

THE UNITED ARAB EMIRATES UNIVERSITY ANNUAL REPORT FOR THE ACADEMIC YEAR 2009  
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The UAE University  
**ANNUAL  
REPORT**

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for the Academic Year 2009/2010

**The UAE University**

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**Annual Report**

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**for the Academic Year 2009/2010**





“We are a university committed to excellence and improvement in all aspects of our work. Our graduates make significant contributions to the economic, social, educational, medical and technological activity in the United Arab Emirates. The university plays an active role in research and innovation, in line with the mission to support the nation’s transformation to a knowledge-based economy.”

**HH Sheikh Nahayan Mubarak Al Nahayan**

Fall 2009 Convocation Address

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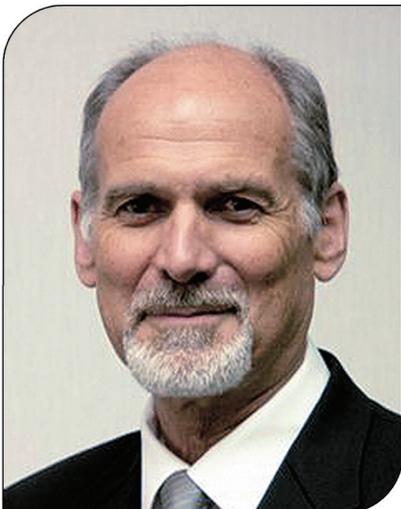
## Message from the Vice-Chancellor and the Provost



“We are proud of our special role and long history of success preparing individuals to meet the needs of the country. This is particularly important as the UAE leads the economic development of the Gulf region and exerts increasing influence globally. Our graduates, who come from every corner of the country, have achieved positions of leadership in all walks of life and through their efforts and involvement, are contributing to the continuing development of the nation, region, and world.”

“We are responsible to build knowledge and national development through research and assure that our students have the highest standards of opportunities, challenges and preparation necessary for the future they deserve. UAEU has much to offer our Nation and our students.”

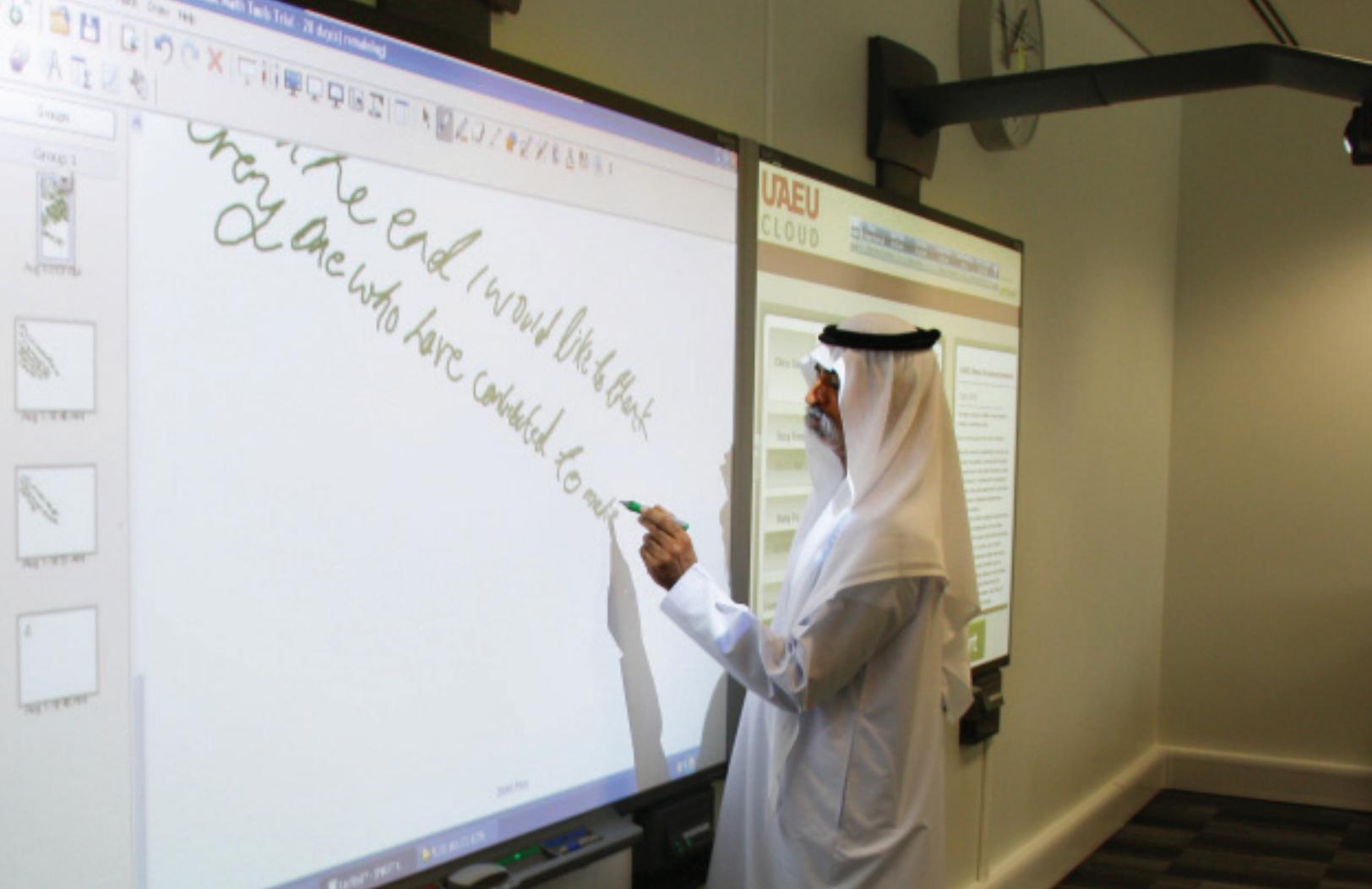
**Dr Abdullah Al-Khanbashi,**  
Vice-Chancellor



“UAEU has been the main force in the Nation both for quality undergraduate education and research relevant to the Nation’s needs. It has been a particular pleasure to see the development of graduate programs with the University that will help to prepare the next generation of scholars, many of them Emirati, to carry this work forward.”

“UAEU undertakes to become the true benchmark for university education and research in the Middle East. Developing an even stronger research capability that attracts top faculty and students is the key that will enable UAEU to become what it can and must be.”

**Professor Wyatt R Hume,**  
Provost



UAEU's success as a research and learning center continues to be recognized through its improved position in the UK Times Higher Education-QS World University Rankings 2009. The UAEU, currently ranked at 372, continues to make great strides forward as noted the Chancellor, His Highness Sheikh Nahayan Bin Mubarak Al Nahayan, at the Fall 2009 Convocation.

Research is the engine that drives advancement in technology, agriculture, medicine, law, the economy and science; the development of research drives policy and underpins growth. UAEU, the research engine for the nation, has achieved many successes over the last year in developing this research mission.

Improvements in institutional capability continue through changes in administrative policy; the automation of manual, repetitive and labour-intensive processes; the outsourcing of non-core services; and the introduction of a performance management program for staff. The first research cluster hire was appointed, 60 national faculty joined the National Faculty Development Program, and 16 nationals were appointed through the National Teaching Assistants' Program.

The educational experience was strengthened through the enhanced math testing and placement of undergraduate students, modifying the undergraduate admissions policy to reflect higher academic standards, and facilitating the UAEU-HCT (Higher Colleges of Technology) Partnership for Academic Achievement and Success. A significant achievement was the full Accreditation Board for Engineering and Technology (ABET) accreditation of the Faculty of Engineering. Existing and new curriculum continues to be evaluated and modified to meet the employment needs of the nation.

Student life was enriched through exchange programs, internships, workshops, local and international conferences, cultural events and activities, competitions and graduate placement support.

Research, the cornerstone of UAEU, represents the University's most significant contribution to the nation, in keeping with the nine pillars of the Abu Dhabi Economic Vision 2030. The research budget of the UAEU of AED 10.9 million was used to support 123 individual projects and 13 interdisciplinary projects, while 106 external projects to the value of AED 31 million were funded. Thirty-eight students began their PhDs and a Doctorate of Business Administration was developed while



faculty and students benefitted from the targeted application of educational technology tools and techniques for teaching. The success of research was further confirmed with the issuance of six patents submitted during 2009/2010.

Research in the Health Sciences was further enhanced during the Global Health and the UAEU Asia-Middle East Connections Conference in which 60 of the world's leading health scientists, researchers and clinicians participated. The five-day conference, the first of its kind on this scale, was held in collaboration with prestigious international universities.

Professor Mohamed Yousef Hasan Baniyas was appointed Vice Provost for Medical Sciences and Dean of Medicine; under his guidance, the Faculty of Medicine and Health Sciences (FMHS) continues to provide highly relevant research for the nation and the region. The UAE Global Health Institute was established. Sir Richard Feachem, former Head of the Global Fund, agreed to serve on its Board.

Students, faculty and staff moved to the new offices and classrooms while more than 2,300 female students transferred to new campus housing facilities. This, together with the Residential College model, provides a complete undergraduate experience that includes academics, mentoring and social activities.

Female students will attend classes in the state-of-the-art facilities on the new campus in the coming academic year. Students and faculty will experience the technological wonders of High Performance Grid/Cloud Computing.

Meanwhile, long-range planning continued with the completion of the Structural Plan for 2030 to support campus development to meet the University's needs over the next 20 years.

The UAEU continues to engage with its external partners and stakeholders and was instrumental in the cooperative development and implementation of the first phase of the UAEU-HCT Partnership for Achievement and Academic Success. UAEU also collaborated with Zayed University and the High Colleges of Technology on the Federal student funding formula for the three institutions. Plans are underway to launch a comprehensive link with the University's more than 50,000 Alumni. Evidence of UAEU's excellent relationship with external partners can be found in the many diverse Memorandums of Understanding signed during the year.



## United Arab Emirates and Al Ain



The Federation to be known as the United Arab Emirates (UAE) was formally established on 2 December 1971. The member emirates include Abu Dhabi, Dubai, Sharjah, Umm al-Qaiwain, Fujairah, Ajman and Ra's al-Khaimah.

The prosperity, harmony and modern development that characterizes the United Arab Emirates, led today by President HH Sheikh Khalifa bin Zayed Al Nahyan, also the Ruler of the Emirate of Abu Dhabi, and his fellow-members of the Supreme Council of Rulers of the seven emirates, is due to a very great extent to the role played by Sheikh Zayed, both prior to the formation of the Federation and in the nearly 33 years that followed until his death in November 2004.

The City of Al Ain is an ancient city, central to the cultural heritage of the UAE and the birthplace of HH The President Sheikh Khalifa Bin Zayed Al Nahyan. It remains close to the heart of the royal family and the people of UAE. For more than 5,000 years, it has been a welcome and a cool retreat from the surrounding desert and coastal Emirates. Known as the 'Garden City of the Gulf', it is built around nurturing oases irrigated by ancient falaj water systems.

The new academic year will see the University take up residence in a new state-of-the-art campus in the Maqam area of the city.

The "Plan Al Ain 2030", the Urban Structure Framework Plan designed by Abu Dhabi Urban Planning, will help Al Ain evaluate and respond to current and future development needs and will guide further planning for new development. It is projected the city will grow over the next 25 years and planning is in place to accommodate population growth without over-development, depletion of ground water resources, or encroachment on vital natural habitats or heritage sites. This is essential to preserve the city's natural assets which give Al Ain its unique character.

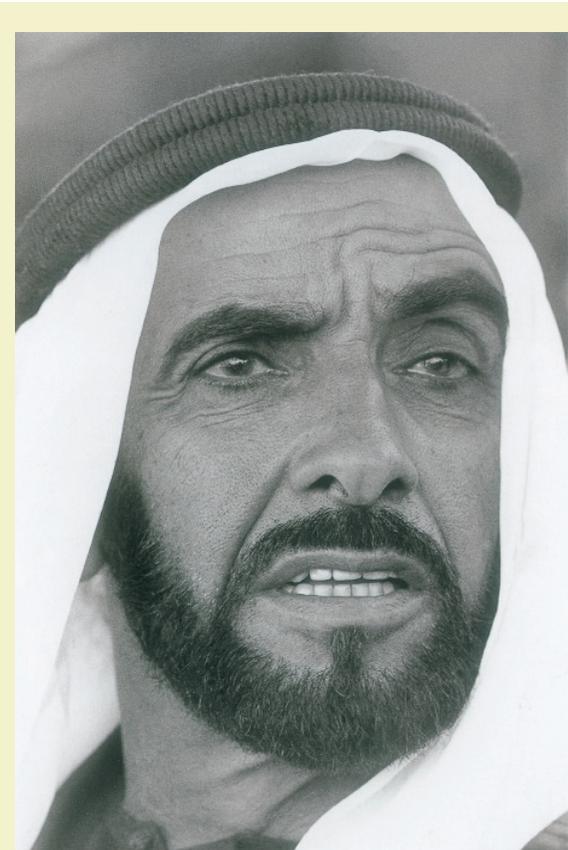
Al Ain's majestic desert landscape is dominated by Jebel Hafeet at the nexus of the Empty Quarter. The mountain, the city's most defining characteristic, rises to more than 1,300 meters and provides spectacular views.

A cultural retreat, Al Ain also hosts annual events including the Al Ain Classical Music Festival. The city is a popular tourist destination with first class hotels, a golf resort, shopping malls, restaurants, and a wild-life park.





## About the **University**



### **Basis of Authority**

The United Arab Emirates University was established by the President of the UAE, His Highness Sheikh Zayed Bin Sultan al Nahyan (may his soul rest in peace), by virtue of Federal Law 4 of the year 1976. UAEU, is a research-based institution providing research solutions to support the UAE and, through its global partners, the wider world.

### **UAE University Council**

The UAE University Council is the governing body responsible for the management of the academic and administrative affairs of the University.

### **Faculties and Departments**

UAEU has nine faculties through which academic staff conduct their teaching at undergraduate and postgraduate levels while pursuing research and scholarly investigations. The University General Requirements Unit (UGRU) offers a preparation program to ensure that students are adequately prepared for university study.

UAEU Faculties provide comprehensive opportunities for study and careers to more than 12,500 students offering a full range of undergraduate and graduate degree programs. The University offers 71 Bachelor's degrees, 16 Master's degrees, and the UAE's first national university PhD program with 38 students in five Faculties.





## University Management

The Vice-Chancellor is responsible for the management of the university as well as the overall direction of institutional planning, budget and financial activities and external relations.

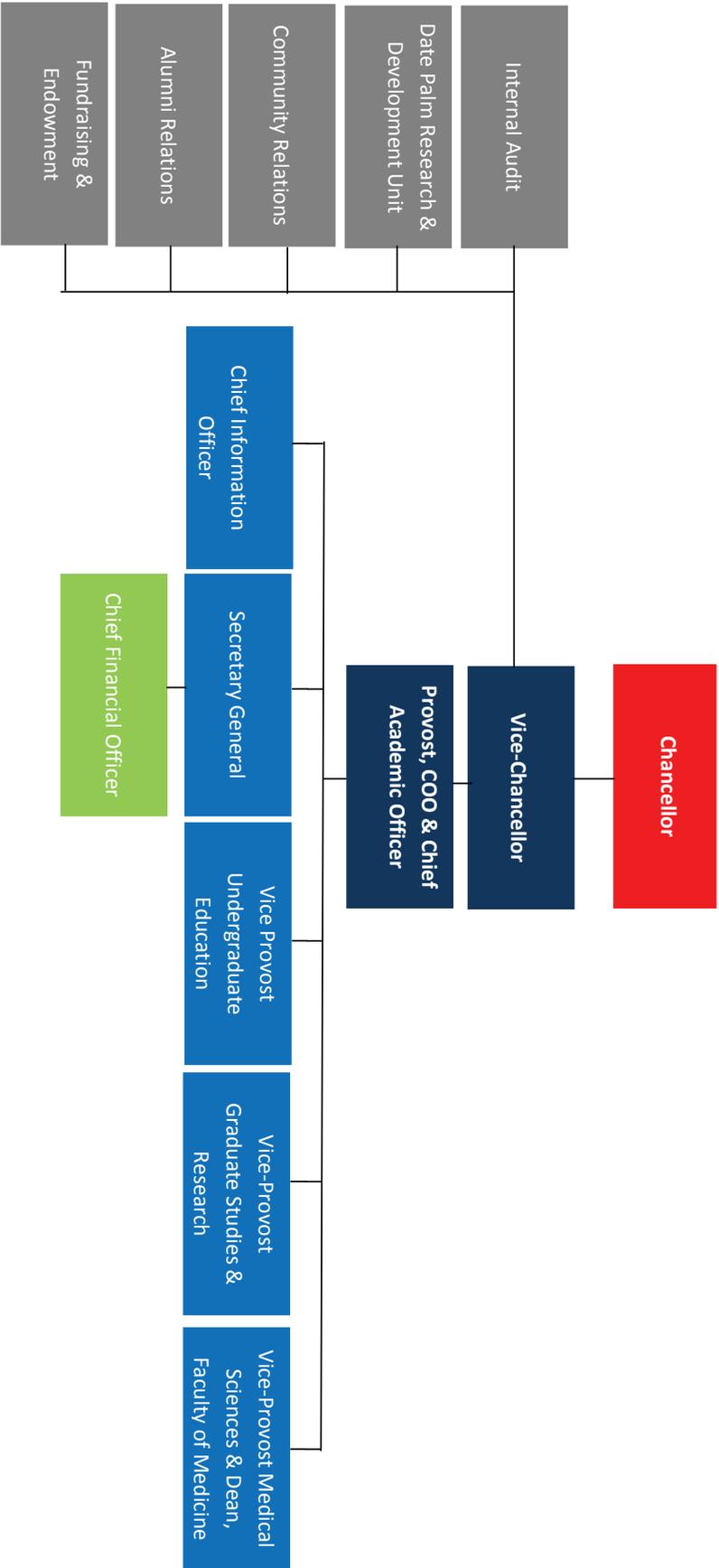
The Provost, is the Chief Academic Officer and Chief Operating Officer responsible for undergraduate education, research and graduate studies, and services that support the academic mission of UAEU.

The Secretary General is responsible for services that include finance, budget, facilities management, human resources, auxiliary services and safety.

The Deans are the heads of Faculties, which are groupings of academic disciplines, through which the academic staff conduct teaching at undergraduate and post graduate levels, and pursue research and scholarly investigations.



# Organization Structure





### **Research Emphasis**

Research is the engine that drives advancement in technology, agriculture, medicine, law, the economy and science; the development of research drives policy and underpins growth. UAEU, the research engine for the nation, continues to develop this strong research mission.

### **Student Life**

Students from all seven Emirates plus more than 20 countries enrich and enliven the campus and the classrooms. The 7,200 students who live on campus enjoy a full range of organized campus activities and events that add a unique educational value and vibrant dimension to each student's academic program. Classrooms and labs feature the state-of-the-art equipment and instructional technology to enhance student learning and contribute to academic success.

### **Graduates**

UAEU graduates provide leadership throughout the UAE, the Gulf region and increasingly the global community. UAEU is committed to the human development goals and cultural values expressed by Sheikh Zayed in establishing UAEU as the national university in 1976.

### **Staff**

Eighteen faculty members were promoted this year and 24 faculty were recruited during the year under review. Sixteen nationals were appointed through the National Teaching Assistants (TA) Program, of which seven have been sent abroad to pursue their graduate studies, while six TAs obtained their PhDs and were appointed as Assistant Professors.

### **Wide Range of Strong Bachelor's Degree Programs**

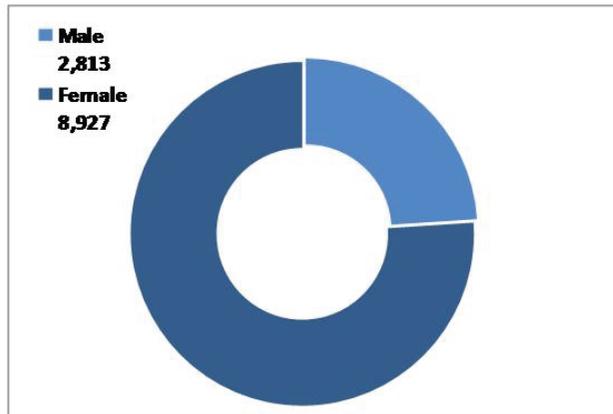
UAEU recognizes its special responsibility to the community by making knowledge and resources readily accessible. More than 750 faculty members add unique quality to every undergraduate degree and unparalleled academic opportunities for students.

In 2009/2010 the UAEU: distributed enhanced recruitment materials to more than 24,000 prospective students and secondary school personnel; processed applications and admission for 4,200 new undergraduate and graduate students; scheduled 9,200 courses and final examinations; conducted on-line registrations for 39,500 students; processed and recorded 98,000 final grades; verified degree completion and prepared and distributed diplomas for 2,700 graduates; issued 13,800 official transcripts and attestations; and billed graduate students and sponsors for tuition and fees in excess of AED 11 million.

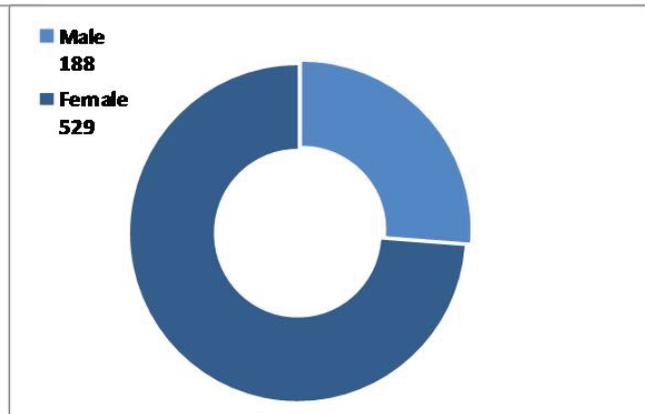


## UAEU Students in Numbers

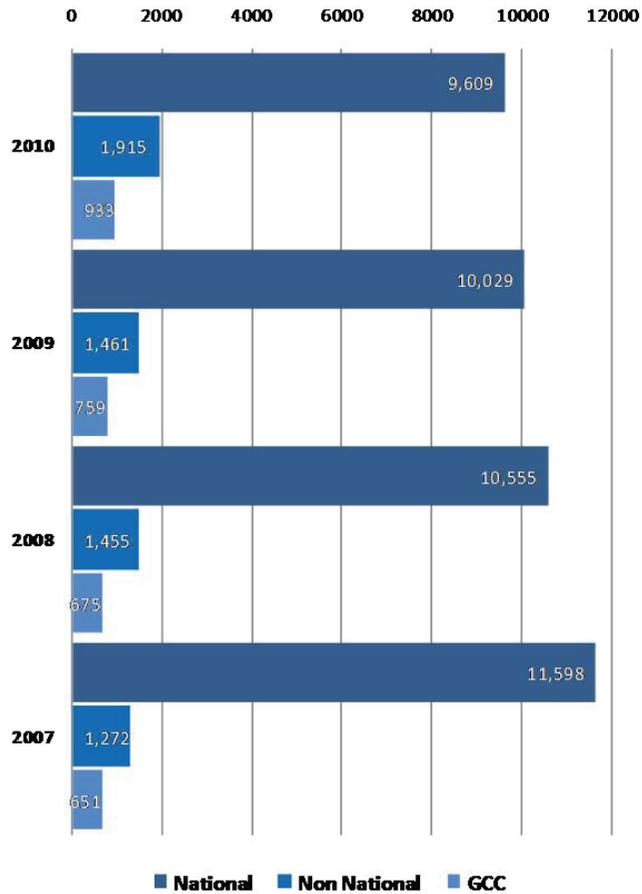
Undergraduate students - Year 2010



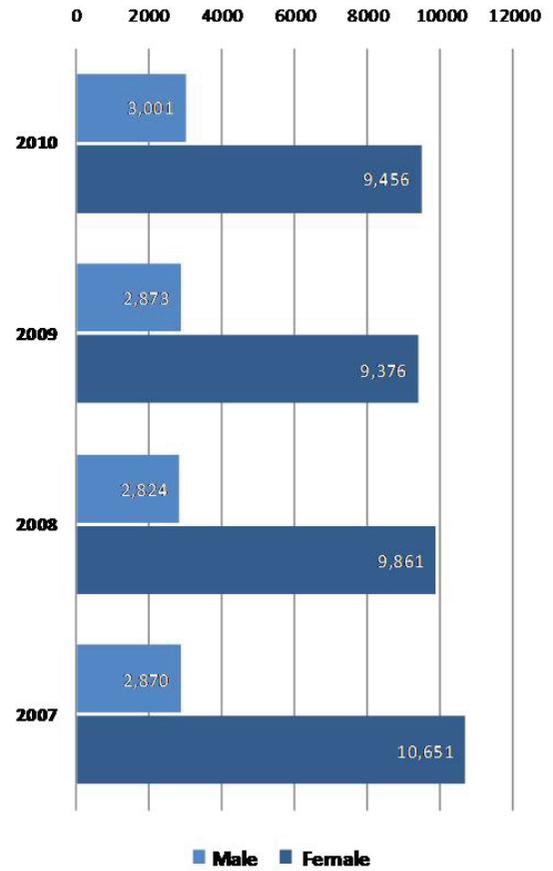
Postgraduate students - Year 2010\*



Enrollment statistics by nationality



Enrollment statistics by gender



\* Includes the graduate diploma students

## Transformation of the UAEU

### Overall Plan of Action

Significant progress has been made towards the transformation of UAEU, outlined in the following six core goals:

<p><b>Goal One</b> <b>Building institutional capability</b></p>	<p>The administrative culture of UAEU has been transformed to one of policy, delegation, audit and accountability, in order to increase creativity and the effective use of resources. Attention is focused on human resource matters to ensure optimal performance. Budgetary processes have been realigned to support the Chancellor's vision and the processes of change necessary for its realization. A coordinated set of actions internal to the University has been introduced to ensure both accountability and ongoing improvements in the quality of our programs.</p>
<p><b>Goal Two</b> <b>Strengthening the educational experience</b></p>	<p>Undergraduate and graduate education has been reviewed and evaluated, and changed if necessary, to ensure a new generation of young Emirati leaders to manage the country's future. This process of review and evaluation strengthens the University and confirms its role and function in nation building. This is done through two main changes: the evolution of a unifying undergraduate educational experience within a research culture, coordinated by a Dean of Undergraduate Studies; and the enhancement of residential life reflecting international best practices while respecting the cultural expectations of the Nation. These changes allow and support a range of extracurricular enhancements to the student experience.</p>
<p><b>Goal Three</b> <b>Developing the research mission</b></p>	<p>The University's research profile and activity has been developed to recognized international standards. This has been done through four concurrent processes. First, the research capability and level of activity within the existing university have been enhanced through targeted hires. Second, research institutes are being established in selected fields of high value to the nation. Third, a university-wide graduate research-training program has been established. Fourth, the University has upgraded its capability to access the world's library resources digitally, to transmit and share scholarly information with research collaborators worldwide and to use information technology in support of education throughout the Nation.</p>

<p><b>Goal Four</b> Investing in the health sciences</p>	<p>The scope and nature of health sciences programs has been upgraded, including a strengthened School of Medicine, with the creation of new programs in related areas and with the aggressive use of new communication and computation technologies. The University's existing strengths in health-related research serves as the foundation for new schools and two global research institutes in health-related fields of high national relevance.</p>
<p><b>Goal Five</b> Creating a physical structure to serve the scholarly community</p>	<p>It is essential to create the right physical environment to sustain the ongoing work and life of a scholarly community, of both faculty and students. An excellent beginning has been made with the current new campus. Additions and modifications are needed, for the residential college system, for the expansion of research throughout the university, for graduate student housing, and for the Global Institutes. A comprehensive physical master plan supports the Chancellor's vision of what this University will become. Needed modifications will be made on the new campus to accommodate the medium-term needs of the transformation action items already underway.</p>
<p><b>Goal Six</b> Engaging external partners and stakeholders</p>	<p>The University exerts strong influence and provide direct support to improve primary and secondary education throughout the UAE. This is achieved with the use of information technology and employment of UAEU's enhanced research capability to influence school policy. UAEU influences the funding formula of the University, Zayed University and the Higher Colleges of Technology to reflect and support national interests while working to clarify the distinct roles of the three partners. Work continues to enhance the visibility and recognition of the University as a national and international resource. The University has increased the philanthropic support for its facilities and programs, and built the University's endowment funds.</p>



## Highlights of **2009/2010**



**October 2009 – Guest Speaker at UAEU Convocation, Professor Alison Richard, Vice-Chancellor, University of Cambridge**

His Highness Sheikh Nahayan Mubarak Al Nahayan, Chancellor of UAE University, delivered the keynote address and welcomed new faculty at UAE University's 2009/2010 Convocation on 6 October 2009.



**March 2010 – Fourth International Date Palm Conference**

The Fourth International Date Palm Conference illustrated the special attention and priority awarded to this vital economic sector by His Highness President Sheikh Khalifa Bin Zayed Al Nahayan. Date palm scientists, researchers, specialists, and senior officials from around the world attended the conference to exchange knowledge, expertise and experience.

**September 2009 – UAEU students join the Sheikh Mohammed bin Zayed Scholars at New York University**

Three UAEU students were included in the 2009/2010 class of Sheikh Mohammed bin Zayed Scholars Program. The program recognizes outstanding students in the United Arab Emirates and provides them with special academic leadership opportunities.

**November 2009 – UAEU Supercomputer and Cloud Computing Laboratory**

UAEU has an impressive lineup of equipment and facilities for active research on different aspects of High Performance Computing and Cloud Computing.

**December 2009 – UAEU Brings Together Sixty Global Health Experts for Landmark Conference in Al Ain**

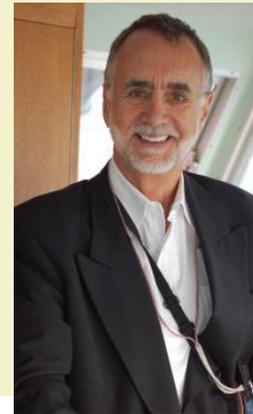
UAEU invited the world's leading health scientists, researchers and clinicians to Al Ain to discuss critical global health threats and to set the research agenda for 2010 onwards.

**February 2010 – UAEU PhD Program Starts**

The United Arab Emirates announced the selection of 38 students to begin its new PhD program, the first PhD program of a federal University in the country.



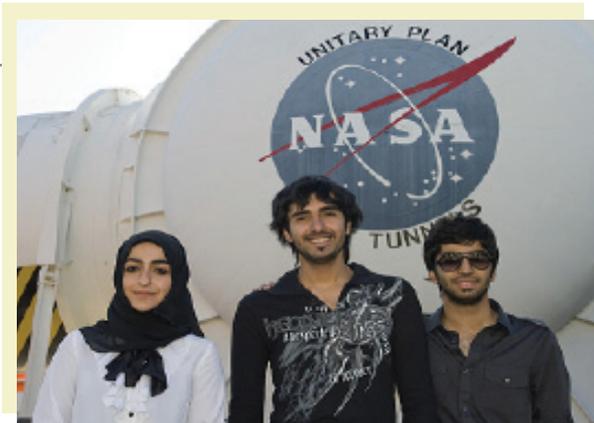
**April 2010 – “Between Traditional Legal Rules & Developed Legal Systems”**, the 18th International UAEU Law Conference was held in Dubai under the Patronage of HH Sheikh Mohammed bin Rashid.



**May 2010 – Sir Richard Feachem Joins Advisory Board for UAEU Global Health Institute**

**June 2010 – Engineering student joins NASA’s Ames Research Center**

Hamad Rajab, 21, was chosen as one of the first Emirati students to join NASA's Ames Research Center, in California, USA.



**July 2010 – Sultan Qaboos University and United Arab Emirates University launch Joint Committee**

“This unequivocal cooperation between the two universities has set an example for other GCC universities to emulate as it resulted in many remarkable achievements in various areas such as academic and scientific cooperation, student activities and administrative and scientific visits.” HE Dr Ali bin Saud Al-Bimani, Vice-Chancellor, Sultan Qaboos University on the occasion of the launch of the Joint Committee between Sultan Qaboos University and UAEU.

**August 2010 – HE Sheikh Nahayan Mabarak Al Nahayan visits UAEU’s new AED 4.4 billion campus and officially inaugurates the new ‘cloud’ network, which allows an interactive learning environment for UAEU students.**





## Goal 1 Building Institutional Capability



A major transformation in building institutional capability has been the change in administrative culture where administration by policy and procedures, delegation, accountability, and transparent auditing now permeates much of the UAEU.

Changes in administration were based on a dynamic strategy that categorizes system and process improvements into three types, and aims: to automate processes that are paper-based, manual, error-prone, repetitive and/or labour-intensive; to outsource functions that are not core to its mission in order to access world-class capabilities and improve service quality; and to use key performance indicators and the University's performance management framework to monitor systems and processes for continuous business improvement.

The automation of manual, repetitive and labour-intensive processes during the past year included: an electronic vacation tracking system; an employee contract renewal notification system; passport/visa renewal notification system; an e-procurement process that includes vendor registration, browsing current bidding opportunities, viewing recent awards, online bidding when permitted, and procurement; and a utility payment system.

### **Outsourcing Services to Access World-class Capabilities**

The University operates certain activities that are not core to its mission, and for which there is no strategic reason that requires the University to manage them internally. These activities are operated on a relatively small scale and are, over time, incapable of possessing the breadth and depth of talent, technology and other resources and capabilities needed to provide world-class services and quality at a reasonable cost. The operation of such activities could also impair the University's ability to focus attention, energies, and resources on its core activities. It has been concluded that activities with these characteristics should be considered for outsourcing to organizations that have the capabilities and specialization to provide better services.

### **Performance Management Program**

The University rolled out an institution-wide Performance Management Program that is intended to support managers and their staff in setting expectations and goals, for staff to provide a self-assessment of themselves to their managers, and for managers to evaluate their staff's performance and provide them feedback.

### **Continuous Business Improvement**

In pursuing continuous business improvement the hiring, onboarding and exit processes were redesigned resulting in employee focused integrated and streamlined processes.

### **Administrative Culture and Management**

In addition to the essential academic and support services of the Enrollment Deanship, several significant accomplishments and initiatives were designed to enhance the services to the University and its primary constituencies, highlights of



which include: developing a comprehensive set of policies for all aspects of enrollment operations reflecting contemporary policies, practices, and standards of public research universities; strengthened graduate tuition and fee payment/collection efforts; introducing advanced staff professional development and Emiratization efforts; and fully implemented a new class and room scheduling process in cooperation with the facilities management contractor, Khadamat, for the new campus to schedule all female classes for Fall 2010.

#### **Faculty Development, Promotion and Recruitment**

The National Faculty Development Program, designed to enhance national faculty development, provided funds for 60 national faculty members totalling AED 1 million to support travel to international conferences, training programs, and scientific visits to other institutions.

Eighteen faculty members were promoted this year and 24 faculty were recruited during the year under review. Sixteen nationals were appointed through the National Teaching Assistants (TA) Program, of which seven have been sent abroad to pursue their graduate studies, while six TAs obtained their PhDs and were appointed as Assistant Professors.

#### **Alumni, Student and Faculty Surveys**

During the academic year, UAEU conducts a number of surveys to gauge the satisfaction of its stakeholder with teaching, learning and services provided at UAEU.

The Alumni Survey of the 28th Cohort indicated that Graduate employment rate for male graduates is 90% while female employment rates are 33%. Unemployed female graduates indicated family responsibilities to be one of the main reasons they are not employed.

The Employee Satisfaction survey indicated that employees have a great degree of satisfaction with the work environment and with the services offered at UAEU with 87% stating their job is important to the university and 81% indicating satisfaction with the respect they get from their managers. Promotions and pay equity were pointed out as areas of concern.

Student surveys indicated that first year students are significantly satisfied with the process of registering and selecting courses or programs and adjusting to life at UAEU. Further, they were satisfied with services and facilities provided by UAEU and were satisfied with their teachers and quality of teaching.

The Student Engagement survey provides an in-depth view of student activities and their involvement in academic life at UAEU. Four in five of the respondents indicated that UAEU places strong emphasis on student excellence. The majority of students indicated that the UAEU is student focused and almost four in six respondents endorsed that UAEU provides a welcoming environment.



## Goal 2 Strengthening the Educational Experience

This goal of the transformation strategy aimed at re-conceptualizing and reforming undergraduate education within a research culture and the implementation of an enhanced residential life experience. Accomplishments in enhancing the student experience included the following highlights:



### **University College**

The University College has been established to redefine and enhance the UAEU undergraduate experience, and to demonstrate to students, their families and the UAE community a commitment to producing graduates who have the distinctive capabilities required for leadership in contemporary UAE society. The University College provides a unifying mission for Faculties, Departments, faculty members and students: to maximize professional and academic capacity to enable graduates of distinction.

The University College is structured through its purpose of providing for students' academic success. It has set requirements for entry standards, and identified graduation outcome standards for Arabic/English literacy, numeracy, personal efficacy and scholarship. The University College has defined a core curriculum for freshman students that provides a broad, stimulating and motivational introduction to university study. The University College has set out its expectations about the facilities, services and activities that will become available to students to ensure that a rich campus life supports their personal and academic growth to the required standards. Honors Colleges and programs will enroll and recognize our most highly achieving students.

### **Residential College**

A further enhancement to the undergraduate experience was the establishment of the Residential College, which provides students with a broader academic and social experience while living in the Residential College. Each college includes community amenities such as study rooms, virtual library access, cafés, exercise and social rooms, spaces that will accommodate a gathering of approximately 80 to 100 people for presentation or lecture, large dining facilities which are designed to foster lingering conversations and discussions, guest facilities and office space for faculty/mentorship advisors.

The outcome is that UAEU students will leave with broader intellectual and social experiences which will enable them to move more quickly into leadership roles within the community and their professions.

## **Student Recruitment and Admission**

During the year, the Registrar's Division successfully implemented and managed a new application and admission process for the University's new PhD program, strategically modified the undergraduate admission policy to increase academic standards and enable the UAEU-HCT Partnership for Achievement and Academic Success and published a new and comprehensive recruitment viewbook.

A new state-of-the-art exhibition booth reflecting the UAEU's new branding was acquired and used this year. The UAEU was prominently featured at various careers, training and educational exhibitions including: Najah 2009 Exhibition; UAE Careers 2010; GETEX; and Al Ain Career Fair.

## **Enhancement of Undergraduate Placement**

A pilot mathematics placement testing program was implemented for UGRU students resulting in improved placement/student success and development of a mathematics proficiency standard. Sponsored students undertook an academic enrichment program that includes an intensive English language instruction program in Ireland and a cultural and scientific trip for senior students to Paris.

## **Automated Online Course Catalogue**

The publication of an online course catalogue was commenced this year and will be a mirror of the curriculum information in the Student Information System when released in the new academic year.

## **Information Resources**

The number of Arabic book titles grew to 88,992, while English book titles number 62,948. The UAEU subscribed to 17,635 e-journals, 967 Arabic print journals, and 1,925 English print journals. There were also 47,688 e-books.

The American Corner, which fosters cultural and educational relationships, continues to prosper through its concerts and workshops, drama education and topical celebrations.

## **Curriculum Development, Accreditation and Certification**

The Faculty of Engineering (FOE) undergraduate programs achieved full accreditation by the Engineering Accreditation Commission (EAC) of ABET. ABET accreditation is a mark of quality for the Faculty of Engineering and provides its graduate employability and the opportunity for professional registration not only in the UAE but worldwide.

Within the Faculty of Business & Economics (FBE), the Department of Business Administration completely revamped its entire curriculum to meet the employment demands of the nation and the GCC. The course structure also allowed students to experience common courses in three new tracks.

The Doctor of Business Administration degree was developed during this year. The FBE has responded to a growing need for new models of performance and innovative solutions to business practices. The program has been designed for research-oriented working professionals and senior level executives. It is aimed at expanding their management knowledge and equipping them with broad research and process management skills. The Faculty of Medicine and Health Sciences (FMHS) launched the Master of Public Health and Doctor of Pharmacy programs. These are all examples of how the UAEU is moving more quickly to introduce new programs beneficial to the region.

The undergraduate degree programs offered by the Faculty of Information Technology (FIT) will be preparing for an accreditation review by ABET that is planned for 2010.





The FOE continues discussions with Mubadala Development Co, Abu Dhabi Advanced Technology Investment Co, and the Abu Dhabi Education Council to establish new programs in Aerospace Engineering and Microelectronics Engineering based on industry's requirements.

Within the Faculty of Food & Agriculture, the Department of Nutrition and Health commenced the Dietetics program, which was revised according to the accreditation requirements of American Dietetic Association (ADA)/ Commission on Accreditation for Dietetic Education (CADE) with Accreditation expected in 2011. It also commenced a Masters Program in Horticulture.

For the second year in a row the Animal Nutrition Laboratory has been certified by The National Forage Testing Association in Omaha Nebraska, USA as a NFTA Certified Laboratory for 2010. The Forage Proficiency Testing Program was conducted by the NFTA and endorsed by The National Hay Association (NHA) and The American Forage and Grassland Council (AFGC) in the USA.

The Faculty of Humanities and Social Sciences (FHSS) is pursuing two endowed Chairs, one an Endowed Chair for Creativity Studies, and the other an Endowed Chair on International Humanitarian Affairs.

### **Students and Faculty Technology Support**

During the 2009/2010 academic year, the Center for Educational Technology (CET) underwent internal reorganization designed to align appropriately the CET's staff and services with its core mission of helping UAEU faculty master selected tools and techniques in order to promote effective teaching and learning. The reorganization saw staff and the entire TV Production Studio transferred to the FHSS where they will directly assist educators and students in the Broadcast Media Program.

The refocused CET was able to concentrate all of its resources on serving UAEU faculty and toward that end, the CET developed and hosted an innovative mix of new faculty workshops, seminars and special presentations to individual departments targeting applications of educational technology tools and techniques in teaching with over 500 faculty participated in CET educational programs.

In addition, the CET's "Mobile Learning" initiative designed to educate faculty about the classroom applications of mobile media tools like podcasting and video streaming was introduced with over 50 educational multimedia podcasts developed.

Using the same media technologies involved in podcasting, FHSS collaborated with the CET to create an internet-based student "radio" station - a first in the UAE.

In keeping with advancing technological developments, the University has developed a mobile application that allows students and faculty to use their mobiles to check their class schedule, grades, and leave balances as applicable.

### **Student Exchange Program**

Two UAEU students were enrolled to participate in the UAEU's only formal student exchange program with Waseda University in Japan. Future plans include establishing further student exchange programs with Spanish and German universities.

### **Internships and Student Experiences**

The Internship & Work-Integrated Learning (iWIL) Center placed over 1,100 students in internships across the Emirates and beyond. Two major campaigns, one for internship placements and the other for graduate placements strengthened and profiled the UAEU as the premier provider of capable, motivated young Emiratis.

Major organizations providing internship opportunities include Sharjah Municipality, RAK Department of Economic Development, Oasis Hospital, Galadari Brothers Group, Khansaheb Civil Engineering, Saleh Construction, Dhafra Int'l Projects Group, Sharjah TV, National Bank of Umm Al Quwain, Fujairah International Airport, Fujairah Municipality, Gulf Craft Inc. Ajman, Gulf Turbine Services, RAK Land Department, DUTCO McConnell Dowell and DulSCO. The iWIL Graduate Placement Campaign targeted around 3,000 selected key employers in the private and the public sectors in the UAE to help graduates find employment with amongst others Mubadala Development Company, Emaar Industries & Investment, Shuweihat O&M, Dolphin Energy, Union National Bank, ADNOC Distribution, Al Foah, Taweelah A2 Operating Company, National Drilling Company, DUBAL and Microsoft.

Nineteen students were accepted and attended a seven-week internship at the world-class Global Foundries chip manufacturing facility in Dresden, Germany. The program, fully sponsored by ADEC and ATIC aims to develop students' technical skills and appreciation of the complexity of semiconductor products and manufacturing life cycle through theoretical and hands-on experience.

Supported by iWIL, the Faculty of Science (FOS) had the opportunity to carry out internship training in some of the world's leading research institutes, like CERN and the Max-Planck Institute. In addition, two female National Biology students were chosen to spend a training period at Professor Schneider's specialized laboratory in Molecular Diagnostics at the University of Erlangen.

Science students also participated in the Women in Science and Engineering Workshop that included presentations on the importance of establishing "women in science and technology" organizations in the MENA region and leverage connections with US organizations. The conference also stressed that establishing international research collaborations are very helpful to develop and advance commercialization of science in the MENA region.



Physics students attended the International Workshop on Advanced Materials where more than 100 scientists from 25 countries around the world presented their research and studies in basic science and applications of nanotechnology and advanced materials, covering topics in nanomaterials, nanotechnology, solar energy materials, processing of hydrocarbons, water purification, energy storage, and restoration of the environment.

Law students participated in two international Moot Courts in Austria and USA and were provided training opportunities in both local and international legal firms, continuing the FOL provision of highly trained and professional National lawyers for the country. In all the FOL has cooperation agreements with 18 international law firms in the UAE and has secured internship opportunities in countries like the UK, USA and Singapore.

Biology students participated in the 8th Inter-College Public Speaking event and won the 1st Runner Up prize. Biology students were also involved in carrying out research in collaboration with Al Ain Wildlife Park & Resort to study behavioural ecology of captive Sand Gazelles and Arabian Oryx as well as endoparasites of Sand Cats and the Arabian Leopard.

FHSS students were introduced to memorable artistic and musical performances by outstanding performers, a distinguished series of lectures on the theme of citizenship, animated student debates on controversial topics, study tours abroad by several groups of students, and notable accomplishments by students and faculty. Student life in FHSS was enhanced through overseas trips to Scotland, California and New York in the USA, Austria, China and Taiwan. A photo exhibition and poetry evening inspired creativity and passion for the arts amongst the youth and encouraged students to take their craft from the classroom to a professional environment.

For the second year in a row the FFA female students won the Inter-College Cultural Cup 2010, while two students from FFA joined the Near East and South Asia Undergraduate Exchange Program in the USA, a cultural enrichment program for one year.



Ashurst and the Faculty of Law (FOL) at United Arab Emirates University signed an agreement to create an internship program to provide students at the Faculty of Law with the necessary legal skills to practice law. Norton Rose and the FOL also signed an agreement to create an internship program to provide students with the necessary legal skills to practice law. The MOUs announce the establishment of internships programs inside and outside UAE for students in order to provide them with hands-on experience intended to hone their legal skills and enhance their understanding of the practice of law.

### **Engineering Students win the GE Renewable Energy Competition**

GE supported the UAE's first Engineering Student Renewable Energy Competition (ESREC), which was hosted and organized by UAEU's Electrical Engineering Department. Students were challenged to think creatively and scientifically about ways to generate renewable energy. Thirty-five Universities from the UAE, Oman and Saudi Arabia took part in the competition with a strong commitment to devise innovative solutions, especially when it comes to harnessing renewable energy.



The winning energy project team from UAEU involved being able to extract wind energy through wind induced vibration by a method called “vortex induced vibration” (VIV), which works even if the speed of the wind is low – one of the key reasons why wind energy is not harnessed in this region.

Engineering students took 1st place at ISMA Student Poster competition at the American University Sharjah, 1st place at IEEE student day at the Petroleum Institute, 1st place at Engineering Student Ethics competition at Khalifa University of Science, Technology and Research, 1st place at 1st Renewable Energy Student Competition at UAEU, and 2nd place at the 4th Engineering Student Gathering at Sultan Qaboos University.

### **The Big Start**

A Student Entrepreneur initiative with a difference was launched by Al Tamimi Investments called ‘The Big Start’, which was created to mentor and sustain growth and entrepreneurship within the region. Al Tamimi Investments will employ and invest in the student with the best business plan following their graduation supported by a team of professionals.

### **Robo-Soccer Design**

Robo-soccer is an annual European design competition for university students to design and implement robots that emulate soccer players with the objective that designs would evolve such that the robo-players would beat human players by 2050. FOE have support the training of 3 relevant faculty members at Vaasa University in 2008/2009 in designing and implementing such robots.



### **Engineering Student Jets off to Join NASA Space Studies**

A student currently enrolled in the Faculty of Engineering at UAEU, was chosen as one of the first National students to join the student internship program to spend ten weeks training at NASA’s Ames Research Center, in California, USA. Along with two other students from the UAE, they were selected for a NASA education initiative to work with top scientists on a variety of projects, including the space shuttle and International Space Station, deep space missions, solar system exploration and aeronautics research.

Studying electrical engineering, the internship with NASA researchers and engineers focuses on a new cutting-edge water recycling system, designed for long-term duration space missions, for the new Ames “Green Building”, Sustainability Base. The proposed water treatment system is a technology developed by NASA Ames, which filters wastewater for re-use and reduces water consumption.

### **Law Student Reaches ‘The Top of Africa’**

A student from the FOL reached the top of Mount Kilimanjaro on the boundaries of Tanzania and Kenya through a self-funded trip. His achievement was highlighted in the UAE media showing him flying the United Arab Emirates University’s flag on the Roof of Africa!

Kilimanjaro is 5,859 meters from sea level and it took him 4 ½ days to climb while it only took one day to go down. The student was part of a group of 12 from the UAE and Kuwait on the trip led by Mr Zed Al Refai from Kuwait who is the first Arab to climb Mount Everest.

### **Web Search for the Visually Impaired**

A visually impaired FIT faculty member, announced a new technology enabling web search for the blind. A television talk show series is scheduled to air and will focus on people overcoming difficult challenges in life.

### **Student Benevolence**

The FIT Female Student Association organized the humanitarian “Touch of Hope” fund-raising drive to support seriously ill and handicapped children in the UAE.

### **Fulbright Scholars and Students Program**

UAEU supports the endeavors for partnership and collaboration in the area of education with world-leading American universities and institutions and continues to have a strong desire to participate in educational exchange of activities such as the Fulbright Program. Through this program, a number of students and scholars from both the UAE and the US, who were selected for their academic excellence and leadership potential, had the opportunity to study and teach in each other’s country, exchange ideas, and provide joint solutions to several problems.

The international cooperation in the area of education brings mutual benefits to both countries as it increases understanding of the culture and leads to an enhanced knowledge and more comprehension of the educational systems. UAEU is committed to encourage new linkages with US educational institutions and continues to pursue an ambitious agenda of cooperation with US world-leading universities in a broad array of academic fields and disciplines.





## **Goal 3** Developing the Research Mission

The research budget from the University for 2009 was AED 10.931 million which is used to support research for faculty members, undergraduate and graduate research. For this academic year, the fund has been utilized to support 123 individual projects and 13 interdisciplinary projects.

For external research funding, the number of projects was 106 for a total value of about AED 31 million, while the total number of faculty publications in refereed journals and conferences was 1253 papers.

### **First Research Cluster Hire**

Professor Rachida Dssouli joined UAEU as the university's first research cluster hire faculty member to help bring together research programs across the university and to increase the quality and volume of output. The encouragement of synergies across subject areas has also helped to promote the university's collaboration with local industry and government agencies.

### **First National University to Offer PhD Program in UAE**

This year, the UAEU announced the selection of 38 students to begin its new PhD program. These outstanding students were selected from almost 800 applications. The students had the opportunity to meet the UAEU Chancellor, HE Sheikh Nahayan Mubarak Al Nahayan at his residence in Abu Dhabi at which the Chancellor welcomed the students and praised them for being selected as members of the first UAEU PhD cohort.

The UAEU PhD Scholarship Program is a research-intensive PhD program based at the University's main campus in Al Ain. Admission to the PhD Scholarship Program is limited and is highly-competitive based on student academic qualifications and potential for success in research activities. The PhD Scholarship Program is open to academically well-qualified Emirati nationals and a limited number of academically well-qualified non-nationals. The University's founding mission was to realize the aspirations of the society, deepen social ambitions and consolidate the structural foundations.



To promote success in a rigorous program of study and research, the PhD Scholarship Program requires full-time enrollment. The expected duration of the PhD program is 3-4 years post-Bachelor's degree or 2-3 years post-Masters degree. Those students with family are provided with housing especially designed for graduate students which also includes an activity centre and beautiful landscape.

### **Investing in Knowledge for the Nation's Future – The Abu Dhabi Economic Vision 2030**

Some major ongoing and concluded research projects at the UAEU are directly related to many of the nine pillars identified in the Economic Vision 2030 that will form the architecture of the Emirate's social political and economic future, such as: a sustainable knowledge-based economy; a continuation of strong diverse international relationships; the optimization of the Emirates resources; and premium education, healthcare and infrastructure assets.

The priority areas, such as infrastructure and environmental sustainability and social and human resources development, identified by the Vision 2030, are also closely related to the research work at the UAEU that has successfully established strong partnerships with public and private sectors to provide valuable services in studying crucial problems faced by the UAE community.

A good research network was also established with some major international companies from countries like Japan, the USA, the UK, Australia, France, Germany, Korea, Singapore, Sudan, Qatar and Oman. In addition, partnerships were also developed with many leading universities and research centers of the region and the world.

Some of the major research projects at the UAEU include:

1. Developing National Strategy for Environmental Health in Abu Dhabi. The Department of Community Medicine at the Faculty of Medicine & Health Sciences of the UAEU is developing a 10-year national strategy for environmental health in the Emirate of Abu Dhabi. The project is sponsored by the Environment Agency of Abu-Dhabi, is supported by the Executive Council of Abu Dhabi and is partnered with the University of North Carolina at Chapel Hill, a US top-ranked school of public health; and RAND Corporation, a global public policy research institution.
2. Web Arabia: The Web in Arabic Language. This project starts by identifying the most successful science and technology web content and develop corresponding Arabic-expressed versions through dynamic updates framework. Five Web sources have been included in the project after mutual copyright agreements with original content owners. The project is being conducted in partnerships with MIT and other prominent institutions, including National Geographic, European Space Agency, and US Environmental Portal Agency, to mirror their Web contents into Arabic language.
3. Emiratization in the Private Sector. The first detailed research into Emiratization in the private sector was concluded last year by the Faculty of Business and Economics of the UAEU with funding from the Emirates Foundation. The findings of the study were related to: the labour laws; competitiveness; tokenism; stereotypes and many other issues relevant to Emiratization. The results and recommendations that may have far reaching affects in the field of HR were presented to authorities.



4. The Roadway Transportation and Traffic Safety Research Center (RTTSRC). The Center was established on the Australian model and with the assistance of the Monash University of Melbourne, Australia. RTTSRC has contributed immensely in issues related to road safety and to finding new solutions. Many important studies were conducted for the Ministry of Interior, National Transport of Authority and other government organizations. The studies viewed the accident rates in the UAE, causes of accidents, ways to avoid accidents and to establish new standards and specifications of traffic safety. The Center has an active role in the field of technology transfer to transportation authorities in the country.
5. Wastewater Management. Scientists from the UAEU, after many years of research, are in the process of installing a pilot plant at the Ruwais Oil Refinery of Abu Dhabi Oil Refining Company to test the new technology for wastewater management. The project will allow petroleum refining companies to recycle the treated water, utilize it for irrigation or safely discharge it into the Gulf. Japanese companies are collaborating in the project. It is expected that the pilot plant assessment will lead to the design of an industrial scale plant to treat about 500 m<sup>3</sup>/hrs of refinery wastewater. This huge amount of treated water may be recycled in the refinery process or reused for irrigation.
6. Removal of Acid Gases from Natural Gas. UAEU scientists, in collaboration with ADGAS and Japanese institutions, are working on another environmental project to develop a new acid gas removal process. It will revolutionize the conventional removal process that suffers from numerous shortcomings including high-energy requirements, corrosion and forming. In contrast, the new process using membrane contactors is expected to overcome these drawbacks.
7. Mangroves. The sandy islands are generally characterized by environmentalists as at risk to erosion. The restoration and expansion of Mangrove Ecosystem at Abu Dhabi islands and channel modification are the major environmental projects undertaken by the UAE University. The UAEU research team also designed the modification of the channels to serve the existing and expanding mangrove forests to different parts of the islands.

# UAEU

## Patents

The UAEU once again contributed to the world of knowledge through the following patents:

1. Filter and Process of Use to Produce Carbon Nanotubes from Automotive Exhausts Utility under 35 USC 111(a), Application No 12496808, USA Professor Yousef Haik, Dr Saud Aldajah and Dr Emad Elnajjar, Faculty of Engineering
2. Diagnostic Agent for Parkinson's Disease UK Patent Application No 0916264.5 Professor Omar El-Agnaf, Faculty of Medicine and Health Sciences
3. Extraction of Fat from Lamb Meat UK Patent Application No 0922627.5 Dr Sulaiman Al-Zuhair, Dr Ali Al-Marzouqi, Isameldin Hashim and Hanifa Essa Taher, Faculty of Engineering
4. Process to Produce Carbon Nanotubes from Microalgae Utility under 35 USC 111(a), Application No 12647439, USA Professor Yousef Haik, Faculty of Engineering
5. Analyzer for H<sub>2</sub>S Determination in Gas Streams Japan Patent Application No 2010-45429 Dr Sayed Marzouk, Faculty of Science and Dr Mohamed Al Marzouqi, Faculty of Engineering
6. Diagnostic Agent for Neurodegenerative Diseases European Application No 08788479.7 Professor Omar El-Agnaf, Faculty of Medicine and Health Sciences

**Journal of Islamic Marketing.** An Assistant Professor of Marketing has been named Editor of a new journal entitled “Journal of Islamic Marketing”. The journal is published by Emerald Publishing and has published Volume 1 Number 1 of the journal.

**The Breathing Building Project.** In the Faculty of Engineering, this project was launched in 2007 and has completed the first stage of a comprehensive plan toward achieving the idea of dynamic breathing buildings in the UAE. The results of the study were already presented in a seminar hosted by Dubai Municipality. The project, in its next stage, will design, build and monitor an exemplar demonstration building to test and validate the energy-saving performance of Dynamic Breathing Building technology in the UAE. The results will be extended nationwide through full-scale trials at selected sites and for selected building types across the country.

The project, after its successful trial, will have an enormous effect on the environment as in the UAE air conditioning of buildings consumes approximately 70% of the total electrical energy that is generated each year. This is by far the single largest source of CO<sub>2</sub> emissions contributing to global warming and climate change. Using the new technology, buildings in future will use air permeable dynamic envelopes to pre-cool and filter incoming ventilation air.

**The UAE High Rise Buildings.** The design provisions of Reinforced Concrete (RC) high-rise buildings (20 to 50-story) in the seismically active areas of the UAE were assessed by UAEU scientists in a recent study. The research not only presented a systematic vulnerability study for the selected test cases, but also provides conclusions and practical recommendations that generically apply to a wide array of high-rise buildings in the seismically active areas of the UAE.

**Sulfur Concrete Manufacturing Plant.** The sulfur concrete study identified and evaluated potential new sulfur market applications. The study is to benefit sulfur producers, existing consumers, and government planners with responsibility for environmental improvement on a national and international scale. The project is to develop the technology of manufacturing sulfur-solidified concrete, develop guidelines for its use, and develop a mechanism for transferring the technology to UAE industries for its use in public works.

**Neurodegenerative Disorders (Disease).** A research team at the UAEU is currently working on the development and discovery of novel drugs and biomarkers for neurodegenerative diseases such as Parkinson’s disease and Alzheimer’s disease. The researchers are involved in the development of promising imaging agents for monitoring disease progression in Parkinson’s disease animal model using noninvasive MRI and PET technology.

**Research from Internal UAEU Budget.** There were more than 1,700 studies funded by the university from its own budget and the results of these wide ranging studies disseminated to the academic world through publications in international journals and conference presentations.





Many studies were conducted particularly on the date palm, highlights of which include:

- DNA Fingerprint of UAE-Grown Date Palm Varieties
- Composition and Quality of Seeds obtained from the Sand Dunes of UAE
- Plant disease control to substitute pesticides application in the UAE
- Detecting the Effect of Salinity on Date Palm Trees Grown in Saline Environment
- Effect of drying conditions on physicochemical properties of date syrup powders

Some of the studies undertaken in information technology, include:

- Achieving a harmonious and mutually beneficial co-existence between humans and robots
- Developing robotic arm
- E-government adoption and diffusion in the UAE
- Efficient selection of web services

As a testament to the contribution the University makes to the UAE, research projects focused on the assessment of Arabian Gulf sea level changes, traffic accidents in Al Ain, social health issues in the UAE, agriculture and farming techniques in Western Abu Dhabi, and factors affecting job satisfaction of employed emirati women.

## Research Partnerships and Funding

The UAEU is working to establish spin-off companies based on intellectual properties with the following companies:

- a. TVM Capital Corporation, Boston, USA
- b. Japan cooperation Petroleum Centre, Tokyo, Japan
- c. Nippon Oil corporation, Japan
- d. TAKREER, Abu Dhabi, UAE
- e. ADGAS, Abu Dhabi, UAE
- f. TARAKHEES-EHS, Dubai

In addition, UAEU is working with ADNOC, National Defense, Abu Dhabi Sewerage Services Company, Abu Dhabi Municipality, Al Ain Municipality, Al Qudra Holdings, Marine Water Resources Research, Ministry of Environment and Water, Ministry of the Interior, Dubai Municipality, Department of Transport, Road Transport Authority, and all major construction companies.

## Interactive Robots

The Interactive Robots and Multimedia Laboratory (IRML) of FIT continues to be in high demand in the press and at technology and education expos. Two major research projects are currently taking place at the lab, namely the Microsoft Award recipient “Facebots” project, in which social robots with face recognition and dialogue system capabilities that can utilize information available in FaceBook are created, as well as “Ibn Sina”, the world's first Arabic speaking dialogic humanoid robot. Ibn Sina drew large crowds at the biggest IT exhibition of the Middle East, GITEX 2009 in Dubai. Ibn Sina also thrilled passengers as he flew Emirates flight EK817 from Dubai to Riyadh in order to appear at the 2010 IEHE expo in Saudi Arabia. A first for Emirates, Ibn Sina travelled as a First Class passenger on the flight.

Ibn Sina Humanoid Robot Boarding Emirates Airline Flight from Dubai to Riyadh





## Goal 4 Investing in the Health Sciences

There were major accomplishments in the Health Sciences through the creation of new programs and two global research institutes in health-related fields of high national relevance, confirming the strong foundation of health research.

### **Global Health and the UAE: Asia-Middle East Connections Conference**

UAEU convened sixty of the world's leading health scientists, researchers and clinicians in Al Ain, UAE. The conference, Global Health and the UAE: Asia-Middle East Connections discussed critical global health threats and help set the research agenda for 2010 onwards. The conference, which was the first of its kind on this scale, was held in collaboration with Yale University, the University of California, American University of Beirut, the Institute for Humanities and Social Sciences at the University of Hong Kong, and Unifob Global at the University of Bergen, Norway.

Throughout the five days of presentations, the 60 speakers presented new research and insight from a dozen countries in the Middle East and Asia in eight major areas of global health concern. Following the conference, UAEU made the scientific results available to the world community in published proceedings and on the web; stimulating debate and discussion on the most important health questions mankind will face in this century.

Speakers at the conference, from all over the world, included Professor Sir Richard Feachem, Professor of Global Health at the University of California, San Francisco and former Under Secretary of the United Nations; Dr Vittoria Colizza whose pioneering research has led to the tracking of the evolution of pandemics in real time; Professor Tai-Hing Lam, one of the world's leading experts on chronic and urban diseases including the long-term and far-reaching consequences of alcohol abuse; and Harvard Professor Richard Mollica, the leading expert on the global health implications of refugee trauma. Dr Oliver Harrison, Director of the Health Authority Abu Dhabi, revealed the rapid progress being made in Abu Dhabi in public health and Professor Lihadh Al-Gazali of UAEU discussed her pioneering work on the importance of genetic factors in the health of the Emirati population.

***“We are delighted to be holding this ground-breaking and important conference at United Arab Emirates University. From the outset of this conference, there can no longer be any doubt that the UAE is a fully committed part of the global health debate. This event is the first of its kind on this scale and illustrates UAEU's ambitions to further its credentials of being a first-class 21st century research university. The coming together of this group of people also provides a rare opportunity to establish collaborative efforts between UAE healthcare professionals and academics and their international counterparts.”***

***Dr Abdullah Al-Khanbashi, Vice-Chancellor***

### **Vice Provost for Medical Sciences and Dean of Medicine**

Professor Mohamed Yousef Hasan Baniyas was appointed as Vice Provost for Health Sciences and Dean of Medicine in March 2010. Professor Mohamed is committed to better health in the UAE and to the advancement of the health sciences at UAEU and has shaped a stellar academic career after receiving his DPharm degree from Yarmouk University in Jordan, and his PhD in Pharmacology and Therapeutics from the University of Wales. His training includes residency and fellowships of the American College of Forensic Examiners and the American College of Clinical Pharmacology. He holds board certifications from the American Academy of Pain Management, the American Board of Forensic Examiners, the American Psychotherapy Association and the American Board of Applied Toxicology. Professor Mohamed served as WHO Advisor on drug safety and a member of the University Council.

### **UAE Global Health Research Institute**

With worldwide partnerships the UAEU is ideally placed to host the Global Health Research Institute, which will endeavour to answer the following two 21st Century global health challenges:

- How can we address the immediate health problems of the Nation and the region?
- What relevance does the UAE have for the rest of the Middle East and Asia?

The UAE Global Health Institute will focus on addressing immediate health problems for the Nation and the region. It will do this through developing key partnerships with the best scholars from around the world. Through this, the UAE will become the world's Global Health hub for the Middle East and Asia.

The primary, initial partnership will be the University of California system-wide Global Health Institute, which has become the global health research hub for the Americas. The UAEU will also network internationally with Yale, Bergen, Hong Kong and Kuala Lumpur.

The Institute will be effective from day one through a combination of partnership and collaboration with the best-fit groups from around the world. The best available talent will be recruited from within the UAE and from further afield. Capacity in the UAE will be built through education and training National undergraduate and graduate students.

The capabilities of the UAEU Institute for Integrated Information and Communications Technology will be leveraged, both for data management and for the creation of new technologies for diagnosis, decision-making and communications.

Five areas of primary focus for the Institute include:

- Epidemiologic capability
- Ethnographic capability
- Migrant health capability
- Epidemic disease and air transport capability
- Refugee health capability

#### **Sir Richard Feachem Joins Advisory Board for UAEU Global Health Institute**

Sir Richard Feachem, Professor of Global Health at both the University of California, San Francisco and the University of California, Berkeley, and Director of the Global Health Group at UCSF Global Health Sciences, has signed an agreement to work with the University over the next three years as it establishes the UAEU Global Health Institute.

*“It is an honour for me to play a role in the newly established UAE Global Health Institute Advisory Board. The Board will play an integral role in establishing and progressing the Institute, and drive forward health research in the UAE. Having participated in the UAE Global Health conference at UAEU at the beginning of the year, I have seen the commitment of the University and the Emirate's leadership to increase the quality and quantity of research in Abu Dhabi, as well as seeing first-hand how impressive the campus facilities are and the levels of investment that are being made to ensure success.”*

**Sir Richard Feachem**

#### **Research in Health**

The Faculty of Medicine & Health Sciences continues to contribute to research within the UAE, providing highly relevant national research, which includes studies in Diabetes and Cancer.

Diabetic studies include: cardiovascular diseases risk factors in UAE adolescents and young adults with type 1 and type 2 diabetes mellitus; investigation of inhibitors extracted from dates for key enzymes relevant to non-insulin-dependent diabetes mellitus; testing novel binders for the DNA-genome receptor of insulin; weight management related behaviors, attitude and perceptions; and examining the anti-diabetic protective effects of a selected herb.

Cancer research includes: the isolation and identification of the chemical components of some UAE plants and their use as potential anti cancer agent; anti cancer properties from the skins of frogs; pharmacological control of lung cancer; expression of a novel gene in pancreatic cancer; potential towards the development of novel gene-based therapeutics for cancer; anti-cancer activities of indigenous UAE herbs extracted by supercritical carbon dioxide; and mechanism of the anti-cancer activity of the clove extract.



## Goal 5 Creating a Physical Structure

The transformation plan identifies that it is essential to create the right physical environment to sustain the ongoing work and life of a scholarly community, of both faculty and students. An excellent beginning has been made with the current new campus. Additions and modifications are underway with the residential college system, the expansion of research throughout the university, graduate student housing, and the Global Institutes. The UAEU has created a comprehensive physical structural plan to support the Chancellor's vision of what this University will become, and will undertake needed modifications on the new campus to accommodate the medium-term needs of the transformation action items already underway.

### **Transition to the New Campus Facilities**

Phase 1 of the new campus project was completed, and over 2300 female students moved to the new campus housing facilities and the Campus Development Department (CDD) has worked with Faculties to implement the moving plans to the female campuses for Fall 2010. In addition, CDD is also preparing to move employees, equipment and documents to the new Crescent Building in the coming months.

### **Development of Residential College Model**

In order to create a different collegial experience, the first undergraduate student housing complex was changed and expanded to include a broader academic, social and mentorship emphasis following the Residential College model.

### **Technological Transformation**

The University Information Technology Services (UITS) Division provides Enterprise wide technology solutions to students, faculty and staff at UAEU. It was agreed that UITS would embark upon five critical projects. These Infrastructure initiatives would have direct impact upon the strategic goals of the University and its transformation into a leading Research intensive University. These projects included securing the University's electronic information and IT systems through secure wireless with Enterprise Active Directory Authentication, upgrading email system through implementation of Microsoft Exchange, offering 24/7 availability of data and telecommunications network availability of 99.0%, implementing and configuring intrusion detection, firewall, anti-spam and anti-virus systems, and the design, build, maintenance and enhancement of the technology infrastructure to enable world-class teaching, learning, research, and scholarship.

### **UAEU Supercomputer**

The UAEU has an impressive lineup of equipment and facilities for active research on different aspects of "HPGC", or "High Performance Grid/Cloud Computing".

The FIT inaugurated the HPGC Research Laboratory last year and it now hosts the operations of the UAEU Supercomputer, which is the largest and most significant computing unit in terms of raw power in the region, ranking as amongst the most powerful computers on the planet. The UAEU Supercomputer is capable of 8.32 Teraflops of computing power and 8.73 Terabytes of shared highly available storage. It would take 50 million people using calculators, for nearly 50 years to process what the UAEU HPGC Lab could achieve in a single day.



On the occasion of its inauguration, the HPGC Laboratory successfully ran its First International Summer School in HPGC, sponsored by local government institutions and industry. Sixteen local and international students from countries such as the UK and the USA joined the summer school this year.

### **Structural Plan for 2030**

The Structural Plan charts a way forward for the University's physical assets, to match both the University's programmatic development and the economic growth and success of the UAE. It was developed through a broad process of consultation with stakeholders ranging from students, staff and faculty to the Abu Dhabi Urban Planning Council and the City of Al Ain. It is a long range development plan, one which planning objectives support both the University's mission and vision and the strengths and aspirations of the UAE.

A concept phasing plan has been developed for campus build out over the next twenty years. The critical period in UAEU's growth will be the next five years. In this time the most critical spaces and programs that should be developed are the expansions to the health sciences, the establishment of a veterinary school, extensive university library/academic learning place, student union and the development of a campus identity that establishes a "sense of place" that is UAE University.

The 2030 Structural Plan responds to the anticipated changes in UAEU student enrollment, faculty and staff employment and affiliated activities on the campus as UAEU matures from a teaching university to a globally recognized first-tier research university. Growth or change in each of these populations is projected in order to meet the teaching, research and public service mission of the university through the target year of 2030.

The Structural Plan Committee identified five over-arching goals and planning principles that would guide the development of UAEU's Structural Plan.

1. Create a framework that will support the growth of academic and research programs
2. Define and strengthen the campus form
3. House students, faculty and staff
4. Integrate sustainable practices
5. Contribute to regional enhancements

Four Global Institutes and three disciplines for Research & Development opportunities have been identified as strong possibilities for UAEU. These areas of research provide tremendous opportunities for UAEU to take a leadership role in development of information and products both in the UAE and globally.





## Goal 6 Engaging External Partners and Stakeholders

The UAEU continues to enhance its visibility and recognition as a national and international resource providing influence and expertise in a range of areas related to education within the UAE.

### **K-12 Reform**

This last year has seen the UAEU contributing and exerting influence on school policy to improve primary and secondary education throughout the UAE. The UAEU has developed close working partnerships with the Abu Dhabi Education Council (ADEC), the various education zones and the education agencies throughout the seven Emirates.

### **UAEU-HCT Partnership**

As part of its role to influence and provide direct advice and support for the nation, the UAEU coordinated the cooperative development and implementation of the first phase of the UAEU-HCT Partnership for Achievement and Academic Success. This partnership allows UAEU applicants to study at their local HCT campus for foundation preparation to meet UAEU's admission standard for English language proficiency.

### **Conferences and Events**

In addition to the Global Health Conference, a number of other high profile conferences significant to the UAE were organised by the UAEU:

#### ***Fourth International Date Palm Conference***

Under the leadership of HH President Sheikh Khalifa Bin Zayed Al Nahayan, the UAEU Date Palm Research & Development Program continued its efforts to increase agricultural productivity and efficiency. These efforts are aimed at improving the Date Palm industry and at transforming the nature of the UAE desert itself. The Fourth International Date Palm Conference illustrates the special attention and priority awarded to this vital economic sector by His Highness. The conference was the fourth one in a series of international conferences organized by the UAEU during the last 11 years. Previous conferences were held in March 1998, March 2001 and February 2006.

Date palm scientists, researchers, specialists, and senior officials from around the world use the conference as a vehicle to exchange knowledge, expertise and experience. Official Ministers of Agriculture from GCC member states were invited to attend the conference in order to share knowledge and offer recommendations and insights.

#### ***Renewable Energy***

The International Conference on Renewable Energy: Generation and Applications sponsored by Abu Dhabi Water & Electricity Authority (ADWEA) featured keynote speakers on photovoltaic technology, passive architecture, and other relevant topics, and workshops on different renewable technologies.

#### **World Classes Practices in Management Education**

In cooperation with the Association to Advance Collegiate Schools of Business (AACSB) the UAEU organized an international conference in December 2009. The three-day conference featured eight plenary sessions covering World Class Practices in Management Education. Participants representing 20 nations were represented.

#### ***UAEU Annual Law Conference***

The UAEU in cooperation with Dubai Courts organized the 18th Annual conference entitled "Between and Construction between Traditional Legal Rules & Developed Legal Systems".

#### **Digital Ecosystems and Technologies Conference (IEEE DEST)**

The UAEU hosted this year's Digital Ecosystems and Technologies Conference (DEST'10). IEEE DEST 2010 is sponsored by IEEE Computer Society TCDP and IEEE Industrial Electronics Society (IEEE-IES), and the proceedings of the Conference are published by the IEEE Computer Society. The main conference theme is around strengthening ICT to support different digital ecosystems, especially the study of triangular relationship between industries, human endeavors and advanced ICT.

## Alumni

A major project with regards to alumni is underway and will be launched in the new academic year. A new alumni website is in testing and will be launched that provides for an alumni database, a dedicated email system and a range of news and events of particular interest to the over 50,000 alumni of the UAEU. A regular newsletter and contact with the alumni is envisaged that will allow the UAEU to gather support in the community and philanthropic contributions.

## MOUs

In recognition of the major contribution to the nation, a number of MOUs were signed with leading institutions, both locally and internationally. The UAEU signed an MOU with Biomin/Romer Labs to establish a Mycotoxin Reference Center that focuses on the importance of gaining knowledge about the prevalence of mycotoxin contaminations in the UAE and the region.

In a significant move that will see closer cooperation to increase the intellectual capital within UAE, as well as the exchange of ideas and sharing of knowledge between the nation's premier educational institution and a global leader in aerospace, defence and related services, the UAEU and EADS Defence & Security signed an MOU to increase cooperation in several areas of common interest.

An agreement was signed with Techiesoft for structural and engineering software that allows students to accurately design and test the structural integrity of different structures.



## Financial Statements

Below are the University's Statement of Revenues and Expenditures for the year ending 31 December 2009, and the Balance Sheet as at 31 December 2009. As a UAE government entity, the University does not capitalize nor account for any fixed assets; the Balance Sheet does not reflect equipment or buildings owned. The Balance Sheet is comprised primarily of cash on hand, accounts receivable, and accounts payable. The University continues to manage its funds prudently in the context of the global financial crisis.

Statement of Revenues and Expenditures for the Year Ended December 31, 2009		Balance Sheet as of December 31, 2009	
Revenues	Amount ( AED )	Assets	Amount ( AED )
Unrestricted - Federal	1,289,192,829.61	Cash	232,770,152.67
Restricted - Government and other	144,131,042.05	Accounts Receivable	75,094,064.28
Allotment	28,495,879.08	Previous year's Deficit	122,839,259.86
<b>Total Revenues</b>	<b>1,461,819,750.74</b>	<b>Total Assets</b>	<b>430,703,476.81</b>
Expenditures		Liabilities	
Unrestricted - Federal	1,289,915,258.65	Salaries Payable	3,505,452.60
Restricted - Government and other	101,633,330.57	Government Payable	5,307,337.11
Allotment	20,485,904.13	Retentions Payable	17,971,312.69
<b>Total Expenditures</b>	<b>1,412,034,493.35</b>	Commitments Payable	352,556,013.61
<b>Ending Fund Balance (Revenues - Expenditures)</b>		Other Accounts Payable	578,103.41
Unrestricted - Federal	277,570.96	<b>Total Liabilities</b>	<b>379,918,219.42</b>
Restricted - Government and other	42,497,711.48	Ending Fund Balance (Revenues - Expenditures)	<b>50,785,257.39</b>
Allotment	8,009,974.95		
<b>Total Ending Fund Balance (Revenues - Expenditures )</b>	<b>50,785,257.39</b>	<b>Liabilities &amp; Fund Balance</b>	<b>430,703,476.81</b>



**UAEU**

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United Arab Emirates University