Malaysia terus berdaya saing di peringkat global. Bagi peringkat Kementerian Pengajian Tinggi (KPT) pula, empat Ministerial Key Result Area (MKRA) telah ditetapkan iaitu:

- i. Peningkatan Akses kepada Pengajian Tinggi yang Berkualiti
- ii. Peningkatan Kebolehpasaran Graduan
- iii. Pengantarabangsaan Pengajian Tinggi Negara; dan
- iv. Peningkatan Kegiatan R&D untuk Memperkaya Ilmu dan Penjanaaan Ekonomi Negara.

Justeru, UTeM sebagai sebuah Institusi di bawah KPT perlu memastikan agenda di atas untuk memenuhi harapan seluruh rakyat bagi melihat tranformasi serta impak pengajian tinggi negara kepada pembangunan Malaysia terlaksana.

BIDANG KEBERHASILAN UTAMA (KRA) & PETUNJUK UTAMA PRESTASI (KPI) - PENYEDIAAN DAN PELAKSANAAN DI UTeM

Berdasarkan tujuh teras utama di dalam dokumen Pelan Strategik Pengajian Tinggi Negara (PSPTN), pihak KPT telah mengenal pasti 21 Projek Agenda Kritikal (CAP) yang perlu diberi perhatian oleh IPTA. CAP juga dirujuk dalam penentuan KRA yang akan menyokong MKRA KPT. Sehingga 31 Disember 2009, UTeM hanya terlibat secara langsung dengan 12 daripada 21 CAP iaitu:

- i. Akademia
- ii. Pengantarabangsaan
- iii. Penyelidikan dan Pembangunan (R&D)
- iv. Industri-Akademia
- v. Jaminan Kualiti
- vi. Kebolehpasaran Graduan
- vii. Tadbir Urus
- viii. Kepimpinan
- ix. Pembelajaran Sepanjang Hayat
- x. My brain 15
- xi. Pembangunan Holistik Pelajar
- xii. Pengajaran & Pembelajaran (P&P)

Bagi memastikan pelaksanaannya berjaya, UTeM telah melantik beberapa orang pegawai kanan untuk mengetuai kumpulan CAP di peringkat Universiti. Kumpulan CAP ini bertanggungjawab mengkaji secara kritikal strategi, peluang dan ruang yang ada untuk memastikan sasaran KPI tercapai.

4. ACHIEVEMENT OF KEY PERFORMANCE INDICATORS (KPI) AND KEY RESULT AREAS (KRA)

The introduction of six core National Key Result Areas by the Prime Minister of Malaysia Datuk Seri Najib Tun Razak on 27 July 2009 aims to create a work culture based on advanced performance in order to transform Malaysia into a globally competitive nation.

At the Ministry of Higher Education level, the following four Ministerial Key Result Areas (MKRA) were established:

- i) Better access to quality higher education
- ii) Increase in graduate marketability.
- iii) Internationalise national higher education, and
- iv) Increase R&D efforts to enrich knowledge and generate national economy.

It is hoped that UTeM, a university under the Ministry of Higher Education, will in accordance with the above agenda, fulfil the hopes of the people by having an impact on higher education which will indirectly transform the development of Malaysia.

KEY RESULT AREAS (KRA) AND KEY PERFORMANCE INDICATORS (KPI)-PREPARATION AND EXECUTION IN UTeM

With reference to the seven thrusts in National Higher Education Strategic Plan, the Ministry of Higher Education has identified 21 PSTPN Critical Agenda Projects (CAP) as the KRA to support the MKRA. From that number, UTeM is involved in 12 CAPs:

- i) Academic
- ii) Internationalisation
- iii) Research and Development
- iv) Industry- Academic Link
- v) Quality Assurance
- vi) Graduate Marketability
- vii) Administrative Management
- viii) Leadership
- ix) Life-Long Learning
- x) MyBrain 15
- xi) Student Holistic Development
- xii) Teaching and Learning

To ensure the success of CAP, UTeM has appointed CAP leaders at the University level. These heads are responsible for identifying activities and ensuring that these activities realise the KPI objectives.

KEY RESULT AREA (KRA) & KEY PERFORMANCE INDICATOR (KPI) – PERLAKSANAAN AKTIVITI UTAMA & PENCAPAIAN

Untuk memastikan pencapaian sasaran KPI, maka universiti telah mengenal pasti dan melaksanakan aktiviti-aktiviti utama bagi setiap KRA yang juga merupakan CAP

i. Akademia

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Mengalakkan penglibatan staf dalam penyelidikan, pakar rujuk, menjalani program sangkut industri/sabatikal/ post doctoral, penulisan & penerbitan bahan ilmiah serta membuat pembentangan penemuan penyelidikan dalam persidangan kebangsaan / antarabangsa	Peratus staf akademik yang mengikuti program pertukaran dan sangkut industri	2.5 %	5%
2.	Penawaran program profesional pada pihak luar			
3.	Memperkukuhkan kerjasama dan usaha sama dengan organisasi dan institusi dalam dan luar negara			
4.	Mewujudkan polisi dan memberi anugerah khas kepada ahli akademik yang unggul	Bilangan polisi dan anugerah khas kepada ahli akademik yang unggul	3 polisi	5 anugerah
5.	Mengambil, membangun dan mengekalkan ahli akademik yang terbaik			
6.	Melaksanakan program pembangunan kepimpinan dan mendapatkan pengiktirafan antarabangsa			

KEY RESULT AREAS (KRA) & KEY PERFORMANCE INDICATORS (KPI) – IMPLEMENTATION OF THE MAIN ACTIVITIES AND ACHIEVEMENTS

To ensure the achievement of the KPI, the University has implemented various activities in all KRAs which reflect the areas of CAP

i. Academia

No.	Main Activities	KPI	Achievement 2009	Target 2010
1.	Encourage staff to embark on research, subject specialization, industrial attachment programmes, sabbatical, post doctorate academic writing and publications and presenting of papers at both local and international conferences	The percentage of academic staff who have undergone industrial attachment exchange programmes	2.5 %	5%
2.	Offer professional programmes to the public			
3.	Enhance relationship and cooperation with other organisations both locally and internationally			
4.	Establish a policy for awarding special rewards/awards to academicians of excellence	The number of policies and received/given to academic staff of excellence	3 policies	5 awards
5.	Hire, develop and retain academicians of excellence			
6.	Embark on leadership development programmes for international accreditation			

ii. Pengantarabangsaan

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Meningkatkan ahli akademik antarabangsa dengan meluaskan promosi dan pencarian staf di luar negara	Bilangan promosi yang dijalankan di luar Malaysia Bilangan staf antarabangsa	4 3.3% (23 orang)	5 5%
2.	Meningkatkan bilangan pelajar antarabangsa dengan mengadakan promosi, pertukaran pelajar dan penawaran kursus Bahasa Inggeris	Peratus pelajar antarabangsa	1% (68 orang)	2%
3.	Meningkatkan pelajar pasca siswazah antarabangsa	Peratus pelajar antarabangsa daripada keseluruhan pelajar Pasca Siswazah	15.5% (63/406)	15%
4.	Meningkatkan pengiktirafan antarabangsa	Bilangan IPT / organisasi antarabangsa yang bekerjasama dengan universiti	16 MoU 2 MoA	18 MoU 4 MoA

ii. Internationalisation

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Increase the intake of international staff through promotions	The number of promotions undertaken outside Malaysia Number of international staff	4 3.3% (23 staff)	5 5%
2.	Increase the intake of international students through promotions, student exchanges and offerings of English Language courses	of international staff	1% (68 students)	2%
3.	Increase international post-graduate students	Percentage of international students from the total of graduate students	15.5% (63/406)	15%
4.	Increase international accreditation	The number of higher learning institutions/ organisations in cooperation with the University	16 MoU 2 MoA	18 MoU 4 MoA

iii. Penyelidikan dan Pembangunan (R&D)

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Menjalinkan dan mengukuhkan Rangkaian Kerjasama dan Pengkomersilan dengan rakan industri (MoU dan MoA)	Bilangan projek yang dilaksanakan	125	10% peningkatan
		Jumlah dana penyelidikan yang diperoleh daripada agensi kerajaan	RM3.2 juta	10% peningkatan
2.	Meningkatkan program penggalakan penyelidikan, inovasi dan pengkomersilan	Bilangan produk/perkhidmatan yang dikomersialkan	20	10% peningkatan
		Nilai pendapatan daripada pihak industri dan antarabangsa	RM 38 ribu	10% peningkatan
3.	Penggubalan polisi yang sistematik dan holistik bertujuan meningkatkan aktiviti penyelidikan, pengkomersilan, inovasi dan penerbitan	Dana penyelidikan daripada pihak industri dan antarabangsa	RM 150 ribu	RM 250 ribu
4.	Meningkatkan akses kepada maklumat output penyelidikan dan inovasi	Bilangan IP produk penyelidikan yang telah diperoleh	9	10% peningkatan
5.	Memperkasakan kluster penyelidikan melalui penubuhan Pusat Penyelidikan dan Pusat Kecemerlangan Universiti	Bilangan anugerah yang diperolehi	37	10% peningkatan
		Bilangan artikel yang diterbitkan di dalam jurnal	249	10% peningkatan

iii. Research and Development (R&D)

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Establish and consolidate the cooperative and commercialization spheres in industrial partnerships for both MOA and MOU	The number of projects undertaken	122	10% increase
		The amount of research grant solicited from government agencies	RM3.2 million	10% increase
2.	Increase research support programmes, innovation and commercialization	The number of products and services commercialised	20	10% increase an
		Income derived from R & I and advisory services	RM 38 ribu	10% increase
3.	Increase research, commercialization, innovation and publication activities via a systematic and holistic policy	Research funds from industries and overseas	RM 150 thousand	RM 250 thousand
4.	Increase accessibility to research output and innovation	The number of IP research products accomplished	9	10% increase
5.	Consolidate research clusters with the establishment of Industry and Centre for Excellence	The number of awards attained	37	10% increase
		The number of articles published in journals	249	10% increase

iv. Jalinan Industri-Akademia

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Menganjurkan program-program hubungan universiti-industri	Bilangan industri yang bekerjasama dalam bidang P&P	65 Industri	10% peningkatan
2.	Memperkembangkan dan mengemas kini pangkalan data berkaitan industri untuk tujuan latihan industri pelajar dan sangkut staf di industri	Bilangan industri yang bekerjasama dalam bidang R&I	9 Mou & 2 MoA	10% peningkatan
3.	Menggubal polisi berkaitan hubungan antara UTeM dengan industri dan polisi latihan industri	Bilangan pelajar dan staf yang terlibat dengan program <i>knowledge transfer bersama industry</i>	1200 pelajar & 13 pensyarah	10% peningkatan
		Bilangan staf industri yang terlibat dengan program <i>knowledge transfer bersama universiti</i>	50 orang	10% peningkatan
4.	Menyediakan direktori kepakaran dan fasiliti universiti untuk rujukan pihak industri dan masyarakat			

iv. Industry-Academia Linkages

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Conduct University and industry programmes	The number of industries in cooperation with P & P	65 Industries	10% increase
2.	Consolidate and update the data of student industrial training and staff industrial attachment	The number of industries in cooperation with R & I	9 Mou & 2 MoA	10% increase
3.	Establish policies on UTeM and industry collaboration as well as industrial training	The number of students and staff involved in <i>knowledge transfer</i> programmes via industrial collaboration	1200 students & 13 lecturers	10% increase
		The number of staff and industries involved in knowledge transfer programmes	50 people	10% increase
5.	Provide a directory on University expertise and other facilities for industrial and public reference			

v. Jaminan Kualiti

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Menambahbaik proses pengumpulan data universiti	Bilangan program akademik yang memperoleh akreditasi dan pengiktirafan pada tahun semasa	23 program diiktiraf	26 program
2	Mendapatkan pengiktirafan dan akreditasi program	Pengiktirafan yang diperoleh oleh Universiti	Persijilan MS ISO 9001:2000/ status MSC	dikekalkan
3	Membangunkan garis panduan akademik - polisi perancangan akademik, polisi semakan kurikulum, polisi P&P dan panduan permohonan program baru			
4	Menyemak semula skim pemeriksa luar			

v. Quality Assurance

No.	Main Activity	KPI	Achievement 2009	Target 2010
1	Improve further University data collection process	The number of academic programmes accredited and endorsed in the current year	23 programmes endorsed	26 programmes
2	Secure endorsement and accreditation of programmes offered	Endorsement received by the University	MS ISO 9001:2000 certification / status MSC	Endorsement remains valid
3	Create academic policy guidelines on academic curriculum review , and teaching and learning as well as on new programmes			
4	Review of external marking scheme			

vi. Kebolehpasaran Graduan

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Meningkatkan kemahiran berkomunikasi dan penggunaan bahasa terutamanya BI dan bahasa ketiga seperti Mandarin, Arab, Jepun dll.	Peratus graduan yang mendapat pekerjaan enam bulan selepas tamat pengajian	59.4%	75%
2	Mengadakan aktiviti bagi meningkatkan kemahiran insaniah termasuk aktiviti kemasyarakatan sebagai persediaan pelajar memasuki pasaran kerja	Bilangan aktiviti yang dianjurkan bagi meningkatkan kemahiran insaniah pelajar	97 aktiviti	5 % peningkatan
3	Meningkatkan pencapaian akademik dan kompetensi di kalangan pelajar			
4	Memberi pendedahan kepada pelajar suasana sebenar di alam pekerjaan			
5	Memantapkan aktiviti kokurikulum yang membabitkan para pelajar			

vi. Graduate Employability

No.	Main Activity	KPI	Achievement 2009	Target 2010
1	Upgrade communication and language skills , especially in English and third languages such as Mandarin and Arabic	The percentage of graduates securing jobs within six months after graduation	59.4%	75%
2	Organise activities to increase students' soft skills	The number of activities conducted to upgrade students' soft skills	97 activities	5 % increase
3	Increase student academic competency and achievements			
4	Expose students to real job situations			
5	Enhance student co-curriculum activities			

vii. Tadbir Urus

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Menghasilkan Perlembagaan dan Statut / kaedah / Peraturan	Jumlah (RM) pendapatan universiti daripada aktiviti penajaan pendapatan	RM17.7 juta	RM20 juta
2	Meningkatkan kegiatan inovasi dengan rakan industri			
3	Meningkatkan kegiatan pengkomersilan / pelesenan teknologi dan perundingan			
4	Menggiatkan aktiviti perundingan Pusat Kecemerlangan (CoE) dan Pusat Pengujian			

vii. Administrative Management

No.	Main Activity	KPI	Achievement 2009	Target 2010
1	Establish constitution and Statutes/Steps/Guidelines	The University's total income from revenue deriving activities	RM17.7 million	RM20 million
2	Upgrade innovation activities with industries			
3	Increase commercialization /technological license and advisory activities			
4	Strengthen advisory services at Centres of Excellence (CoE)and Testing			

viii. Kepimpinan

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Mengenal pasti pegawai / pensyarah muda (35 tahun dan ke bawah) untuk menyertai program kepimpinan	Bilangan program kepimpinan yang dianjurkan	12	15
2.	Menyediakan jadual (perancangan satu tahun) giliran yang bersistematik kepada pegawai utama / pensyarah muda	Jumlah jam latihan per staf setiap tahun	40 jam	42 jam
3.	Merekod data data staf akademik yang telah mengikuti program kepimpinan ke dalam sistem MyCPD dan buku Rekod Perkhidmatan (BPR)			
4.	Mencalonkan dan menghantar staf UTeM yang dikenal pasti sebagai <i>Master Trainer</i>			

viii. Leadership

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1.	Select staff among officers and young academicians (age 35 and below) to join leadership programmes	The number of leadership programmes conducted	12	15
2.	Prepare a systematic yearly plan for the officers and young academicians	Total hours of training	40 hours	42 hours
3.	Record data of academicians who undergo leadership training in the MyCPDsys and service record book			
4.	Select UTeM staff for the <i>Master Trainer</i> training			

ix. Pembelajaran Sepanjang Hayat

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Menawarkan program latihan jangka pendek dalam membudayakan ilmu kepada orang awam dan staf	Bilangan program/latihan jangka pendek yang ditawarkan kepada orang awam	3	10
		Bilangan peserta (orang awam) Program Pembelajaran Sepanjang Hayat	150 orang	300 orang
2	Memberi peluang staf meningkatkan kelayakan akademik			
3	Mengukuhkan peranan Pusat Pembelajaran Berterusan dalam memperluaskan aktiviti LLL			

ix. Life-Long Learning

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Offer short-term training programmes to instil a culture of knowledge among the staff and public	The number of short-term training programmes offered to the public	3	10
		The number of public participants in continuing education programmes	150 people	300 people
2	Provide staff opportunities to enhance their academic achievements			
3	Consolidate the role of the Centre for Continuing Education to further enhance activities of life-long learning			

x. MyBrain 15

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Penawaran Program PhD	Bilangan penawaran kursus PhD	10	20
2	Penambahbaikan proses penilaian untuk kemasukan pemohon	Bilangan pelajar pasca siswazah (PhD) pada tahun semasa	61	79
3	Meningkatkan prasarana penyelidikan dan sokongan	Bilangan Graduan PhD tahun semasa	3	4
4	Penawaran program PhD bukan konvensional	Bilangan pensyarah yang mempunyai kelayakan PhD	66	90
5	Penambahan bilangan dan nilai bantuan kewangan	Bilangan / peratus staf yang sedang melanjutkan pelajaran di peringkat PhD	217	289
6	Peningkatan kualiti penyeliaan			

x. MyBrain 15

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Offer PhD programmes	The number of PhD courses offered	10	20
2.	Add value on assessment of candidates	The number of postgraduate students (PhD) in the current year	61	79
3.	Enhance further research atmosphere and support	The number of PhD graduates in the current year	3	4
4.	Establish provision for non-conventional PhD programmes	The number of academicians with PhDs	66	90
5.	Increase in numbers and amount of financial support	The number of staff currently on PhD programmes	217	289
6.	Improve the quality of supervision			

xi. Pembangunan Holistik Pelajar

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Meningkatkan modul berdasarkan 8 teras utama	Bilangan aktiviti kokurikulum di luar kurikulum pengajian yang dikreditkan	35	45
2	Penyemakan semula kokurikulum yang berkredit berdasarkan LO dan KI	Peratus Kokurikulum yang berkredit disemak semula adalah berdasarkan Hasil Pembelajaran, Kemahiran Insaniah dan Taksonomi yang bersesuaian merangkumi keseluruhan reka bentuk kokurikulum, kaedah penyampaian dan penaksiran	100%	100%
		Bilangan anugerah (bukan akademik) yang diperoleh oleh pelajar	7	10

xi. Student Holistic Development

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Establish module advancement according to the eight main pillars	The number of co-curriculum activities outside of credited curriculum studies	35	45
2.	Review credited co-curriculum in accordance with LO and KI	Credited co-curriculum that were reviewed according to Learning Outcomes, Soft Skills and overall suitable taxonomies that include curriculum design, teaching methods and evaluation	100%	100%
		The number of non-academic awards attained by students	7	10

xii. Pengajaran & Pembelajaran (P&P)

No.	Aktiviti Utama	KPI	Pencapaian 2009	Sasaran 2010
1	Melaksanakan program akademik (<i>designing, delivery & assessment</i>) berlandaskan Hasil Pembelajaran, Kemahiran Insaniah dan Taksonomi yang bersesuaian dengan Badan Penilai	Peratus program yang dilaksana berdasarkan Hasil Pembelajaran, Kemahiran Belajar, Kemahiran Insaniah dan Taksonomi yang bersesuaian dengan keperluan badan pengiktirafan	70%	75%
2	Melaksanakan komponen 7 GSA dalam program akademik	Peratus pelaksanaan komponen <i>Generic Student Attributes</i> dalam program akademik yang ditawarkan.	60%	70%
3	Mengukuhkan peranan Pusat Pembelajaran Berterusan dalam memperluaskan aktiviti LLL			
4	Meningkatkan kompetensi, kemahiran dan kecekapan staf bukan akademik			
5	Meningkatkan kualiti pensyarah dari aspek kelayakan akademik, pengajaran & penyeliaan, penerbitan & penulisan serta R&D			
6	Pembangunan peralatan mengikut compliance yang ditetapkan (kualiti & kuantiti) dan kemudahan prasarana fizikal yang kondusif			

UTeM sentiasa berusaha untuk meningkatkan martabat Pengajian Tinggi Negara melalui penggubalan dokumen Pelan Strategik universiti yang menjurus kepada teras PSPTN dan juga MKRA serta NKRA. Universiti juga akan menerapkan budaya kerja berprestasi tinggi agar transformasi yang dibawa oleh pihak Kementerian dan juga hasrat Y.A.B Perdana Menteri Malaysia tercapai.

xii. Teaching and Learning

No.	Main Activity	KPI	Achievement 2009	Target 2010
1.	Execute academic programmes (designing, delivery & assessment) in accordance with learning outcomes, soft skills and relevant taxonomies in line with the assessment agencies	The percentage of programmes conducted according to Learning Outcomes, Study Skills and Soft Skills and taxonomies in line with the assessment agencies	70%	75%
2.	Execute the 7 GSA components in academic programmes	The percentage of execution on the component of Generic Student Attributes in academic programmes offered	60%	70%
3.	Enhance the role of the Centre for Continuing Education to further enhance life- long learning activities			
4.	Enhance staff competencies, skills and advancement of			
5.	Enhance further lecturers' qualities in terms of academic qualifications, teaching and supervision, publications and R&D			
6.	Develop tools in compliance with quality and quantity as well as conducive to the physical environment.			



annual report **laporan tahunan**

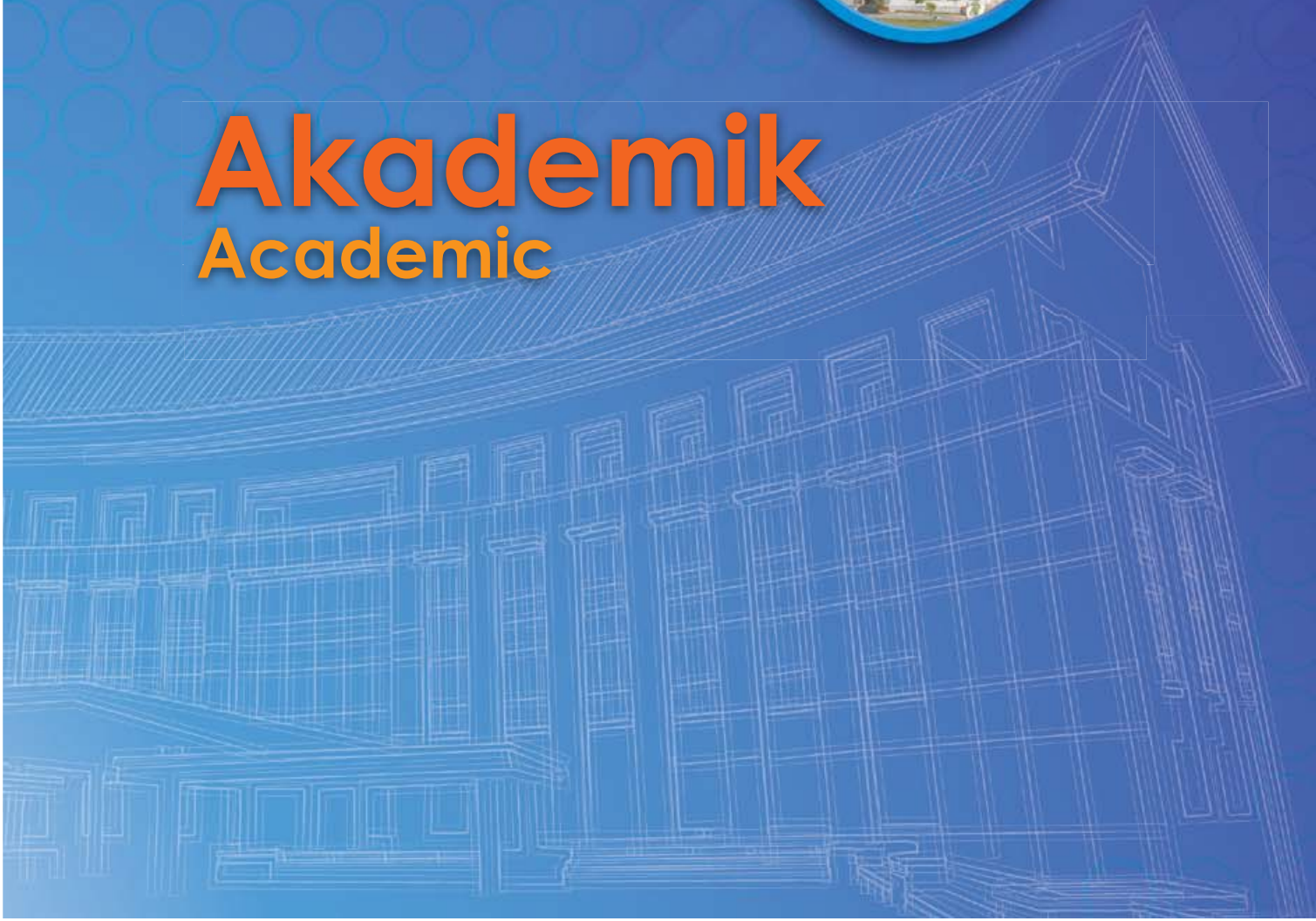
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

'09



Akademik

Academic



5.1 PROGRAM AKADEMIK

UTeM menawarkan sebanyak lima (5) program di peringkat Diploma, 25 program di peringkat Sarjana Muda di samping 14 program Sarjana dan 10 program Doktor Falsafah. Tiga (3) program baru diluluskan pada tahun 2009 di peringkat prasiswazah iaitu Sarjana Muda Teknousahawanan dengan Kepujian, Sarjana Muda Pengurusan Teknologi dengan Kepujian (Inovasi Teknologi), dan Sarjana Muda Pengurusan Teknologi dengan Kepujian (Pemasaran Teknologi Tinggi).

5.2 PROGRAM SARJANA MUDA & DIPLOMA

Sebanyak 25 program Sarjana Muda dan 5 program Diploma telah ditawarkan sepanjang tahun 2009. Senarai keseluruhan adalah seperti berikut;

5.2.1 FAKULTI KEJURUTERAAN ELEKTRONIK & KEJURUTERAAN KOMPUTER (FKEKK)

- Ijazah Sarjana Muda Kejuruteraan Elektronik (Elektronik Telekomunikasi)
- Ijazah Sarjana Muda Kejuruteraan Elektronik (Kejuruteraan Komputer)
- Ijazah Sarjana Muda Kejuruteraan Elektronik (Elektronik Industri)
- Ijazah Sarjana Muda Kejuruteraan Elektronik (Komunikasi Wayarles)
- Diploma Kejuruteraan Elektronik

5.2.2 FAKULTI KEJURUTERAAN ELEKTRIK (FKE)

- Ijazah Sarjana Muda Kejuruteraan Elektrik (Kawalan, Instrumentasi & Automasi)
- Ijazah Sarjana Muda Kejuruteraan Elektrik (Kuasa Industri)
- Ijazah Sarjana Muda Kejuruteraan Elektrik (Elektronik Kuasa & Pemacu)
- Ijazah Sarjana Muda Kejuruteraan Mekatronik
- Diploma Kejuruteraan Elektrik

5.1 ACADEMIC PROGRAMME

UTeM offers a total of 5 Diploma and 25 Bachelor level programmes. It also offers 14 programmes at Masters and 10 at Doctoral levels. In 2009, three new programmes were approved at the pre-graduate level, namely: Bachelor of Technopreneurship with Honours, Bachelor of Technology Management (Innovation Technology) with Honours, and Bachelor of Technology Management (High Technology Marketing) with Honours.

5.2 DIPLOMA AND BACHELOR PROGRAMMES

A total of 5 Diploma and 25 Bachelor level programmes were offered in 2009. The list is as follows.

5.2.1 FACULTY OF ELECTRONICS AND COMPUTER ENGINEERING

- Bachelor of Electronics Engineering (Telecommunication Electronics)
- Bachelor of Electronics Engineering (Computer Engineering)
- Bachelor of Electronics Engineering (Industrial Electronics)
- Bachelor of Electronics Engineering (Wireless Communication)
- Diploma in Electronics Engineering

5.2.2 FACULTY OF ELECTRICAL ENGINEERING

- Bachelor of Electrical Engineering (Control, Instrumentation and Automation)
- Bachelor of Electrical Engineering (Industrial Power)
- Bachelor of Electrical Engineering (Power Electronics and Drives)
- Bachelor of Mechatronics
- Diploma in Electrical Engineering

5.2.3 FAKULTI KEJURUTERAAN MEKANIKAL (FKM)

- Ijazah Sarjana Muda Kejuruteraan Mekanikal (Struktur Bahan)
- Ijazah Sarjana Muda Kejuruteraan Mekanikal (Reka Bentuk & Inovasi)
- Ijazah Sarjana Muda Kejuruteraan Mekanikal (Automotif)
- Ijazah Sarjana Muda Kejuruteraan Mekanikal (Termal Bendalir)
- Diploma Kejuruteraan Mekanikal

5.2.4 FAKULTI KEJURUTERAAN PEMBUATAN (FKP)

- Ijazah Sarjana Muda Kejuruteraan Pembuatan (Proses Pembuatan)
- Ijazah Sarjana Muda Kejuruteraan Pembuatan (Reka Bentuk Pembuatan)
- Ijazah Sarjana Muda Kejuruteraan Pembuatan (Robotik & Automasi)
- Ijazah Sarjana Muda Kejuruteraan Pembuatan (Bahan Kejuruteraan)
- Ijazah Sarjana Muda Kejuruteraan Pembuatan (Pengurusan Pembuatan)
- Diploma Kejuruteraan Pembuatan

5.2.3 FACULTY OF MECHANICAL ENGINEERING

- Bachelor of Mechanical Engineering (Structural Materials)
- Bachelor of Mechanical Engineering (Design and Innovation)
- Bachelor of Mechanical Engineering (Automotive)
- Bachelor of Mechanical Engineering (Thermal-Fluids)
- Diploma in Mechanical Engineering

5.2.4 FACULTY OF MANUFACTURING ENGINEERING

- Bachelor of Manufacturing Engineering (Manufacturing Process)
- Bachelor of Manufacturing Engineering (Manufacturing Design)
- Bachelor of Manufacturing Engineering (Robotics and Automation)
- Bachelor of Manufacturing Engineering (Engineering Materials)
- Bachelor of Manufacturing Engineering (Manufacturing Management)
- Diploma in Manufacturing Engineering

5.2.5 FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI (FTMK)

- Ijazah Sarjana Muda Sains Komputer (Pembangunan Perisian)
- Ijazah Sarjana Muda Sains Komputer (Rangkaian Komputer)
- Ijazah Sarjana Muda Sains Komputer (Media Interaktif)
- Ijazah Sarjana Muda Sains Komputer (Pengurusan Pengkalan Data)
- Ijazah Sarjana Muda Sains Komputer (Kepintaran Buatan)
- Diploma Teknologi Maklumat dan Komunikasi

5.2.6 FAKULTI PENGURUSAN TEKNOLOGI DAN TEKNOUSAHAWAN (FPTT)

- Ijazah Sarjana Muda Teknousahawan
- Ijazah Sarjana Muda Pengurusan Teknologi (Inovasi Teknologi)
- Ijazah Sarjana Muda Pengurusan Teknologi (Pemasaran Teknologi Tinggi)

5.2.5 FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

- Bachelor of Computer Science (Software Development)
- Bachelor of Computer Science (Computer Networking)
- Bachelor of Computer Science (Interactive Media)
- Bachelor of Computer Science (Database Management)
- Bachelor of Computer Science (Artificial Intelligence)
- Diploma in Computer Science

5.2.6 FACULTY OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP

- Bachelor of Technopreneurship
- Bachelor of Technology Management (Innovation Technology)
- Bachelor of Technology Management (High Technology Marketing)

5.3 PROGRAM SARJANA DAN DOKTOR FALSAFAH SECARA PENYELIDIKAN & KERJA KURSUS

Sebanyak 14 program Sarjana dan 10 program Doktor Falsafah telah ditawarkan sepanjang tahun 2009. Senarai keseluruhan adalah seperti berikut;

5.3.1 FAKULTI KEJURUTERAAN ELEKTRONIK & KEJURUTERAAN KOMPUTER (FKEKK)

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Elektronik

Secara Kerja Kursus

- Telecommunication Systems
- Computer Engineering
- Electronic Systems

Secara Penyelidikan

- Optoelectronics
- RF & Microwave Engineering
- Broadband & Multimedia Communications
- Computer Engineering
- Embedded Systems
- Electronics Instrumentation
- Consumer Electronics

5.3.2 FAKULTI KEJURUTERAAN ELEKTRIK (FKE)

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Elektrik

Secara Mod Campuran

- Industrial Power
- Power Electronics and Drives
- Robotic and Control

Secara Penyelidikan

- High Voltage Technology
- Analysis and Modeling of Power Systems
- Power Electronics and Drivers
- Energy Efficiency and Renewable Energy
- Control, Instrumentation & Automation
- Mechatronics Systems

5.3 MASTERS AND DOCTORAL PROGRAMMES BY RESEARCH AND COURSE WORK

A total of 14 Masters and 10 Doctoral level programmes were offered in 2009. The list is as follows:

5.3.1 FACULTY OF ELECTRONICS AND COMPUTER ENGINEERING

Doctor of Philosophy and Master of Science in Electronics Engineering

Course work Mode

- Telecommunication Systems
- Computer Engineering
- Electronic Systems

Research Mode

- Optoelectronics
- RF & Microwave Engineering
- Broadband and Multimedia Communications
- Computer Engineering
- Embedded Systems
- Electronics Instrumentation
- Consumer Electronics

5.3.2 FACULTY OF ELECTRICAL ENGINEERING

Doctor of Philosophy and Master of Science in Electrical Engineering

Mixed Mode

- Industrial Power
- Power Electronics and Drives
- Robotic and Control

Research Mode

- High Voltage Technology
- Analysis and Modelling of Power Systems
- Power Electronics and Drivers
- Energy Efficiency and Renewal Energy
- Control, Instrumentation & Automation
- Mechatronics Systems

5.3.3 FAKULTI KEJURUTERAAN MEKANIKAL (FKM)

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Mekanikal

Secara Penyelidikan

- Thermal Fluids
- Structure Mechanics & Advance Materials
- Design & Innovation
- Automotive Engineering
- Energy Engineering

5.3.4 FAKULTI KEJURUTERAAN MEKANIKAL PEMBUATAN (FKP)

Doktor Falsafah dan Sarjana Sains dalam Kejuruteraan Pembuatan

Secara Kerja Kursus

- Manufacturing Systems Engineering
- Industrial Engineering
- Quality Systems Engineering
- Precision Engineering

Secara Penyelidikan

- Concurrent Engineering
- Precision Engineering
- Autonomous and Intelligent Manufacturing
- Competitive Manufacturing
- Advanced Materials

5.3.5 FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI (FTMK)

Doktor Falsafah dan Sarjana dalam Teknologi Maklumat & Komunikasi

Secara Kerja Kursus

Internetworking Technology
Software Engineering and Intelligence

Secara Penyelidikan

Software & Information Systems Engineering
Data & Knowledge Engineering
Artificial Intelligence, Modeling & Decision Support Technology
Networking & Internet Computing
Computer Systems and Security

5.3.3 FACULTY OF MECHANICAL ENGINEERING (FMecE)

Doctor of Philosophy and Master of Science in Mechanical Engineering

Research Mode

- Thermal-Fluids
- Structure Mechanics & Advanced Materials
- Design & Innovation
- Automotive Engineering
- Energy Engineering

5.3.4 FACULTY OF MANUFACTURING ENGINEERING

Doctor of Philosophy and Master of Science in Manufacturing Engineering

Course work Mode

- Manufacturing Systems Engineering
- Industrial Engineering
- Quality Systems Engineering
- Precision Engineering

Research Mode

- Concurrent Engineering
- Precision Engineering
- Autonomous and Intelligent Manufacturing
- Competitive Manufacturing
- Advanced Materials

5.3.5 FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

Doctor of Philosophy and Master in Information and Communication Technology

Course work Mode

- Internetworking Technology
- Software Engineering and Intelligence

Research Mode

- Software & Information Systems Engineering
- Data & Knowledge Engineering
- Artificial Intelligence, Modeling & Decision Support

Technology

- Networking & Internet Computing
- Computer Systems and Security

5.3.6 FAKULTI PENGURUSAN TEKNOLOGI DAN TEKNOUSAHAN (FPTT)

Secara Kerja Kursus

Master of Business Administration (MBA)

- Technology and Innovation Management
- Advanced Operation Management

Secara Penyelidikan

- Technology Management
- Entrepreneurship
- Human Resource Management
- Technical Communication
- Industrial Counselling
- Strategic Management
- Quality Management

5.4 ENROLMEN PELAJAR

Sehingga Disember 2009, enrolmen pelajar yang mengikuti pengajian pada sesi 2009/2010 ialah 6,233. Jadual terperinci enrolmen pelajar adalah seperti berikut :

5.3.6 FACULTY OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP

Master of Business Administration

Mixed Mode

- Technology and Innovation Management
- Advanced Operation Management

Research Mode

- Technology Management
- Entrepreneurship
- Human Resource Management
- Technical Communication
- Industrial Counselling
- Strategic Management
- Quality Management

5.4 STUDENT ENROLMENT

As of December 2009, the total number of students for the 2009/2010 session is 6,233. A detailed description of student enrolment is presented in the following tables:

Jadual 1.1 : Pecahan Enrolmen Pelajar Prasiswazah sehingga Disember 2009

Fakulti	Program		Jumlah
	Diploma	Ijazah	
Fakulti Kejuruteraan Elektrik	202	999	1,201
Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer	142	916	1,058
Fakulti Kejuruteraan Mekanikal	203	995	1,198
Fakulti Kejuruteraan Pembuatan	151	931	1,082
Fakulti Teknologi Maklumat dan Komunikasi	200	918	1,118
Fakulti Pengurusan Teknologi dan Teknousahawan	0	175	175
Jumlah	898	4,934	5,832

Table 1.1: Undergraduate Enrolment as of December 2009

Faculty	Programme		Total
	Diploma	Degree	
Faculty of Electrical Engineering	202	999	1,201
Faculty of Electronics and Computer Engineering	142	916	1,058
Faculty of Mechanical Engineering	203	995	1,198
Faculty of Manufacturing Engineering	151	931	1,082
Faculty of Information and Communication Technology	200	918	1,118
Faculty of Technology Management and Technopreneurship	0	175	175
Total	898	4,934	5,832

Jadual 1.2 : Pecahan Enrolmen Pelajar Pasca Siswazah sehingga Disember 2009

Program	Jumlah
Sarjana	341
Doktor Falsafah	60
Jumlah	401

Table 1.2 : Postgraduate Enrolment as of December 2009

Programme	Total
Masters	341
Doctor of Philosophy	60
Total	401

Bagi sesi akademik 2009/2010, seramai 2,040 pelajar baru telah mendaftar di UTeM bagi program Diploma dan Sarjana Muda. Ia menunjukkan peningkatan seramai 151 orang pelajar berbanding bagi sesi akademik 2008/2009. Pecahan mengikut fakulti adalah seperti jadual di bawah.

As for the 2009/2010 academic session, a total of 2,040 new students registered at UTeM for the Diploma and Degree programmes. The registration showed an increment of 151 students compared with the 2008/2009 academic session. The table below illustrates the breakdown of enrolment based on faculties:

Jadual 1.3 : Pecahan Bilangan Pelajar Baru Sesi Akademik 2008/2009
Table 1.3 : New Graduate Enrolment for the 2008/2009 Academic Session

Fakulti	Program		Jumlah
	Diploma	Ijazah	
Fakulti Kejuruteraan Elektrik	77	325	402
Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer	47	300	347
Fakulti Kejuruteraan Mekanikal	71	311	382
Fakulti Kejuruteraan Pembuatan	60	304	364
Fakulti Teknologi Maklumat dan Komunikasi	81	288	369
Fakulti Pengurusan Teknologi dan Teknousahawan	0	176	176
Jumlah	336	1,704	2,040

Faculty	Programme		Total
	Diploma	Degree	
Faculty of Electrical Engineering	77	325	402
Faculty of Electronics and Computer Engineering	47	300	347
Faculty of Mechanical Engineering	71	311	382
Faculty of Manufacturing Engineering	60	304	364
Faculty of Information and Communication Technology	81	288	369
Faculty of Technology Management and Technopreneurship	0	176	176
Total	336	1,704	2,040



Bagi program pengajian siswazah di UTeM, permohonan adalah dibuka sepanjang tahun dan pengambilan pada tahun 2009 adalah seramai 184 orang pelajar iaitu 19 di peringkat Doktor Falsafah manakala 165 lagi di peringkat Sarjana.

Pada 28 Disember 2009, UTeM telah menerima pendaftaran 25 pelajar dari negara Yaman bagi mengikuti Intensive English Language Programme (IELP) selama 6 bulan sebagai persediaan untuk mengikuti pengajian di peringkat Sarjana Muda di UTeM.

5.5 KONVOKESYEN

Majlis Konvokesyen Ke-5 telah diadakan pada 3 dan 4 Oktober 2009. Majlis Konvokesyen UTeM ke-5 ini mencatatkan sejarah tersendiri dengan penganugerahan Ijazah Kehormat kepada mantan Perdana Menteri dan isteri. Majlis yang berlangsung buat pertama kalinya di Dewan Besar UTeM menyaksikan Tuan Yang Terutama Datuk Seri Utama Mohd Khalil bin Yaakob, Canselor UTeM menganugerahkan Ijazah Kehormat Doktor Pembangunan dan Pengurusan Teknologi kepada Tun Dr. Mahathir bin Mohamad manakala Tun Dr. Siti Hasmah Mohd Ali dianugerahkan Ijazah Kehormat Doktor Pembangunan Komuniti.

Penganugerahan Ijazah Kehormat kepada kedua-dua tokoh ini adalah sebagai menghargai sumbangan yang tidak ternilai kepada pembangunan negara lebih-lebih lagi dalam bidang teknologi sepanjang pentadbiran Tun Mahathir selama lebih 22 tahun.

Seramai 1591 pelajar telah bergraduat dalam majlis tersebut. Pecahan mengikut bidang adalah seperti jadual di bawah :

For the postgraduate programmes at UTeM, the application is open all year-round. The intake comprises 184 students : 19 at Doctorate and 165 at Masters levels.

On 28 December 2009, Twenty-five Yemeni students registered at UTeM to undergo an Intensive English Language Programme (IELP) for six months as a preparation prior to their studies at Bachelor level at UTeM.

5.5 CONVOCATION

The 5th UTeM convocation which was held on 3 and 4 October 2009 made history with the conferment of Honorary Doctorates to both the former Prime Minister and his wife. The prominent event took place for the first time at the UTeM Main Hall witnessed by His Excellency, Datuk Seri Utama Mohd Khalil bin Yaakob, UTeM Chancellor who conferred the Honorary Doctorate of Development and Technology Management on Tun Dr. Mahathir and the Doctorate of Community Development on Tun Dr. Siti Hasmah Mohd Ali.

The conferment of Honorary Doctorates on these two outstanding figures are an expression of respect and appreciation for their invaluable contributions to the nation, specifically in the area of technology during Tun Mahathir's 22 years as Prime Minister.

A total of 1,591 graduands were conferred degrees on during the convocation ceremony. The number of graduands based on their respective fields is illustrated in the table below:



Jadual 1.4 : Pecahan Graduan dalam Majlis Konvokesyen Ke-5 UTeM 2009

Fakulti	Program				Jumlah
	Diploma	Sarjana Muda	Sarjana	Doktor Falsafah	
Fakulti Kejuruteraan Elektrik	57	242	2	-	301
Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer	41	276	1	-	318
Fakulti Kejuruteraan Mekanikal	46	295	1	-	342
Fakulti Kejuruteraan Pembuatan	43	287	2	-	332
Fakulti Teknologi Maklumat dan Komunikasi	43	236	-	3	315
Institut Pengurusan Teknologi & Keusahawanan	-	-	16	-	16
Jumlah	230	1,336	22	3	1,591

Table 1.4 : The Number of Graduands at the 5th UTeM Convocation Ceremony 2009

Faculty	Programme				Total
	Diploma	Bachelor	Masters	Doctor of Philosophy	
Faculty of Electrical Engineering	57	242	2	-	301
Faculty of Electronics and Computer Engineering	41	276	1	-	318
Faculty of Mechanical Engineering	46	295	1	-	342
Faculty of Manufacturing Engineering	43	287	2	-	332
Faculty of Information and Communication Technology	43	236	-	3	315
Faculty of Technology Management and Technopreneurship	-	-	16	-	16
Total	230	1,336	22	3	1,591

Bagi majlis konvokesyen ini juga, beberapa anugerah khas telah diberi kepada pelajar cemerlang. Bilangan graduan yang menerima anugerah cemerlang ialah 2 orang bagi Anugerah Pelajaran Diraja, 2 orang Hadiah Canselor, 5 orang Hadiah Industri manakala 24 graduan penerima Hadiah Naib Canselor.

In this convocation ceremony, special awards were presented to outstanding students. Two graduates received the Royal Education Award and another two the Chancellor Award. The Industrial Award was presented to five graduands and the Vice-Chancellor Award to 24 graduands.

5.6 PENERBITAN

Penerbitan berbentuk akademik ataupun penerbitan ilmiah merupakan kayu pengukur bagi kekuatan sesebuah universiti. UTeM melalui Penerbit Universiti tidak terkecuali dalam memastikan penjanaan idea menerusi penerbitan-penerbitan ilmiah yang bermutu. Bagi tahun 2009, Penerbit Universiti telah menerbitkan penerbitan berkala menerusi penerbitan buku ilmiah, prosiding, media interaktif, buletin berkala, hasilan grafik serta bahan terbitan di bawah khidmat profesional Penerbit UTeM.

5.6 PUBLICATION

Academic publication is used as a yardstick in measuring the strength of a university. UTeM through its University Publication ensures that high quality ideas are generated in academic publications. In 2009, the University Publication published a series of academic books, proceedings, interactive media, periodical bulletins and graphical products.

BIL	PERKARA	BIL TERBITAN 2009	TAJUK
1.	Buku Ilmiah		
	- Bahan umum	19	1. Citra Dua Hati Satu Aspirasi Tun Dr Mahathir Mohamad dan Tun Dr. Siti Hasmah Mohamad Ali 2. Titian Gemilang 3. Buku Panduan Akademik - 8 buah buku 4. Buku Cenderahati Konvokesyen Ke-5 5. Buku Hari Kualiti-1 6. Buletin Fakulti/PTj - 7 buah buku
	- Karya asli	9	1. Pembelajaran Berasaskan Masalah 2. <i>Co-operative MIMO Communication in Wireless Sensor Networks</i> 3. Motivasi untuk Pelajar Jurutera 4. <i>Skill issues in Engineering</i> 5. <i>The Fundamental Of Electronic Computer Aided Design</i> 6. <i>The Fundamental Of Digital Systems</i> 7. <i>Knowledge management in Higher Education - A case study in Malaysia</i> 8. <i>Review on Statistic</i> 9. Hukum Merokok dari Perspektif Islam
	- Monograf	1	1. <i>The Key Development of Key Performance Indicator (KPIs) at Aerospace Manufacturing Company</i>
	- Karya Suntingan	1	1. Konsentrasi dalam Sukan
	- Modul	27	1. <i>Telecommunication Engineering Module 1</i> 2. <i>Problem Solving Using C++ A Practical Approach – Module 1</i> 3. <i>Advanced Manufacturing Process – Module 1</i> 4. <i>Logic Circuit BENM 1143</i> 5. <i>Electrical Circuit II</i> 6. <i>Microprocessor Technology BENG 2223 – Module 5</i> 7. <i>Principles of Electrical And Electronics – Module 2</i> 8. Lukisan Berbantu Komputer – Modul 1

No	ITEM	NUMBER of PUBLICATION IN 2009	TITLE
1.	Academic Books		
	General	19	1. <i>Citra Dua Hati Satu Aspirasi</i> Tun Dr Mahathir Mohamad dan Tun Dr. Siti Hasmah Mohamad Ali – 1 copy 2. <i>Titian Gemilang</i> – 1 copy 3. Academic Handbook Book - 8 copies 4. Souvenir Book in conjunction with the 5th Convocation – 1 copy 5. Quality Day book – 1 copy 6. Faculties/Departments – 7 copies
	Original Work	9	7. <i>Pembelajaran Berasaskan Masalah</i> 8. Co-operative MIMO Communication in Wireless Sensor Networks 9. <i>Motivasi untuk Pelajar Jurutera</i> 10. <i>Skill issues in Engineering</i> 11. The Fundamental of Electronic Computer Aided Design 12. The Fundamental of Digital Systems 13. Knowledge management in Higher Education - A case study in Malaysia 14. Review on Statistics 15. <i>Hukum Merokok dari Perspektif Islam</i>
		1	1. The Key Development of Key Performance Indicator (KPIs) at Aerospace Manufacturing Company
	Edited Work	1	<i>Konsentrasi dalam Sukan</i>
	Module	27	1. Telecommunication Engineering Module 1 2. Problem Solving Using C++ A Practical Approach – Module 1 3. Advanced Manufacturing Process – Module 1 4. Logic Circuit BENM 1143 5. Electrical Circuit II 6. Microprocessor Technology BENG 2223 - Module 5 7. Principles of Electrical And Electronics – Module 2 8. <i>Lukisan Berbantu Komputer – Modul 1</i>

BIL	PERKARA	BIL TERBITAN	TAJUK
			9. <i>Computer Organization and Architecture</i> 10. <i>Electric Circuit I</i> 11. <i>Fedora 9 for Beginner and Intermediate - Module 2</i> 12. <i>Fundamental Of Electronic Engineering</i> 13. <i>Power System Protection</i> 14. <i>BENT 3113 Communication Principles Teaching Module - Module 10</i> 15. <i>A Module of Electronic Instrumentation - Module 8</i> 16. <i>Control Systems Engineering Theory and Worked Examples</i> 17. <i>Latihan Kecemerlangan Pelajar - Module 10</i> 18. <i>Komunikasi Berkesan</i> 19. <i>Mendepani Tekanan Kerja dan Agresif Marah</i> 20. <i>Eksplorasi Potensi Kendiri Melalui Ujian Personaliti</i> 21. <i>Kendiri Asertif</i> 22. <i>Strategi Belajar Berkesan</i> 23. <i>Kemahiran Melayan dalam Pengajaran</i> 24. <i>Asas Kaunseling</i> 25. <i>Fundamental of Digital Systems</i> 26. <i>Fundamental of electrical and Electronics</i> 27. <i>Power System Protection</i>
2.	Artikel Jurnal	34	1. <i>Fuzzy Expert System Modeling of Laser Processing</i> 2. <i>Vibration Control of Gantry Crane System Using Inverse Dynamic Analysis</i> 3. <i>Oral Communication Apprehension & Communicative Competence among Electrical Engineering Undergraduates in UTeM</i> 4. <i>Exploring Engineering Employability Competence</i> 5. <i>Communication Gap Analysis at Aerospace Manufacturing Company</i> 6. <i>Factors Influencing the Formation of Business Ventures</i> 7. <i>Using Weblogs in ESP Classroom</i> 8. <i>City as an Urban Social Diversity: A case study of Rukun Tetangga in Kuala Lumpur and Selangor</i> 9. <i>Hubungan antara peranan individu dan organisasi dengan amalan pembangunan kerjaya</i> 10. <i>The impact of path-goal leadership behaviour on group cohesiveness: a Japanese electronic company and Singaporean electronic company in Johor</i>

NO	ITEM	NUMBER of PUBLICATION IN 2009	TITLE
			9. Computer Organization and Architecture 10. Electric Circuit I 11. Fedora 9 for Beginner and Intermediate - Module 2 12. Fundamental Of Electronic Engineering 13. Power System Protection 14. BENT 3113 Communication Principles Teaching Module-Module 10 15. A Module of Electronic Instrumentation - Module 8 16. Control Systems Engineering Theory and Worked Examples Module 10 17. <i>Latihan Kecemerlangan Pelajar</i> 18. <i>Komunikasi Berkesan</i> 19. <i>Mendepani Tekanan Kerja dan Agresif Marah</i> 20. <i>Eksplorasi Potensi Kendiri Melalui Ujian Personaliti</i> 21. <i>Kendiri Asertif</i> 22. <i>Strategi Belajar Berkesan</i> 23. <i>Kemahiran Melayan dalam Pengajaran</i> 24. <i>Asas Kaunseling</i> 25. Fundamental of Digital Systems 26. Fundamental of electrical and Electronics 27. Power System Protection
2.	Journal Articles	34	1. Fuzzy Expert System Modeling of Laser Processing 2. Vibration Control of Gantry Crane System Using Inverse Dynamic Analysis 3. Oral Communication Apprehension & Communicative Competence among Electrical Engineering Undergraduates in UTeM 4. Exploring Engineering Employability Competence 5. Communication Gap Analysis at Aerospace Manufacturing Company 6. Factors Influencing the Formation of Business Ventures 7. Using Weblogs in ESP Classroom 8. City as an Urban Social Diversity: A case study of <i>Rukun Tetangga</i> in Kuala Lumpur and Selangor 9. <i>Hubungan antara peranan individu dan organisasi dengan amalan pembangunan kerjaya</i> 10. The impact of path-goal leadership behaviour on group cohesiveness: a Japanese electronic company and Singaporean electronic company in Johor

BIL	PERKARA	BIL TERBITAN	TAJUK
			11. <i>The implementation of risk management at aerospace manufacturing company</i> 12. <i>Environmental communication and sustainable development in Malaysia: an analysis on environmental</i> 13. <i>Students' perspectives on the engagement of electronic portfolio as a tool in classroom instruction</i> 14. <i>Perkaitan persepsi terhadap organisasi dengan kepuasan kerja dalam kalangan guru penolong kanan sekolah menengah negeri Melaka</i> 15. <i>Coaching leadership styles and athlete satisfactions among hockey team</i> 16. <i>The effectiveness of entrepreneurial leadership styles in improving SMEs manufacturing performance among bumiputera technopreneurs in Melaka</i> 17. <i>A study on factors that influence choice of Malaysian institution of higher learning for international graduate students</i> 18. <i>Simulation of an Input Shaping Scheme Technique to Investigate Unwanted Noise and Vibration in Wiper Blade</i> 19. <i>Development of Tin (IV) Oxide Based Catalyst for Carbon Monoxide Emission Control</i> 20. <i>The Development of Computational Model through Reverse Engineering: Side Mirror Case Study</i> 21. <i>Thermal Stress Analysis of Heavy Truck Brake Disc Rotor</i> 22. <i>Hybrid Palm Oil Mills Maintenance System</i> 23. <i>Vibration Control of a Gantry Crane System using Dynamic Feedback Swing Controller</i> 24. <i>Impact Analysis on Composite of PET</i> 25. <i>The Development of Rectangular Waveguide Bandpass Filter</i> 26. <i>The Effect of Conductor line to Meander Line Antenna Design</i> 27. <i>Optimizing The Design of Beam Squinted RLSA at 5.8 GHz Frequency Band</i> 28. <i>Development of an Indigenous Microwave Absorber</i> 29. <i>Security System Using Controller Area Network (CAN Bus)</i> 30. <i>An Analysis on the Performance of Fast Block Matching Motion Estimation Algorithms</i> 31. <i>Cooperative MIMO Communication in Wireless Sensor Networks: Energy Efficient Cooperative MAC Protocol</i> 32. <i>A Study on GPRS Throughput at Northern Region BSC Network</i> 33. <i>Performance Analysis of Concurrent Transmission With Reducing Handshakes in Multihop Wireless Mesh Networks (WMNS)</i> 34. <i>Modeling and Simulation of Finite Machine Memory Built-in Self Test Architecture for Embedded Memories</i>

NO	ITEM	NUMBER of PUBLICATION IN 2009	TITLE
			11. <i>The implementation of risk management at aerospace manufacturing company</i> 12. <i>Environmental communication and sustainable development in Malaysia: an analysis on environmental</i> 13. <i>Students' perspectives on the engagement of electronic portfolio as a tool in classroom instruction</i> 14. <i>Perkaitan persepsi terhadap organisasi dengan kepuasan kerja dalam kalangan guru penolong kanan sekolah menengah negeri Melaka</i> 15. <i>Coaching leadership styles and athlete satisfactions among hockey team</i> 16. <i>The effectiveness of entrepreneurial leadership styles in improving SMEs manufacturing performance among Bumiputera technopreneurs in Melaka</i> 17. <i>A study on factors that influence choice of Malaysian institution of higher learning for international graduate students</i> 18. <i>Simulation of an Input Shaping Scheme Technique to Investigate Unwanted Noise and Vibration in Wiper Blade</i> 19. <i>Development of Tin (IV) Oxide Based Catalyst for Carbon Monoxide Emission Control</i> 20. <i>The Development of Computational Model through Reverse Engineering: Side Mirror Case Study</i> 21. <i>Thermal Stress Analysis of Heavy Truck Brake Disc Rotor</i> 22. <i>Hybrid Palm Oil Mills Maintenance System</i> 23. <i>Vibration Control of a Gantry Crane System using Dynamic Feedback Swing Controller</i> 24. <i>Impact Analysis on Composite of PET</i> 25. <i>The Development of Rectangular Waveguide Bandpass Filter</i> 26. <i>The Effect of Conductor line to Meander Line Antenna Design</i> 27. <i>Optimizing The Design of Beam Squinted RLSC at 5.8 GHz Frequency Band</i> 28. <i>Development of an Indigenous Microwave Absorber</i> 29. <i>Security System Using Controller Area Network (CAN Bus</i> 30. <i>An Analysis on the Performance of Fast Block Matching Motion Estimation Algorithms</i> 31. <i>Cooperative MIMO Communication in Wireless Sensor Networks: Energy Efficient Cooperative MAC Protocol</i> 32. <i>A Study on GPRS Throughput at Northern Region BSC Network</i> 33. <i>Performance Analysis of Concurrent Transmission With Reducing Handshakes in Multihop Wireless Mesh Networks (WMNS)</i> 34. <i>Modeling and Simulation of Finite Machine Memory Built-in Self</i>

BIL	PERKARA	BIL TERBITAN	TAJUK
3	Jurnal	4	1. <i>Journal of Advanced Manufacturing Technology</i> Vol. 3 No. 1 2009 (JAMT) 2. <i>Journal of Human Capital Development</i> Vol .2. No. 1 2009(JHCD) 3. <i>Journal of Mechanical Engineering and Technology</i> Vol.1 No. 1 2009 (JMET) 4. <i>Journal of Telecommunication, Electronics and Computer Engineering</i> Vol. 1 No. 1 2009 (JTEC)

Jadual 1.5 : Penerbitan yang dihasilkan

Pada tahun 2009 juga Penerbit Universiti sedang berusaha menyediakan sebuah sistem e-book yang membolehkan setiap pelawat/ pembaca boleh mendaftar masuk ke dalam laman web Penerbit Universiti seterusnya memuat turun buku-buku yang telah disediakan terus ke dalam pendrive, hard disk, CD, telefon dan peralatan elektronik yang menyokong sistem ini.

5.7 MEMORANDUM PERJANJIAN / PERSEFAHAMAN

Dalam usaha untuk meningkatkan jalinan kerjasama antara universiti-industri, sebanyak 2 Memorandum Persefahaman (MoU) dan 1 Memorandum Perjanjian (MoA) telah ditandatangani dengan universiti luar negara. Butiran memorandum adalah seperti jadual di bawah.

Jadual 1.6 : Perjanjian Persefahaman yang dimeterai

Negara	Organisasi / Universiti	Bidang Kerjasama	Tarikh Perjanjian
United Kingdom	Lancaster University, United Kingdom	Perkongsian aktiviti penyelidikan Pertukaran staf & pelajar dalam pembangunan akademik	27 Mac 2009
	University of Hertfordshire, United Kingdom	Pertukaran & perkongsian bahan-bahan saintifik yang dapat dijadikan rujukan kepada para akademik di kedua-dua universiti Kerjasama & kolaborasi dalam bidang pengajaran dan juga penyelidikan yang memberikan manfaat kepada kedua-dua belah pihak.	30 Mac 2009
Indonesia	Dian Nuswantoro University, Indonesia (UDINUS)	Perjanjian lebih menghusus kepada perkara seperti : - Penawaran 'Dual Master Degree Program in Computer Science'. - Mengadakan 'Joint Research in Information Technology and Communication' dalam bidang-bidang yang berkaitan.	6 Ogos 2009

No	ITEM	NUMBER of PUBLICATION IN 2009	TITLE
3.	Journal	4	1. Journal of Advanced Manufacturing Technology Vol. 3 No. 1 2009 (JAMT) 2. Journal of Human Capital Development Vol. 2. No. 1 2009 (JHCD) 3. Journal of Mechanical Engineering and Technology Vol. 1 No. 1 2009 (JMET) 4. Journal of Telecommunication, Electronics and Computer Engineering Vol. 1 No. 1 2009 (JTEC)

Table 1.5 : Publications that been produced.

In 2009, the University Publication initiated an e-book system to enable visitors/ users to log-in to access the homepage. This system also offers books to be downloaded directly onto pendrives, hard disks, CDs, handphones and other electronic devices that are able to support the system.

5.7 MEMORANDUM OF AGREEMENT/UNDERSTANDING

In its effort to increase collaboration between the University and Industry, UTeM has signed two Memorandum of Understandings (MoU) and one Memorandum of Agreement (MoA) with local and international organizations. The details of the memorandum are illustrated in the table below:

Table 1.6 : MoU and MoA that been signed

Country	Organisation/ University	Area of Collaboration	Date of Agreement
United Kingdom	Lancaster University, United Kingdom	Research and Development (R & D) smart partnership Staff and student exchange in academic development	27 March 2009
(MoU)	University of Hertfordshire, United Kingdom	Exchange and share scientific related materials for references at both universities Cooperation and collaboration in the teaching and learning area as well as in research for the beneficial of both universities	30 March 2009
Indonesia	Dian Nuswantoro University, Indonesia (UDINUS)	Agreement focused on : - Offer of Dual Masters Degree Programme in Computer Science - Organise Joint Research in Information Technology and Communication and in related areas	6 August 2009
(MoA)			

5.8 JAMINAN KUALITI DAN AKREDITASI

Penerimaan dan permintaan graduan di pasaran tenaga kerja akan menggambarkan sama ada kualiti pembelajaran yang ditawarkan di sesebuah institusi itu menepati keperluan sektor industri dan sektor awam. Namun demikian, bagi proses pengiktirafan, Lembaga Jurutera Malaysia (BEM) memainkan peranan penting dalam menentukan kualiti program akademik yang ditawarkan memenuhi kriteria seperti yang termaktub di dalam manual Majlis Akreditasi Kejuruteraan Malaysia (EAC). Oleh itu, program tersebut akan dinyatakan mendapat akreditasi.

Sehingga tahun 2009, bagi program kejuruteraan sebanyak 14 program di UTeM telah mendapat akreditasi dan selebihnya sedang dalam proses atau belum mencapai masa untuk dinilai.

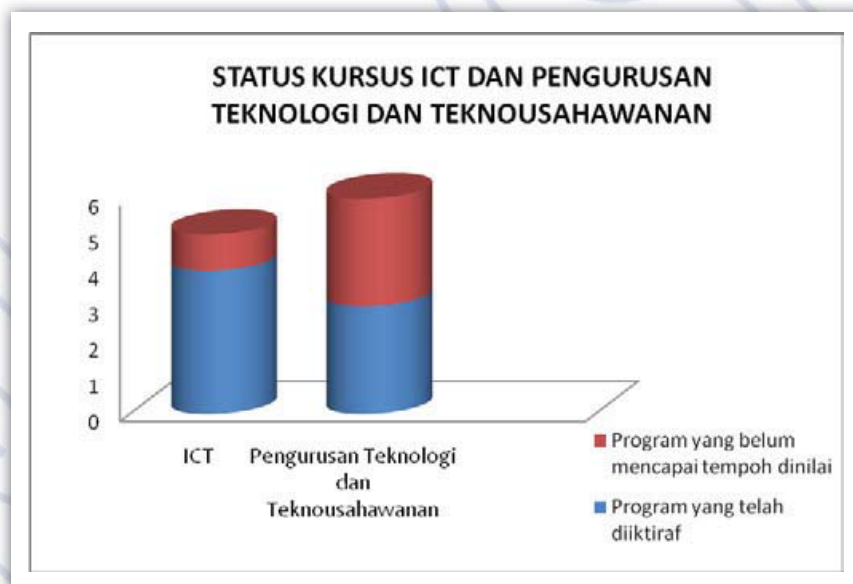
Selain bidang kejuruteraan, bagi program-program Sarjana Muda ICT dan Sarjana Muda Pengurusan Teknologi dan Teknousahawan pula, penilaian dijalankan oleh pihak Agensi Kelayakan Malaysia (MQA) mengikut garis panduan COPA (Code of Practice For Programme Accreditation).

5.8 QUALITY ASSURANCE AND ACCREDITATION

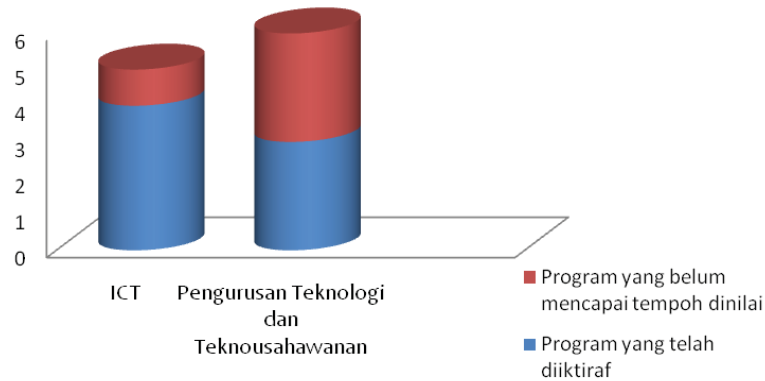
The acceptance of and demand for graduates at the job market reflects whether the quality of learning offered by a particular institution meets the needs of the public and industrial sectors. In the accreditation process, the Board of Engineers, Malaysia (BEM) plays a significant role in ensuring that the quality of academic programmes offered meets the requirements as endorsed in the Engineering Accreditation Council (EAC) Malaysia manual. Once the requirements are met, the programme will be given accreditation.

As for 2009, 14 programmes under the engineering programmes have been accredited, while the others are in the process or has not reached the time frame in order for the programmes to be evaluated.

Besides the engineering programmes, the ICT and Technology Management and Technopreneurship Bachelor Programmes will be evaluated by the Malaysian Qualifications Agency (MQA) which adheres to the guidelines issued by the Code of Practice for Programme Accreditation (COPA). To date, four programmes have been accredited by the Public Services Department (JPA).



ACCREDITATION STATUS OF ICT AND TECHNOLOGY MANAGEMENT PROGRAMMES



Bagi program Diploma Kejuruteraan dan ICT hanya perlu mendapat pengiktirafan dari MQA untuk diiktiraf oleh JPA. Sehingga Disember 2009, UTeM telah mencapai 100% pengiktirafan untuk kesemua program Diploma yang ditawarkan.

5.9 AUDIT INSTITUSI

Audit Prestasi Akademik atau lebih dikenali sebagai Audit Institusi merupakan satu dari pelbagai aktiviti yang perlu dilaksanakan seperti yang digariskan dalam Pelan Strategik Pengajian Tinggi Negara (PSPTN). Aktiviti ini telah dilaksanakan di bawah tanggungjawab Agensi Kelayakan Malaysia (MQA). Tujuan audit ini adalah untuk menilai keberkesanan sistem Universiti terutamanya yang berkaitan dengan pengajaran dan pembelajaran serta penyelidikan. Melihat kepada tujuan audit institusi ini untuk menentukan status pencapaian akademik, UTeM telah memulakan proses awal penyediaan dokumen bermula dari Disember 2008.

Untuk melalui audit ini, UTeM telah menyediakan dokumen yang diperlukan berdasarkan panduan yang dikenali sebagai Code of Practice for Institutional Audit (COPIA). Dokumen tersebut telah berjaya dihasilkan dan telah diserahkan kepada pihak MQA pada bulan September 2009.

For the Diploma of Engineering and ICT programmes, the MQA needs to accredit them first in order to get JPA's accreditation. As of December 2009, all UTeM Diploma programmes have received 100% accreditation.

5.9 INSTITUTIONAL AUDIT

Academic Performance Audit also known as Institutional Audit is one of the core activities that needs to be executed according to the guidelines drawn by the National Higher Education Strategic Plan (PSPTN). This activity is listed under the responsibility of the Malaysian Qualifications Agency (MQA). As one of the higher learning institutions (HLIs), the onus is on UTeM to be audited. The aim of the audit is to assess the effectiveness of the University's system specifically to the teaching and learning context as well as research. Bearing in mind the status of academic achievements, UTeM has started the initial process of preparing the related documents effective from December 2008.

For the auditing process, UTeM has prepared the documents based on the guidelines for the Code of Practice for Institutional Audit (COPIA). Through cooperation and collective approach with the top management, respective heads of centres and staff, the document was successfully completed and handed over to the MQA in September 2009.

5.10 PERSIJILAN ISO

Jaminan kualiti bagi proses penyampaian perkhidmatan merupakan aspek yang diberikan keutamaan dalam tadbir urus Universiti ini. Amalan jaminan kualiti memantapkan penyampaian perkhidmatan pengajaran dan pembelajaran di UTeM dalam melahirkan modal insan kelas pertama.

Bagi memastikan kualiti perkhidmatan pengajaran dan pembelajaran terjamin, beberapa prosedur lain yang berkaitan dengan pengajaran dan pembelajaran telah dihasilkan untuk menyokong prosedur yang ada. Terdapat 61 prosedur ISO yang telah dihasilkan oleh pihak UTeM dalam pengajaran dan pembelajaran.

UTeM sentiasa berusaha memberikan yang terbaik dalam proses pengajaran dan pembelajaran. Bagi mengekalkan persijilan yang diperolehi, pelbagai inisiatif telah dilakukan seperti menjalankan audit dalaman dan audit pematuhan bagi memastikan proses pengajaran dan pembelajaran sentiasa diperbaiki untuk kepentingan para pelajar dan Universiti ini sendiri. Selain itu, UTeM juga telah melaksanakan penghijrahan standard dari MS ISO 9001:2000 kepada MS ISO 9001:2008. Perubahan ini telah mula dijalankan pada tahun 2009. Lanjutan daripada penghijrahan tersebut, UTeM telah bersedia menjalani audit persijilan mengikut standard ISO 9000:2008 pada tahun 2010.

5.10 ISO CERTIFICATION

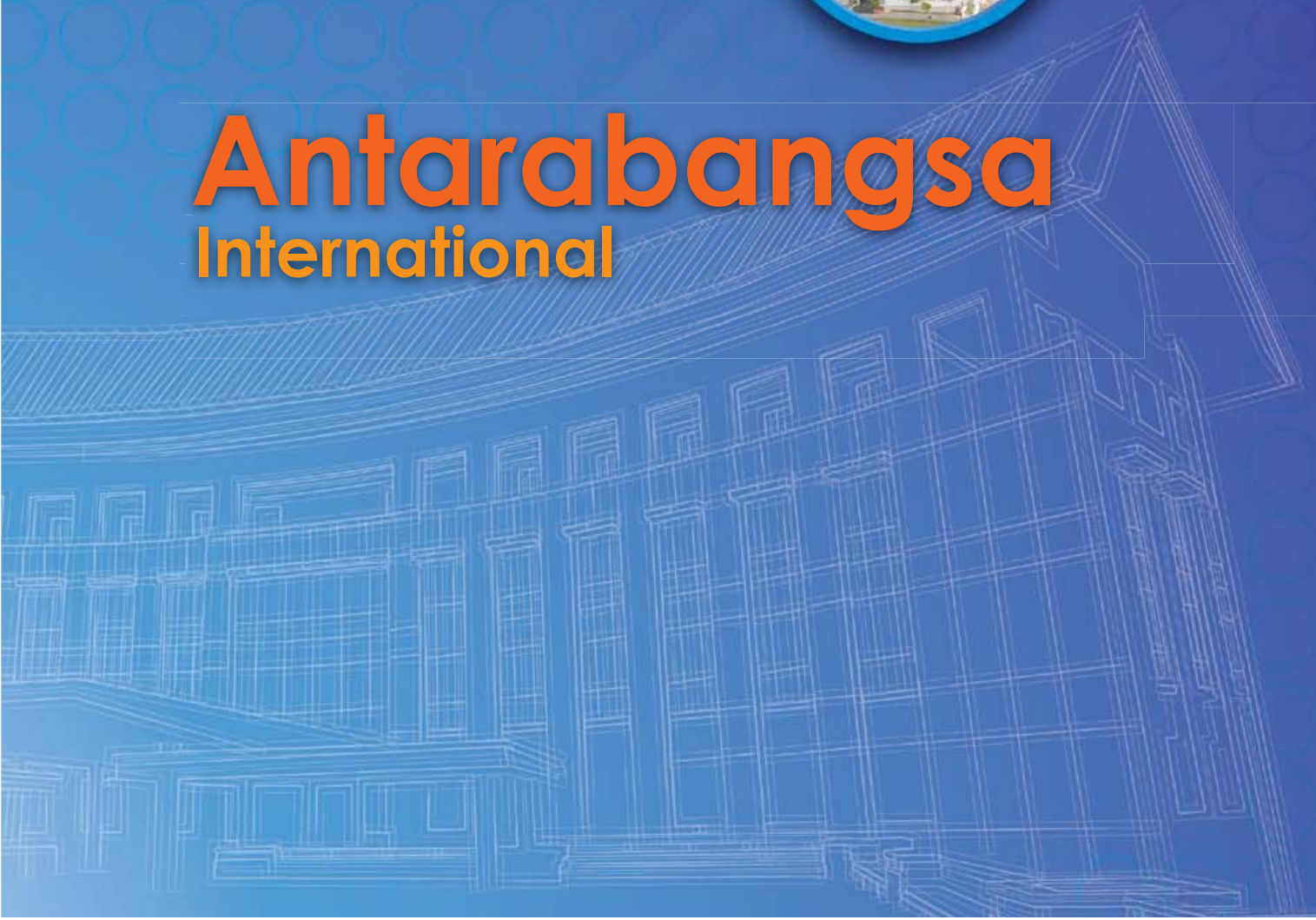
The focus of attention in managing the University is given to the process of giving better service with the quality guaranteed. The practice of quality guarantee strengthens the service delivered in the teaching and learning context at UTeM in order to produce first class human capital.

In order to ensure that the quality of service in teaching and learning is guaranteed, a set of related procedures is developed to support the existing ones. Hence, UTeM has created sixty-one ISO procedures in the scope of teaching and learning.

UTeM ensures to provide the best in the area of teaching and learning. In order to preserve the certification, various initiatives have been implemented. For example, conducting internal auditing and checking conformity to auditing in order to ensure that the teaching and learning process is elevated for the benefits of both the students and University. Apart from that, UTeM has also executed the change in the standard of MS ISO 9001:2000 to MS ISO 9001:2008 with effect from 2009. Due to the changes, UTeM is now ready to undergo the certification audit according to the standard ISO 9000:2008 in 2010.



Antarabangsa International



6. ANTARABANGSA

Sejajar dengan visi pengantarabangsaan iaitu untuk membina reputasi global maka beberapa langkah telah diambil dalam melonjak serta merealisasikan hasrat ini. Salah satu usaha yang dilakukan universiti adalah dengan meningkatkan bilangan komuniti antarabangsa untuk melanjutkan pengajian mereka di UTeM.

6.1 PELAJAR ANTARABANGSA

Sehingga Disember 2009, jumlah pelajar antarabangsa telah mencecah ke 100 orang. Pelajar antarabangsa UTeM datang dari 11 buah Negara iaitu Indonesia, India, Pakistan Syria, Iraq, Jordan, Cameroon, Arab Saudi, Sudan, Tanzania dan Yemen.

Setakat ini, pelajar tajaan sepenuhnya datang dari dua Negara iaitu seorang dari Tanzania (tajaan Islamic Development Bank) dan 23 pelajar dari Yemen yang ditaja oleh kerajaan negara mereka. Pecahan mengikut bilangan pelajar dan staf antarabangsa adalah seperti jadual di bawah.

Jadual 2.1 : Pecahan Bilangan Pelajar Antarabangsa
Table 2.1 : Numbers of International Students

Perkara	Jumlah
Pelajar Antarabangsa	
Doktor Falsafah	11
Sarjana	39
Sarjana Muda	25
IELP	25
Jumlah	100

Subject	Total
International Students	
Doctor of Philosophy	11
Masters	39
Bachelor Degree	25
IELP	25
Total	100

6. INTERNATIONAL

In line with the international vision to establish a global reputation, UTeM has taken several measures to achieve this. One measure is by taking in more international students to continue their studies at UTeM.

6.1 INTERNATIONAL STUDENTS

There were 100 international students in UTeM until December 2009. International students in UTeM come from 11 countries such as Indonesia, India, Pakistan, Syria, Iraq, Jordan, Cameroon, Saudi Arabia, Sudan, Tanzania and Yemen.

Only two countries are fully sponsoring their students that is one student from Tanzania, being sponsored by the Islamic Development Bank and another 23 Yemeni students by their government. The breakdown of international staff and students are given in the following table.



6.2 LAWATAN ANTARABANGSA

Begitu juga dalam usaha untuk meningkatkan interaksi universiti dengan organisasi luar negara maka beberapa lawatan ke luar negara telah dibuat. Universiti juga ada menerima beberapa lawatan dari luar negara. Jadual di bawah menunjukkan bilangan lawatan yang terlibat.

6.2 INTERNATIONAL VISITS

Several visits have been made by the staff of the University to increase their interaction with members of foreign organisations. The University has also received visits from delegates from foreign countries. The table below shows the number of visits which took place.

Jadual 2.2 LAWATAN PELAWAT LUAR NEGARA KE UTeM

No	Tarikh	Perkara
1.	9-31 Januari 2009	Lawatan Delegasi dari Petra Christian University, Surabaya, Indonesia
2.	27 April 2009	Lawatan dari Queensland University of Technology (QUT), Australia
3.	22 Mei 2009	Lawatan dari South Central University for Nationalities (SCUN), China .
4.	22 Mei 2009	Lawatan dari SMA Negeri 1, Kebomas, Indonesia .
5.	15 Jun 2009	Lawatan dari University of South Australia (UniSA), Australia .
6.	22 Jun 2009	Lawatan dari Timbalan Menteri Pendidikan, Sri Lanka .
7.	25 Jun 2009	Lawatan dari Timbalan Menteri Belia, Sukan dan Kebudayaan, Namibia
8.	13 Julai 2009	Lawatan dari University of Maryland Eastern Shore, USA
9.	20 Julai 2009	Lawatan dari University of Southern Queensland (USQ), Australia
10.	11 November 2009	Lawatan dari SMA Negeri 1, Grisek, Jawa Timur, Indonesia .
11.	3 - 6 Disember 2009	Lawatan dari Universitas Dian Nuswantoro, Semarang, Indonesia



Table 2.2 FOREIGN VISITS TO UTeM

No	Date	Subject
1.	9-31 January 2009	Visit by a delegation of Petra Christian University, Surabaya, Indonesia
2.	27 April 2009	Visit from the Queensland University of Technology (QUT), Australia
3.	22 May 2009	Visit from the South Central University for Nationalities (SCUN), China .
4.	22 May 2009	Visit from SMA Negeri 1, Kebomas, Indonesia .
5.	15 June 2009	Visit from the University of South Australia (UniSA), Australia .
6.	22 June 2009	Visit by the Deputy Minister of Education, Sri Lanka .
7.	25 June 2009	Visit by the Deputy Minister of Youth, Sports and Culture, Namibia .
8.	13 July 2009	Visit from the University of Maryland Eastern Shore, USA
9.	20 July 2009	Visit from the University of Southern Queensland (USQ), Australia .
10.	11 November 2009	Visit from SMA Negeri 1, Grisek, Jawa Timur, Indonesia .
11.	3 - 6 December 2009	Visit from Universitas Dian Nuswantoro, Semarang, Indonesia .

2.3 LAWATAN KE LUAR NEGARA OLEH PEGAWAI UTeM BAGI TAHUN 2009

TARIKH	TEMPAT	JUMLAH DELEGASI	TUJUAN
12-18 Feb 2009	India Bangladesh Pakistan	3 orang	Lawatan kerja dan pengambilan staf akademik secara Head Hunting ke India (Chennai & New Delhi), Bangladesh & Pakistan.
13-19 Feb 2009	Pekan Baru, Padang, Indonesia	2 orang	Menyertai " Malaysia Education Exhibition 2009 " (MOHEX 2009)
14-19 Mac 2009	Jeddah, Arab Saudi	5 orang	Promosi Pendidikan Pasca Siswazah Middle East Education, Training, Equipment and Solution (MEETES)
24-30 Mac 2009	Manchester, Liverpool, London	4 orang	Program Pengambilan secara Head Hunting.
25-31 Mac 2009	United Kingdom	Seorang	Menandatangani MOU dengan Lancaster University & University of Hertfordshire, United Kingdom.
10-14 Mei 2009	Bandung, Yogyakarta, Indonesia,	3 orang	Lawatan kerja ke beberapa Pusat Penyelidikan dan Pendidikan, serta Fakulti Bahasa Komunikasi dan Pembangunan Kemanusiaan di Institusi Pengajian Tinggi di Universitas Padjajaran, Bandung dan Universitas Gajah Mada, Yogyakarta, Indonesia.
28-30 Mei 2009	Bali, Indonesia	3 orang	Mengiringi pelajar bagi menyertai "Regional Convention on Student Development"
13-16 Jun 2009	Universiti Brunei	2 orang	Lawatan kerja dan mesyuarat ke Universiti Brunei Darussalam
1-4 Jun 2009	Jakarta, Bandung, Indonesia	2 orang	Lawatan kerja dan mesyuarat dengan pihak Indonesia (University sports Council) bagi membincangkan perlaksanaan sukan Tahunan Malaysia- Indonesia di Indonesia pada tahun 2009.
17-19 jun 2009	Pekan Baru, Indonesia	2 orang	Promosi dan Pameran Pendidikan di Pekan Baru , Riau
11-17 Jun 2009	Unand, Padang, Indonesia	seorang	Ekspedisi Wisata AUTEM G.Merapi, G. Singgalang & lawatan Ilmiah ke Politeknik Unand, Padang Indonesia
25-30 Julai 2009	Ausburg, German	3 orang	Pembangunan & Penyelidikan serta kerjasama dalam bidang Robotics & Industrial Automation - Industri KUKA Roboter GmbH, Ausburg, German.

2.3 FOREIGN VISITS BY UTeM OFFICERS FOR THE YEAR 2009

DATE	PLACE	NUMBER OF DELIGATION	OBJECTIVE
12-18 February 2009	India Bangladesh Pakistan	3 persons	Working visit and Head Hunting for academic staff in India (Chennai & New Delhi), Bangladesh & Pakistan.
13-19 February 2009	Pekan Baru, Padang, Indonesia	2 persons	Participated in " <i>Malaysia Education Exhibition 2009</i> " (MOHEX 2009)
14-19 March 2009	Jeddah, Arab Saudi	5 persons	Post Graduate Educational Promotion <i>Middle East Education, Training, Equipment and Solution</i> (MEETES)
24-30 March 2009	Manchester, Liverpool, London	4 persons	Head Hunting programme
25-31 March 2009	United Kingdom	One person	Signing of the MoU with the Lancaster University & University of Hertfordshire, United Kingdom.
10-14 May 2009	Bandung, Yogyakarta, Indonesia,	3 persons	Working visit to several Educational and Research Centres and Faculties of Languages and Human Development at higher learning institutions i.e. Universitas Padjajaran, Bandung and Universitas Gajah Mada, Yogyakarta, Indonesia.
28-30 May 2009	Bali, Indonesia	3 persons	Accompanied students participating in the "Regional Convention on Student Development"
13-16 June 2009	Bandar Seri Begawan, Brunei Darussalam	2 persons	Working visit and meeting at Universiti Brunei Darussalam
1-4 June 2009	Jakarta, Bandung, Indonesia	2 persons	Working visit and meeting with Indonesians (University sports Council) to discuss the
17-19 June 2009	Pekan Baru, Indonesia	2 persons	Educational Promotion and Exhibition at Pekan Baru, Riau
11-17 June 2009	Unand, Padang, Indonesia	One person	Wisata AUTEM Expedition to G.Merapi, G. Singgalang & Educational visit to Politeknik Unand, Padang Indonesia
25-30 July 2009	Ausburg, Germany	3 persons	Development, Research and Cooperation in <i>Robotics & Industrial Automation</i> - Industri KUKA Roboter GmbH, Ausburg, Germany

TARIKH	TEMPAT	JUMLAH DELEGASI	TUJUAN
30-31 Julai 2009	Singapura	18 orang	Menjalin hubungan kerjasama dalam pertukaran idea dan mencari satu penanda aras bagi perpustakaan akademik
5-11 Ogos 2009	Indonesia	7 orang	Lawatan kerja dan pengambilan staf akademik secara Head Hunting ke Indonesia (Jakarta dan Bandung)
5-7 Ogos 2009	Indonesia	2 orang	Memberi ceramah bagi tujuan mempromosikan program-program yang ditawarkan oleh UTeM serta memperkenalkan UTeM sbagai salah sebuah IPTA di Malaysia
11-16 Oktober 2009	Frankfurt Jerman	2 orang	Program Specialized Marketing Mission sempena Pesta Buku Antarabangsa di Frankfurt
16-22 Ogos 2009	Hiroshima, Jepun	3 orang	Lawatan kerja ke Industri dan Universiti di Jepun bertujuan untuk memberi pendedahan dan meningkatkan ilmu dalam bidang pengkhususan mencari ruang untuk program sangkut industri.
19-21 Nov 2009	Belgium	6 orang	Menyertai Brussels Innova 2009, The World Exhibition On Innovation Research and New Technologies
19-26 Sept 2009	Melbourne, Australia	seorang	Mesyuarat bertujuan unuk mengemaskinikan rekabentuk kejuruteraan pra pengkomersilan. Rekabentuk ini adalah milik (patent) kerajaan Malaysia melalui USM
10-17 Oktober 2009	Belanda Australia	3 orang	Lawatan ke Institusi Pengajian Tinggi di Belanda dan Australia
12-17 Oktober 2009	Beijing China	3 orang	Lawatan Rasmi ke Beijing untuk bertukar-tukar pengalaman dan kepakaran dlm bidang bahasa dan kemahiran insaniah pelajar serta mencari peluang kerjasama ntara kedua-dua belah pihak
24-28 Oktober 2009	Japan	3 orang	Lawatan kerja ke Centre of Research in Mechatronic and Electronic Power in Yokohama University dan Keio University
5-8 November 2009	Nuremberg Jerman	5 orang	Menyertai pameran "International Trade Fair Ideas-Invention-New Products" IENA 2009
2-11 November 2009	Jerman Holland	4 orang	Lawatan kerja ke Universiti dan Industri di Jerman dan Holland
28 Okt - 3 Nov 09	Sepanyol	seorang	Lawatan sambil belajar ke Madris, Seville & Granada -bersama Majlis Agama Islam Melaka
4-6 November 2009	Yemen	4 orang	Program Promosi Pendidikan MOHEX 2009: Malaysian Education Fair

DATE	PLACE	NUMBER OF DELIGATION	OBJECTIVE
30-31 July 2009	Singapore	18 persons	Building cooperation and exchanging ideas in creating a benchmark for academic libraries.
5-11 August 2009	Indonesia	7 persons	Working visit and headhunting for academic staff in Indonesia (Jakarta dan Bandung)
5-7 August 2009	Indonesia	2 persons	Giving talk and promoting UTeM programmes and introducing UTeM as a public university in Malaysia
11-16 October 2009	Frankfurt Germany	2 persons	<i>Specialized Marketing Mission</i> programme in conjunction with International Book Fest in Frankfurt
16-22 August 2009	Hiroshima, Japan	3 persons	Working visit to industries and universities in Japan to gain exposure and knowledge in specialised fields.
19-21 November 2009	Belgium	6 persons	Participated in the Brussels Innova 2009, The World Exhibition On Innovation Research and New Technologies
19-26 September 2009	Melbourne, Australia	1 persons	Meeting to refine Malaysian Government patent for engineering design through USM
10-17 October 2009	Holland	3 persons	Visiting higher learning institution in Holland and
12-17 October 2009	Beijing, China	3 persons	Official visit to Beijing to exchanging experiences and expertise in the fields of languages and students' soft skills and also looking for cooperation opportunities between the universities.
24-28 October 2009	Japan	13 persons	Working visit to the Centre of Research in Mechatronic and Electronic Power in Yokohama University and Keio University
5-8 November 2009	Nuremberg Germany	5 persons	Participated in the "International Trade Fair Ideas-Invention-New Products" IENA 2009 exhibition
2-11 November 2009	Germany and Holland	4 persons	Working visit to universities and industries in Germany and Holland
28 October - 3 November 2009	Spain	One persons	Study tour to Madrid, Seville & Granada with the Melaka Islamic Council
4-6 November 2009	Yemen	4 persons	Educational Promotion Programme MOHEX 2009: Malaysian Education Fair

TARIKH	TEMPAT	JUMLAH DELEGASI	TUJUAN
1-8 November 2009	Australia New Zealand	3 orang	Lawatan Kerja Akademik Pusat Pengajaran & Pembelajaran ke Universiti di Australia dan New Zealand
15-21 November 2009	Jerman United Kingdom	5 orang	Lawatan Timbalan Naib Canselor (Akademik & Antarabangsa) dan Dekan UTeM ke Jerman dan United Kingdom
5-7 November 2009	Jordan	3 orang	Program promosi pendidikan " Annual Jordan Education and Training Exhibition and Conference, JETE 2009
19-21 November 2009	Eindhoven, Belanda	2 orang	Lawatan Kerja ke University Eindhoven Belanda
29 Nov-4 Dis 2009	Brunei & Thailand	4 orang	Lawatan kerja ke Brunei dan Thailand
12-14 November 2009	Thailand	2 orang	Mengikuti Mesyuarat dan Lawatan Kerja Majlis Perumahan Universiti-Universiti Malaysia
16-17 November 2009	Singapura	2 pegawai 22 Org Pelajar FTMK	Lawatan Ilmiah FICTS sesi 2009/2010 ke Singapura
18 Disember 2009	Singapura	19 orang	Lawatan Kerja ke Universiti Nasional Singapura dan Nanyang Technological Universiti

DATE	PLACE	NUMBER OF DELIGATION	OBJECTIVE
1-8 November 2009	Australia New Zealand	3 persons	Educational working visit by the Centre for Teaching and Learning to universities in Australia and New Zealand
15-21 November 2009	Germany United Kingdom	5 persons	Visit by the Vice Chancellor (Academic & <i>International</i>) and UTeM Deans to Germany and the United Kingdom
5-7 November 2009	Jordan	3 persons	Educational Promotion Programme " <i>Annual Jordan Education and Training Exhibition and Conference, JETE 2009</i>
19-21 November 2009	Eindhoven, Holland	2 persons	Working visit to the University Eindhoven , Holland
29 November-4 December 2009	Brunei & Thailand	4 persons	Working visit to Brunei and Thailand
12-14 November 2009	Thailand	2 persons	Meeting and Working visit by the council of Housing of Universities Malaysia
16-17 November 2009	Singapore	2 officers and 22 student of FICT	Educational visit to FICTS 2009/2010 session to Singapore
18 December 2009	Singapore	19 persons	Working visit to the National University of Singapore and Nanyang Technological University