

# A Decade of Achievement 1997-2007





GRADUATE

# **Catalog**

2007-2008

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His Highness Sheikh Dr. Sultan Bin Mohammed Al Qassimi

Supreme Council Member, Ruler of Sharjah Founder and President of American University of Sharjah

### Chancellor's Message

In academic year 2007–2008, American University of Sharjah celebrates the 10th anniversary of its service to the people of the United Arab Emirates and the Gulf region. With the support of the Founder, His Highness Sheikh Dr. Sultan Bin Mohammed Al Qassimi, Member of the Supreme Council and Ruler of Sharjah, and through dedication of faculty, staff and students, AUS has gained a reputation that is unsurpassed in the region.

A mature university serves many roles but all of them must be consistent with its primary mission of providing the best possible education to its students. AUS takes that primary mission seriously and strives to improve upon all aspects of its operations to meet that goal. Completion of a magnificent new library building is recent testament of our determination to provide the best possible learning environment to students, as is the construction, soon to begin, of a new building for the School of Business and Management. Constant attention to curricular modifications to meet changing circumstances is a less obvious example of the same commitment.

This catalog is intended to provide students with a listing of available courses, programs, regulations and services that they may expect at AUS. Most of the information contained in the catalog is also available on our website, www.aus.edu, which in some instances provides a more recent summation than is possible in printed form. I encourage you to review the materials in this catalog and to visit our website as well. Additionally, a visit to our magnificent campus will help you gain an even better appreciation for the unique environment at American University of Sharjah.



Winfred L. Thompson

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Dr. Moza Al Shehhi, Student Affairs

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Ms. Lorin Ritchie, Academic Administration and Operations

Mr. Basheer Daoud, Controller and Director of Finance

Mr. Mark Kirchner, Facilities

Dr. Ahmad Al-Issa, Faculty Development Center

Mr. Kevin Mitchell, Graduate and Undergraduate Programs

Ms. Paula Doyle, Human Resources

Mr. Ashutosh Sheth, Information Technology

Ms. Jeanine Romano, Institutional Research

Mr. Ronald Williams, Internal Audit

Mr. Nazzal Nazzal, Media and Printing

Mr. Richard Mundy, Operations

Mr. Saeed Al-Shamsi, Public Relations

Mr. Munketh Taha, Student Activities

Dr. Pia Anderson, Student Advising and Counseling

Dr. Lubna Yousif, MD, University Health Center

The academic requirements of American University of Sharjah are under continual examination and revision for improvement. This catalog is not a contract. The student assumes full responsibility for compliance with the most up-to-date academic requirements.

### Academic Calendar 2007–2008

	***
Fall Semester	2007
August 1	Last day for application for admission/assistantships for new students for the fall semester
August 19–30	Registration period
August 25	Graduate students' orientation
August 26 /September 2	First week of classes, first day to add and/or drop courses
September 9	Late payment fee applies
September 9	Last day to add and/or drop courses
October 11	Classes end for Eid Al Fitr holiday 10 p.m.*
October 21	Classes resume at 8 a.m.
November 15	Last day to withdraw from a course without academic penalty
_	Deadline for Application for Graduation
<u> </u>	Last day to move from thesis to project and vice versa
November 29	Classes end at 10 p.m. for National Day holiday
December 4	Classes resume at 8 a.m.
December 6	Deadline for thesis or final project defense in order to qualify for fall commencement ceremony
December 13	Deadline for submitting thesis to the library in order to receive your diploma at the fall commencement ceremony
December 18-25	Eid Al Adha and Christmas holiday
January 1	New Year holiday
January 3	Fall Commencement
<b>January</b> 10	Al Hijra holiday

Spring	2008
January 2	Last day for application for admission/assistantships for new students for the spring semester
January 20–31	Registration period
January 26	Graduate students' orientation to be held by each program
January 27/February 3	First week of classes, first day to add and/or drop courses
February 10	Late payment fee applies
_	Last day to add and/or drop courses
March 13	Classes end for Spring Break 10 p.m.
March 23	Classes resume 8 a.m.
April 17	Last day to withdraw from classes without academic penalty  Deadline for Application for Graduation
_	Last day to move from thesis to project and vice versa
April 30	Application deadline for graduate assistantship application for continuing students
May 15	Deadline for thesis defense in order to qualify for spring commencement ceremony; application deadline for starting graduate programs in the summer session Deadline for submitting thesis to the library in order to receive your diploma at the spring commencement ceremony
	Deadline for submitting thesis to the horary in order to receive your diploma at the spring commencement ceremony
June 5	Spring Commencement

Summer	2008
<b>June</b> 8-9	Summer school registration
June 10-12	Late registration and add/drop period

Fall	2008
August 1	Last day for application for admission/assistantships for new students for the fall semester

<sup>\*</sup>Islamic holidays are determined after sighting the moon. Thus, actual dates may not coincide with the dates in this calendar. In the event of loss of teaching days due to unscheduled closing, the semester(s) may be extended

	University Terminology
Academic Status	Determined by regulations governing good standing, probation and dismissal
Academic Year	The period of time beginning with the first day of class of a fall semester up to, but exclusive of, the first day of class of the fall semester of the following year
Add and Drop	A period of time beginning the first day of classes when students can adjust schedules by dropping or adding courses or changing sections of a course
Admission	Formal acceptance as a student
Advisor	Faculty member/administrator assigned to counsel students on academic matters. The student is called the advisor's "advisee."
Alumni	Those who have graduated from American University of Sharjah
Audit, Course	Permission to attend and participate in a course without benefit of a grade or credit
Audit, Degree	Methodical examination and reviewing of students' compliance with their degree requirements
Bachelor's Degree	A four-year minimum undergraduate degree
Calendar, Academic	Annual listing of all official dates and deadlines for the academic year
Catalog Year	A student's catalog year denotes which specific set of graduation requirements will apply to that student. Unless altered, a student's catalog year is the year when the student first matriculated to study at AUS.
Concentration	Subspecialization within a major that allows a student to focus on a particular aspect of the major field of study
Co-requisite	A course required to be taken simultaneously with another course
Course	A unit of study that may utilize lecture, discussion, laboratory, recitation, seminar, workshop, studio, independent study, internship or other similar teaching formats to

facilitate learning for a student

recitation work per week for one regular semester

An academic unit of a college or school

unsatisfactory academic achievement

Charges for services other than course tuition

Grade point average of the grades of AUS courses

of the Registrar

3.00 or higher

Total credits for which a student is registered in a given semester or term

A structured set of learning objectives built in a specified set of courses

A course selected at a student's discretion with the approval of the advisor

The equivalent of a one-hour lecture, two to three hours of laboratory, or three hours of

The involuntary separation of a student from the university for unacceptable conduct or

Records directly related to the education of a student that are maintained by the Office

Enrichment and leadership development activities that are part of student life but are

not part of the academic program, such as student activities, athletics and music

A graduate student who is registered for nine or more credits in a given semester

The academic standing of a graduate student who has achieved a cumulative GPA of

Course Load

Curriculum

Department

**Educational Records** 

**Elective Course** 

Extracurricular

**Full-Time Student** 

Good Standing, Academic

Fee

**GPA** 

Dismissal

Credit

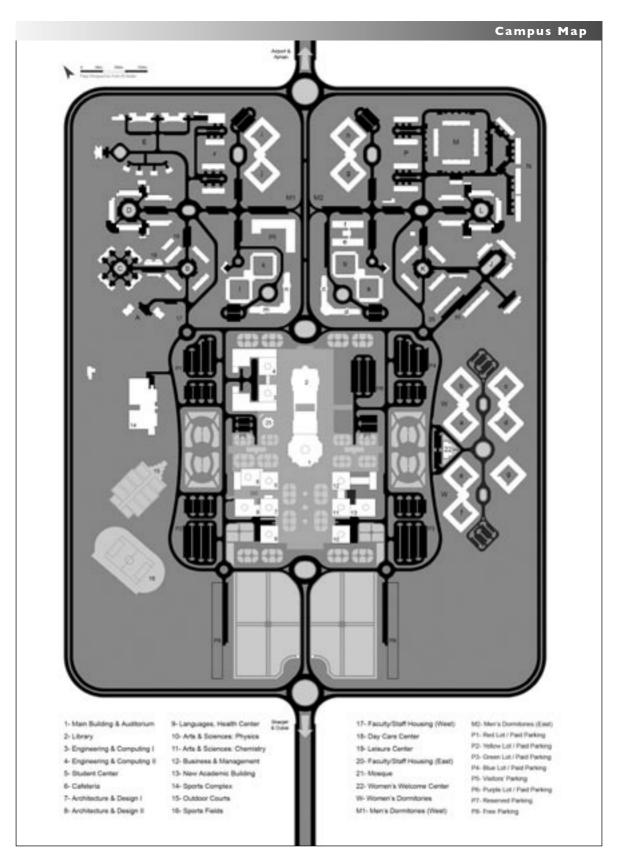
Grade Points	Numerical value associated with each grade	
Graduate Student	A student who is working toward completion of a master's degree	
Graduate Student	University student identification card providing and controlling access to university	
ID Card	facilities and services	
Independent Study	Theoretical or practical research or course work beyond the courses offered in a specific semester conducted by a student under the supervision of a designated faculty member	
Major	A student's main field of study	
Master's Degree	A post-bachelor's graduate degree	
Matriculation	Enrollment as a degree-seeking student	
Non-degree Student	Designation used for students who are enrolled in courses but are not pursuing a degree program	
Petition	A written request seeking a waiver of or an exception to a university regulation, policy or deadline	
Prerequisite	A course required to be completed before a certain course may be taken	
Prerequisite/Concurrent	A course that must be completed either along with or before enrolling in a certain course	
Probation	A warning status resulting from the student's unsatisfactory conduct	
Probation, Academic	Status of any graduate student who has less than a 3.00 cumulative GPA	
Registration	The process of enrolling in classes	
Regular Student	A degree-seeking student	
Required Courses	Courses other than free electives prescribed by the school or college necessary for the completion of a particular degree program	
Residence	A student's tenure within the university inclusive of all interruptions of study	
Schedule, Class	A list of courses offered during a semester that specifies the days, hours, locations of classes and the names of the instructors	
Schedule, Student	A listing of the courses a student is taking in a given semester that specifies the days, hours, locations of classes and the names of the instructors	
Semester	Either of the two 18-week periods of instruction and exams into which the academic year is divided	
Term	A period of instruction and exams that is shorter than a semester	
Transcript	A student's historical academic record	
Transfer Credit	Credit from course work completed at another institution that is accepted at AUS and which may or may not be applicable toward a specific AUS degree	
Tuition	The fees charged for courses each semester or term	
Visiting Student	A student of another accredited institution who receives permission to register (for up to two semesters) as a non-degree seeking student to earn credit to transfer back to his or her home institution	
	The act of officially leaving the university for reasons other than graduation. Students	

## Directory

UAE Code 971, Sharjah Code 6

www.aus.edu

Department	Telephone	Fax	E-mail
Academic Affairs	515 2020	515 2150	vcaa@aus.edu
Admissions	515 1000	558 5018	admission@aus.edu
Alumni Affairs	515 2000	515 2125	alumni@aus.edu
Architecture and Design	515 2825	515 2800	docad@aus.edu
Arts and Sciences	515 2412	558 5067	deanofcas@aus.edu
Business and Management	515 2310	558 5065	deanofsbm@aus.edu
Career Advising and Placement Services	515 2036	515 2065	caps@aus.edu
Chancellor	515 2205	558 5858	chancellors_office@aus.edu
Engineering	515 2948	515 2979	dosoe@aus.edu
Finance	515 2185	515 2190	finance@aus.edu
Finance and Administration	515 2192	515 2130	vcfa@aus.edu
Financial Aid and Scholarships	515 2005/60/55	515 2040	scholarship@aus.edu
General Information	558 5555	558 5858	info@aus.edu
Graduate Studies	515 2208	515 2150	gradstudies@aus.edu
Health Center	515 2699	515 2690	clinic@aus.edu
Human Resources	515 2228	515 2280	hr@aus.edu
Information Technology	515 2119	515 2120	it@aus.edu
Intensive English Program	515 2654	515 2638	iep-office@aus.edu
International Student Exchange Program	515 2001	515 2002	isep@aus.edu
Learning and Counseling Services	515 2790	515 2711	aalghourani@aus.edu
Library	515 2252	558 5008	auslibrary@aus.edu
Operations	515 2299	558 5009	operations@aus.edu
Public Affairs	515 2207	515 2200	public_affairs@aus.edu
Registrar	515 2031	515 2040	registration@aus.edu
Research and Grants	515 2200	515 2150	research@aus.edu
Residential Halls	515 2244	515 2294	res-halls@aus.edu
Student Accounts	515 2233/82	515 2190	studentaccounts@aus.edu
Student Affairs	515 2166	558 5024	studentaffairs@aus.edu
Emergency Numbers			
Maintenance Emergency	515 2100		
Medical Hotline (24 hours)	050 635 7651		
Security	515 2222		





## Table of Contents

Board of Trustees and Emeriti	vi
University Administrators	vii
Academic Calendar	ix
University Terminology	х
Directory	xii
Campus Map	xiii
The University	2
Historical Preamble	2
Mission Statement	2
Overview	4
Introduction	4
The Campus Complex	4
On-Campus Services	5
University Resources	7
Graduate Studies	12
Graduate Admission Policies and Procedures	12
Registration	14
Academic Regulations and Policies  Degree Requirements	16
Graduation Procedures	17 18
Graduation Procedures	10
Graduate Degree Programs	19
College of Arts and Sciences	19
Master of Arts in Teaching English to Speackers of Other Languages	19
Master of Arts in English/Arabic/English Translation and Interperting	20
College of Engineering	21
Master of Science in Engineering Systems Management	21
Master of Science in Mechatronics Engineering	23
School of Architecture and Design	24
Master of Urban Planning	24
School of Business and Management	25
Master of Business Administration	25
Master of Public Administration	27
Gulf Executive of Public Administration	29
Course Descriptions	32
Graduate Student Handbook	48
1.0 Office of Graduate Programs	48
2.0 Graduate Program Council and the Graduate Curriculum Committee	48
3.0 Master's Thesis at AUS	48
3.1 Selecting the Thesis Research Topic	48
3.2 Preparing and Submitting Your Thesis Proposal	49
3.3 Conducting Thesis Research and Writing the Thesis	49
3.4 Conducting the Oral Thesis Defense	49
3.5 Guide for Preparing Your Thesis	49
4.0 Graduate Student Employment Opportunities	49
4.1 Graduate Assistantships:	
Policies, Selection Requirements and Application Procedures	49
4.2 Graduate Student Work-Study Opportunities:	
Policies, Selection Requirements and Application Procedures	51
5.0 Office of Student Affairs	51
Full-Time Faculty	53













### The University

#### Historical Preamble

American University of Sharjah (AUS) was founded in 1997 by His Highness Sheikh Dr. Sultan Bin Mohammed Al Qassimi, Member of the Supreme Council of the United Arab Emirates and Ruler of Sharjah. Sheikh Sultan articulated his vision of a distinctive institution against the backdrop of Islamic history and in the context of the aspirations and needs of contemporary society in the UAE and the Gulf region.

AUS was mandated to:

- reinforce the efforts of the leaders of the UAE "to ensure that science and education regain their rightful place in the building and advancement of our society and shaping the lives of our children"
- join other institutions of higher education in seeking "to reshape fundamentally the minds of our youth to enable them to address the challenges of life using the scientific method"

- become a "center of research for educational development and the solution of social problems"
- become "organically linked" to the economic, cultural, scientific and industrial sectors of society in "productive cooperation"
- exercise the "independence and objectivity in teaching and research" necessary for the achievement of these goals

#### Mission Statement

The mission of American University of Sharjah (AUS) is to achieve and maintain preeminence as a coeducational institution based upon American models and grounded in the history and culture of the Arab Gulf region.

AUS is a not-for-profit university that:

 admits students on the basis of their academic qualifications regardless of race, color, gender, religion, disabilities,

- age or national origin
- employs faculty and offers academic programs that are equivalent to those at leading institutions of higher education in the United States
- integrates liberal studies, professional education, and co-curricular and extracurricular learning experiences to provide its graduates both breadth and depth of knowledge
- values strong relationships with its alumni, the public, the media and appropriate governmental entities
- encourages and supports research and scholarship by its faculty and students and serves as a resource for the community
- provides students with a rich and varied campus life that fosters personal growth, maturity and a sense of social responsibility
- operates effectively and efficiently, develops and uses its fiscal and human resources wisely, and encourages wide participation in its governance





### Overview

#### Introduction

American University of Shariah (AUS) was founded in 1997 by His Highness Sheikh Dr. Sultan Bin Mohammed Al Oassimi, Member of the Supreme Council of the United Arab Emirates and Ruler of Sharjah, who envisioned AUS as a leading educational institution in the Gulf region. American University of Sharjah is an independent, not-for-profit, coeducational institution. Although consciously based upon American institutions of higher education, AUS is expected also to be thoroughly grounded in Arab culture and to be part of a larger process of the revitalization of intellectual life in the Middle East.

American University of Sharjah has succeeded in building a multicultural education environment that brings together people from diverse nations and backgrounds. AUS strives to instill in its students the importance of appreciating and understanding diversity, global issues and their own roles in society.

AUS is emerging as a leading comprehensive coeducational university in the Gulf, serving students from the Gulf region and around the world. AUS students are introduced to a culture of high aspiration and achievement to aid them in leading productive and meaningful lives. AUS is also dedicated to the preservation of the physical environment, free from pollution and neglect. This sense of environmental responsibility is passed on to AUS graduates in order to create ecologically aware citizens.

In keeping with its mission, AUS offers students an education that will enable them to comprehend the dynamism and complexity of contemporary global processes. Through the integration of liberal studies and professional education, students are given both breadth of knowledge and specialization in their chosen fields. Education at AUS runs the gamut from art, poetry and

religions from past civilizations to the latest skills and technologies of today's information age. These are all presented to students in order to produce future leaders with a firm understanding of how society has reached its present state. The combination of traditional and innovative teaching methods provides an educational environment in which students can realize their individual potential and pursue their goals.

AUS is well qualified to meet the challenges inherent in preparing its students for life in the age of electronic communication, global economies, social pluralism and political interdependence.

The university offers 22 bachelor's degrees, 39 minors and eight master's degrees through the College of Arts and Sciences, College of Engineering, School of Architecture and Design, and School of Business and Management.

While Arabic is the official language of the United Arab Emirates, the language of instruction at AUS is English. All classes and administrative functions are conducted in English.

Islam is the official religion of the state, and Arab Islamic culture predominates in the UAE. The nation is also distinguished by its tolerance toward its large expatriate communities, which comprise diverse nationalities, cultures and religious beliefs. Following in this spirit of understanding and acceptance of all peoples, AUS admits students solely on the basis of their academic qualifications regardless of race, color, gender, religion, disabilities, age or national origin. The university's mission is to create a multicultural, international academic community in order to prepare its students to become lifelong learners equipped to adapt to the needs of our changing world.

AUS was established as an "American" university not only in its formal academic and organizational characteristics but also in the recognition that the total culture

and philosophy of the educational community is as significant as the formal program of studies. Students learn the lessons of the classroom and the lessons of life in a coeducational, multicultural and multinational environment. From its inception, AUS was envisioned as a place that would "feel" like an American campus.

#### Accreditation and Licensure

American University of Sharjah is licensed in the United States by the Department of Education of the State of Delaware. It is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools (3624 Market Street, Philadelphia, PA 19104 USA, 215 662 5606). AUS is also licensed by the UAE Ministry of Higher Education and Scientific Research, and all programs are recognized by the ministry and have been awarded either full or initial accreditation status. All bachelor's degree programs in the College of Engineering are accredited by the Engineering Accreditation Commission of ABET, Inc. (111 Market Place, Suite 1050, Baltimore, MD 21202 USA, 410 347 7700).

### The Campus Complex

American University of Sharjah is situated in University City, which is located 16 kilometers (10 miles) from the center of Sharjah. The distinctive architecture of the domes and arches of the academic and administrative buildings is accentuated with graceful Arab motifs.

The center of the AUS campus comprises 11 academic buildings. The academic buildings house classrooms and lecture halls of various sizes; a state-of-the-art library; science, language, computer and engineering laboratories; workshops, digital studios and dark rooms; and offices for faculty, academic administrators and support staff.

The campus includes 12 student residential halls (eight for men and four for women) as well as a large Sports Complex and a Student Center. Approximately 50 percent of the student body lives in campus housing. Unlike most American campuses, faculty members and their families are required to live on campus. Thus, there is a large and continuous faculty presence at the heart of the campus, providing students with a learning and living environment that allows for on-going interaction with faculty members and their families.

#### The City of Sharjah

The location of the university enhances its mission. Sharjah is situated strategically between the Far East and the West, between Africa and Asia. Straddling the breadth of the UAE, the emirate of Sharjah has beautiful beaches on the shores of both the Arabian Gulf and the Gulf of Oman. Its landscape varies from level plains to rolling sand dunes and mountain ranges.

Today, as in ancient times, Sharjah is a global trade center. Modern Sharjah is a city of learning and the arts, as confirmed by its 1998 UNESCO designation as the Cultural Capital of the Arab World. This context facilitates the university's intention to be an academic center at the intersection of ancient cultural traditions and contemporary intellectual currents. The city of Sharjah boasts over 27 museums with splendid collections of artifacts and art objects as well as exhibits on science and natural history. These institutions are sites for field trips, research and possible internships. Sharjah hosts many cultural festivals, programs, educational conferences, fairs and economic expositions. including the annual book fair and the Sharjah International Biennial art exhibition. These resources permit AUS to broaden students' formal education in a way not possible elsewhere in the region.

### **On-Campus Services**

#### Athletics and Recreation

The Sports Complex meets the needs of nearly all athletic interests. The indoor facilities include an Olympic-size swimming pool, fitness centers and courts for basketball, volleyball, tennis and squash. A soccer field, a cricket practice ground, and basketball, volleyball and tennis courts are located outside. The Student Center features a billiard room and an eight-lane bowling alley.

The university's intramural sports program complements students' academic, social and cultural education. Involvement in intramural sports activities allows students to develop new friendships and enjoy the benefits of exercise.

#### **Banking Services**

Located on the ground floor of the Main Building, the Sharjah Islamic Bank offers banking services such as checking and saving accounts, ATM transactions and transfer of funds. ATMs are located at the bank, the Student Center and the Women's Welcome Center.

#### **Bookstore**

Located on the ground floor of the Library Building, the bookstore sells all required textbooks, other books, art supplies, stationery, notebooks and many items essential for students.

#### Campus Cash Program

Students can use their ID cards for purchases at various AUS outlets through the Campus Cash program at no additional charge. To participate, a student must deposit an initial sum with the university cashier, who will credit that amount to the student's Campus Cash account. The Campus Cash program is very secure, and students may check their balances online. Students can use their ID cards

at most AUS outlets. For program details, visit the Campus Cash section of the university website.

#### Copy Center

The AUS Copy Center is located on the ground floor of the Main Building. It serves faculty, staff and students by providing a variety of quality and reasonably priced document reproduction services. The center also offers professional binding, lamination, stapling and other related services

#### **Dining Services**

Many international franchise restaurants, coffee shops and snack services are located in the Student Center and Library Building. Most of these outlets offer campus delivery service.

Most residential halls are equipped with kitchenettes, which include refrigerators and hot plates, in addition to vending machines containing snacks and beverages.

#### Gifts and Memorabilia

Located on the ground floor of the Library Building adjacent to the bookstore, the AUS Gift Shop offers a variety of merchandise, memorabilia and gift items customized for AUS.

#### Information Technology

The Information Technology (IT) Department serves the computer-related administrative, instructional, technical and research needs of students, faculty and staff. It also acts as the university's gateway to the Internet for academic purposes. Services provided include e-mail accounts and passwords, online courseware (Blackboard), wireless and local area networks and telephone services. Many services are monitored 24 hours a day, seven days a week to maintain availability for on-campus users. The university's

computer network uses fiber-optic cables that interconnect the entire campus, including the residential halls and faculty housing. Additional information can be found in the IT section of the university website.

#### International Students Office

Part of the Public Relations
Department, the International Students
Office provides essential support to
international students before and after
their arrival. Among its many tasks is
to help international students comply
with immigration rules and regulations
during their time at the university. This
division aids all international students
with visa processing, including
new students, transfer students and
SIEP students. Furthermore, the
International Students Office provides
passport custody and medical test
assistance.

#### Lost and Found

The lost and found is located at the Student Center reception desk. Items unclaimed after one semester will be given to charitable organizations, sold or destroyed.

#### Media and Printing Department

The Media and Printing Department is the AUS communications team. It promotes the university's visibility by cultivating relationships with the news media, creating publications, and developing and implementing advertising campaigns. This department generates media coverage through press conferences, interviews and press releases. Additionally, the department writes, designs and produces Campus Report, which is published for the campus community, and AUS News, which is distributed on and off campus. Updates to the university's website are coordinated between the Media and Printing and Information Technology departments.

#### Mini-Mart

The Leopard Mini-Mart provides a large variety of grocery items, fresh fruits and vegetables, and other household items. One outlet is located in the Student Center; a second outlet is located in the Women's Welcome Center.

#### Parking and Transportation

Parking lots, free and paid, are provided for faculty, staff, students and visitors. Vehicles must be registered with the Public Relations Department, and faculty, staff and students must display a valid AUS parking sticker on the windshield. These permits are issued once the vehicle is registered. Parking regulations are posted on the Security Division's portion of the AUS website.

AUS also offers a bus shuttle service between the student residential halls and other areas of campus. Students who wish to commute off campus may contact Transportation Services, which can provide transportation to the cities of Sharjah, Dubai, Abu Dhabi and Al Ain. For more information on all routes and schedules, contact Transportation Services at 515 2171 or visit the university website. Transportation Services also provides information on local taxi and rental car services.

#### Personal Services

A beauty salon is located in the Women's Welcome Center, and a barbershop is located in the Student Center. Regular and dry-clean laundry services are available on the west and east sides of campus near the faculty housing.

#### **Pharmacy**

Located in the Student Center, the pharmacy is part of the health coverage program and offers a full range of medication and various health, hygiene and cosmetic products.

#### Post Office and Mail

AUS provides a full-service post office on the ground floor of the Main Building. Mail is distributed daily to all university offices by the University Post Office. It also maintains individual post office boxes for all resident students. All mail intended for university offices and for those residing on campus should be addressed to:

American University of Sharjah P.O. Box 26666 Sharjah, UAE

#### Public Relations Department

The Public Relations Department ensures a good working relationship between the university and the local public and private sectors. It handles all official government documents and transactions for students, faculty and staff, including the processing of visas and residence permits, driving licenses, car registration, traffic violations and accidents. It also provides official letters that might be required by various government and/or private organizations. This department also issues AUS Identity Cards (IDs) and car stickers. Students must carry their IDs with them at all times and have them available upon request. ID cards must be validated by the Public Relations Department every semester (including summer session) to avoid charges.

#### Safety

The Safety Enforcement Division, part of the Public Relations Department, is located on the mezzanine floor of the Main Building. This division provides information on occupational safety and health hazards, and promotes a safe and healthy environment on campus.

#### Security

The Security Division is the

recognized law enforcement agent on campus. It monitors security on the entire campus, including residential halls and all university-owned buildings, and works to ensure that UAE laws and AUS regulations are implemented. If a violation occurs, the security officers have the right to withdraw any ID.

This division oversees the campus traffic and parking system and is authorized to enforce all related regulations. It also provides security personnel 24 hours a day on university premises, including the residential areas, and for campus events when requested.

#### Travel Office

The Travel Office, located in the Student Center, offers efficient and cost-effective services designed to assist all AUS students, faculty and staff. The office handles all travel arrangements, negotiates the most favorable rates and provides information on special offers.

#### University Health Center

The University Health Center (UHC) provides primary health care to all AUS students, and faculty and staff members and their dependents. The center is open Sunday—Thursday from 8:30 a.m. to 4:30 p.m. and provides 24-hour accident and emergency care as well. Depending on the severity of the illness, patients are referred to hospitals for further treatment. Great emphasis is placed on making the campus a healthy and safe place to study, work and live.

The UHC is staffed with a highly qualified medical team, which includes three general practitioners, a psychologist, a nutritionist and four registered nurses. The UHC is equipped with an ECG machine to monitor heart ailments, nebulizers for respiratory problems, a respiratory function test (spirometer), glucometers to check blood sugar levels, and an observation room (day care) to closely monitor patients.

#### **Health Education Programs**

As part of an educational institution, the UHC plays an active role in educating the university community and promotes on-campus health and wellness activities throughout the academic year. UHC programs include lectures and awareness campaigns on health-related issues such as first-aid training and CPR courses, substance abuse, mental health and healthy eating.

#### **Health Insurance Plans for Students**

As part of the registration procedures, every student must enroll in one of two health insurance plans. Plan I is compulsory for AUS-sponsored students but optional for others who are officially enrolled in health insurance plans with their families. Plan II is compulsory for all students who are not enrolled in Plan I. Visit the University Health Center's section on the AUS website for more information on the health insurance plans.

### **University Resources**

#### Architecture and Design Facilities

The school provides for the use of both Macintosh and Intel-based platforms. All students have 1:1 access to the 100 Mbs Ethernet. Dedicated ancillary spaces, which are shared by all curricula, include digital classrooms and closed networked studios, a highend Macintosh lab, an Intel-based lab, input/output labs, a printmaking shop, lighting and photography labs, a dedicated student wood and metal shop, the Visual Resource Center, the Technical Equipment Center, a 3-D lab, the Material Resource Room, an exhibition gallery and dedicated critique rooms. Multimedia, video and sound equipment are featured in the Advanced Digital Laboratory, which includes sound editing booths.

#### **AUS Writing Center**

The AUS Writing Center, located on the first floor of the Library Building, is dedicated to helping students become independent, confident writers through an interactive approach to writing. Available to all AUS students, the Writing Center offers one-on-one writing conferences by appointment or on a drop-in basis. During these conferences, students and consultants work together on various aspects of writing: thesis development, organization, outlining, paragraph development, vocabulary, sentence structure and mechanics. Students can visit the Writing Center to work on their drafts, to do research or to work with a consultant on particular aspects of their writing. The Writing Center also offers workshops on a variety of writing topics throughout the academic vear.

## Career Advising and Placement Services (CAPS)

Located on the mezzanine floor of the Main Building, Career Advising and Placement Services (CAPS) offers students and alumni comprehensive career services to enable them to make good decisions about their future. CAPS works closely with industry in Sharjah and the other emirates in order to promote interaction between potential employers and AUS students and alumni. CAPS organizes corporate briefings, employer receptions and the annual Career Fair. It also provides information on full-time and parttime job opportunities, internships and summer employment. CAPS staff members help students prepare for the world of work through career development workshops, one-to-one interviews, drop-in sessions, career assessments and other activities. Advice on working abroad is also available. CAPS has a career resource library and is constantly updating its database of employers in the UAE and Middle East.

#### Computer Learning Resources

All classrooms are networked and most are equipped with data projectors and other technology that enable faculty members and students to enhance learning with digital and online content. Wireless network access is available in all academic areas of the campus, and its capacity is being increased in selected locations to support wireless laptops.

AUS departments and programs offer a range of specialized computer laboratories with software to support student work. Additionally, the library features an information commons with an expanded range of computers, software and related technology along with support for students' research and other academic work.

## Engineering and Computing Laboratories

The College of Engineering has approximately 30 laboratories and workshops. All equipment and instruments are accessible to and extensively used by the students. Laboratory summaries are presented below by department, and may be reviewed in detail on each department's website.

Chemical engineering has unit operation, software, environmental, petroleum, water, materials, fluid flow and heat transfer laboratories.

Civil engineering laboratories are designed for conducting standard construction materials, soil, rocks, water and environmental tests.

Computer engineering has generalpurpose programming, digital systems, microprocessor, very large scale integration (VLSI), embedded systems, industrial computer applications, high-performance computer cluster, computer network, software engineering and database laboratories.

Computer science has one dedicated computer lab as well as a senior project lab. In addition, the computer engineering digital systems lab is used by computer science students for their digital systems laboratory course component.

Electrical engineering laboratories focus on electronics, electric power, control, measurements, machines, communications and signal processing, nondestructive testing and medical electronics.

Mechanical engineering has laboratories for measurements and control, engine testing, advanced manufacturing, fluid mechanics, materials testing, mechatronics, vibrations, computer-aided engineering, refrigeration and airconditioning, thermodynamics and solar energy.

The various departments share six computer labs with more than 180 stations. All labs have dedicated lab instructors and engineers. Additionally, all engineering facilities offer wireless connectivity.

#### Library

The AUS Library provides a wide range of resources and services to meet the specialized needs of graduate students. The library's growing collection of 100,000 items includes reference materials, books, DVDs, and magazines and scholarly journals. In addition to its print collections, the library provides access to 30,000 e-books, thousands of electronic journals and 45 online databases. Through the library's website, AUS users can search the online catalog, access databases, read e-books and full-text journal articles, and find other digital resources whether on or off campus. The website also provides instructional aids such as subject guides and tutorials to help students use the library more effectively. Library facilities include a technology-intensive Information Commons, group study rooms, media viewing rooms, and an abundance of reading and study areas. For students who need a silent study environment, the library offers three "No Talking Zones" in which talking, whispering and mobiles are prohibited. Working with professors, AUS librarians offer hands-on workshops on how to do library research, how to conduct a literature review, evaluating sources and websites, and using both print and electronic tools more

effectively. Graduate students can request books or journal articles not available in the library through our interlibrary loan service. For more detailed information, please see the library's website, http://library.aus.edu.

#### Office of Alumni Affairs

The Office of Alumni Affairs assists alumni, through the AUS Alumni Association, in organizing events, facilitating contact among graduates and maintaining contact between alumni and the university. The Office of Alumni Affairs also oversees worldwide chapters of the AUS Alumni Association and, in conjunction with the association, publishes the quarterly magazine AUS Connect. The office further aims to establish endowments and scholarships to support the academic endeavors of AUS students and faculty through named scholarships. For more information, visit www.aus.edu/upaa/ alumni/.

#### Research and Grants

AUS supports and promotes the research and consulting activities of its faculty members. In addition, AUS offers its students opportunities to work on faculty research projects, to present papers with faculty at international conferences and to assist faculty in developing research grants.

AUS upholds its ethical and legal responsibility to administratively review all proposed research projects involving humans or animals as participants to ensure compliance with internationally recognized principles and regulations governing the protection of research participants. All research studies at AUS involving the participation of humans must be submitted to and approved by the AUS Institutional Review Board (IRB) before any study is undertaken; research involving animals must be approved by the Animal Care Committee.

For further information on the

university's research and grant opportunities, please visit the AUS website.

#### Research Centers

AUS has established a number of research centers as part of its commitment to research and community outreach.

#### **Earthquake Observatory**

The AUS Earthquake Observatory uses state-of-the art equipment and software to record and analyze the region's earthquake activity. The Earthquake Observatory also provides expert opinions on earthquake hazard and related risk in the UAE and the Gulf region: assessment of seismic hazards at construction sites and petrochemical and industrial facilities; assessment of seismic risk of existing structures and recommendations for strengthening and retrofitting; analysis and design of earthquake-resistant structures; evaluation of local site effects; preparation of macrohazard and microhazard zonation maps: evaluation of dynamic soil properties; training workshops for engineers on the analysis and design of structures for earthquake loading; and expertise on the development of earthquakeresistant design codes.

#### **Mechatronics Center**

The Mechatronics Center leads research and development in advanced engineering systems and high-tech technology transfer in the region. It promotes multidisciplinary research activities among faculty members and graduate students at AUS, and between AUS and universities in the United States, Europe and Japan. It also cooperates with industry and government agencies where extensive integration of instrumentation, control systems, electronics, intelligent software and computers is required. Areas of expertise within the center include modern industrial installations and systems, computer integrated manufacturing systems, maintenance diagnosis and troubleshooting, microelectro- mechanical systems, vehicle manufacture and design, robotics, electrical control and drives, and

automated production systems.

#### **Institute of Materials Systems**

The Institute of Materials Systems collaborates with governmental and private sectors in areas of materials research and applications. focusing on quality control. performance, development and use of standard procedures, and quality assurance materials used in the region. Objectives of the institute are to conduct scientific research focused on materials properties and applications in harsh environments: assist governmental departments in establishing local and regional codes of practice; provide independent technical evaluation and consultation services on materials-related issues: enhance education through seminars, conferences and short courses: and establish collaboration with similar centers of excellence worldwide.

### Institute of Urban and Regional Planning and Design

The Institute of Urban and Regional Planning and Design advances urban planning as it relates to the local culture and identity of the UAE and the Arab Gulf region, and promotes sustainability as integral to all activities pertinent to urban planning and urban design. The institute's objectives are to advance production and accumulation of knowledge in urban and regional planning and urban design; develop and offer educational and training opportunities in urban and regional planning and urban design; collaborate with local governmental, not-for-profit, non-governmental and private agencies concerned with urban planning and development to advance quality of practice and research; advance public discourse on urban planning through public forums (e.g., seminars, conferences, symposia); and increase public awareness in urban planning and urban design.

#### Science Laboratories

The science programs benefit from up-to-date laboratories and equipment. Chemistry laboratories are equipped with standard chemical instrumentation, including balances, centrifuges, pH-meters, spectrophotometers, a rapid kinetic apparatus, and electrochemical and chromatographic equipment. The environmental sciences and analytic chemistry laboratories are equipped with the latest sampling and analytical devices, including AA, GC-MS, ICP, FTIR and HPLC equipment. The physics laboratories are supplied with up-to-date standard equipment, including computer interfaces, motion sensors, current sensors, voltage sensors, magnetic field sensors, linear air tracks, photogates, smart timers, projectile launchers, ballistic pendulums, rotational systems. digitometer, electric field mappers, current balance apparatus, signal/ function generators, oscilloscopes, a Hall effect apparatus, lasers, spectral lamps, photoelectric effect apparatus, Geiger-Muller tubes, radiation counters, h/e apparatus, Frank Hertz apparatus, e/m apparatus, spectrometers, Interferometers, Xray machines, a Millikan oil drop apparatus, heat engines/gas law apparatus, a thermal expansion apparatus and an adiabatic gas law apparatus. The biology laboratories are equipped with the latest stereo inverted and compound microscopes, a microtome, an autoclave, a laminar flow sterile hood, PAGE and agarose electrophoresis equipment, cryostat and microtome units, a workstation with a computer connected to digital microscope cameras, a growth chamber, IDEXX Colilert and a manifold filtration unit for microbiological analysis.

#### Interpreting Laboratory

The Department of Arabic Studies has a purpose-built interpreting facility. It features simultaneous interpreting booths, a consecutive interpreting table, Internet access and equipment for simulated video teleconferencing. This interpreting facility is also equipped with the latest technology and machine translation software, TRADOS and other relevant, including Internet-based, software needed in language engineering.





### Graduate Study

American University of Sharjah is a center for high-quality graduate education and research as well as a resource for sustainable development and advancement for the Gulf region and internationally.

Students in AUS graduate programs find career advancement opportunities and personal enrichment. These programs foster a stimulating intellectual environment of collaborative research and intellectual exchange. The university's cross-disciplinary graduate courses and specialized degree programs attract excellent students who pursue creative and original work under the guidance of highly qualified, dedicated faculty members recruited from the most prestigious universities in the United States, Canada and around the world.

#### Degree Offerings

The Office of Graduate Programs oversees the development and implementation of graduate academic policies and of graduate-related activities on campus. AUS currently offers eight programs of graduate studies leading to the master's degree. These are:

#### College of Arts and Sciences

- Master of Arts in Teaching English to Speakers of Other Languages (TESOL)
- Master of Arts in English/Arabic/ English Translation and Interpreting

#### **College of Engineering**

- Master of Science in Engineering Systems Management
- Master of Science in Mechatronics Engineering

#### School of Architecture and Design

· Master of Urban Planning

#### School of Business and Management

- · Master of Business Administration
- · Master of Public Administration
- Gulf Executive Master of Public Administration

## Graduate Admission Policies and Procedures

Admission to all AUS graduate programs is processed through the Office of Admissions. Applicants should address all inquiries, requests for application forms and correspondence to:

American University of Sharjah Office of Admissions P.O. Box 26666, Sharjah, UAE E-mail: graduateadmission@aus.edu www.aus.edu/programs/graduate

To apply to a graduate program at AUS, applicants must:

- complete the official graduate application form available from the Office of Admissions or through the AUS website
- pay application fees (UAE Dirhams 200)
- submit official transcripts to the Office of Admissions
- submit official TOEFL scores to the Office of Admissions
- submit to the Office of Admissions an equivalency of your degree from the UAE Ministry of Higher Education, +(971) 2 695 1300 (applies only to applicants with a bachelor's degree obtained outside the UAE)

Applicants must meet all general and program specific admissions requirements as listed on the application form. Incomplete applications are not processed.

Upon receiving a complete application, the Office of Admissions determines if the applicant meets the minimum university requirements. If the applicant meets such requirements, graduate admission committees within each program will review applications and make recommendations for admission. Applicants must satisfy both general university requirements and program-specific admission criteria for graduate study.

The Office of Admissions will notify the applicant of the university's final decision.

#### Application Deadlines

Applicants must submit completed application forms and all supporting documents to the Office of Admissions by the following dates:

 Fall Semester 2007
 August 1, 2007

 Spring Semester 2008
 January 2, 2008

 Summer Session 2008
 May 15, 2008

Applications received after these deadlines will be considered based on seat availability.

#### **International Applicants**

International applicants (i.e., graduates of universities located outside the UAE) are required to submit completed application forms and all supporting documents to the Office of Admissions by the following dates:

**Fall Semester 2007** July 15, 2007

Spring Semester 2008 December 16, 2007

Summer Session 2008 May 15, 2008

Applicants in this category are required to present an equivalency of their degree from the UAE Ministry of Higher Education located in Abu Dhabi, UAE. Details on the procedure can be obtained directly from the Ministry by contacting them by telephone at: +(971) 2 695 1300 or by visiting their website: www.uae.gov. ae/mohe/.

Admitted international students needing visas for the UAE should submit the visa application form included in the admission package and also available from the AUS website at least <u>one month</u> prior to the first day of class.

Admission is only valid for the semester a candidate has applied. If applicants do not enroll in the semester for which they have been accepted, applicants may request that their

admission be deferred to the following semester. This request should be in writing and submitted to the Office of Admissions

#### University Requirements for Graduate Admission

#### **Eligibility**

To be considered for admission, all applicants must meet general university requirements for graduate admission. Some graduate programs have additional requirements. For program-specific requirements, consult the pertinent degree program listing in this catalog.

#### **General University Requirements for Full Admission**

For full admission to a graduate degree program at AUS, an applicant must:

- hold a four-year bachelor's degree from an accredited university recognized by
- have maintained a minimum cumulative grade point average (CGPA) of 3.0 (on a scale of 4.0) or its equivalent, and 3.0 or its equivalent in 300- and 400-level courses in discipline(s) relevant to the graduate program
- have attained a minimum Computer-Based TOEFL score of 213 or Internet-Based TOEFL score of 80

Some programs may require satisfactory performance on specific entry examinations.

Please refer to the program descriptions in this catalog for particular requirements.

#### General University Requirements for Conditional Admission

Conditional admission to a graduate program may be granted to applicants who meet the following set of requirements:

- hold a four-year bachelor's degree from an independently accredited university recognized by AUS
- have a minimum cumulative GPA of 2.5 (on a scale of 4.0) or its equivalent
- have a minimum Internet-Based TOEFL score of 71 or Computer-Based TOEFL score of 197 (applicable to all programs but TESOL)

Conditional admission applicants may also be required to meet additional specific requirements in their program of admission. Additional admission requirements, if applicable, are stated in each program's section of this catalog.

To be accorded full admission into a graduate program, a conditional admission student must:

- achieve before the beginning of the second semester the required TOEFL score for full admission of 80 Internet-Based (213 Computer-Based) and
- achieve a cumulative GPA of at least 3.0 in his/her first semester (two graduate courses maximum)

If either provision is not met, the student will be dismissed.

Note: Each graduate program may assign undergraduate prerequisite courses and/or specially tailored courses for conditional admission students. Credits from these courses do not satisfy credit requirements for completing the graduate degree and are not used to calculate the graduate cumulative GPA.

#### **Visiting Students Admission**

Students may enroll as visiting graduate students at AUS for credit transfer to their home universities. To be admitted as a visiting graduate student, a student must be enrolled in a graduate program at an accredited institution and be in good academic standing in his/her current institution. Students must have attained a minimum Computer-Based TOEFL score of 213 or Internet-Based TOEFL score of 80. Requests for visiting student admission are submitted to the Office of the Registrar. Students are admitted as visiting students for a maximum of one academic year, and are responsible for determining that AUS credits are transferable to their home institutions. Standard graduate tuition rates apply.

#### Non-degree Admissions

Non-degree graduate students are those who wish to take AUS courses for academic credit but who do not seek a master's degree. Students are admitted to AUS with non-degree status if they meet requirements for full or conditional graduate admission. Complete applications should be submitted to the Office of Admissions. Standard graduate tuition rates apply.

#### **Change of Status**

Students may request a change of status (from non-degree to degree status, or from visiting to degree status) by submitting a complete application to the Office of Admissions. Credits taken while under non-degree status may be accepted with the approval of the graduate program director. All admissions requirements in place at the time of the change of status request must be met.

#### **Transfer Credit Policy**

A graduate student may transfer up to nine graduate credits from a recognized graduate school at an accredited university to his/her program of study at AUS, depending upon program specific rules and regulations. Such transfer credits should meet all of the following criteria:

1.The course work must:

- be offered by a recognized accredited institution
- be applied toward a graduate degree at the host institution and taken for graduate credit
- be approved by the graduate program director in consultation with appropriate faculty members
- not have been used to earn another degree
- not have been taken more than five years prior to entering a graduate program at AUS. (Some programs have more stringent time limitations on transfer credits. Consult individual program descriptions and the graduate program director for regulations.)
- 2.The student must have earned a grade of B or higher for 500-level or 600-level courses or other courses restricted to graduate students.

Transfer credit will not be accepted for research and thesis/dissertation hours, travel experience or work/life experience. Applicants must request that credit transfers be reviewed at the time of application.

#### **Course Auditing**

Students wishing to attend a graduate course without receiving academic credit may apply to audit a course. Audit students do not sit for final examinations and do not receive credit nor any university certificate of completion. Permission to audit a course is granted as seats are available. Audit students do not register for courses until degree students have been enrolled. Registration for audits is done through the Office of the Registrar, given the approval of the course instructor and graduate program director. Regular graduate tuition rates apply.

#### Registration

The Office of the Registrar is responsible for overseeing the registration process and maintaining students' records. Students must register in a course prior to attending classes. It is the responsibility of the individual student to monitor his/her registration status. This is possible by accessing his/her records through the AUS website. Registering after the designated date will require a late registration fee of 400 Dirhams.

#### Orientation Program

At the beginning of each semester, new graduate students attend an orientation program that introduces them to the different offices with which they will interact during their studies at AUS. They are introduced to the officers of the university and meet representatives of all the service areas of the university.

#### Registration Procedures

At the end of the orientation program, each graduate program has its own program-based orientation. At this session, advisors help students with course selection and registering for their first semester. In subsequent semesters, the students, after

discussing course possibilities with their advisors, register themselves through Banner, the university's online registration system. This session also informs students about potential research/project areas available within the program.

#### Add/Drop Procedures

The add/drop period for each term is announced by the Office of the Registrar and posted on the academic calendar. Students wishing to add or drop courses should first obtain the appropriate form from their graduate programs and have it approved by their advisors.

Students must add and/or drop courses through their programs during the specified add/drop period. Courses dropped during this period are not recorded in the student's transcript.

#### Withdrawal from Courses

Students may withdraw from courses without academic penalty by a date established by the Office of the Registrar. A grade of W will be assigned to these courses. Students who withdraw from courses after this deadline receive a grade of WF for those courses.

#### Withdrawal from the University

Students may choose to withdraw from the university. Students unable to complete a semester should acquire a withdrawal form from the Office of the Registrar, obtain signatures as indicated on the form and return the completed form to the Office of the Registrar. Courses will be assigned the grade of W or WF according to the rules stated in the above section on withdrawal from courses. No academic credit is given for these courses.

#### Registering for Thesis/Project Credit

Your thesis proposal must be formally and orally presented to and approved in writing by your thesis committee before you may register for the thesis course (XXX 699). Only students in good academic standing may register

for thesis credits

In the first semester of thesis work (usually no earlier than the third semester of enrollment in the graduate program), a student can enroll for either three or six thesis credit hours. If the student finishes and defends the thesis, the student will receive the thesis grade. If the thesis work continues into a second semester, the student must register for thesis credit hours (i.e., enroll in the final three credits if he/she only enrolled in three the previous semester). If the thesis has not been completed and defended by the end of any semester for which a student has registered for thesis credit hours, a grade of IP will be given. The IP designation will be used until the student completes and successfully defends his/her thesis.

Graduate students registering for thesis or project credits must register through the Office of the Registrar. At registration time, the program directors will e-mail the registrar a list of the students who will be signing up for thesis or project credits. The registrar will use the lists provided by the program directors to set the credit hours and billing hours.

If a student has accumulated six credit hours and has not completed the thesis/project, he or she must pay a 200 Dirhams fee in subsequent semesters until the thesis/project is finished and defended. If the student does not pay the 200 Dirhams, he or she will be considered to have interrupted his or her studies (see the Interrupted Studies and Readmission section below). All students must be enrolled in the semester in which they defend their thesis

**Note:** A student must complete all degree requirements within five years from the time of initial enrollment into the program.

#### Permanent Record

A permanent record reflecting each student's academic achievement and history at AUS is maintained in the Office of the Registrar. All students have the right to:

#### Graduate Study

- inspect and review information contained in their permanent educational records
- request changes or updates to their personal data
- consent to disclosure of, within the extent of UAE federal and local laws, personally identifiable information from education records

All student transcripts and other documents submitted to AUS by and on behalf of other institutions remain the property of AUS, and are maintained in the Office of the Registrar. Students may obtain transcripts of their AUS academic records by submitting a written request to the Office of the Registrar. AUS issues complete transcripts only.

Student records are also made available to any agency that sponsors a student.

## Interrupted Studies and Readmission

Students are expected to maintain continuous enrollment (fall and spring semesters) until they complete their program. A student may take up to two semesters off from graduate studies but must inform the Office of the Registrar in writing of their intention to do so. Reinstatement of the student is automatic; however, students must reactivate their record by applying to the Office of the Registrar. No fees are charged for reinstatement. Enrollment in zero-credit courses only does not establish residency for the purpose of this policy.

#### Tuition and Financial Aid

Tuition and fees are outlined by program in the table that follows.

#### Financial Aid

AUS offers graduate students two types of on-campus employment: graduate assistantships and graduate work-study positions. Assistantships are available to qualified graduate students and are competitively awarded and merit based. A variety of student work-study opportunities are

available through specific departments, graduate programs and AUS internal research grants to faculty members. Information on eligibility and application guidelines is available at www.aus.edu/gpr/graduate/ or in the Graduate Student Handbook section of this catalog.

#### Payment of Tuition and Fees

Tuition and fees are due each semester at or before the time of registration and form an integral part of registration. AUS accepts the following methods of payment:

- · cash in UAE Dirhams (AED) only
- checks drawn on local banks in UAE Dirhams (If two or more checks return due to insufficient funds, checks will no longer be accepted.)
- · banker's drafts in UAE Dirhams

**Activity Fee** 

- credit cards (including online payment)
- direct transfers to Sharjah Islamic Bank Account No. 0029-200170-001

(student's name and ID number must be noted on transfer)

A charge of Dhs. 500 is added if a

check is returned for insufficient funds. All student financial transactions with the university are processed through the Student Accounts Office located on the mezzanine floor of the Main Building. Questions concerning student accounts should be directed to the Student Accounts Office by calling 515 2233 or sending e-mail to

One US Dollar is equivalent to 3.65 UAE Dirhams.

#### Late Fees and Fines

studentaccounts@aus.edu.

All university employees and students must adhere to university deadlines, rules and regulations. Late fees and fines may apply for late book returns, parking violations, breakage/replacement charges, late tuition payment, etc.

Master of Business Administration	2,550/per credit hour
Master of Public Administration	2,550/per credit hour
Gulf Executive Master in Public Administration	140,000 for the complete program
Master of Engineering Systems Management	2,550/per credit hour
Master of Mechatronics Engineering	2,550/per credit hour
Master in Urban Planning	2,550/per credit hour
Master in TESOL	2,020/per credit hour
Master in Translation and Interpreting	2,020/per credit hour
Graduate Fees (in UAE Dirhams)	
Application Fee	200
Late Registration Fee	400
Thesis or Project Extension Fee	200
Thesis Processing Fee	1,000
Internship Fee	400
Deposit Payment (for MBA program only)	500 (non-refundable, non-transferable)

Graduate Tuition for Academic Year 2007–2008 (in UAE Dirhams)

Health insurance is available for graduate students. The insurance fee is 250 Dirhams per semester or 550 Dirhams per semester, depending on the type of plan applicable to each student.

100

## Academic Regulations and Policies

#### Student Responsibility

All official university communications are distributed to the student's AUS-issued e-mail address. These are considered official notifications. Students are responsible for checking their AUS e-mail accounts and for responding to or acting upon messages accordingly.

Students should keep their own records of all transactions with the university (e.g., registration schedules and forms, grade reports, payment records, etc.). It is also advisable to keep copies of all tests, digital files, papers and so forth submitted in fulfillment of course work

#### Academic Integrity

Academic integrity lies at the heart of intellectual life. The academic integrity code for American University of Sharjah describes standards for academic conduct, students' rights and responsibilities as members of an academic community, and procedures for handling allegations of academic dishonesty. As an institution of higher education, American University of Sharjah views academic integrity as an educational and judicial issue. The full text of the AUS Student Academic Integrity Code is found at www.aus. edu/osa/handbook/docs/academic.pdf.

#### Academic Load

The normal academic load for a fulltime graduate student is nine credit hours per semester. The graduate program director may register a student in good standing for up to 12 hours per semester.

#### **Grading System**

Final grades are recorded on each student's permanent record in the Office of the Registrar. Grades may not be removed from the record

A minimum passing grade of C is required for each course. Normally, graduate students who receive an F in a graduate course will not be allowed to continue in the program.

AUS uses the following grading system for all graduate courses:

Excellent			
A	equals 4.00 grade points		
Meet	s Expectation		
Α-	equals 3.70 grade points		
$B^{+}$	equals 3.30 grade points		
В	equals 3.00 grade points		
Belov	<b>Below Expectation</b>		
В-	equals 2.70 grade points		
C <sup>+</sup>	equals 2.30 grade points		
C	equals 2.00 grade points		
Fail			
F	equals 0.00 grade points		
With	Withdrawal Fail		
WF	equals 0.00 grade points		

Grades not calculated in the grade point average are:

I	Incomplete
IP	In Progress
AUD	Audit
WV	Waive; no credit
TR	Transfer; credit counted
W	Withdrawal
N	No Grade
P	Pass; credit counted
AW	Non-Academic Administrative Withdrawal

#### Incomplete Work

In emergency circumstances, a student may request permission from the course instructor and graduate program director to complete a course in the following semester. A grade of I (incomplete) is assigned for the course. Students must complete the course before the end of the following semester. Otherwise, a tentative grade estimated on the basis of work already completed may be recorded. Failure to complete the course within the following semester may result in the grade being recorded as F unless a tentative grade has been reported previously.

#### **Graduate Probation Policy**

Graduate students must maintain a 3.0 (B) grade point average in all course work taken for graduate credit at AUS and must meet any additional academic requirements imposed by their specific graduate program of study. Normally, graduate students who receive an F in a graduate course will not be allowed to continue in the program. If a graduate student's cumulative GPA is below 3.0, the student is placed on academic probation. During probation status, the following conditions apply:

- A graduate student on probation who is not restored to good academic standing by the end of the regular semester following the term in which the cumulative GPA fell below 3.0 will be dismissed from the university.
- A graduate student on probation may not register for more than six credit hours.
- A graduate student on probation may not register for thesis or final project credit hours until a cumulative GPA of 3.0 is achieved

In the case of ineligibility to continue in the graduate program as a result of academic probation, a graduate student may petition for re-enrollment in the program to the director of the graduate program. Petitions will be reviewed by the director, who will make a written recommendation first to the appropriate dean and then to the Director of Graduate Programs. The final decision will be made in consultation with the Director of Graduate Programs.

#### Repeating Courses

With the recommendation of the program director and the approval of the appropriate dean, a graduate student may be allowed to repeat any course in which a grade of B-, C+ or C is received. The original grade and the new grade will appear in the transcript, but only the new grade will be calculated into the GPA.

No course may be repeated more than once.

## Time Limits on Duration of Study and Degree Credit

Students must complete their program requirements within five years from first enrollment in their graduate programs at AUS. Students must register for at least three semesters to obtain a master's degree from AUS. In addition, credits more than eight years old (courses transferred to AUS) at the time of graduation may not be counted toward the fulfillment of a graduate degree program.

#### Degree Requirements

Students are governed by a set of minimum requirements for the master's degree. Each specific degree program has further requirements that are detailed in the graduate program descriptions of this catalog.

**Caution:** The course offerings and requirements of American University of Sharjah are under continual examination and revision for improvement. This catalog is not a contract; it merely presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will not change. The university specifically reserves the right to change requirements for any graduate degree during any particular year. The student assumes full responsibility for compliance with all academic requirements.

The graduation requirements for any individual student are determined either by the catalog that was effective when the student began graduate studies or the catalog effective for the academic year when the student graduates. In case of substantial changes in course offerings, equivalent graduation requirements are determined by the dean of the program concerned

#### Thesis or Final Project

Master's theses or final master's project reports are the final reports on research conducted by AUS graduate students under the guidance and supervision of AUS faculty members. They are the culmination of the students' program of study and are expected to reflect appropriate scholarly depth and rigor, and in many cases result in new publications. Theses and final projects are defended publicly.

The Office of Graduate Programs, in collaboration with the Graduate Program Council, establishes and oversees the regulations and requirements for theses and final projects at AUS. Degree candidates are responsible for familiarizing themselves with and adhering to the standards and regulations of the latest edition of the AUS Guide to Formatting Graduate Theses. This manual is available from the Office of Graduate Programs and online at www. aus.edu/gpr/graduate/thesesguide/index.php.

AUS also has a stringent policy regarding research involving humans or animals as subjects. Detailed information on such research activities may be found at www.aus.edu/gpr/research/polices research/.

It is AUS policy to preserve master's theses in the AUS Archives and also to make theses available to other students and scholars. The AUS Library is responsible for the archiving and binding of the master's thesis. Detailed procedures and requirements for submitting master's theses to the AUS Library and Archives for binding are outlined in the AUS Guide to Formatting Graduate Theses.

#### **Thesis or Project Time Extensions**

As per the current thesis/project registration process, students who register for extensions (i.e., those who have already paid their full thesis/project credit hours but have not yet completed their thesis/project work) are registered for the full thesis/project credits but with zero billing hours. A fee of 200 Dirhams per semester is charged to establish continuous enrollment.

### Switching from Projects to Thesis and Vice-versa

In general, if a student switches master's degree options from thesis to project and vice versa, he or she will be given an N for no grade (or WP) for the thesis/project credit hours (i.e., XXX 698 or XXX 699) completed for the first option selected. The student must pay for any additional credit hours or courses required for the new option. That is, his or her payments for previous work under the old option (hours or courses) will not apply toward the costs of hours or new courses in the new option. If the switch involves a reduction in credits. potential refunds will follow.

#### Advising

Each graduate student is assigned an academic advisor. Students are required to consult with their advisor on issues regarding degree requirements, policies and procedures. Some programs require that students have a graduate advisory committee, which has specific responsibilities identified by each graduate program in accordance with university policy.

## Academic Petitions, Appeals and Grievances

Graduate students may petition the Director of Graduate Programs for exceptions to academic policies of the university or in cases of academic grievances. Petitions are received by the Office of Graduate Programs through the appropriate channels, which include an initial discussion

with the involved faculty member. If the issue or grievance is not resolved, the student should contact the graduate program director and then the Director of Graduate Programs or dean's designee. Students who wish to petition the Office of Graduate Programs should first consult with the graduate director of their program of study to determine if a petition is actually required.

#### Graduation Procedures

Candidates for degrees file an Application for Graduation form in the Office of the Registrar during the registration period of the last expected term of study. Only after an application for graduation has been filed can the Office of the Registrar begin processing the necessary information for final certification for graduation.

Only students who have successfully completed degree requirements and have no holds by the end of the term for which they have applied to graduate are certified for conferral of a degree.

Degrees are conferred at the end of the semester in which requirements have been met. Conferral of the degree is noted on the permanent record of the graduate with the date of graduation.

Students who fail to complete all degree requirements by the end of the term for which they apply to graduate need not reapply for graduation. Their previous application will be forwarded automatically to the following semester.

### Participation in Commencement Exercises

The university holds commencement exercises at the end of the fall and the spring semesters. Students who have been certified for conferral of a degree in summer may participate in the fall commencement. In order to participate in a commencement exercise, students must have completed all thesis requirements, including corrections and final submission of the completed thesis to the library.

### Attestation of Diplomas and

#### Degrees

The Office of Alumni Affairs offers the service of attesting degrees and transcripts with the UAE Ministry of Higher Education once at the end of every semester. The office also provides all information relevant to the attestation process to help graduates who wish to handle it individually.

### Graduate Degree Programs

## COLLEGE OF ARTS AND SCIENCES

William Heidcamp, Dean Ibrahim El-Sadek, Associate Dean

### Teaching English to Speakers of Other Languages

Fatima Badry, Director

#### Master of Arts in Teaching English to Speakers of Other Languages (MA TESOL)

The mission of the master's degree program in Teaching English to Speakers of Other Languages (MA TESOL) is to provide students a balanced foundation of both practical and theoretical knowledge needed to teach English at various proficiency levels, and to prepare them for doctoral studies in areas related to language learning and teaching. By combining theory and practice, the curriculum aims to produce informed teachers capable of using theory to enhance their teaching practice.

### Program Goals, Objectives and Learning Outcomes

To fulfill this mission, the program strives to:

- prepare students for positions requiring high levels of proficiency in teaching English as ESL/EFL at the secondary and tertiary levels
- equip its graduates with the required competencies to contribute to the field and be prepared to enroll in PhD programs

For more details, please visit www. edu/cas/matesol.

The educational objectives of the MA TESOL program are to:

• provide students with state-of-the-art knowledge in TESOL, and develop strategies for adapting that knowledge to serve the specific needs of the region

- explain the relation between the form and function of English
- demonstrate the practice of teaching English in ESL/EFL classroom settings
- provide students with knowledge about how languages are learned
- teach students how to evaluate the effectiveness and validity of different testing procedures
- · develop students' research skills
- enhance students' awareness of the role of culture in learning and teaching in an ESL/EFL environment
- familiarize students with computerassisted learning and teaching and supervise ESL/EFL classroom teachers

Upon graduation from the MA TESOL program, students should be able to achieve the following outcomes:

- assess various approaches to teaching language skills
- evaluate the effectiveness and validity of different teaching methodologies
- take initiative in developing appropriate teaching materials
- develop or adapt materials for special/ learning teaching situations
- understand language testing concepts
- apply testing and assessment concepts to real classroom situations
- · select appropriate tests for specific goals
- analyze and critique important theoretical positions in the field of applied linguistics
- adapt and apply theoretical concepts in grammar to actual ESL teaching practice
- identify personal and social factors that impact language learning
- recognize the complexities involved in language learning
- ask informed questions about the process of language acquisition
- understand the basic models explaining language learning
- apply pedagogical theories to teaching practices
- develop effective classroom observations skills
- use classroom research to improve teaching
- · demonstrate critical, and practical

knowledge in the field of computerassisted/enhanced language learning

- · conduct original research
- recognize the pedagogical potential of available technologies and develop curricula relying on these technologies
- supervise ESL/EFL teachers

#### Admission Requirements

In addition to fulfilling the university's general admission requirements for graduate studies, the applicant must have a TOEFL score of 213 (CBT)/550 (PBT) or higher with a minimum of 5 on the TWE (Test of Written English). Only official ETS scores are accepted.

Applicants with a bachelor's degree or equivalent in English/linguistics with a minimum grade point average of 3.0 (B average) from an accredited institution are granted full admission. Holders of bachelor's degrees in other fields who satisfy all admission requirements are granted conditional acceptance pending completion of ENG 223 Introduction to Language Study and ENG 401 Advanced English Grammar with a GPA of 3.0 or higher. These courses, however, may be waived with a minimum of two years of full-time English language teaching in an accredited institution.

#### **Transfer Policy**

The transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

#### Academic Standing

Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. Students who fall below that level will be placed on probation and must raise their overall GPA to at least 3.0 within one semester to be returned to good standing.

#### Degree Requirements

The MA TESOL degree is awarded after successful completion of 36 credits at the graduate level. This

consists of 10 graduate-level courses and a six-credit thesis supervised by a faculty advisor and committee. Students must complete the degree requirements within five years from the time of initial enrollment in the program. A minimum cumulative grade point average of 3.0 is required for graduation.

#### Required Courses (27 credits)

- ELT 510 Research Methods and Academic Writing
- ELT 511 Linguistics for ESL Teachers
- ELT 513 Language Acquisition and Development
- ELT 515 Methods and Materials Development
- ELT 551 Language Testing and Evaluation
- ELT 553 Technology in the ESL Classroom
- ELT 619 Practicum in TESOL
- ELT 699 Master's Thesis

#### **Elective Courses (9 credits)**

Students must complete three courses (nine credits) from the following list, in consultation with their advisor.

- ELT 501 Advanced English Grammar
- ELT 503 Contrastive Linguistics
- ELT 504 Discourse, Semantics and Pragmatics
- ELT 505 Culture and the Language Teacher
- ELT 517 Curriculum Design
- ELT 521 Reading and Writing in ESL
- ELT 523 Bilingual Education
- ELT 531 Sociolinguistics
- ELT 567 ELT Leadership and Management
- · ELT 611 Classroom Research
- ELT 615 Quantitative and Qualitative Research in ELT
- ELT 694 Special Topics in Applied Linguistics

#### The Master's Thesis

The thesis must be prepared under close supervision of a faculty supervisor on a topic related to some aspect of TESOL. It must be defended to the satisfaction of the thesis committee, which is composed of three faculty members

from TESOL program faculty. One committee member may be selected from outside the TESOL graduate faculty upon approval of the director of the program. The *AUS Guide to* Formatting Graduate Theses is available from the Office of Graduate Programs and online at www.aus.edu/gpt/graduate/thesesguide/index.php.

#### Academic Advising

Students work closely with their advisor in selecting elective courses that address their individual needs. The advisor also encourages students to develop professional portfolios that include samples of selected work such as research papers, teaching reports, projects and lesson plans.

## Translation and Interpreting

Said Faig, Director

#### Master of Arts in English/ Arabic/English Translation and Interpreting (MATI)

Translation and interpreting services are in demand now more than ever as the world market expands and the trend toward globalization gathers momentum. The vital role that English continues to play in international communication and the growing impact of the Arab region on world affairs combine to create a demand for highly trained English/Arabic translators and interpreters.

The Master of Arts in English/Arabic/ **English Translation and Interpreting** (MATI) degree at AUS is designed to respond to these demands. The program aims to equip graduates from a variety of disciplines with highly specialized translation and interpreting skills in English and Arabic. The program also addresses the need for upgrading the skills of professionals who are already working as translators and interpreters. Courses are intended to produce graduates conversant with the various forms of translation and interpreting required in the complex web of communication. This diverse range of skills is placed within a

general theoretical framework, which provides the student with the conceptual tools to identify, analyze and resolve problems and develop a reflective approach to translation.

The MATI program enables students to achieve a high level of competence in English/Arabic/English translation and interpreting, provides them with advanced training in translation and interpreting techniques, and helps them develop a thorough understanding of translation theory and its relevance to the practical concerns of translators. In addition, students can further develop their knowledge of academic writing conventions and research methods. More details on the program are available at www.aus.edu/cas/mati.

#### Admission Requirements

Applicants are required to fulfill the university's general admission requirements for graduate studies.

Full admission to the program is granted to applicants who hold a recognized BA degree or equivalent bachelor's degree with an overall GPA of at least 3.0 (or equivalent) and 3.0 or its equivalent in 300- and 400-level courses in discipline(s) relevant to the program. In addition to the general admission requirements, non-native speakers of Arabic must hold a BA in Arabic. A TOEFL score of 213 (CBT)/550 (PBT) is required. Only official ETS scores will be accepted.

Conditional admission status may be granted to applicants with a minimum overall GPA of 2.5 (or equivalent) and a 2.5 or its equivalent in 300- and 400-level courses in discipline(s) relevant to the program, and at least three years of relevant practical experience in translation and/or interpreting. In such cases, the student must take Principles and Strategies of Translation (TRA 500) and another course as specified by the program director, and must attain a GPA of 3.0 (B) or above for that semester to achieve full admission and to be allowed to proceed.

Furthermore, applicants with a TOEFL score between 530 (197 computer-based) and 550 (213 computer-based) may be granted conditional admission

for one semester but must meet the program's required TOEFL score by the end of that semester. Only students who meet the TOEFL requirements will be allowed to continue in the program.

#### **Transfer Policy**

The transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

#### Academic Standing

Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. Students who fall below that level will be placed on probation and must raise their overall GPA to at least 3.0 within one semester to be returned to good standing.

#### Degree Requirements

To graduate with the MA in English/ Arabic/English Translation and Interpreting, students must complete all the requirements of the program, which consist of 36 credits inclusive of a research thesis (eight required courses and three advised electives). Students must complete the degree requirements within five years from the time of initial enrollment in the program. A minimum cumulative grade point average of 3.0 is required for graduation. Courses are offered during the weekday evenings.

#### Required Courses (27 credits)

- TRA 500 Principles and Strategies of Translation
- TRA 501 Terminology and the Translator
- TRA 503 Theoretical Models of Translation
- TRA 505 Interpreting and the Profession I
- TRA 509 Interpreting and the Profession II
- TRA 558 Contrastive Linguistics and Translation
- TRA 695 Translation Research Seminar
- TRA 699 Master's Thesis

#### **Elective Courses (9 credits)**

Students must complete three courses (nine credits) from the course list

below in consultation with their advisor.

- ELT 501 Advanced English Grammar
- TRA 502 Arabicization and Translation
- TRA 504 Discourse Semantics and Pragmatics in Translation
- TRA 506 Perspectives on Translation Ouality Assessment
- TRA 508 Research and Academic Writing
- TRA 556 Rhetoric for Translators
- TRA 610 Intercultural Communication and Translation
- TRA 694 Special Topics in Translation and Interpreting

The AUS Guide to Formatting Graduate Theses is available from the Office of Graduate Programs and online at www.aus.edu/gpr/graduate/thesesguide/index.php.

#### **COLLEGE OF ENGINEERING**

Yousef Al-Assaf, Dean Hany El-Kadi, Associate Dean Jamal Abdalla, Graduate Programs Director

## Engineering Systems Management

Moncer Hariga, Coordinator

#### **Faculty**

Ibrahim Al Kattan Hazim El-Baz Moncer Hariga

#### Master of Science in Engineering Systems Management (MSESM)

The mission of the Engineering Systems Management (ESM) Graduate Program is to significantly increase the opportunities for practicing, degreed engineers working in engineering management and in systems engineering positions to be successful in their efforts to build effective teams, lead and manage major engineering projects, and expand economic development for the private and public sectors of the UAE and the Gulf region countries.

The curriculum provides foundation

courses followed by concentration courses in the theme areas of engineering management (EM), construction management (CM) and information technology management (ITM).

The ESM program is designed to educate engineers of all disciplines in techniques to manage and lead industrial and public projects in a systematic and effective manner. With quality standards similar to those established in the United States, the program offers a multidisciplinary curriculum designed to integrate management skills with technical knowledge from different engineering disciplines for the purpose of accomplishing work activities and entire projects more economically and productively. ESM encompasses the integration of system elementspeople, information, hardware, software, facilities, equipment, energy and processes—to manage work activities and projects in the public and private sectors. The program provides students from engineering and related disciplines with the knowledge and skills needed to plan, design, analyze and improve integrated systems of people, material, technology and information. It also aims to contribute to the related world body of knowledge and advance research and development efforts in the region.

#### Program Educational Outcomes

Graduates of the ESM program are expected to be able to:

- apply the techniques, tools and skills of engineering systems management to address real-world problems
- conduct economic and financial analysis of projects and engineering operations
- function as an effective manager and member of a multidisciplinary team and communicate effectively in both written and verbal forms
- recognize professional and ethical responsibilities and act accordingly within a global and social context
- engage in theoretical or applied research projects

## Admission Requirements

In addition to meeting the university's general graduate admission requirements, applicants must meet specific requirements of the ESM program. These requirements are:

- a bachelor of science degree in engineering from an accredited institution. Degreed individuals in fields closely related to engineering such as computer science or information technology may be considered only for the information technology theme.
- · one year of professional experience

## **Transfer Policy**

The transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

## Academic Standing

Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. Students who fall below that level will be placed on probation and must raise their overall GPA to at least 3.0 within one semester to be returned to good standing.

#### Degree Requirements

Students in the ESM program must choose from two options, the thesis or professional project option or the course option, as described below.

## Thesis or Professional Project Option

The 36 credit hours needed as degree requirements for this option include:

- foundation courses as specified below (18 credits)
- theme electives as specified below (12 credits)
- ESM 698 Professional Project (6 credits) or ESM 699 Master's Thesis (6 credits)

#### **Course Option**

The 39 credit hours needed as degree requirements for this option include:

- foundation courses as specified below (18 credits)
- theme electives as specified below (15 credits)

- ESM 600 Research Methodology (3 credits)
- capstone project course in the selected theme (either ESM 685, ESM 686 or ESM 687)

Normally, the degree can be finished in a minimum of four semesters. A student must complete the degree requirements within five years from the time of initial enrollment in the program.

Students with no prior background in engineering statistics will be required to take ESM 501 Fundamentals of Probability and Statistics. Students with no prior background in engineering economy will be required to take ESM 502 Fundamentals of Engineering Economy.

#### **Foundation Courses (18 credits)**

- ESM 520 Management for Engineering
- · ESM 540 Modeling and Simulation
- · ESM 555 IT Management
- ESM 560 Quality Engineering and Management
- ESM 575 Advanced Engineering Economy
- One of the following two courses based on the student's theme:

ESM 570 Project Management (for EM and CM themes)

ESM 580 IT Project Management (for ITM theme)

## Theme Courses (12 credits)

Students must complete 12 credits in one of the three following themes:

## **IT Management Theme**

- ESM 600 Research Methodology
- ESM 612 Information Systems Management
- ESM 614 Communication and Network Management
- ESM 616 Infrastructures for e-Businesses
- · ESM 620 Security Management
- ESM 624 Knowledge Management
- ESM 626 Data Warehousing and Business Intelligence
- · ESM 642 Business Process Management
- ESM 644 Financial Management for Engineers

- ESM 660 Legal Aspects of ESM
- · ESM 694 Special Topics in ESM

## **Engineering Management Theme**

- · ESM 600 Research Methodology
- ESM 610 Strategic Technology Management
- ESM 632 Applied Operations Research
- ESM 636 Human Resources Management
- ESM 638 Decision Analysis
- ESM 640 Supply Chain Management
- ESM 642 Business Process Management
- ESM 644 Financial Management for Engineers
- ESM 660 Legal Aspects of ESM
- ESM 694 Special Topics in ESM

#### **Construction Management Theme**

- · ESM 600 Research Methodology
- ESM 642 Business Process Management
- ESM 644 Financial Management t for Engineers
- ESM 650 Construction Management
- ESM 652 Construction Planning and Scheduling
- ESM 654 Material Management
- ESM 660 Legal Aspects of ESM
- ESM 667 Construction Contracting and Cost Estimating
- ESM 668 Construction Safety Management
- · ESM 694 Special Topics in ESM

#### Thesis or Project Advising

A student must complete his/her research thesis or professional project under the direct supervision and guidance of the principal advisor. This faculty member is usually the chair of the student's advisory committee. The thesis advisor and one of the other two members must be from the program faculty. The third member may be selected from outside AUS with the approval of the program director.

## Mechatronics Engineering

Rached Dhaouadi, Coordinator

# Master of Science in Mechatronics Engineering (MSMTR)

The Master of Science in Mechatronics Engineering (MSMTR) program is committed to being an international, multidisciplinary center of excellence in synergistic applications of the latest techniques in embedded systems. precision mechanical engineering, control theory, computer science and electronics through education, research and outreach. The technological gap between developing and industrialized nations continues to widen at an alarming rate, largely due to the lack of skilled engineers capable of integrating new technologies into existing systems and networks. The mandate of the mechatronics engineering program is to improve this situation by equipping engineers with the design, analysis and synthesis abilities to plan, implement and manage the latest technologies. The curriculum of the mechatronics program meets the region's needsboth present and future—through the education of engineers and scientists.

Professional jobs considered to be in the mechatronics engineering field are grounded in the multidisciplinary aspects of electrical, mechanical, control, computer and software engineering. The unique skills of the mechatronics graduate are becoming increasingly valuable to employers in a variety of areas, including modern industrial installations and systems, computer integrated manufacturing systems, maintenance diagnosis and troubleshooting, defense systems, vehicle design and manufacturing, robotics and many more.

This graduate program provides students with state-of-the-art knowledge in their areas of specialization and with practical strategies for adapting that knowledge to serve the specific needs of the region. Multidisciplinary engineers are needed now more than ever to meet the demands for a flexible engineering workforce to deal with highly integrated engineering systems.

## Program Educational Objectives

Graduates of the Master of Science in Mechatronics Engineering degree program are expected to be able to:

- apply the latest techniques in precision mechanical engineering, control theory, computer engineering and science, and electronics to the design process to create more functional, adaptable and cost-effective products
- provide an employer with interdisciplinary skills necessary to utilize cutting-edge technology tools in the design, development and implementation of modern engineering systems
- understand and develop technologies such as information technology, embedded systems, modeling and simulation, and precision engineering systems in the design and development of smart products
- apply mechatronics principles in the broad context of engineering system design
- address open-ended problems and maintain an attitude of self-learning

More details on the program are available at www.aus.edu/engr/mechatronics/index.php.

## Admission Requirements

In addition to meeting the university's general graduate admission requirements, applicants must meet the specific requirements of the mechatronics engineering program. Applicants must hold a bachelor of science degree in engineering from an accredited institution. Degreed individuals in fields closely related to engineering or a quantitative science may be considered on a case-by-case basis. An applicant with a bachelor's degree in technology (or less than four years of university-level work) is not normally admissible to the program.

## **Transfer Policy**

The transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

#### **Waiver Policy**

Students may qualify to waive up to nine credits (three courses) from prerequisite discipline-bridging courses (see Degree Requirements). In general, a course may be waived if the student has completed comparable course work at the undergraduate level. Students may be required to submit course documentation. Waivers are only granted after an official, sealed transcript is received by the AUS Office of Admissions. A petition for waiving a discipline-bridging course must be submitted before the first semester of enrollment in the program. Listed below are the waiver rules:

- Students may waive prerequisite discipline-bridging courses if two similar undergraduate courses have been taken at an accredited university toward a degree completed within five years prior to admission to the AUS program.
   Only courses with a minimum grade of B (3.0) will be considered.
- Students with professional experience that indicate mastery of a given discipline-bridging course content may be granted a waiver.
- Students may be required to take a placement exam in order to waive a discipline-bridging course.

## Academic Standing

Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. A student who falls below that level will be placed on probation and must raise his/her overall GPA to at least 3.0 within one semester to be returned to good standing.

## Degree Requirements

Students must complete prerequisite discipline-bridging courses as required by the Mechatronics Engineering Admission Committee. These courses do not generate credits toward the completion of the degree. Students must file formal study plans upon the completion of 12 credits of approved graduate courses. The formal program of study must include a minimum of 30 credits including the completion of either a research thesis or design project. Both options require students to take a minimum of five core courses (15 credits) with a minimum cumulative GPA of B (3.0). Both options also require students to

complete additional credits at the 600 level with a minimum cumulative GPA of B. Students opting for the thesis option need to complete six credits of course work at the 600 level. Students opting for the design project option need to complete an additional 12 credits of course work. Up to nine credits of prerequisite discipline-bridging courses may also be required depending on the student's background. Students must complete the degree requirements within five years from the time of initial enrollment in the program. A minimum cumulative grade point average of 3.0 is required for graduation.

## Prerequisite Discipline-Bridging Courses

- MTR 505 Applied Electrical and Electronics Systems (Students with a BS in Electrical Engineering are exempted.)
- MTR 510 Applied Mechanical Systems (Students with a BS in Mechanical Engineering are exempted.)
- MTR 515 Information Technology for Mechatronics (Students with a BS in Computer Engineering are exempted.)

Credits for prerequisite courses do not count toward fulfillment of degree requirements.

## Core Courses (15-18 credits)

Students must complete the following courses:

- MTR 500 Advanced Engineering Mathematics
- MTR 520 Embedded Systems for Mechatronics
- MTR 540 Advanced Control Systems
- MTR 590 Mechatronics Design
- MTR 600 Modeling and Simulation of Dynamic Systems
- MTR 605 Digital Signal Processing (thesis option only)
- · MTR 695 Mechatronics Seminar

## Elective Courses (6–12 credits)

Students in the thesis option must complete six credit hours, while students in the project option must complete 12 credit hours from the following list of courses:

- MTR 605 Digital Signal Processing (thesis option only)
- MTR 610 Automated Manufacturing

Systems

- MTR 615 Artificial Intelligent Systems
- MTR 620 Machinery Dynamics and Vibration
- MTR 625 Distributed Control Systems
- · MTR 630 Real-Time Robotics Systems
- MTR 635 Smart Structures and Sensor Fusion
- MTR 640 Nonlinear and Intelligent Control Systems
- MTR 645 Image Processing and Computer Vision
- MTR 694 Special Topics in Mechatronics Engineering
- MTR 696 Independent Study in Mechatronics Engineering

Only those students who have finished five graduate courses (15 credits) in the program with a cumulative GPA of 3.0 or above can pursue the master of science degree.

## **Thesis Option**

Students must complete a program of research culminating in a thesis for at least six credits (MTR 699 Master's Thesis) that contributes to a selected area of knowledge. Students will be supervised by faculty members with a main advisor to supervise the research topic. The faculty advisor is appointed no later than the end of the third semester of study in the program. Students must pass a final oral thesis defense and exam. The AUS Guide to Formatting Graduate Theses is available from the Office of Graduate Programs and online at www.aus.edu/ gpr/graduate/thesesguide/index.php.

#### **Design Project Option**

Students must complete a comprehensive design project for three credit hours (MTR 691 Mechatronics Design Project) during the final semester of the master of science degree program. Projects are normally industry related and developed through an industrial partner. Students must pass a final oral project presentation and exam. The AUS Guide to Formatting Graduate Theses is available from the Office of Graduate Programs and online at www.aus.edu/gpr/graduate/thesesguide/index.php.

## Thesis or Project Advising

A student will complete his/her thesis or project under the direct supervision and guidance of the major advisor. This faculty member is usually the chair of the student's master of science degree advisory committee.

## SCHOOL OF ARCHITECTURE AND DESIGN

Fatih Rifki, Dean W. Eirik Heintz, Associate Dean

## **Urban Planning**

Varkki Pallathucheril. Coordinator

#### **Faculty**

Erik Ferguson Jerry Kolo (Visiting Professor) Amer Moustafa

## Master of Urban Planning (MUP)

Urban planning is concerned with creating better environments in which present and future generations live, work, entertain and engage in their customary community, social, religious and cultural activities.

Urban planning has roots in architecture, engineering, public health, law and the social sciences. Planners today combine design and analytical and communication skills to help communities manage change. Urban planning involves government, private enterprise and local communities taking concerted action toward achieving a common goal.

The Master of Urban Planning (MUP) at AUS provides professionals with outstanding, specialized graduate education that enables them to undertake leadership roles in managing urban growth, developing urbanization policies and advancing social development. The program empowers students with the highest ethical standards compatible with the values of local cultural settings, principles of social justice and concerns for environmental protection and sustainability. More details on the program are available at www.aus.edu/programs/mup.

## Admission Requirements

Applicants are required to fulfill the university's general admission requirements for graduate studies. The program admits students from all fields of study including, but not limited to, architecture, engineering, business, the humanities and the social sciences. The admissions committee consists of the Director of the Urban Planning Program and two faculty members who teach in the program, one from the School of Architecture and Design and one from the School of Engineering. An updated curriculum vitae (CV) must be submitted with the application package.

## **Transfer Policy**

The transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

## Academic Standing

Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. Students who fall below that level will be placed on probation and must raise their overall GPA to at least 3.0 within one semester to be returned to good standing.

#### Academic Load

Students may register for two courses per semester (part-time) or three to four courses per semester (full-time). Classes are held on weekday evenings and/or Saturdays to meet the scheduling needs of working professionals.

## Degree Requirements

The MUP degree is awarded after the successful completion of 48 credits, which include an internship and research thesis or final project. In addition to core course requirements, students must choose between two areas of concentration: design of the built environment or transportation planning. Students must also complete two elective courses at the 500 or 600 level. Students must complete the

degree requirements within five years from the time of initial enrollment in the program. A minimum cumulative grade point average of 3.0 is required for graduation.

## Required Courses (36 credits)

Core Courses (27 credits)

- UPL 501 Fundamentals of Urban Planning
- UPL 541 Planning Theory and Methods
- UPL 547 Research Methods and Analysis
- UPL 548 Environmental Planning
- UPL 550 Urban Economics and Analysis
- UPL 556 Advanced Planning Tools: GIS Applications
- UPL 565 Land Use Planning Principles and Practice
- UPL 597 Planning Internship
- UPL 667 Urban Planning Lab

Concentration: Design of the Built Environment (9 credits)

- UPL 582 Theory and Principles of Urban Design
- UPL 584 Urban Form Analysis
- UPL 686 Space, Society and the Public Realm

Concentration: Transportation Planning (9 credits)

- UPL 572 Urban Transportation Planning
- UPL 574 Urban Transportation Systems Analysis
- UPL 676 Transportation Systems Operations and Control

#### **Elective Courses (6 credits)**

Students must complete two elective courses selected in consultation with their advisor from any university graduate-level course or UPL course not counted as a core or concentration course. UPL 698 and UPL 699 cannot be counted as electives.

## Final Project or Master's Thesis (6 credits)

In addition to the courses above, students must pursue either a final project (UPL 698) or a research thesis (UPL 699) option. The *AUS Guide to Formatting Graduate Theses* is available from the Office of Graduate Programs and online at www.aus.edu/gsr/graduate/thesesguide/index.php.

## Academic Advising

Academic advisors are responsible for orienting, guiding and following the student's progress. The advisor works closely with the student in selecting elective courses that address the student's individual needs. Upon completing 30 credits in the program and once a research topic has been identified for the final project or thesis, the program director will encourage the student to select a research advisor whose background and interests suit the research interest of the student. The role of the academic advisor will then be transferred to the research advisor.

## SCHOOL OF BUSINESS AND MANAGEMENT

R. Malcolm Richards, Dean Allan Paul Williams, Associate Dean Peter Mitias, Director of Graduate Programs

Hussein Hassan, Graduate Programs Coordinator

Rob Bateman, GEMPA Academic Coordinator

## Master of Business Administration (MBA)

The AUS Master of Business
Administration program (MBA) is
committed to the idea of helping
individuals in the Gulf region to
think and act globally and integrate
knowledge into problem solving.
The program provides advanced
management education in an
environment that encourages students
to extend their leadership capabilities.
It is built on the premise that up-todate expertise is what gives workers a
value-added capacity in a knowledgebased economy.

Through this program, students are prepared for careers in management and leadership positions in both the private and public sectors. Students will acquire a comprehensive foundation in the fundamentals of business in the global environment in which they function. They will also learn the skills and analytical tools for effective communicating and decision making.

AUS faculty worked in close cooperation with American University, Washington, DC, to design the program. Individual participation is emphasized through class discussions. case study methodology, and interaction and cooperation with other students in the class. Graduates of the MBA program are prepared to identify, analyze and understand the interrelationships among business organizations and international and domestic institutions in the UAE and throughout the world. Students also develop an awareness of societal and environmental needs and concerns as they relate to ethical, professional and socially responsible business practices. More details on the program are available at www.aus.edu/mba.

## Program Educational Objectives

The curriculum of the MBA program is designed to:

- prepare individuals to identify, analyze and understand the interrelations among business organizations and international and domestic institutions in the UAE and throughout the world
- develop individuals who can lead organizations toward economic success and social responsibility in the global marketplace of the 21st century
- prepare individuals to integrate information resources and technology to enable them to anticipate and manage change
- advance students' knowledge of issues and practices affecting business organizations, international and domestic institutions, and government
- develop an awareness of social and environmental needs and concerns as they relate to ethical, professional and socially responsible business practices
- provide students with a solid core business education that emphasizes the following teaching methodologies: case analyses and presentations, seminars and lectures

## Admission Requirements

In addition to meeting the university's general graduate admission requirements, applicants must meet the specific requirements of the

MBA program. Admission to the MBA program is highly competitive. Applicants are required to submit an acceptable score on the Graduate Management Admission Test (GMAT). This score is then combined with the student's undergraduate grade point average for the last two years of study. The resulting index is used to assist the Admissions Committee in determining the admission status of an applicant. GMAT scores more than five years old will not be accepted. The test may be administered locally. Students admitted into the program normally have at least two years of work experience.

#### **Conditional Admission**

Conditional admission is limited and difficult to receive. During the semester in which they have conditional admission status, applicants must satisfy all admission requirements for the MBA program. Failure to do so will result in the student being unable to take any further courses in the MBA program.

## **Transfer Policy**

The credit transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

## **Waiver Policy**

Students may qualify to waive up to 21 credits (seven courses) from the foundation courses (see Degree Requirements). In general, a course may be waived if the student has completed comparable course work at the undergraduate level. Students may be required to submit course documentation. Waivers are only granted after an official, sealed transcript is received by the AUS Office of Admissions. A petition for waiving a foundation course must be submitted to the School of Business and Management's Office of Graduate Programs before the first semester of enrollment in the program. Listed below are the waiver rules:

 Students may waive foundation courses if two similar undergraduate courses have been completed at an accredited university toward a degree completed within five years prior to admission to the AUS program. Only courses with a minimum grade of B will be considered.

- Students with professional experience and/or holders of commonly recognized certificates (e.g., CPA or CFA) that indicate mastery of the content of a foundation course may be granted a waiver
- Students may be required to take a placement exam in order to waive a foundation course

#### Academic Load

An MBA student may register for up to nine credits per semester. Upon a student's request, the program director can approve three additional credits if the student has completed the first semester in the MBA program with a cumulative GPA of 3.5 or above.

## Academic Standing and Grading Policy

The MBA program follows the university graduate program guidelines for grading. Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. The policies regarding probation, dismissal, repeats, readmission and all other retention requirements are described in the Graduate Academic Regulations and Policies section of this catalog. In addition to university guidelines, the following rules apply:

- A student is allowed to receive two Cs (C or C+) in courses in the MBA program. If the student receives a third C or C+, he/she is automatically dismissed from the program.
- A student who receives an F in any course in the MBA program is automatically dismissed from the program.

## Degree Requirements

The MBA degree is composed of 51 credits (17 courses). Twenty-one credits (seven courses) comprise the foundation courses and 30 credits (10 courses) comprise the core courses and electives. Students are required to complete 24 credits (eight courses) of required core courses and six credits (two courses) from the elective courses. Courses are offered in the

evenings. The MBA program can be completed in 24 months, including summers, if all the foundation courses are required and 16 months if all the foundation courses are waived.

With permission from the SBM Director of Graduate Programs, students may replace up to two core courses with elective courses.

## **Foundation Courses (21 credits)**

- MBA 501 Foundations of Economics
- · MBA 502 Organizational Behavior
- MBA 503 Accounting Concepts
- · MBA 504 Managerial Statistics
- · MBA 505 Financial Management
- MBA 506 IT Essentials for Managers
- MBA 507 Marketing Concepts

#### **Core Courses (24 credits)**

- MBA 601 Managerial Economics
- MBA 606 Management Information Systems
- MBA 609 Operations Management
- MBA 611 Advanced Financial Management
- MBA 612 Leadership and Change Management
- MBA 613 Accounting Analysis for Managers
- · MBA 614 Marketing Management
- MBA 618 Strategic Management

#### **Elective Courses (6 credits)**

Students must complete two courses (six credits) from the following list, in consultation with their advisor.

- MBA 607 Business Communication
- MBA 610 Business Research Applications
- MBA 615 Innovation and Entrepreneurship
- MBA 616 e-Commerce Business Models and Technology
- MBA 617 Ethical and Legal Issues
- MBA 632 Investment Analysis
- MBA 633 Financial Derivatives
- MBA 634 Commercial Banking
- MBA 635 Islamic Economics
- MBA 636 Islamic Banking and Finance
- MBA 651 Supply Chain Management and Strategy

- MBA 652 Modeling and Analysis of Supply Chain Processes
- MBA 653 Supply Chain Management Technology and Applications
- MBA 654 Transportation and Logistics
- MBA 655 Information Systems Design
- MBA 661 Strategic Human Resources Management
- MBA 662 International Human Resource Management
- MBA 663 Staffing
- · MBA 664 Training and Development
- MBA 672 Managing Family Businesses
- · MBA 694 Special Topics in Business

#### Concentrations

Students enrolled in the program have the option to choose an area of concentration in one of the following fields: finance, human resource management or supply chain management. Students who elect to choose an area of concentration will increase their degree requirements from 51 to 54 credit hours.

## Finance Concentration Requirements

The finance concentration requires a total of 12 credits. These include one required course (MBA 611 Advanced Financial Management) and three finance electives. Students may choose from the following or any other approved elective:

- MBA 632 Investment Analysis
- MBA 633 Financial Derivatives
- MBA 634 Commercial Banking
- · MBA 635 Islamic Economics
- MBA 636 Islamic Banking and Finance

## **Human Resource Management Concentration Requirements**

The human resource management concentration requires a total of 12 credits. These include two required courses (MBA 612 Leadership and Change Management and MBA 661 Strategic Human Resource Management) and two elective courses. Students may choose from the following or any other approved elective:

- MBA 662 International Human Resource Management
- · MBA 663 Staffing
- · MBA 664 Training and Development

## **Supply Chain Management Concentration Requirements**

The supply chain management concentration requires a total of 12 credits. These include one required course (MBA 609 Operations Management) and three electives. Students may choose from the following or any other approved elective:

- MBA 651 Supply Chain Management and Strategy
- MBA 652 Modeling and Analysis of Supply Chain Processes
- MBA 653 Supply Chain Management Technology and Applications
- MBA 654 Transportation and Logistics

## Academic Advising

The SBM Office of Graduate Programs provides academic and career advising to students through the director, coordinator and graduate faculty in the School of Business and Management. Additionally, the graduate committee provides assistance in advising as required. The graduate committee consists of faculty members who teach in the MBA program and are appointed on a yearly basis. Additionally, after completion of the initial orientation session and initial meeting with the director and the coordinator, each student is assigned a faulty member who will serve as their advisor and assist in curricular and career guidance. Assignment of the advisor will be based on the student's individual goals and career interests.

## Master of Public Administration (MPA)

The AUS Master of Public Administration (MPA) program provides a rewarding opportunity for working public officials to improve their administrative knowledge and problem-solving skills. Because effective public management delivers services that enhance quality of life and create an attractive business investment environment, AUS offers students interested in public service a well-rounded experience based on the fundamental bodies of knowledge necessary for responsible leadership positions.

The MPA degree requires completion of 36 to 51 credits, depending on previous course work. Designed to be challenging, the program also allows each participant great flexibility in tailoring their progress to personal circumstances. Full-time students may complete the MPA in less than 24 months, but others who attend part-time may elect to take as long as five years to finish. Courses are scheduled in the late afternoon or early evening hours, with each class meeting one day per week.

Concepts covered in the program include principles of financial and human resource management, organizational theory and motivation, quantitative and qualitative problem solving, management of relations with the private sector, ethics and public policy analysis. Students will learn leadership skills and have an opportunity to apply them in action learning projects. Participants interested in organizational transformation, e-government, logistics management and other aspects of the discipline will also have an opportunity to pursue these interests with faculty who are knowledgeable in their field. Student involvement will be stimulated with case studies, class discussion, team projects and action learning exercises. In developing the MPA program, our faculty have drawn on examples from several of the most highly respected programs in the US and Europe. An MPA from AUS reflects the state-of-the-art in administrative education adapted to the local context. More details on the program are available at www.aus. edu/mpa.

## **Program Educational Objectives**

The curriculum of the MPA program is

designed to:

- prepare graduates with conceptual and managerial knowledge that will allow them to function as effective managers in governmental or nonprofit organizations
- develop in each student a strong sense of personal ethics, understanding of the public good and appreciation for the stewardship role played by public officials
- develop contacts and relationships with local officials who can provide practical learning experiences, serve as mentors and create employment opportunities
- provide a qualified faculty dedicated to student learning and actively engaged in adapting and applying public management theory to the local context
- foster awareness of the broad context in which government works and understanding its role in a diverse, tolerant and cooperative learning environment

## Admission Requirements

In addition to meeting the university's general graduate admission requirements, applicants must meet the specific requirements of the MPA program. Admission to the MPA program is highly competitive. Applicants are required to submit an acceptable score on the Graduate Record Examination (GRE), although a Graduate Management Admission Test (GMAT) score will also be accepted. This score is then combined with the student's undergraduate grade point average for the last two years of study. The resulting index is used to assist the Admissions Committee in determining the admission status of an applicant. GRE or GMAT scores more than five years old will not be accepted. The tests may be administered locally. Students admitted into the program are normally expected have at least two years of relevant work experience.

## **Conditional Admission**

In addition to the university requirements relating to conditional admission, the MPA program allows students to complete only two graduate courses under the conditional admission status. Conditional admission is limited and difficult to receive. During the semester in which they have conditional admission status, applicants must satisfy all admission requirements for the MPA program and demonstrate ability to pursue graduate study by earning six credits with a B average. Failure to do so will result in the student being unable to take any further courses in the MPA program.

## **Transfer Policy**

The credit transfer policy is described in the Graduate Admission Policies and Procedures section of this catalog.

## Waiver Policy

Students may waive any or all of the foundation courses if they have completed comparable course work at the undergraduate level. Waivers are only granted after review of official transcripts and submission of a petition of waiver to the SBM Office of Graduate Programs prior to the first semester of enrollment. The following waiver rules apply:

- A foundation course may be waived if the student has completed two similar undergraduate courses at an accredited university within the five years prior to admission to AUS. Only courses in which the student achieved a grade of 3.0 or higher will be considered.
- Students with professional experience or holders of commonly accepted certifications (e.g., CPA or CFA) that indicate mastery of the content of a foundation course may be granted a waiver.
- Students may be required to take a placement exam in order to waive a foundation course.

#### Academic Load

An MPA student may register for up to nine credits per semester. Upon a student's request, the program director may approve three additional credits if the student has completed the first semester in the MPA program with a cumulative GPA of 3.5 or above.

## Academic Standing and Grading Policy

The MPA program follows the university graduate program guidelines for grading. Enrolled students must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing. The policies regarding probation, dismissal, repeats, readmission and all other retention requirements are described in the Graduate Academic Regulations and Policies section of this catalog. In addition to university guidelines, the following rules apply:

- A student is allowed to receive two Cs (C or C+) in courses in the MPA program. If the student receives a third C or C+, he/she is automatically dismissed from the program.
- A student who receives an F in any course in the MPA program is automatically dismissed from the program.

## Degree Requirements

Eligibility for the MPA degree is based on successful completion of the following requirements:

- Students must attend a two-day, noncredit colloquium during the first year of study. This event will introduce some of the key themes associated with administration in the public sector.
- Students must complete 15 credits in five foundation courses. Individuals who have completed similar course work elsewhere may petition to have some of this requirement waived.
- Students must complete 10 specific courses, totaling 30 credits that form the MPA core.
- Students must also complete six credits
  of electives. For individuals without two
  years of work experience in government
  or the non-profit sector, at least
  three credits must be a public sector
  internship, for which the policies and
  forms are available from the program
  coordinator.
- During the final year in the program, students must complete a comprehensive exam constituting an action learning project that must be presented in both written and oral form. This project requires the student to take a leading

role in an organizational change initiative in which he or she applies the knowledge and skills learned during the MPA experience. Specific guidelines for the project, the written report and the oral presentation are available from the program coordinator and the MPA website.

Courses will generally be offered one night per week for two hours and 45 minutes.

#### **Foundation Courses (15 credits)**

- MPA 501 Public Managerial Economics
- MPA 502 Organizational Behavior and Administrative Practice
- MPA 503 Government Accounting Concepts and Analysis
- MPA 504 Methods of Problem Solving
- MPA 506 MIS for Public and Non-profit Organizations

## **Required Core Courses (30 credits)**

- MPA 600 Public Affairs Colloquium (two days)
- MPA 601 Public Administration and the Policy Process
- MPA 604 Public Policy and Program Evaluation
- · MPA 605 Public Financial Management
- MPA 606 Public Human Resource Strategies
- MPA 607 Public Communication
- MPA 615 The Public-Private Partnership
- MPA 617 Ethics, Law, Democracy and Society
- MPA 619 Executive Leadership
- MPA 632 Comparative Administrative Systems
- MPA 685 Capstone Course in Public Management

## **Elective Courses (6 credits)**

- MPA 610 Management of Non-profit Organizations
- MPA 612 Managing Organizational Change
- · MPA 616 e-Government
- MPA 629 Team Development and Leadership
- MPA 670 Transportation and Logistics Management
- · MPA 680 Project Management
- MPA 694 Special Topics in Public Administration

• MPA 697 MPA Internship in a Public Organization

Students may also take approved electives in the MBA, urban planning and engineering systems management graduate programs.

## Academic Advising

The SBM Office of Graduate Programs provides academic and career advising to students through the director, coordinator and graduate faculty in the School of Business and Management. Additionally, the graduate committee provides assistance in advising as required. The graduate committee consists of faculty members who teach in the MPA program and are appointed on a yearly basis. Additionally, after the completion of the initial orientation session and initial meeting with the director and the coordinator, each student is assigned a faulty member who will serve as their advisor and assist in curricular and career guidance. The assignment of the advisor will be based on the student's individual goals and career interests.

# Gulf Executive Master of Public Administration (GEMPA)

The AUS Gulf Executive Master of Public Administration (GEMPA) program has been designed to increase the capacity of governments in the Gulf Region by stimulating the ability of key executives to learn from theories, policies and practices proven successful in enhancing service quality, improving public participation and strengthening the business investment environment in other rapidly developing economies.

Emphasis is placed on learning

from cultures, societies, religions, traditions, technologies and the social sciences to identify new ideas that stimulate creative problem solving and promote effective cooperation between government leaders and the public. A key element of this approach and objective of the program is to stimulate dialogue among participants and foster a network of innovative thinkers who can create solutions that

serve governments throughout the Gulf Region.

Development of core competencies for effective management is also a fundamental goal of the program. Individual sessions focus on key skills as they apply to the use of human, financial and data resources. Other seminars consider policy development and evaluation, effective communications and executive problem solving. Participants learn to motivate others and to drive organizational change.

Each participant is expected to integrate these skills and demonstrate their application in a project using action learning—one of the most powerful new techniques in executive education. Upon completion of the program, each participant will be more effective in his or her existing role and will be better prepared to deal with new challenges.

More details on the program are available at www.aus.edu/gempa.

## **Program Educational Objectives**

The GEMPA program will enable participants to:

- broaden their perspectives by engaging the working knowledge and diverse viewpoints of motivated public executives through cooperative interaction with instructors and peers
- develop an integrative approach to organizational learning, bringing together liberal thought, practical policy choices and analogies drawing on the experience of others
- promote an ethic of public service and stewardship, respect for rule-of-law and concern for effective communication with stakeholders in society
- apply executive management skills and competencies to new challenges across the full spectrum of public resource and leadership issues

#### Admission Requirements

Admission to the GEMPA program is limited to experienced public officials committed to making effective use of an executive education opportunity. In addition to meeting the university's general graduate admission requirements, applicants must submit the following materials to the Admissions Committee prior to the end of the second week of July:

- a graduate application form (on paper or via e-mail)
- official transcripts from each college or university attended
- a résumé or CV indicating current position title, service level rating and awards or special recognition received.
   Participants are normally expected to have at least five years of service in a governmental or nonprofit organization, with at least one year in a midlevel or senior management position.
- a letter from a supervisor or other executive of the individual's employer, indicating the applicant's potential for taking on increased levels of responsibility
- a statement of interest in which the applicant describes his or her reasons for seeking admission to the program
- an example of the potential participant's written work, such as a report or policy statement

After reviewing these materials, the Admissions Committee will schedule interviews with candidates judged most likely to benefit from the program. The evaluation and interview results will be used by the committee to prepare a ranked list of candidates for not more than 20 available seats in each cohort.

In order to promote the geographic diversity of each cohort, the committee may set aside a predetermined number of admission vacancies for each Gulf state, releasing any unfilled vacancies on a specific date to other applicants on the admissions list.

## **Conditional Admission**

Conditional admission is not applicable to the GEMPA program.

#### **Transfer Policy**

Transfers or non-degree students are not admitted to the GEMPA program.

#### **Waiver Policy**

The waiver policy is not applicable to the GEMPA program.

### Academic Load

GEMPA course instruction takes place in four-day sessions, usually scheduled over a single weekend each month, excluding Ramadan. Attendance at all sessions is required. Courses often span traditional academic terms but approximate a six-credit load per semester.

Participants are working officials in government, non-profits or similar organizations. Courses frequently require the application of administrative leadership concepts in practical assignments. Each participant is required to undertake an action learning project within his or her organization.

Course modules are often taught away from AUS, but in each case one or more instructors have faceto-face interaction with participants. Reading selections, exams and class assignments are administered through the AUS web-based learning system.

## Academic Standing and Grading Policy

The GEMPA program follows the university graduate program guidelines for grading. Enrolled participants must maintain a cumulative GPA of at least 3.0 (B average) to remain in good standing.

Only two course grades of C (2.00) are allowed. A participant who receives an F in any course in the GEMPA program will be automatically dismissed from the program. Participants may retake no more than two modules with a subsequent cohort to improve their grade. No course may be repeated more than once.

In exceptional circumstances, the program director may allow participants who have left the program to return, provided that no more than one year has elapsed between the last module completed and the return of the participant to the program. All participants must complete their degree requirements within three years from first enrollment. All credit applied toward the degree must be completed in the AUS Gulf Executive MPA program.

## Degree Requirements

The Gulf Executive MPA degree requires completion of 40 credits, normally over a 22-month period. Course and seminar modules vary from one to three credits, depending on the length of instruction and the nature of assignments. All modules must be successfully completed to earn the degree. Participants are expected to attend all course modules with their cohort, but the GEMPA Academic Coordinator may, in extenuating circumstances, allow a participant to participate in a module with the subsequent cohort to fulfill this requirement.

Participants must take a comprehensive exam constituting an action learning project that must be presented in both written and oral form. This project requires the student to take a leading role in an organizational change initiative in which he or she applies the knowledge and skills learned during the GEMPA experience. Specific guidelines for the project, the written report and the oral presentation will be available from the GEMPA Academic Coordinator and the GEMPA website.

Each course in the GEMPA program is designed to convey new ideas and teach practical concepts that participants can apply in their own areas of responsibility. Faculty members update course content continuously to include the latest in management thinking and real world application.

#### Required Courses (40 credits)

- GMP 500 Executive Writing and Research
- GMP 501 Economics for Public Executives
- GMP 504 Executive Problem Solving
- GMP 506 Government Informatics
- GMP 600 Public Administration Colloquium (2 day, non-credit colloquium)
- GMP 601 Policy, Politics and Administration
- GMP 605 Financial Management and Budgeting

- GMP 606 Strategic Human Resource Management
- GMP 607 Public Marketing and Strategic Communication
- · GMP 612 Organizational Transformation
- · GMP 614 Analysis and Evaluation
- GMP 615 Managing the Public Private Partnership
- · GMP 616 e-Governance
- GMP 617 Public Ethics and the Rule of Law
- GMP 619 Executive Leadership
- GMP 632 Learning in Public Management
- GMP 680 Project Management for Executives

## Academic Advising

The SBM Office of Graduate Programs provides academic and career advising to participants through the SBM Director of Graduate Programs, the Graduate Programs Coordinator, the GEMPA Academic Coordinator and graduate faculty in the School of Business and Management. Additionally, the graduate committee provides assistance in advising as required. The graduate committee consists of faculty members who teach in the GEMPA program and are appointed on a yearly basis.

## College of Arts and Sciences

## **ELT** TESOL

ELT 501 Advanced English Grammar (3-0-3). Examines the structure, function and meaning of contemporary English. Discusses issues relative to descriptive/ prescriptive approaches to language and ESL instruction.

ELT 503 Contrastive Linguistics (3-0-3). Compares and contrasts English and Arabic phonology, morphology, syntax and semantics. Promotes a functional approach to language to demonstrate the applications of contrastive linguistics to ESL teaching.

ELT 505 Culture and the Language Teacher (3-0-3). Investigates how identities, values, assumptions, behaviors and communication styles affect teaching and learning a second language. Analyzes methods and approaches for cross-cultural research.

## ELT 510 Research Methods and Academic Writing (3-0-3).

Develops students' academic writing competencies and research skills. Introduces students to quantitative and qualitative research methods and teaches them how to conduct and report research.

ELT 511 Linguistics for ESL Teachers (3-0-3). (Formerly ENG 511). Focuses on areas in linguistics relevant to ESL teachers. Explores ways of utilizing research and generalizations derived from linguistics to inform ESL teaching practice.

ELT 513 Language Acquisition and Development (3-0-3). Focuses on processes involved in acquiring first and second languages. Examines different theoretical perspectives explaining acquisition and analyzes the factors that affect language development and learning. Explores the implications of SLA research in ELT classroom contexts.

ELT 515 Methods and Materials Development (3-0-3). Examines traditional and contemporary

approaches to English language teaching. Various aspects of classroom practice are analyzed, including teacher and learner roles, classroom management, and integrated versus separate teaching of the language skills.

ELT 517 Curriculum Design (3-0-3). Introduces students to the principles of ESL course design. Examines the stages of developing and evaluating learning centered curricula and materials. Prerequisite/co-requisite: ELT 515.

ELT 521 Reading and Writing in ESL (3-0-3). Discusses various theoretical models dealing with teaching literacy skills in a second language to children and adults. Explores ways to adapt and apply these models for effective ESL instruction. Prerequisite: ELT 510.

ELT 523 Bilingual Education (3-0-3). Reviews different models of bilingual education and issues in bilingualism. Discusses how to achieve a balanced bilingual education system by examining the challenges posed by cultural and linguistic diversity in a bilingual education setting.

ELT 531 Sociolinguistics (3-0-3). Studies the relationship between language, society and culture. Investigates the implications of sociolinguistic research for ESL teachers. Prerequisite: ELT 510.

ELT 551 Language Testing and Evaluation (3-0-3). Covers the fundamental goals, principles, standards and uses of language assessment and language assessment research. Reviews the factors involved in assessing proficiency in second language skills and in selecting appropriate testing instruments and evaluation tools. Prerequisite/concurrent: ELT 515.

ELT 553 Technology in the ESL Classroom (3-0-3). Introduces a wide range of current applications of technology in the ESL classroom. Focuses on creating innovative and effective ESL learning and teaching

environments using computers and other educational technologies. Prerequisite/concurrent: ELT 515.

ELT 567 ELT Leadership and Management (3-0-3). Introduces students to basic concepts in ELT leadership and management. Explores the areas of educational organizations, human resources in ELT, language program development and marketing as well as establishing stakeholder relations. Prerequisite: ELT 515.

ELT 611 Classroom Research (3-0-3). Reviews ESL classroom-based research as a means of understanding how ESL instruction and learning take place. Discusses research topics such as teacher talk, wait time, conversational repair, error correction, learning strategies and feedback. Prerequisite: ELT 510.

ELT 615 Quantitative and Qualitative Research in ELT (3-0-3). Surveys both quantitative and qualitative theoretical and epistemological approaches in TESOL research. Emphasizes how choices in research designs and analytical procedures impact data collection and results. The course is applications-oriented using the results of established theory. Graduate students can use this course to develop their research project proposals. Prerequisite: ELT 510.

ELT 619 Practicum in TESOL (1 to 3 credits). Provides the opportunity to observe, explore and implement effective ESL teaching strategies. Involves weekly seminars in which the students discuss their classroom experiences and reflect on their personal growth as ESL teachers. Prerequisite: ELT 551.

ELT 694 Special Topics in Applied Linguistics (1 to 4 credits). Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

ELT 696 Independent Study in ESL (1 to 4 credits). Requires a theoretical or practical project initiated by an

individual student and conducted under faculty supervision beyond what is offered in existing courses. Cannot be repeated more than once. Prerequisite: permission of program director.

ELT 699 Master's Thesis (6 credits). Requires students to complete individual and original research work on a topic related to some aspect of TESOL that addresses both theoretical and practical aspects of ELT. The thesis is supervised by the thesis faculty supervisor and is defended to the satisfaction of the committee of three faculty members. Graded as Pass/Fail.

## **TRA** English/Arabic/ English Translation and Interpreting

TRA 500 Principles and Strategies of Translation (3-0-3). Provides advanced training in principles and methods of translation from English to Arabic and vice versa. A variety of text types are covered, ranging from legal to journalistic genres.

TRA 501 Terminology and the Translator (3-0-3). Reviews the field of terminology in the work of the translator. Covers term formation, standardization and banks, among others. Uses samples from humanities and technical-scientific texts to apply terminology theories and models.

TRA 502 Arabicization and Translation (3-0-3). Reviews the process of Arabicization and its impact on translating into Arabic. Covers term formation, standardization, coordination and banks, among others. Uses samples from humanities and technical-scientific texts to demonstrate theories of Arabicization.

TRA 503 Theoretical Models of Translation (3-0-3). Provides the students with a conceptual map of translation studies and outlines the various theoretical approaches to translation equivalence. Students are introduced to the range of factors that govern the process of translation and to the theoretical underpinnings that

have motivated different attitudes to translating and translations. Prerequisite: TRA 500.

## TRA 504 Discourse Semantics and Pragmatics in Translation (3-0-3).

Addresses the needs of the practicing translator and interpreter within a discourse framework. Advanced training in semantics and pragmatics is provided, and linguistic analysis in these domains is re-considered from the vantage point of cross-cultural communication.

TRA 505 Interpreting and the Profession I (3-0-3). Provides the students with high-level training in those interpreting skills most relevant to the translator at work. Provides advanced training in liaison and consecutive interpreting with a focus on professional standards and community needs. Theoretical insights into the process of interpreting are presented and placed within an overall, practice-driven model of the process.

TRA 506 Perspectives on Translation Quality Assessment (3-0-3). Enables students both to achieve competent standards of translation and to reflect on the process of deriving texts from English or Arabic. Emphasis is placed on texts with a persuasive function in professional settings such as journalism, advertising and translation for the media

TRA 508 Research and Academic Writing (3-0-3). Introduces students to the conventions of academic writing in both English and Arabic, and of promoting an "action research" stance. These research skills are applied to the work of the translator and interpreter both as practitioners and as analysts.

TRA 509 Interpreting and the Profession II: Simultaneous Interpreting (3-0-3). Builds on TRA 505 and provides high-level training in those skills most relevant to Simultaneous Interpreting (SI), including professional standards and international conventions as well as equipment simultaneous interpreters use. Theoretical insights into the process of interpreting are presented and placed within an overall, practice-driven model of the process. Prerequisite: TRA 505.

TRA 556 Rhetoric for Translators (3-0-3). Surveys the various traditions within both English and Arabic grammar and rhetoric. This is related to the concerns of the translator in dealing with modern standard Arabic and English composition. Develops and applies a text-linguistic model rooted in rhetorical thinking, particularly to the translation of sacred and sensitive texts.

TRA 558 Contrastive Linguistics and Translation (3-0-3). Deals with how English and Arabic compare and contrast at various levels of linguistic organization: phonology, morphology, syntax and semantics. Promotes a discourse pragmatic perspective throughout to enable students to look at the way texts are organized functionally. Prerequisite: TRA 500.

## TRA 610 Intercultural Communication and Translation.

(3-0-3). Provides an in-depth view of the way in which cultures influence communication and representations. Covers perception differences, worldview, identity, verbal and nonverbal communication styles in both high and low context cultures, and the effect of bias and conflicting value systems on cross-cultural communication through translation.

# TRA 694 Special Topics in Translation and Interpreting (1 to 4 credits). Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Can be repeated for credit. Prerequisite: permission of

TRA 695 Translation Research Seminar (3-0-3). Allows students to share what they have learned throughout the course as they develop their thesis proposal. Students further refine their research skills, learn appropriate presentation formats and enhance their professionalism in a supportive environment. Prerequisite: permission of program director.

TRA 696 Independent Study in Translation and Interpreting (1 to 4 credits). Requires a theoretical or practical project initiated by an individual student and conducted under faculty supervision beyond

program director.

what is offered in existing courses. Cannot be repeated more than once. Prerequisite: permission of program director.

TRA 699 Master's Thesis (6 credits). Requires students to complete an extended piece of individual research (10.000–12.000 words) on a topic

within translation/interpreting studies, including an extended translation (c. 5000 words) and a commentary, chosen in consultation with the thesis faculty supervisor. Emphasis is placed on the theoretical and practical aspects of translating or interpreting. The thesis must be completed within two

consecutive academic semesters. An extension may be allowed if a candidate presents acceptable mitigating circumstances. The thesis is defended to the satisfaction of a committee composed of three faculty members. Graded as Pass/Fail. Prerequisite: permission of program director.

## College of Engineering

## **ESM** Engineering Systems Management

ESM 520 Management for Engineers (3-0-3). Explores a full range of integrated topics for individuals in both public and private sector organizations who coordinate and manage engineering projects, personnel, resources and systems. Covers human resources, communication skills, leadership styles, team building, the basics of marketing management and financial management, and the management needs in multicultural and multinational environments. Integrates the core management principles with engineering experiences using case studies and applications.

**ESM 540 Modeling and Simulation** (3-0-3). Explores the concepts and principles associated with systems modeling and simulation using contemporary software such as simulation with ARENA. Covers probability and statistics review; modeling techniques, including problem formulation and queuing theory; and discrete event simulation modeling. Students become experienced with state-of-the-art simulation and modeling software, reflecting the joint nature of these activities using ARENA. Previous knowledge of statistics is required. Includes a team project.

ESM 555 Information Technology for Engineering Managers (3-0-3). Provides an overview of the important managerial and strategic issues associated with using IT in today's

networked organization. Covers IS/IT strategy, IT/business strategy alignment, IT-enabled business models, IT governance, managing integration with partners, planning and implementing new systems in organizations, and managing IT outsourcing. Previous knowledge of statistics is required. Includes case studies and team projects.

ESM 560 Quality Engineering and Management (3-0-3). Covers the techniques and applications of quality control using total quality management and reliability engineering. Includes sampling procedures, product quality and control, statistical process control charts and troubleshooting, product acceptance sampling plans, process capability analysis, an introduction to six sigma and design of experiment, time-to-failure, failure rate, reliability and system reliability.

**ESM 570 Project Management** (3-0-3). Covers the elements of project management critical to the success of engineering projects: project management framework, strategic management and project selection. project organization, human aspects of project management, conflicts and negotiations, scope management, time management, cost management, risk management, contracts and procurement, project termination, the project management office, and modern developments in project management. Integrates and clarifies the principles and tools through case studies from a variety of disciplines.

ESM 575 Advanced Engineering Economy (3-0-3). Covers the

theory and application of advanced engineering economy principles and methods. Studies the effects of inflation, depreciation and taxes, cost estimation, sensitivity analysis, risk and uncertainty, capital budgeting, multi-attribute decision making, advanced asset replacement analysis and real option analysis. Includes case studies and a term project related to the topic.

**ESM 580 Information Technology Project Management (3-0-3).** Covers the elements of project management critical to the success of IT projects: project management framework, strategic management and project selection, project organization, human aspects of project management, conflicts and negotiations, scope management, time management, cost management, risk management, contracts and procurement, project termination, the project management office and modern developments in project management. Integrates and clarifies the principles and tools through case studies from a variety of disciplines.

ESM 600 Research Methodology (3-0-3). Introduces the methodology of scientific research. Covers topics such as internal and external construct validity and reliability issues in research; normative, prescriptive and descriptive theories; process and variance approaches to theory formulation; introduction to quasi-experimental design and case study methodologies; practical strategies for literature review; APA and IEEE style guidelines; and presenting research results and conclusions. Includes

invited speakers from industry and business. Prerequisites: ESM 520 and ESM 560 or equivalent.

ESM 610 Strategic Technology Management (3-0-3). Provides students with a broad overview of the main topics encompassed by management of technology. Covers innovative activities beginning with research and development and extending through production and marketing. Focuses on the emergence of the knowledge economy and technology as a key knowledge asset. Includes case studies covering technological innovation, technological forecasting. technological impact identification, and technology assessment and evaluation. Prerequisite: ESM 520.

## ESM 612 Advanced Information Systems Management (3-0-3).

Explores the capability maturity model and integration (CMMI). Introduces CoBIT and ITIL as a framework for managing IT services. Covers service-oriented architectures, e-government systems, executive information systems (EIS), mobile information systems (MIS), enterprise systems (ERP, SCM, CRM), workflow systems, reengineering of IS, metrics and measurements, exception handling and quality assurance. Includes case studies related to the topic. Prerequisite: ESM 555 or equivalent.

## ESM 614 Communication and Network Management (3-0-3).

Addresses the key technological and managerial issues related to the design, operation and maintenance of computer networks and the enterprise telecommunication system. Provides an overview of telecom technologies, including telecom architectures and protocols, voice technologies, LANs, WANs, cellular and mobile networks, satellite systems. and Internet/intranet architectures. Covers feasibility analysis, service level agreements, service quality monitoring, network planning, network management, survivability, telecom equipment procurement, contracting, outsourcing, technology forecasting and replacement, telecom investment decisions, legal and regulatory

issues in telecommunications, and performance modeling and monitoring tools. Includes case studies related to the topic. Prerequisite: ESM 555.

ESM 616 Infrastructures for e-**Businesses (3-0-3).** Explores the various elements of infrastructures deployed to run e-businesses, including the Internet, intranet and extranet. Covers web hosting, web servers and web services; electronic transaction processing and payment systems: trust services: modes of e-businesses, including businessto-business transactions and EDI: ethical and social issues involved in e-business; and quality of service and infrastructures. Includes case studies related to the topic. Prerequisite: ESM 555 or equivalent.

in the administration and management of security for computer-based systems. Introduces the management of security, including managing identity, IT threats, vulnerabilities and trust. Covers planning for security and contingencies, the development of security programs and policies,

**ESM 620 Security Management** 

(3-0-3). Provides a solid background

security models, practices and standards, security risk management, personnel and security, and legal and ethical issues in security. Prerequisite: ESM 555.

## ESM 624 Knowledge Management

(3-0-3). Introduces the roots of knowledge and knowledge management (KM); theories/ definitions of knowledge; theories, applications, tools, and practices of KM; the Knowledge Management Life-Cycle Framework and Models; significant issues in KM (e.g., best practices, culture, economics, strategy, intellectual capital and sustainable innovation). Includes case studies related to the topic. Prerequisite: ESM 555 or equivalent.

## ESM 626 Data Warehousing and Business Intelligence (3-0-3).

Covers planning, designing and operating data centers; site selection; operational procedures; physical and operational security; business continuity and disaster recovery; data collection and organization; concepts

and tools of data warehousing; and business intelligence and trends discovery including data visualization, data mining and machine learning techniques. Includes case studies related to the topic. Prerequisite: ESM 555

**ESM 632 Applied Operations** 

Research (3-0-3). Covers the formulation of mathematical models, solutions using linear programming, sensitivity and cost analysis of developing alternative optimum solutions, transportation and network analysis, inventory control, production planning and control, forecasting and stochastic modeling. Includes case studies related to the topic and a term project. Prerequisite: ESM 540 or equivalent.

#### **ESM 636 Human Resources**

Management (3-0-3). Covers human resource planning processes, tools and techniques, job specification and methods of job analysis. Describes the requirements and ethical context of HRM methods of recruitment, evaluation, career training and development programs, salary systems and employee benefits, HR information systems and international HR issues. Integrates HR management practices and methodologies with engineering experiences. Prerequisite: ESM 520 or equivalent.

#### **ESM 638 Decision Analysis**

(3-0-3). Covers the theory and practice of analyzing decisions in the public and private sectors. Covers multiple objectives, influence diagrams, decision trees, sensitivity analysis, probability assessment, multi-attribute utility and human biases. Describes practical applications through realworld systems model building. Explores the use of decision analysis software and spreadsheets to solve real-life problems through case studies. Prerequisite: ESM 632.

**ESM 640 Supply Chain** 

Management (3-0-3). Covers supply chain management (SCM) concepts, an integration of purchasing, operations, logistics, management, warehouse, documentation and information flows within the supply chain cycle. Topics include supply chain management

purposes and uncertainty processes; supply chain design, evaluation and measurement models; and trends in strategic operations, procurement and logistics within the supply chain. Term projects and case studies are required. Prerequisite: ESM 540 or equivalent.

**ESM 642 Business Process** Management (3-0-3). Introduces the important issues in alignment of business internal activities and resources with external requirements through process design and process improvements. Includes process types and hierarchies, workflow management system, incremental process improvement, process reengineering and benchmarking. Covers implementation and change management. Integrates the use of BPM software in practical applications in the service and manufacturing sectors. Prerequisite: ESM 540 or equivalent.

ESM 644 Financial Management for Engineers (3-0-3). Provides engineers with financial management knowledge necessary for value-added decision making. Covers structure and analysis of financial statements, corporate valuation, working capital management, capital structure and budget, securities analysis and financial markets, and financial forecasting. Includes practical financial management case studies in technical organizations. Prerequisite: ESM 575 or equivalent.

**ESM 650 Construction Management** (3-0-3). Covers both the fundamental concepts and contemporary applications of construction management. Discusses elements of the construction project life cycle, project stakeholders, project administration and coordination and construction delivery methods. Provides the student with the opportunity to simulate real-life construction management problems and apply acquired skills in their solution through case studies and team projects. Prerequisite: ESM 570 or equivalent.

ESM 652 Construction Planning and Scheduling (3-0-3). Covers the application of planning and scheduling

techniques critical to the success of construction projects, critical path method, resource allocation and leveling, time-cost optimization, project monitoring, updating and control, linear scheduling, stochastic scheduling, contractual implications of construction schedules, analysis of time-related change orders and delays, schedule diagnostics, and use of construction planning and scheduling software. Includes case studies from the construction industry. Prerequisite: ESM 570 or equivalent.

ESM 654 Materials Management (3-0-3). Covers applications of management skills on materials, site, personnel, planning process, information systems, expediting and quality assurance, purchasing, logistics, materials control, forecasting, inventory and warehouse management, physical distribution, just-in-time principles and total quality management. Prerequisite: ESM 570 or equivalent.

ESM 660 Legal Aspects of ESM (3-0-3). Introduces construction contracts and their administration with special emphasis for engineering. Covers construction claims, matters of time, delays and litigation. Discusses analysis of specific issues concerning contracts, subcontracting, tort claims. insurance and bonds. Covers strategies for avoiding or terminating litigation, methods of dispute resolution, key aspects of prosecuting and defending claims, the role of dispute review boards and their use, procedures of claims presentation, conducting cost evaluation of claims and methods of international construction contracts. Discusses actual legal cases involving construction and law. Prerequisite: ESM 570.

## ESM 667 Construction Contracting and Cost Estimating (3-0-3).

Examines the cost elements of construction contracting crucial to the success of construction businesses. Provides an overview of cost estimating and bidding procedures, including the role of the estimator, various levels and details of an estimate and the bidding process. Covers accounting and cost-keeping

systems, budgeting, quantity takeoff, pricing labor, material and equipment, bonding, private and public bidding formats, markups and bidding strategies. Prerequisite: ESM 650 or equivalent.

ESM 668 Construction Safety
Management (3-0-3). Covers safety
and health concerns in the construction
worksite, concentrating on safety
process development and management
in construction. Provides the student
with a comprehensive background in
worksite hazard assessment, safety
and health program development, and
risk management in the construction
industry. Prerequisite: ESM 560.

ESM 685 Capstone Course in Engineering Management (3-0-3). Presents students with an opportunity to showcase the theory and the

to showcase the theory and the practical knowledge accumulated throughout their studies. The general intent of the engineering capstone is to demonstrate students' knowledge of the integrative aspects of ESM tools through rigorous written and oral communication of case analysis and a team project. Uses case studies to demonstrate the integrative aspects of ESM applications. Prerequisite: ESM 600.

ESM 686 Capstone Course in Construction Management (3-0-3).

Presents students with an opportunity to showcase the theory and the practical knowledge accumulated throughout their studies. The general intent of the engineering capstone is to demonstrate students' knowledge of the integrative aspects of ESM tools through rigorous written and oral communication of case analysis and a team project. Uses case studies to demonstrate the integrative aspects of ESM applications. Prerequisite: ESM

ESM 687 Capstone Course in Information Technology Management (3-0-3). Presents students with an opportunity to showcase the theory and the practical knowledge accumulated throughout their studies. The general intent of the engineering capstone is to demonstrate students' knowledge of the integrative aspects of ESM tools through rigorous

written and oral communication of case analysis and a team project. Uses case studies to demonstrate the integrative aspects of ESM applications. Prerequisite: ESM 600.

ESM 694 Special Topics in Engineering Systems Management (1 to 4 credits). Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

ESM 698 Professional Project (6 credits). Requires completion of an approved professional project on a selected area of engineering management and systems engineering. Requires students to demonstrate the ability to integrate the information and the skills accumulated in their study plan through rigorous written and oral communication. A final report and presentation must be submitted to the advisory committee. Graded as Pass/Fail.

ESM 699 Master's Thesis (6 credits). Requires students to complete original research work in a multidisciplinary area in engineering systems management. Requires students to demonstrate the ability to integrate the information and the skills accumulated in their study plan through rigorous written and oral communication. The thesis is completed under the supervision of a faculty member serving as the thesis advisor, and a final defense to the advisory committee is required. Graded as Pass/Fail.

## MTR Mechatronics Engineering

MTR 500 Advanced Engineering Mathematics (3-0-3). Covers analysis of linear and nonlinear physical systems equations of motion (ODEs and PDEs), partial differential equations of mathematical physics (wave, diffusion, Laplace, Poisson Equations), transform and integral methods for solving boundary and initial value problems, and numerical methods for ordinary and partial differential equations. Prerequisite: admission to program.

MTR 505 Applied Electrical and Electronics Systems (3-1-3). Covers operational amplifiers and their applications, power amplifiers and switches, DC and AC motors, digital systems and electronic CAD tools. Prerequisite: admission to program.

MTR 510 Applied Mechanical Systems (3-0-3). Covers modeling of thermal and fluid systems. Includes kinematics and dynamics of machinery, and CAD tools for mechanical systems. Prerequisite: admission to program.

MTR 515 Information Technology for Mechatronics (3-1-3). Covers computer organization, operating systems, computer networking (LAN and WAN), Internet programming and application, and web-based monitoring. Prerequisite: admission to program.

MTR 520 Embedded Systems for Mechatronics (2-3-3). Explores microprocessor hardware and software modules. Covers microcontroller hardware and software architectures, microcontrollers programming and interface with real-time mechatronics systems, data acquisition unit and designing stand-alone embedded systems for mechatronics products. Includes case studies and course projects. Prerequisite: admission to program.

MTR 530 Power Electronics and Electrical Drives (3-0-3). Gives an overview of power electronic systems, energy conversion and electric power conditioning. Covers analysis and applications of various energy conversion processes: AC power controllers, controlled rectifiers, DC choppers, DC-AC converters, operation of DC machines and AC Drives. Prerequisite: MTR 505.

MTR 535 Electro-pneumatic and Hydraulic Systems (2-3-3). Explores fluids and fluid flows in high-performance actuators and controllers, power flow and fluid power elements, valve and pump control, linear and rotary motion and state space descriptions. Covers design of electrohydraulic position and velocity control servomechanisms for high performance with stability.

Prerequisite: MTR 505 or MTR 510.

MTR 540 Advanced Control Systems (3-0-3). Covers state variable models, design of control systems in state space, full state observers, reduced order observers, digital compensator design LQ regulator and LQG theory, servomechanism design, and design of continuous and digital control systems using modern analytic and computer design tools. Prerequisite: admission to program.

MTR 590 Mechatronics Design (2-3-3). (Formerly MTR 525). Requires individual and team projects involving the development and integration of hardware and software into a "smart" system, which includes the sensing, processing and controlling functions. Prerequisite: MTR 520.

MTR 600 Modeling and Simulation of Dynamic Systems (3-0-3). Introduces multi-domain systems.

Covers mechanical, thermal, fluid, electrical, electronic and electromechanical system dynamics. Emphasizes modeling and simulation of hybrid systems using computeraided tools. Prerequisite: MTR 500.

MTR 605 Digital Signal Processing (3-0-3). Covers signal representation and system response, signal sampling and reconstruction, convolution, transfer function and system characteristics, digital filter design and realization, adaptive filters, spectral analysis, multirate signal processing, and time-frequency analysis and wavelets. Prerequisites: MTR 500.

## MTR 610 Automated Manufacturing Systems (3-0-3).

Describes and demonstrates automated machine tools and machining cells. Covers machining center configuration and operation, machine tool controller, machining code generation, in-process sensing and control, cell controllers and system simulation. Prerequisites: MTR 520.

MTR 615 Artificial Intelligent Systems (3-0-3). Covers biological and cognitive paradigms, concepts of machine intelligence, intelligent agents, vision and image analysis, principles of decision making, fuzzy logic, decision trees, casebased reasoning, genetic algorithms, neural networks and expert systems. Prerequisites: MTR 515 and MTR 520.

MTR 620 Machinery Dynamics and Vibration (3-0-3). Covers machinery vibration analysis (signature analysis in time and frequency domains, fault detection, diagnosis and correction), instrumentation, case studies and machine monitoring programs.

Prerequisite: MTR 500.

MTR 625 Distributed Control Systems (3-0-3). Studies distributed computer systems architecture, system elements, data communications links, software algorithms, reliability and applications. Prerequisite: MTR 500.

MTR 630 Real-Time Robotics Systems (2-3-3). Covers components of robot systems, analysis and design of modern robotic and industrial control systems, hardware and software, computational methods and techniques used in vision-based robotics, real-time embedded control, optimization techniques, matrix analysis and analytic 2D/3D geometry. Prerequisites: MTR 500 and MTR 520.

MTR 635 Smart Structures and Sensor Fusion (3-0-3). Explores basic material properties, models, and active and sensory material systems. Covers health monitoring approaches to detect damage in a structure; applications of smart materials primarily for vibration and pointing control; finite element models with piezoelectric elements use in sensor selection and actuator; the design of feedback and adaptive feed-forward control algorithms; and implementation of sensor, actuator and control electronics. Prerequisite: MTR 520.

MTR 640 Nonlinear and Intelligent Control Systems (3-0-3). Introduces nonlinear systems, Lyapunov stability theory, linearization by high gain and sliding modes, nonlinear observers, Lyapunov design methods, feedback linearization, and intelligent control strategies, such as neural networks and fuzzy logic. Prerequisite: MTR 540.

MTR 645 Image Processing and Computer Vision (3-0-3). Discusses fundamentals of digital images, image enhancement, restoration and segmentation. Covers color representation, morphological image processing, representation of images and object recognition. Prerequisite: MTR 500.

MTR 691 Mechatronics Design Project (0-6-3). Requires an extended project of interdisciplinary nature in which elements of computing, mechanics and electronics should be involved. Graded as Pass/Fail. Prerequisite: MTR 600. MTR 694 Special Topics in Mechatronics Engineering (1 to 4 credits). Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

MTR 695 Mechatronics Seminar (1-0-0). Explores project planning development and realization, case studies of engineering systems design and realization, and current research topics in mechatronics engineering, including areas such signal processing, image processing, control, robotics, intelligent systems, computer vision and MEMS. Prerequisite: approval of advisor.

MTR 696 Independent Study in Mechatronics Engineering (1 to 4 credits). Requires investigation under faculty supervision beyond what is offered in existing courses. Cannot be repeated more than once. Prerequisite: approval of advisor.

MTR 699 Master's Thesis (6 credits). Requires students to complete extended and original research work on a topic related to elements of computing, mechanics, electronics and intelligence. Graded as Pass/Fail. Prerequisite: approval of advisor.

## School of Artchitecture and Design

## **UPL** Urban Planning

UPL 501 Fundamentals of Urban Planning (3-0-3). (Cross-listed as ARC 571). Introduces the discipline of urban planning. Surveys the history of the field as well as its links with other fields of environmental studies, such as architecture, urban design, geography, engineering and others. Overviews what planners do and the tools they use in their practice.

UPL 541 Planning Theory and Methods (3-0-3). Explores the theoretical foundations of planning and its associated methods. Examines the basic theoretical framework

that fosters good planning practice. Reviews the classical theoretical paradigms of planning, examines the major roles played by practicing planners, and looks at the application of theory in dealing with such issues as community development, environmental protection, economic policies, political and administrative structure, and social equity.

UPL 547 Research Methods and Analysis (3-0-3). Introduces the quantitative and qualitative methods and techniques used in urban planning research and practice. Analytic approaches include research design, multivariate regression, survey research, case study research,

evaluation and graphic data presentation. Emphasizes methods in the context of planning and urban policy research. Prerequisite/ concurrent: UPL 501.

UPL 548 Environmental Planning (3-0-3). (Cross-listed as ARC 578). Provides a comprehensive overview of the field of environmental planning and how it relates to efforts intended to manage, organize and protect environmental resources. Reviews the political and administrative context of environmental planning. Addresses principles of sustainability, ethics and the law in relation to land, air, water and other natural resources. Prerequisite: UPL 501.

**UPL 550 Urban Economics and** Analysis (3-0-3). Examines the economics of cities and urban problems. Undertakes economic analysis of the location and growth of urban and regional areas with emphasis on public policy issues. Discusses land-use patterns, measurement and change in regional economic activity, and urban problems such as transportation, housing, poverty and crime. Places special attention on local fiscal behavior. overlapping jurisdictions and the provision of local public goods, and intergovernmental fiscal relations. Prerequisite: UPL 501.

UPL 556 Advance Planning Tools: GIS Applications (4-0-3). Introduces the Geographic Information Systems (GIS) concepts, capabilities and applications. Focuses on developing the skills required to use GIS tools to analyze geographic data. Discusses issues of data input, data models, spatial analysis and data output. By the end of the course, students will gain a good understanding of GIS development, capabilities, and potentials for socioeconomic and urban planning studies. Prerequisite: UPL 501.

## **UPL 565 Land Use Planning Principles and Practice (3-0-3).**

Examines various theoretical and practice-based approaches to land use planning. Gives an overview of the various social, economic, political and legal influences on land use and the planning process and application appropriate to balance such influences. Prerequisite/concurrent: UPL 501.

UPL 572 Urban Transportation Systems Planning Techniques (3-0-3). Covers data collection, trip generation, trip distribution, factors underlying the choice of mode, traffic assignment, modeling and evaluation techniques, use of planning software packages, development and evaluation of alternatives. Prerequisite/ concurrent: UPL 501.

**UPL 574 Urban Transportation Systems Analysis (3-0-3).** Explores the use of quantitative techniques for modeling urban transportation systems' performance. Covers the

application of graph theory and network analysis to transportation problems, and analytical approaches to formulate network equilibrium assignment problems and solution algorithms. Introduces dynamic traffic assignment. Prerequisite: UPL 572.

UPL 582 Theory and Principles of Urban Design (3-0-3). (Cross-listed as ARC 573). Examines major concepts, principles and theories of urban design. Reviews the historic development of urban design as a professional field and surveys current urban design issues, trends and practices in both the Western and non-Western/Islamic contexts. Prerequisite/concurrent: UPL 501.

UPL 584 Urbanism and Urban Form Analysis (3-0-3). Examines urban form elements, patterns and evolution. Focuses on the forces that have shaped cities in history and analyzes contemporary trends that impact urban formation and regeneration. Explores methods of urban morphological analysis as related to urban design. Places special attention on the study of cities of the Middle East and Islamic societies. Prerequisite: UPL 501.

**UPL 594 Special Topics in Urban Planning (2 to 4 credits).** Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

**UPL 597 Urban Planning Internship** (0-0-0). Consists of eight weeks (320 hours) of approved internship. At the end of the internship, the student must submit a report of the internship work experience. Course is offered on a Pass/Fail basis. Prerequisite: UPL 501. Registration fees apply.

UPL 667 Urban Planning Lab (12-0-6). Covers the application of substantive skills in urban planning. Focuses on comprehensive planning exercises for an urban area in the UAE/Gulf region, involving fieldwork and hands-on analysis and application. Emphasizes the methods and tools of preparing plans. Addresses development of baseline data; analysis of existing conditions; identification of strategic planning and development issues; forecasting of future conditions; review of development goals.

objectives and policies; development and synthesis of alternative plans; evaluation of alternatives; and development of implementation strategies and programs that support policymaking. Prerequisites: UPL 501 and UPL 556.

UPL 676 Transportation Systems Operations and Control (3-0-3). Studies the operation and control of transportation systems with emphasis on traffic characteristics, capacity analysis, traffic improvements, signalization, signs and marking, channelization, intersection capacity, and principles and techniques used to improve the efficiency and safety of transportation systems. Prerequisite: UPL 572.

UPL 686 Space, Society and the Public Realm (3-0-3). Explores the nature of urban space and its role in the social being. Focuses on the potentials of space as a tool in shaping the public realm and nurturing citizenship. Examines critical issues of globalization and the transforming role of space in the post-industrial, informational city. Prerequisite: UPL 582.

**UPL 694 Special Topics in Urban Planning (2 to 4 credits).** Explores a theoretical or practical topic proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

UPL 696 Independent Study in Urban Planning (1 to 4 credits). Requires a theoretical or practical project initiated by an individual student and conducted under faculty supervision beyond what is offered in existing courses. Cannot be repeated more than once. Prerequisite: permission of program director.

UPL 698 Final Project (6 credits). Requires students to choose an applied research topic often in conjunction with a real planning problem and/or client. Students will produce a high-quality project report guided by an advisor and a minimum of two readers. The final project serves as a capstone course requiring students to draw on the basic knowledge, skills and techniques learned from their coursework. Graded as Pass/Fail.

Prerequisite: permission of program director.

**UPL 699 Master's Thesis (6 credits).** Requires independent, significant original research conceived and developed by the student and guided

by an advisor and a minimum of two readers. Students will demonstrate scholarly capabilities and expertise based on the theoretical knowledge and methodological skills they have developed in their previous coursework. The thesis experience serves as a capstone course for students who intend to pursue careers in research, teaching and/or scholarship. Graded as Pass/Fail. Prerequisite: permission of program director.

## School of Business and Management

## **GMP** Gulf Executive Public Administration

GMP 500 Executive Writing and Research (2-0-2). Teaches the elements of effective writing and research. Introduces students to online research and available information resources, including journals and databases. Includes writing concepts such as organizing and prewriting, wordiness, parallel structure, paragraphing, subordination, passive voice, transitions, report structure, nominalizations, prepositional decay, proofreading, and document design and layout.

GMP 501 Economics for Public Executives (3-0-3). Explores micro and macroeconomic theory for management decisions and emphasizes basic economic reasoning in the analysis of public policy choices. Covers topics such as resource scarcity, supply and demand, household and firm behavior, market equilibrium, externalities, market failure, public goods and benefit-cost analysis. Discusses the comparative advantages of short-run fiscal and monetary policy changes and of longer-run growth policy options.

GMP 504 Executive Problem Solving (3-0-3). Introduces basic quantitative methods and their application to executive decision making and problem solving. Presents a variety of techniques for data analysis. Covers topics such as defining problems, choosing appropriate techniques, descriptive data analysis, probability theory, sampling, point and interval estimation, analysis of comparisons

and associations, and hypothesis testing. Prepares participants to be effective initiators, consumers and evaluators of quantitative studies.

**GMP 506 Government Informatics** (3-0-3). Explores the organizational integration and performance implications of networked information assets in the public sector. Explores information architecture planning, open standards and interoperability of IT infrastructures, open source software applications in government, and IT investment planning and evaluation. Addresses the role of information systems at all levels of government. Considers trust and privacy issues, ethics, access and security aspects. Outlines models for organization of the IT function and management of IS resources in the government sector.

## GMP 600 Public Administration Colloquium (2 days) (0-0-0).

Frames key challenges for public administration in the Gulf Region. Introduces participants to each other, the GEMPA staff, SBM and AUS. Incorporates registration, computer configuration, calendaring and logistics activities. Establishes expectations and procedures for testing, assignment submission and communication with faculty.

GMP 601 Policy, Politics and Administration (3-0-3). Introduces the public policy process and considers concepts such as competing values, externalities, market failure, risk and uncertainty. Explores alternate models of policy decision making and teaches approaches used by public managers to build support for specific programs.

Examines the roles of agency culture, administrative reform, public trust, judgment and ethical norms.

**GMP 605 Financial Management** and Budgeting (3-0-3). Presents use of the executive budget as a device for management planning and control. Emphasizes underlying concepts of public finance and the elements of budget analysis, strategy, review and execution. Highlights factors that influence budgetary commitments and considers the interplay among tax policy, budgets and fiscal policy. Examines basic financial management functions including cash management, debt administration and communication with their impact on financial performance.

GMP 606 Strategic Human Resource Management (1.5-0-0). Examines the management of human resources as a key element in organizational strategy and implementation. Presents the human resource inventory and considers principles of effective hiring, performance management, employee development, position classification, job analysis and managerial discretion in the context of ethical theories on equity, equality and representative governance.

## GMP 607 Public Marketing and Strategic Communication (1.5-0-0).

Examines the principles of effective marketing and communication as they apply in the public sector. Encourages participants to improve their interpersonal, group and representational communication skills in written and oral form. Explores conceptual and theoretical frameworks for developing communication

campaigns aimed at advancing organizational priorities and public policy.

#### **GMP 612 Organizational**

Transformation (3-0-3). Explores the principles of organizational diagnosis, planning and change. Presents methods for identifying root causes, analyzing processes, evaluating alternatives and securing support for implementation. Covers topics such as data collection methods, diagnostic models, organizational design principles, process reengineering, business case analysis and training alternatives. Cases will allow students to apply theories, models and methods to real situations.

GMP 614 Analysis and Evaluation (3-0-3). Focuses on quantitative and qualitative research activities essential for designing, implementing and appraising government programs. Explores approaches to assessing the effectiveness and efficiency of public services, new initiatives and ongoing agency activities. Considers the US Government Performance and Results Act, along with parallel initiatives for program reform in other nations.

GMP 615 Managing the Public-Private Partnership (3-0-3). Explores the broad range of public-private interaction in delivery of public services. Considers tenets of the New Public Management, including entrepreneurialism in government, public-private partnerships and their implications for political, managerial. legal and ethical questions associated with use of non-governmental service providers. Considers types of services amenable to new approaches and introduces elements of performance monitoring in acquisition, contracting and program delivery.

GMP 616 e-Governance (1-0-1). Introduces the concept of e-governance and the basic stage model of e-government. Distinguishes between models of government automation and transformation. Considers the potential influence of government information access on the development of an informed and empowered citizenry. Explores the potential of electronic media for stimulating

citizen participation in public decision making.

GMP 617 Public Ethics and the Rule of Law (3-0-3). Presents public ethics, the public good and stewardship as derived from liberal theory and moral reasoning. Considers the relationship between law and ethics in Western thought, stressing the implications of rule of law and due process for administrative practice. Reviews the impact of interests, privilege, political power and conflict of interest on integrity and public trust. Addresses differences in values, norms and social objectives based on local culture and tradition.

GMP 619 Executive Leadership (3-0-3). Explores leadership roles and responsibilities in creating highperforming public organizations. Emphasizes creation and implementation of an organizational vision integrating key program goals, priorities and values. Considers adaptive leadership, team-building, conflict resolution, crisis management, emotional intelligence, integrity and dealing with diversity in a crosscultural context. Employs case analysis and discussion, role plays and an active learning project.

**GMP 632 Learning in Public** Management (3-0-3). Synthesizes and integrates principles and theories from throughout the GEMPA Program, applying them to leadership, human resource management, law and ethics, policy and evaluation. Presents the notion of a learning organization and explores its implications for government performance. Introduces the concept of policy transfer and considers the ability of public organizations to learn by analogy. Explores the importance of administrative capacity and the relationship between policy and implementation

GMP 680 Project Management for Executives (1-0-1). Explores techniques, models and tools for management of government projects. Uses case studies to evaluate leadership challenges in managing complex, highly technical and timesensitive projects. Considers project

design, planning, scheduling, systems engineering, cost estimation and control.

## MBA Business Administration

MBA 501 Foundations of Economics (3-0-3). Provides an introductory survey of microeconomics and macroeconomics, designed primarily for MBA students unfamiliar economics principles. The microeconomics side of the course includes elements of demand and supply, consumer behavior, costs, market structures and income distribution. The macroeconomic side of the course analyzes movements in prices and national output, inflation, unemployment, and monetary and fiscal policy.

MBA 502 Organizational Behavior (3-0-3). Looks into the factors that influence individual and group performance while incorporating current management theory and research. Topics discussed range from individual attitudes and motivation to leadership, change, culture and organizational structure.

MBA 503 Accounting Concepts (3-0-3). Addresses the use of accounting as a management tool, including the strengths and limitations of accounting as an information system. Explores the financial and managerial aspects of accounting, focusing on the underlying concepts of accounting, the role of accounting in management planning and control, and the usefulness of accounting data for evaluating the results of operations and decision making.

MBA 504 Managerial Statistics (3-0-3). Examines the decision-aiding tools that can be applied by managers to gain insight into decision problems, ranging from simple graphic displays of data to sophisticated statistical tests. Students use real-world data sets and PC-based software to describe sets of measurements, construct probability distributions, estimate numerical descriptive measures and

build multiple regression models. Prerequisite: a college-level finite mathematics course is highly recommended.

MBA 505 Financial Management (3-0-3). Covers financial theory and techniques of analysis, including valuation theory, theories of risk measurement, managing a firm's investment decisions and capital structure, sources of financing for a firm, and financial planning and analysis.

MBA 506 IT Essentials for Managers (3-0-3). Provides an overview of the essentials of information systems management, computer hardware and software, database management systems, telecommunications and data networks, Internet technologies and security. The second part of the course covers effective methods of designing, building and testing models, and performing model-based analyses; non-technical, craft skills that expert modelers commonly employ, such as abstracting a situation, debugging a model and translating model results into managerial insights; and an introduction to statistical and management science techniques used in business today such as data analysis, simulation and optimization. The hands-on labs emphasize advance Excel skills, and use Premium Solver. Crystal Ball and sensitivity tools.

MBA 507 Marketing Concepts (3-0-3). Covers the fundamental aspects of marketing including the marketing mix (product strategy, pricing, advertising and promotion, and distribution), by focusing on problem-solving and decision-making abilities. Includes lectures, case studies, projects and experiential learning activities as students learn to research consumer needs, segment markets and other basic marketing functions. Gives particular attention to localizing content to provide a stronger regional understanding.

MBA 601 Managerial Economics (3-0-3). Covers the application of economic theory to management problems, using basic economic tools and techniques of economic

analysis to analyze decision-making problems faced in private businesses, government agencies and non-profit organizations. Prerequisite: MBA 501.

MBA 606 Management Information Systems (3-0-3). Provides the theoretical, technological, practical and managerial foundations of management information systems. Covers information technologies, systems development, the impact of information systems on business organizations, information technology as a competitive tool and the management of information systems within domestic and multinational corporations. Introduces students to current systems and software. Prerequisite: MBA 506.

MBA 607 Business Communication (3-0-3). Focuses on the written and oral communication aspects of the participants. Emphasis is placed on the use of technology in business communication. Covers effective business writing and presentation, listening and negotiation skills. Stresses the study and practice of advanced techniques of argumentative writing.

**MBA 609 Operations Management** (3-0-3). Takes an analytical approach to solving problems in production and operations management. Explores basic principles, functions and concepts involved in the design, operation and control of operations in contemporary organizations to real operations management decisions. Covers development of operations strategy, decision analysis, mathematical (linear and integer) programming, quality management and control, project management, inventory control, forecasting and process analysis. Prerequisite: MBA 504.

MBA 610 Business Research
Applications (3-0-3). Introduces
students to the basic tools of
business research by explaining
various research methodologies
and techniques. Includes numerous
illustrations, portraying actual research
in management, marketing, finance,
accounting and other areas of business,
that show how to perform the research

function. Prerequisite: MBA 504.

MBA 611 Advanced Financial Management (3-0-3). Examines, at an intermediate level, the problems of managing short-term assets including cash, marketable securities, accounts receivable and inventory, managing the acquisition and disposal of long-term assets, and financing decisions including leverage, leasing, mergers and international issues. Familiarizes students with both the basic theories in each of these areas and various strategies for integrating the theory with practice. Prerequisite: MBA 505.

MBA 612 Leadership and Change Management (3-0-3). Investigates the role of leadership in the context of global change. Gives particular attention to leadership issues as they pertain to organizational development, culture and the dynamics of change. Prerequisite: MBA 502.

MBA 613 Accounting Analysis for Managers (3-0-3). Explains the role of accounting information in facilitating the functions of management.

Covers decision making, planning, performance evaluation, budgeting, cost control and international transfer prices. Prerequisite MBA 503.

**MBA 614 Marketing Management** (3-0-3). Introduces current marketing management techniques and the tools necessary for effective marketing decision making. Provides global perspectives on marketing management and international marketing issues. Interactive learning techniques include the case method and active class participation. Incorporates issues such as ethics, minorities and the ecological environment. Requires familiarity with microeconomic theory, basic concepts of accounting and relevant support software. Prerequisite: MBA 507.

MBA 615 Innovation and Entrepreneurship (3-0-3). Considers the practices and techniques used to stimulate and sustain innovation and the entrepreneurial spirit. Examines the process of new venture formation and the issues involved in both the contexts of existing firms and freestanding new ventures. Prerequisite: MBA 609.

## MBA 616 e-Commerce Business Models and Technology (3-0-3).

Presents a survey of consumer and business-to-business electronic commerce models, systems and technical solutions. Includes hands-on projects and assignments. Prerequisite: MBA 606

MBA 617 Ethics and Legal Issues (3-0-3). Intensively introduces the legal and ethical issues confronting the global business manager. Addresses the legal system, legal processes and several areas of substantive commercial law relevant to the business manager. Discusses the developing recognition of legal and ethical issues and their managerial implications. Examines product liability, the administrative legal process of regulation, antitrust and the contract as the fundamental legal instrument of global commercial relations.

## MBA 618 Strategic Management in a Global Environment (3-0-3).

Focuses on developing and applying strategic management to successfully position organizations in a competitive global environment. Integrates previous course experiences to hone decision making, analysis, and oral and written communication skills. Requires students to work in small teams to analyze a real company's external environment, perform an internal corporate audit and build detailed action plans including implementation issues and financial forecasting. Prerequisites: all core courses; up to two core courses may be taken concurrently.

MBA 632 Investment Analysis (3-0-3). Covers the purpose and operations of security markets; investment instruments and their characteristics; introduction to portfolio and capital market theory; theory of valuation, bonds and the term structure of interest rates; options, commodity and financial futures, investment companies; and international investments. Prerequisites: MBA 611.

MBA 633 Financial Futures and Derivatives (3-0-3). Comprehensively studies equity and debt-based futures

and other derivative instruments. Discusses the functioning of options and futures markets and the role the market participants. Analyzes derivative instruments with a focus on pricing, hedging techniques and arbitrage applications. Prerequisites: MBA 632.

**MBA 634 Commercial Banking** (3-0-3). Focuses on decision making based on an integrated approach that exposes students to the understanding of bank management. Discusses factors that influence credit, investment, funding and pricing decisions. Introduces topics that help develop an appreciation of the trade-offs between risk and return. Discusses a wide range of cases related to bank performance evaluation, making new loans, managing the investment portfolio, asset and liquidity management as well as the macro and international environment

in which commercial banks operate.

Prerequisite: MBA 501.

MBA 635 Islamic Economics (3-0-3). Provides the theoretical foundation for advanced studies in Islamic economics. Addresses questions concerning the need for an Islamic economic system, the viability of an economic system that is built on religious paradigm, how that system should be, and how it relates to contemporary economic systems. Investigates the socioeconomic dynamics of classical Islamic economics and its views on wealth creation and distribution, optimum growth and employment, economic stability, public finance and the role of the state in economic activity. Prerequisite: MBA 501.

MBA 636 Islamic Banking and Finance (3-0-3). Provides students with a formal and intuitive understanding of the essentials of Islamic finance including the foundation of traditional Islamic financial tools and practices and the development of modern Islamic banking and financial instruments and institutions. Relates the theory of Islamic finance to current development in Islamic banking and finance industry. Prerequisite: MBA 501.

## MBA 651 Supply Chain Management and Strategy (3-0-3).

Introduces basic concepts of logistics and supply chain management. Examines supply chain management topics, tools and issues from a general management point of view. Covers supplier selection and collaboration, performance measurement along the supply chain, strategic outsourcing, just-in-time partnership and distribution, customer relationship management, logistics, procurement, inventory and warehousing strategies, and service supply chains. Includes case assignments, discussions and mini-projects. Prerequisite: MBA 506.

## MBA 652 Modeling and Analysis of Supply Chain Processes (3-0-3).

Enables students to learn and apply analysis and modeling techniques to typical supply chain problems using a spreadsheet-based and example-driven approach. Covers the basics of supply chain modeling for the optimization and monitoring of a supply chain, or a segment thereof, using statistical, simulation and optimization tools and models. Examines process modeling, transportation models, facility location models, logistics cost analysis, multi-echelon inventory, linear programming, routing and scheduling, network optimization, simulation and optimum service levels. Prerequisite: MBA 506.

**MBA 653 Supply Chain** Management Technology and **Applications (3-0-3).** Provides students with the knowledge, tools and hands-on experience necessary to develop, implement and sustain ITenabled strategies for managing supply chains. Familiarizes students with supply chain information technology trends and explores procurement and order fulfillment strategies and the impact of the Internet on distribution and back-end supply chain processes. Uses a combination of concepts, analytical models and commercial software to give students a theoretical foundation and practical experience in applying their supply chain management knowledge. Prerequisite: MBA 506.

MBA 654 Transportation and

## Logistics Management (3-0-3).

Introduces the transport system and related logistics activities in the context of their role in an economy. Applies public management principles to domestic and international transportation and shipping facilities, considering operations management, material handling, warehousing and storage, environmental impact, information technology and other variables as they apply to a variety of transport modes and intermodal activities. Prerequisite: MBA 506.

**MBA 655 Information Systems** Design (3-0-3). Introduces students to basic elements of IS infrastructures. such as networks, intranets and XML, databases, and data warehouses and data centers. Teaches students how to plan and develop IT architectures and business applications based on business requirements. Emphasizes building shared databases and planning integrated applications such as CRM, SCM and ERP and other knowledge management and business intelligence platforms. Covers alternative paradigms for designing business solutions including outsourcing, utility computing, open source software and grid computing. Requires a courselong project within a real-world context. Prerequisite: MBA 506.

MBA 661 Strategic Human Resource Management (3-0-3). Focuses on the strategic role of HRM. Examines the role of HRM in strategy formulation and implementation, and measuring and improving HRM effectiveness. Discusses how to align HRM practices with organizational business goals. Focuses on strategic recruitment and retention practices, high-performance management practices, strategies for developing employees, and the role of HR in supporting change and in managing mergers and alliances. Prerequisite: MBA 502.

## MBA 662 International Human Resource Management (3-0-3).

Explores the roles of HR managers in multinational corporations, identifies and analyzes efficient management strategies and practices in the field of international HR, and effective HRM policies and

practices in international contexts. Focuses on the internationalization of the organizations and the cultural dimensions that have an impact on HRM activities. Studies recruitment and selection, training, development, and evaluation and compensation practices in an international context. Covers ethics and social responsibility issues in MNE as well as the challenges of designing and implementing an iHRM policy. Prerequisite: MBA 502.

MBA 663 Staffing (3-0-3). Allows students to develop critical. analytical and integrative thinking about the staffing process in today's organizations. Examines in detail the six steps in the staffing process: job design and analysis, HR planning, recruitment, selection, orientation and retention. Explores selection interviews, interviewing skills and selection tests. Covers how to manage diversity in the staffing context, as well as evaluation and improvement of the important steps in the staffing process. Includes concrete exercises and case studies. Prerequisite: MBA 502.

**MBA 664 Training and Development** (3-0-3). Adopts a systematic approach to training and development systems, focusing on the blend between theory and practice. Covers training in organizations, the training process, identifying learning needs and appropriate learning opportunities, designing and delivering training, the transfer of learning, reviewing and evaluating training activities. the management of transfers and promotions, the strategic development of leaders and managers, numerous developmental techniques, the learning organization and knowledge management. Studies the strategic management of training and development activities. Prerequisite:

MBA 672 Managing a Family Business (3-0-3). Addresses issues facing family enterprise, a unique subset of entrepreneurial, small and growing businesses. Considers family business issues, family business systems, family members as employees, boundaries and succession issues. Cases and empirical studies engage students in family business experiences. Prerequisite: MBA 612.

MBA 694 Special Topics in Business (1 to 4 credits). Explores special research topics proposed by students and accepted by faculty for oversight. Topics must be approved by the director of graduate programs and the dean. Prerequisite: topic specific.

## MBA 696 Independent Study in Business Administration

(1 to 4 credits). Requires a theoretical or practical project initiated by an individual student and conducted under faculty supervision beyond what is offered in existing courses. Cannot be repeated more than once. Prerequisite: permission of program director.

## MPA Public Administration

## MPA 501 Public Managerial

Economics (3-0-3). Establishes a background in microeconomic theory and its application to the problems faced by public managers. Emphasizes teaching students to use basic economic reasoning in the analysis of public policy choices. Covers resource scarcity, supply and demand, household and firm behavior, market equilibrium, externalities, market failure, public goods and benefit-cost analysis.

## MPA 502 Organizational Behavior and Administrative Practice (3-0-3).

Introduces the study of organizations and management in the public sector. Applies theories and concepts for understanding human behavior and organizational phenomena to case studies and management simulations. Considers the role of perception and attitude formation as well as the impact of organizations on people. Stresses the importance of key management competencies for motivation, communication flows, conflict resolution and decision making.

MPA 503 Government Accounting Concepts and Analysis (3-0-3). Addresses the use of accounting as a

management tool in the public sector, including the strengths and limitations of accounting as an information system. Explores the financial and managerial aspects of accounting with focus on underlying concepts, the role of accounting in management planning and control, and the usefulness of accounting data for evaluating decision outcomes and assessing government performance.

# MPA 504 Methods of Problem Solving (3-0-3). Introduces students to a variety of tools and techniques for data analysis, using these methods to solve problems in public management and service delivery. Covers defining problems, choosing appropriate

statistical techniques, descriptive data analysis, probability theory, sampling, point and interval estimation, analysis of comparisons and associations and hypothesis testing.

## MPA 506 MIS for Public and Nonprofit Organizations (3-0-3).

Provides a theoretical overview of the technological, managerial, policy and ethical implications of managing information assets in the public sector and non-governmental organizations. Explores the role of information systems in supporting transactional processes, management control and strategic decision making. Considers different IT architectures and infrastructures, organization of the IT function, and management of IT resources. Assesses the social and governmental impacts of the Internet and a networked society.

MPA 600 Public Affairs Colloquium (2 days) (0-0-0). A mandatory course that serves a threefold purpose: (1) to orient new students to the MPA program, the School of Business and Management, and AUS; (2) to give students an opportunity to understand the nature and scope of the skills, attitudes and attributes required of effective public administrators; and (3) to introduce students to some of the key questions and challenges that face public administration in the local context.

MPA 601 Public Administration and the Policy Process (3-0-3). Introduces

the public policy process and considers concepts such as competing values, externalities, market failure, risk and uncertainty. Presents alternate models of policy decision making and explores the approaches used by public service managers to build support for specific programs. Examines the roles of agency culture, administrative reform, public trust, judgment and ethical norms. Prerequisite: MPA 501 or waiver.

MPA 604 Public Policy and Program Evaluation (3-0-3). Provides students an opportunity to improve the analytical and problem-solving skills developed in earlier course work. Develops the skills necessary to undertake policy analysis and evaluations of program implementation and performance using appropriate research design. Teaches participants to be discriminating customers of program evaluation research from other sources. Prerequisites: MPA 504 or waiver, and MPA 601.

MPA 605 Public Financial
Management (3-0-3). Introduces
fundamental concepts and practice in
budgeting, financial administration
and revenue generation. Considers
the budget process, budget
preparation, resource allocation, cost
analysis and audit. Presents basic
management functions including cash
management, debt administration
and communication of financial
performance. Surveys various public
funding sources in the context of the
Gulf Region. Prerequisite: MPA 503
or waiver.

MPA 606 Public Human Resource Strategies (3-0-3). Presents traditional issues and contemporary approaches in human resource management, considering their implications for creation of high performance public organizations. Reviews policies and management processes related to staffing, development, job design, and performance evaluation. Addresses the implications for human resource strategy of labor relations, diversity, political considerations, local preferment programs and expanding legal protections. Prerequisite: MPA 502 or waiver.

# (3-0-3). Seeks to enhance participant interpersonal, group and representational communication skills in both written and oral form. Focuses

MPA 607 Public Communication

in both written and oral form. Focuses on conveying government objectives, performance information and policy within organizations and to external consumers. Explores the conceptual and theoretical framework of public relations and addresses agency campaigns, including the marketing of services, using principles from private sector marketing practice.

MPA 610 Management of Nonprofit Organizations (3-0-3). Focuses on the application of management theory and practice in nonprofit organizations. Examines the establishment of nonprofits, strategic planning, governance, accountability, communication, budgeting and fundraising, human resource management, design of volunteer programs, ethics and responsiveness to stakeholders. Prerequisite: MPA 502 or waiver.

**MPA 612 Managing Organizational** Change (3-0-3). Presents alternative theories and methods of intervention designed to bring about effective change within organizations. Explores systematic methods for identifying root causes for poor performance, analyzing service processes, evaluating alternatives and securing support for implementation. Presents techniques including data collection methods, process reengineering, business case analysis and training alternatives. Cases allow students to apply theories. models and methods to real situations. Prerequisite: MPA 502 or waiver.

MPA 615 The Public-Private
Partnership (3-0-3). Explores key
tenets of the New Public Management
and their implications for the delivery
of public services. Examines the
political, managerial, legal and ethical
issues associated with use of nongovernmental organizations. Considers
types of services amenable to new
approaches and introduces elements of
performance monitoring in acquisition,
contracting and program delivery.
Prerequisite: MPA 601 or waiver.

## MPA 616 e-Government (3-0-3).

Introduces the concept of egovernment and explores the role of IT and the Internet in the delivery of public services and reengineering of administrative processes. Explores the dramatic changes in public administration and methods of transformation. Examines issues of technology, public interfaces, transparency and accountability, access and security, equity, privacy and their impact on the deployment of government electronic services. Considers the influence of government information delivery in the development of an informed citizenry and expanded citizen participation in public decision making. Prerequisite: MPA 506 or waiver; concurrent: MPA 607.

MPA 617 Ethics, Law, Democracy and Society (3-0-3). Considers ethical issues and moral reasoning in the context of public policy formulation and implementation. Examines ethical standards and legal requirements that apply to managers in the public sector. Explores concepts such as the rule-of-law, constitutional constraints. administrative legitimacy, due process, rule making, administrative appeal and managerial liability. Reviews the impact of interests, privilege, political power and conflict-of-interest on public trust. Addresses differences in values, norms and social objectives based on culture and tradition. Prerequisite: MPA 601.

MPA 619 Executive Leadership (3-0-3). Presents students with an opportunity to explore dimensions of leadership in the public context and helps to develop appropriate leadership styles. Covers team-building, conflict resolution, situational and adaptive leadership, crisis management, emotional intelligence, integrity and dealing with diversity in a crosscultural context. Involves case analysis and discussion, role playing and an active learning project. Prerequisites: minimum of 18 credits at the 600 level.

MPA 629 Team Development and Leadership (3-0-3). Applies behavioral science and group theory to improve the performance of individuals, groups and organizations. Examines data collection, group processes, team building, conflict management, professional competition and feedback. Explores methods for facilitating effective group decision making. Prerequisite: MPA 502 or waiver.

## MPA 632 Comparative Administrative Systems (3-0-3).

Examines governmental systems of administration in developed and developing nations. Focuses on alternative approaches to government structure, decision making, civil service selection and management. Explores the role of key concepts such as merit, accountability and authority in the context of cultures and societies. Considers the importance of administrative capacity for public service delivery and economic growth.

## MPA 670 Transportation and Logistics Management (3-0-3).

Introduces the transport system and related logistics activities in the context of their role in an economy. Applies public management principles to domestic and international transportation and shipping facilities, considering operations management, material handling, warehousing and storage, environmental impact, information technology and other variables as they apply to a variety of transport modes and intermodal activities. Prerequisites: MPA 501 or waiver, and MPA 506 or waiver.

## MPA 680 Project Management (3-0-3). Examines the concepts and

techniques associated with managing projects in government organizations, nonprofits and private sector enterprises delivering public services. Considers project design, planning, scheduling, systems engineering, cost estimation and control. Explores the relationship between innovation and risk. Prerequisite: MPA 506 or waiver.

MPA 685 Capstone Course in Public Management (3-0-3). Synthesizes and integrates the elements of previous course work. Considers diagnosis of organizational and program problems, analysis of alternative

reforms, the application of new public management approaches and appropriate use of theory. Focuses on issues facing government and nonprofit organizations in service delivery, program management and organizational capacity building. Requires an action-learning project in preparation for the comprehensive oral examination. Prerequisites minimum of 24 credits at the 600 level.

MPA 694 Special Topics in Public Administration (3-0-3). Explores theoretical or practical topics proposed by the faculty beyond what is offered in existing courses. Prerequisite: topic specific.

MPA 697 MPA Internship in a Public Organization (3-0-3). Provides the student hands-on experience with an approved public sector agency or nonprofit organization. Requires a minimum of 240 hours of on-the-job administrative activity benefiting the student and the organization. Requires students to submit a written report, daily journal and supervisor's assessment. Graded as Pass/Fail. Registration fee applies.



## Graduate Student Handbook

## Foreword

The Office of Graduate Programs is the central source of information about the graduate program offerings at AUS. In this *Graduate Student Handbook* we have attempted to compile in one volume all the information necessary to keep graduate students informed of the academic policies and procedures of the graduate programs and opportunities for financial support. The handbook also includes a section on research opportunities and facilities at AUS.

The preceding 2007–2008 catalog section contains much more detailed information on the admission and program requirements. The catalog is the official university document that describes the academic requirements for each degree.

More information about graduate programs and research is also available at www.aus.edu/gpr/.

If you have further questions about the graduate program offerings please contact the Office of Graduate Programs at +(971) 6 515 2208 or gpr@aus.edu or the individual program directors.

## I.0 Office of Graduate Programs

The Office of Graduate Programs was established in Fall 2004. Its mission is to strengthen and promote excellence in graduate education and research activity across the campus. The office's activities in graduate programs focus on developing and maintaining standard, university-wide policies and procedures for the graduate programs and developing services for graduate students. The responsibilities of the office include:

 organizing and overseeing the work of the Graduate Program Council, which establishes the rules and regulations for the running of the graduate programs (with the program directors and representatives from the library, the Office of the Registrar and the Office of Admissions

- organizing and overseeing the work of the Graduate Program Curriculum Committee (with faculty representatives from the four college/schools)
- organizing and administering the distribution of university funds within the seed and regular research grant competitions (with the University Research Grant Committee)
- organizing and overseeing the Institutional Review Board (IRB) and the Animal Care Committee (ACC) (with faculty and community members)

Office of Graduate Programs American University of Sharjah P.O. Box: 26666, Sharjah, UAE Tel: +(971) 6 515 2208 Fax: +(971) 6 515 2150

E-mail: gpr@aus.edu

# 2.0 Graduate Program Council and the Graduate Curriculum Committee

The Graduate Program Council oversees the cross-university issues related to graduate studies except for curriculum. The committee recommends policies and procedures for both the programs and the graduate students.

The Graduate Curriculum Committee reviews all requests for new programs, additions of concentrations in existing programs as well as other changes to programs and courses which are not editorial.

The members of both the Graduate Program Council and the Graduate Curriculum Committee are listed on the AUS website at www.aus.edu/gpr/ committees.

## 3.0 Master's Thesis at AUS

A thesis is a formal manuscript that identifies theories or hypotheses, tests these hypotheses and accepts or rejects them using formal, systematized research methodology. On the basis of the findings, the researcher

draws conclusions and makes recommendations.

The thesis is an opportunity for the student to conduct developmental research or do an applications project on a particular topic of personal interest.

A thesis presents the results of an original, creative investigation leading to new insights, conclusions and recommendations appropriate to the investigated topic. The key outcome is the development and documentation of new knowledge. Therefore, it is expected that you will be able to prepare and submit scholarly papers to peer-reviewed journals based on the research presented in your formal and approved thesis document.

The master's thesis at AUS must have appropriate depth for graduate work. As the culmination of the program of study, it should reflect scholarly depth and rigor. "Literature review" and "routine implementation" theses are not acceptable for completing the master's degree.

Several distinct steps occur in the preparation of a thesis:

- · selecting the thesis research topic
- preparing and submitting the formal thesis proposal for approval by the thesis supervisor and thesis committee
- conducting research and writing the thesis under the direction of the thesis supervisor and committee
- conducting the oral thesis defense
- submitting the approved thesis for certification by the AUS Office of Graduate Studies
- submitting the thesis to the AUS Archives within the AUS Library for binding and archiving

## 3.1 Selecting the Thesis Research Topic

Prior to registering for the thesis course (e.g., XXX 699), you should develop and submit a list of potential thesis topics to your academic advisor and the graduate program director. A master's thesis committee (MTC),

composed of the thesis supervisor (TS) and at least two other faculty members, is then formed and will approve the topic.

After your final thesis topic is approved, you must provide your thesis supervisor with an outline of the work to be conducted, which should include a time frame. All members of the MTC must approve in writing the topic and work outline.

While students are given a great deal of latitude in selecting thesis topics, your topic must represent an area appropriate to your graduate program. Furthermore, the thesis should not have been submitted for credit elsewhere or have been published previously.

## 3.2 Preparing and Submitting Your Thesis Proposal

Your thesis proposal must be formally and orally presented to and approved in writing by your thesis committee before you may register for the thesis course (XXX 699). Only students in good academic standing may register for thesis credits.

The thesis proposal should, at a minimum, include the following sections in the following order:

- · proposed thesis title
- · abstract
- problem statement: must include a hypothesis and/or a list of basic research questions central to the problem
- · significance of the research
- · review of the literature
- summary of planned research methodology: summarizes the research methods to be used and why these particular methods are appropriate
- · preliminary bibliography

Specific graduate programs may have requirements for additional sections and page limitations. Consult with your thesis supervisor and graduate program director.

## 3.3 Conducting Thesis Research and Writing the Thesis

When you begin the process of

researching and writing your thesis, you and your thesis supervisor will agree upon a review process and schedule to ensure satisfactory and timely completion of your final written document. You should update your thesis supervisor regularly and consult with him/her frequently during the research and writing phase to review progress. The final draft of the thesis must be distributed to the thesis committee at least three weeks prior to the final defense and review.

## 3.4 Conducting the Oral Thesis Defense

An oral presentation (defense of the thesis) explaining the thesis and responding to questions by members of your thesis committee is required of all thesis students. It is the student's responsibility to schedule this presentation with the thesis committee members and to notify the graduate program director. All committee members must be present unless an unforeseen emergency occurs. The committee meeting may not be scheduled until the entire committee approves the final draft of the thesis as ready for defense.

The oral defense has two parts. The first part is open to the public. The director of your graduate program will notify the Director of Graduate Programs of the date, time and place of your defense so that members of the academic community may be invited.

The public part of your defense should be no longer than 40 minutes, with an additional 15–30 minutes for questions. The presentation should include a summary of key content points that explain the intellectual contributions of the work, conclusions, recommendations and lessons learned.

The second part of the oral defense is a 30-minute closed session limited to you, your thesis supervisor and thesis committee. In this session, your committee may ask additional questions and may convene privately to deliberate on their recommendations for your thesis grade.

A timeline for completion of this requirement will be indicated in each

semester's academic calendar. Failure to complete the requirement by that timeline will prevent the student from participating in the commencement exercise of that semester.

## 3.5 Guide for Preparing your Thesis

A complete guide for preparing your thesis is given on the website of the Office of Graduate Programs: www. aus.edu/gpr/graduate/thesesguide/contents.php.

# 4.0 Graduate Student Employment Opportunities

AUS offers its graduate students several employment/learning opportunities on campus: employment as graduate assistantships, as research assistants on faculty research projects (both internally and externally funded grants) and as work-study students. These opportunities are described below.

## 4.1 Graduate Assistantships: Policies, Selection Requirements and Application Procedures

A number of graduate assistantships are competitively awarded to qualified graduate students each year. Generally, graduate assistants work for members of the graduate faculty as research or teaching assistants. The purpose of offering graduate assistantships at AUS is to attract highly qualified students who bring benefit to the academic community.

## **4.1.1 Types of Assistantships** Available at AUS

AUS offers two types of graduate assistantships within its master's degree programs (excluding the GEMPA program):

- · full-time assistantships
- · part-time assistantships

#### 4.1.2 Full-Time Assistantships

This type of graduate assistantship is highly competitive and is for full-time

graduate students at AUS. Students must take a minimum of nine credit hours each term of their assistantship or be registered for thesis/project credit. They may take no more than 12 credit hours per term. They work a maximum of 20 hours per week as research assistants or teaching assistants during the academic year for members of the graduate faculty. Full-time graduate assistants receive tuition waivers for nine credit hours, and they receive a work stipend.

## 4.1.3 Part-Time Assistantships

This assistantship is also highly competitive. It is open to both full-time and part-time graduate students at AUS. Part-time assistants must take six credit hours or be registered for thesis/project credit each term of their assistantship. They work a maximum of 10 hours per week as research assistants or teaching assistants for members of the graduate faculty. Part-time assistants receive up to six credit hours of tuition waiver each term of their assistantship, and a work stipend based on the number of hours worked.

## 4.1.4 Eligibility Requirements for Full- and Part-time Assistantships

- 1. Graduate assistantships are only available to graduate students who have been admitted to the university in good standing, meeting or exceeding all university and program-level requirements for full admission. Students on conditional or probationary status are not eligible for graduate assistantships.
- Graduate assistants must achieve and maintain a satisfactory academic record, that is, a GPA of 3.0 or greater.

**Note**: Specific graduate programs may establish additional and/or higher standards, which are available to applicants through the relevant graduate program, and posted on the graduate office website.

- Full-time graduate assistants must register for and complete a minimum of nine credit hours of graduate courses or be registered for thesis/project credit for each semester in which they hold an assistantship.
  - Part-time graduate assistants must register for and complete six credit

- hours of graduate courses or be registered for thesis/project credit for each semester in which they hold an assistantship.
- 4. Full-time and part-time graduate students may hold graduate assistantships and concomitantly serve as work-study students at AUS only if the total hours worked is 20 or less. Graduate students who are employed full-time may not hold full-time graduate assistantships but are eligible

for part-time assistantships.

5. New applicants to AUS may indicate on the Graduate Application form their desire to be considered for a graduate assistantship. In order to complete the application, three letters of recommendation must be sent to the Office of Admissions by the application deadline. Forms for these letters are available at www.aus.edu/ gpr/forms/docs/.

Those students already enrolled in a graduate program but not holding a graduate assistantship may also apply for one through the Office of Graduate Studies. The application form for continuing students can be found at www.aus.edu/gpr/forms/docs/graduate.

Note: In all cases, an applicant must submit a complete application package by the deadline, and the selection process described below will be followed.

## 4.1.5 Appointments, Workload and Responsibilities

Graduate assistants are appointed annually for the academic year. All assistantships are subject to review by the program director at the end of each semester. The maximum workload over this period ranges from 20 hours per week for full-time assistants to 10 hours per week for part-time assistants.

The director of the relevant graduate program or faculty supervisor is required to provide a written statement of duties and assignments for the graduate assistant at the beginning of the appointment that details essential duties and responsibilities. Graduate assistants are responsible for understanding weekly workload expectations. This includes work assigned and the expected time of completion.

In general, both full- and part-time assistants conduct research, serve as lab assistants, teaching assistants or research assistants and grade and read student papers under moderate to minimum supervision of their faculty supervisors.

Information about stipends and benefits is posted at www.aus.edu/gpr/graduate/.

#### 4.1.6 Deadlines

Applicants for both full- and parttime assistantships should submit a completed graduate assistantship application package by the application deadline, which is **August 1** for new students and **April 30** for continuing students. Applications submitted after the deadline may be reviewed depending on availability of funding.

## 4.1.7 Application Package

A complete application package consists of:

- completed admissions application form for new students and a completed assistantship application form for continuing students
- · relevant transcripts
- three signed recommendation letters, each accompanied by a completed Recommendation for Graduate Assistantship at AUS form
- cover letter (maximum 2 pages, 1-inch margins, 12-point Times New Roman font) that explains why holding an assistantship will enhance your graduate education at AUS and what you will bring to the assistantship and to AUS

The recommendation form and application are available on the Office of Graduate Programs website: www. aus.edu/gpr/graduate/.

#### 4.1.8 Address for Submission

For new students, completed admissions application packages should be submitted to:

Office of Admissions American University of Sharjah Main Building P.O. Box 26666, Sharjah, UAE graduateadmissions@aus.edu

For continuing students, completed assistantship application packages should be submitted to:

Office of Graduate Programs American University of Sharjah Main Building, Office 267 P.O. Box 26666, Sharjah, UAE gpr@aus.edu

#### 4.1.9 Review Process

The application packages of newly admitted or continuing students are first screened by the Office of Graduate Programs to check for completion of package, current admission status and academic standing of the applicant.

Complete application packages of students meeting minimum requirements are forwarded to the dean of the relevant school or college and are fully reviewed by selection committees within the relevant graduate programs. These committees are made up of faculty members who teach in the graduate program, and they report to the graduate director.

After selection committees review application packages, the director of each graduate program will forward application packages to the dean of the relevant school or college along with committee review comments and recommendations

The dean will review application packages and recommendations, and make comments and recommendations. He/she will forward application packages with all recommendations and comments to the Director of Graduate Programs.

The Director of Graduate Programs will forward his/her comments and recommendations to the Vice Chancellor for Academic Affairs (VCAA), who will approve the final selection. Applicants will be notified by the directors of the outcome as soon as it is possible.

## 4.2 Graduate Student Work-Study Opportunities: Policies, Selection Requirements and Application Procedures

AUS provides a variety of student work opportunities for graduate students through specific departments, graduate programs and through serving on AUS internal research grants to faculty members. The following sections describe the general policies governing graduate student employment at AUS.

#### 4.2.1 Eligibility Requirements

To be employed as a graduate student worker, a student must meet the following minimum requirements:

- · have a GPA of 3.0
- be enrolled in a graduate program for a minimum of six hours

Graduate student workers may work up to 20 hours per week while courses are in session. Graduate student workers may work up to 40 hours per week during breaks as long as they are enrolled full-time in classes, both before and after the break. Students are not paid for work beyond these limits.

**Note**: Graduate students are not allowed to hold two or more parttime student employment positions during the same period. Graduate students who have received a graduate assistantship—either full- or parttime—are eligible for employment as student workers up to a maximum of 20 hours.

#### 4.2.2 Pay Range and Work Records

The hourly rate for a specific position is based on range and complexity of duties, skill requirements and equity. Appointing departments are responsible for consistency and equity in pay rates among the graduate workers within their departments. The department also determines starting wage and pay increases.

## 4.2.3 Timesheets

All AUS colleges and departments are required to keep detailed timesheets for each student worker. Work-study students will check their posted hours and sign the timesheet. Timesheets should be submitted by the department/college or school through their dean to the Director of Graduate Programs for approval. Timesheets must be completed at the end of each month and submitted to the Director of Graduate Programs within two weeks of that date.

Graduate student timesheets are posted on the AUS website at www.aus.edu/gpr/forms/docs/graduate.

## 4.2.4 Payment

Checks for work-study students are issued from the Finance Department (second floor, Main Building). Students must present a valid ID to receive their paychecks.

### **4.2.5 Application Process**

Graduate students apply for student employment through their graduate program directors, a graduate faculty member or through the Director of Graduate Programs.

Those who wish to hire graduate student workers must fill out the form posted on the AUS website at www. aus.edu/gpr/forms/docs/graduate. There are no deadlines, as graduate student workers are hired throughout the academic year.

## 5.0 Office of Student Affairs

#### 5.1 Mission Statement

The mission of the Office of Student Affairs (OSA) is to provide state-of-the-art services and a congenial atmosphere to the university's multicultural students that responsibly develops their all-around personality and fulfills their educational and personal goals.

The services and programs provided by the Office of Student Affairs support the academic mission of AUS. OSA is the main hub for welcoming students. It is also responsible for enforcing the rules and regulations concerning student life at the university. This office has the moral and legal responsibilities of upholding the highest academic and behavioral standards among AUS students.

The Office of Student Affairs contains the following departments: Judicial Affairs, Residential Halls, the Learning and Counseling Center, and Student Activities. The Student Activities Department is further divided into Sports and Athletics, Student Activities, Student Employment and Community Services.

The Advising and Counseling Center, Judicial Affairs and the Residential Halls departments are student services providers that aim to help students adjust to university life and successfully complete their educational programs. The Student Activities Department is responsible for the all-around development of students through co-curricular activities and programs.

For more information on the Office of Student Affairs and its programs, please visit www.aus.edu/osa/.

## 5.2 Rights and Responsibilities

- No member of the university community shall be deprived of academic freedom, personal rights or liberties without due and fair processes of applicable regulations.
- No disciplinary sanctions may be imposed upon any member of the university community under authority of the university without fair and due process.
- 3. Each student has a duty to understand the rules and regulations set forth by the university. The Conduct Council Hearing Board shall not consider ignorance of a rule or regulation an acceptable defense.

## 5.2 Student Code of Conduct

Judicial Affairs is responsible for educating students about their rights and responsibilities and the university rules they must follow. Allegations of misconduct under the Student Code of Conduct are resolved by Judicial Affairs in a manner consistent with the core values of fairness, honesty and integrity. The Student Code of Conduct, which applies to all AUS students, is published in the undergraduate catalog and is available on the website at www.aus.edu/osa/handbook/.

## **Full-Time Faculty**

#### A

Abdalla, Jamaleldin, PhD, University of California at Berkeley, 1989; Professor in Civil Engineering and Director, CEN Graduate Programs

**Abdallah, Abed Al-Nasser**, PhD, University of Lancaster, 2004; Assistant Professor in Accounting and Finance

**Abdelfatah, Akmal**, PhD, University of Texas at Austin, 1999; Assistant Professor in Civil Engineering

Abdel-Hafez, Mamoun, PhD, University of California at Los Angeles, 2003; Assistant Professor in Mechanical Engineering

**Abdelhaq, Hamza**, PhD, Massachusetts Institute of Technology, 1989; Professor in Physics and Head, Department of Physics

**Abdel-Jabbar, Nabil**, PhD, University of Michigan, 1996; Associate Professor in Chemical Engineering

**Abdel-Malek, Kamal**, PhD, McGill University, 1992; Associate Professor in Arabic Studies

**Abdelsalam, Omneya**, PhD, Heriot-Watt University, 1999; Associate Professor in Accounting and Finance

**AbdulHadi, Zayid**, PhD, Université Laval, 1987; Associate Professor in Mathematics and Statistics

**Abouleish, Mohamed Yehia**, PhD, Tennessee Technological University, 2003; Assistant Professor in Biology and Chemistry

**Abu Al-Foul, Bassam**, PhD, University of Utah, 1994; Associate Professor in Economics

**Abualrub, Taher**, PhD, University of Iowa, 1998; Associate Professor in Mathematics and Statistics (on sabbatical Fall 2007)

**Abukhaled, Marwan**, PhD, Texas Tech University, 1995; Associate Professor in Mathematics and Statistics

**Abu-Lebdeh, Ghassan**, PhD, University of Illinois at Urban-Champaign, 1999; Assistant Professor in Civil Engineering **Abu-Muhanna, Yusuf**, PhD, State University of New York at Albany, 1979; Professor in Mathematics and Statistics

**Abu-Yousef, Imad**, PhD, McGill University, 1996; Associate Professor in Biology and Chemistry

Ahmad, Saiyad, PhD, Princeton University, 2000; Assistant Professor in Arabic Studies

**Ahmad, Shoaib Nabi**, MID, Rhode Island School of Design, 1991; Associate Professor in Design

**Ahmed, Khawlah**, PhD, State University of New York at Buffalo, 1998; Assistant Professor in English

**Ahmed, Rana**, PhD, Duke University, 1991; Associate Professor in Computer Engineering (on sabbatical AY 2007-2008)

**Ahmed, Saad**, PhD, Georgia Institute of Technology, 1981; Professor in Mechanical Engineering

**Al-Ali, Abdul Rahman**, PhD, Vanderbilt University, 1990; Professor in Computer Engineering

**Al-Assaf, Yousef**, PhD, Oxford University, 1988; Professor in Electrical Engineering and Dean, College of Engineering

**Albasha, Lufti**, PhD, The University of Leeds, 1995; Assistant Professor in Electrical Engineering

**Al-Ghoussein, Tarek**, MA, University of New Mexico, 1989; Associate Professor in Design

**Ali, Naghmana**, PhD, University of Toronto, 2004; Assistant Professor in English

Alibrandi, Thomas, DEd, University of San Francisco, 1999; Assistant Professor in Writing Studies

Al-Issa, Ahmad, PhD, Indiana University of Pennsylvania, 1998; Associate Professor in English and Director, Faculty Development Center

Al-Kattan, Ibrahim, PhD, Tennessee Technical University, 1994; Associate Professor in Engineering Systems Management **Al-Khazali, Osamah**, PhD, University of Memphis, 1997; Associate Professor in Accounting and Finance

**Allagui, Ilhem**, PhD, University of Montreal, 2001; Assistant Professor in Mass Communication

Allee, John, PhD, George Washington University, 2000; Senior Lecturer in Management, Marketing and Public Administration

**Al-Musawi, Muhsin**, PhD, Dalhousie University, 1978; Professor in Arabic Studies

**Alnaizy, Raafat**, PhD,Texas A&M University, 1999; Assistant Professor in Chemical Engineering

**Al-Najjar, Abeer**, PhD, University of Edinburgh, 2003; Assistant Professor in Mass Communication

Alnaser, Ali Sami, PhD, Western Michigan University, 2002; Assistant Professor in Physics

**Al-Nashash, Hasan**, PhD, Kent University, 1988; Professor in Electrical Engineering

**Alobaidi, Ghada**, PhD, University of Western Ontario, 2000; Assistant Professor in Mathematics and Statistics

**Aloul, Fadi**, PhD, University of Michigan, 2003; Assistant Professor in Computer Engineering

**Al-Sayah, Mohamed**, PhD, University of Alberta, 2002; Assistant Professor in Biology and Chemistry

**Al-Shibli, Khalid**, PhD, University of Colorado, 1995; Associate Professor in Civil Engineering

Al-Tamimi, Adil, PhD, Strathclyde University, 1990; Associate Professor in Civil Engineering, and Director, Institute of Material Systems

**Anabtawi, Mahmoud**, PhD, University of Texas, 1998; Associate Professor in Mathematics and Statistics and Head, Department of Mathematics and Statistics

**Anderson, Pia-Kristina**, PhD, University of California at Berkeley, 2001; Assistant

Professor in International Studies and Director, Student Advising and Counseling

Angell, Linda, DBA, Boston University, 1996; Associate Professor in Management, Marketing and Public Administration

Arenfeldt, Pernille, PhD, European University Institute, 2006; Assistant Professor in International Studies

**Arzaghi, Mohammad**, PhD, Brown University, 2005; Assistant Professor in Economics (on leave AY 2007-2008)

Ashill, Nicholas, PhD, University of Bradford, 2004; Associate Professor in Management, Marketing and Public Administration; (Spring 2008)

**Assaleh, Khaled**, PhD, Rutgers University, 1993; Associate Professor in Electrical Engineering

#### В

**Badawi, Ayman**, PhD, University of North Texas, 1993; Professor in Mathematics and Statistics

**Badry, Fatima**, PhD, University of California at Berkeley, 1983; Professor in English and Director, Graduate Program in TESOL

**Baghestani, Hamid**, PhD, University of Colorado, 1982; Professor in Economics

**Bahloul, Maher**, PhD, Cornell University, 1994; Assistant Professor in English

**Bantey, Paul**, MFA, Whitecliffe College of Arts and Design, 2005; Assistant Professor in Design

**Barkat, Mourad**, PhD, Syracuse University, 1987; Professor in Electrical Engineering

Barkhi, Reza, PhD, Ohio State University, 1995; Associate Professor in Management Information Systems and Head, Department of Management Information Systems

**Barlas, Gerassimos**, PhD, National Technical University, Athens, 1996; Associate Professor in Computer Science

**Barnett, Andy**, PhD, University of Virginia, 1978; Professor in Economics

Bartholomew, Aaron, PhD, College

of William and Mary, 2001; Assistant Professor in Biology and Chemistry

**Bateman II, Robert**, PhD, University of Utah, 2004; Assistant Professor in Management, Marketing and Public Administration

**Beheiry**, **Salwa**, PhD, University of Texas at Austin, 2005; Assistant Professor in Civil Engineering

**Bendik-Keymer**, **Jeremy**, PhD, University of Chicago, 2003; Assistant Professor in International Studies

**Berbić**, **Amir**, MFA, The School of the Art Institute of Chicago, 2004; Assistant Professor in Design

**Berry, Moulouk**, PhD, University of Michigan, 2002; Assistant Professor in Arabic Studies

**Bigelow, Kim**, MFA, Northwestern University, 1983; Assistant Professor in Mass Communication

**Bley, Jörg**, PhD, Florida Atlantic University, 2000; Associate Professor in Accounting and Finance

Bodolica, Virginia, PhD, HEC Montreal Business School, 2006; Assistant Professor in Management, Marketing and Public Administration

**Boisvert, Jean**, PhD, Macquarie Graduate School of Management, 2007; Assistant Professor in Management, Marketing and Public Administration

**Botthoff, John**, MID, Pratt Institute, 1980; Lecturer in Design

**Boubakri, Narjess**, PhD, Université Laval, 2000; Associate Professor in Accounting and Finance

**Breslow, Harry**, PhD, University of Illinois, Champaign-Urban, 1995; Assistant Professor in Mass Communication

**Brodtkorb, Tor**, LLB, McGill University, 2000; Assistant Professor in Management, Marketing and Public Administration

#### $\mathbf{C}$

Caesar, Judith, PhD, Case Western Reserve University, 1976; Professor in English Chan, Anthony, PhD, York University, 1980; Associate Professor in Mass Communication (Spring 2008)

**Chazi, Abdelaziz**, PhD, University of North Texas, 2004; Assistant Professor in Accounting and Finance

**Chebbi, Rachid**, PhD, Colorado School of Mines, 1991; Professor in Chemical Engineering

Chen, Kim Heng, PhD, Washington State University, 2002; Assistant Professor in Management Information Systems

**Chilton, John**, PhD, Brown University, 1989; Assistant Professor in Economics

Chiravuri, Ananth, PhD, University of Wisconsin, Milwaukee; Assistant Professor in Management Information Systems

**Crompton, Peter**, PhD, Lancaster University, 2003; Assistant Professor in English

Cruickshank, Donald, PhD, University of Illinois at Urbana-Champaign, 1984; Senior Lecturer in Writing Studies and Head, Department of Writing Studies

#### D

**Daghfous, Abdelkader**, PhD, Pennsylvania State University, 1997; Associate Professor in Management Information Systems

**Dahm, Carl Bob**, MA, Syracuse University, 1998; Assistant Professor in Design and Interim Head, Department of Design

**Darayseh, Musa**, PhD, University of Nebraska-Lincoln, 1990; Professor in Accounting and Finance (on leave AY 2007-2008)

**DeGeorges, Thomas**, PhD, Harvard University, 2006; Assistant Professor in International Studies

**Deiab, Ibrahim**, PhD, McMaster University, 2003; Assistant Professor in Mechanical Engineering

**Dhaouadi, Rached**, PhD, University of Minnesota, 1990; Associate Professor in Electrical Engineering and Coordinator, Mechatronics Engineering Program and Mechatronics Center

## Full-Time Faculty

**Diederich, Joachim**, PhD, Bielefeld University, 1985; Professor in Computer Science

**Djeredjian, Daron**, PhD, Syracuse University, 2004; Assistant Professor in Economics

**Dodigovic, Marina**, PhD, University of Bremen, 1995; Assistant Professor in English

#### $\mathbf{E}$

**Eberlein, Armin**, PhD, University of Wales, 1998; Associate Professor in Computer Engineering and Head, Department of Computer Engineering

**Eischen, Erich**, LLM, University of Denver, 2006; Assistant Professor in Accounting and Finance

El-Baz, Hazim, PhD, University of Missouri, Rolla, 1991; Associate Professor in Engineering Systems Management and Director, Engineering Outreach Program

**Eldred, Gary**, PhD, University of Illinois, 1973; Associate Professor in Accounting and Finance

Ellssawy, Manal, PhD, Helwan University, 2003; Assistant Professor in Mass Communication

**El-Emam, Magdi**, PhD, Queen's University, 2003; Assistant Professor in Civil Engineering

El-Fakih, Khaled, PhD, University of Ottawa, 2002; Assistant Professor in Computer Science (on sabbatical AY 2007-2008)

**El-Hag, Ayman**, PhD, University of Waterloo, 2004; Assistant Professor in Electrical Engineering

El-Kadi, Hany, PhD, University of Alberta, 1993; Associate Professor in Mechanical Engineering, and Associate Dean, College of Engineering

**El-Kadri, Oussama**, PhD, Wayne State University, 2006; Assistant Professor in Biology and Chemistry

**El-Mousfy, Mona**, MArch, Georgia Institute of Technology, 1983; Assistant Professor in Architecture

El-Sadek, Ibrahim, PhD, University

of California at Santa Barbara, 1983; Professor in Mathematics and Statistics and Associate Dean, College of Arts and Sciences

El-Sayegh, Sameh, PhD, Texas A&M University, 1998; Assistant Professor in Civil Engineering

**El-Sinawi, Ameen**, PhD, University of Dayton, 1999; Associate Professor in Mechanical Engineering

**El-Tarhuni, Mohamed**, PhD, Carleton University, 1997; Associate Professor in Electrical Engineering and Head, Department of Electrical Engineering

#### F

Faiq, Said, PhD, Salford University, 1991; Professor in Arabic Studies and Director, Graduate Program in Translation and Interpreting

**Ferguson, Erik**, PhD, University of Southern California, 1988; Assistant Professor in Urban Planning

**Filipović, Zlatan**, MFA, Alfred University, 2001; Assistant Professor in Design

**Fiocco, Marcello**, PhD, University of California at Santa Barbara, 2002; Assistant Professor in International Studies

**Forster, John**, PhD, McMaster University, 2001; Associate Professor in Management, Marketing and Public Administration

## G

**Gadalla, Mohamed**, PhD, University of Alabama, 1988; Associate Professor in Mechanical Engineering

**Gandhi, Neena**, PhD, University of Delhi, 2006; Assistant Professor in Writing Studies

**Gassan, Richard**, PhD, University of Massachusetts, 2002; Assistant Professor in International Studies

**Gatenby, Bruce**, PhD, University of Arizona, 1992; Assistant Professor in Writing Studies

**Genc, Ismail**, PhD, Texas A&M University, 1999; Associate Professor in Economics Gibbs, Joseph, PhD, Boston University, 1994; Associate Professor in Mass Communication, and Interim Head, Department of Mass Communication

**Giesen, Martin**, PhD, Heidelberg University, 1973; Professor in Fine Arts

Gold, Gary, JD, Indiana University, 1991; Associate Professor in Management, Marketing and Public Administration

**Goldfinch, Shaun**, PhD, University of Melbourne, 1999; Associate Professor in Management, Marketing and Public Administration

**Golley, Nawar**, PhD, Nottingham University, 1994; Associate Professor in English

**Goodwin**, **Ronald**, PhD, Indiana University of Pennsylvania, 2005; Assistant Professor in Writing Studies

**Gorla, Narasimhaiah**, PhD, University of Iowa, 1986; Professor in Management Information Systems

**Grant, James**, DBA, Mississippi State University, 1978; Professor in Management, Marketing and Public Administration (on leave Fall 2007)

**Grant, Michelle**, MArch, Cranbrook Academy of Art, 2005; Assistant Professor in Architecture

**Grant, Roderick**, MFA, Rhode Island School of Design, 2005; Assistant Professor in Design

**Gressel, Justin**, PhD, Purdue University, 2006; Assistant Professor in Management, Marketing and Public Administration

**Griffin, James**, PhD, University of London, 2004; Assistant Professor in Mathematics and Statistics

**Guessoum, Nidhal**, PhD, University of California at San Diego, 1988; Associate Professor in Physics

**Gumus, Mehmet**, PhD, University of Waterloo, 2006; Assistant Professor in Management Information Systems

**Gunatillake, Gajath**, PhD, Purdue University, 2005; Assistant Professor in Mathematics and Statistics

**Gunn, Cindy**, PhD, University of Bath, 2001; Associate Professor in English

#### Н

**Hamdan, Nasser**, PhD, Middle East Technical University, 1993; Professor in Physics

**Haney II, William**, PhD, University of California at Davis, 1984; Professor in English and Head, Department of English

**Hariga, Moncer**, PhD, Cornell University, 1989; Professor in Engineering Systems Management and Coordinator, Engineering Systems Management Program

**Hashem, Mahboub**, PhD, Florida State University, 1984; Professor in Mass Communication

**Hassan, Mohamed**, PhD, University of Arizona, 2005; Assistant Professor in Electrical Engineering

**Hatim, Basil**, PhD, University of Exeter, 1982; Professor in Arabic Studies

Haverila, Matti, PhD, Tampere University of Technology, 1995; Associate Professor in Management, Marketing and Public Administration

**Hawileh, Rami,** PhD, University of Wisconsin-Milwaukee, 2005; Assistant Professor in Civil Engineering

**Heaton, J. Lade**, JD, University of Utah, 1972; Senior Lecturer in Management, Marketing and Public Administration

**Heidcamp, William**, PhD, University of Pittsburg, 1971; Professor in Biology and Chemistry and Dean, College of Arts and Sciences

Heintz, W. Eirik, MArch, Harvard University, 1994; Associate Professor in Architecture and Associate Dean, School of Architecture and Design

**Hewitt, David**, MFA, Cornell University, 1979; Associate Professor in Design and Coordinator, Foundations Program and Admissions

**Husseini, Ghaleb**, PhD, Brigham Young University, 2001; Assistant Professor in Chemical Engineering

## I

**Ibrahim, Taleb**, PhD, Auburn University, 1997; Associate Professor in Chemical Engineering

Irimia-Vladu, Marina, PhD, Auburn University, 2006; Assistant Professor in Economics

**Islam, Mohammad**, PhD, Columbia University, 2003; Assistant Professor in Physics

## J

Jaidi, Asad Hasan, PhD, University of Kansas, 1993; Associate Professor in Physics

Jarrah, Mohammad-Ameen, PhD, Stanford University, 1989; Professor in Mechanical Engineering; Head, Department of Mechanical Engineering; Director, Mechatronics Engineering Graduate Program

**Jumean, Fawwaz**, PhD, City University of New York, 1973; Professor in Biology and Chemistry and Head, Department of Biology and Chemistry

### K

**Kanan, Sofian**, PhD, University of Maine, 2000; Associate Professor in Biology and Chemistry

**Karake-Shalhoub, Zeinab**, PhD, George Washington University, 1987; Professor in Management Information Systems

**Karavatos, Nicholas**, CELTA, St. Giles University, 1999; Assistant Professor in English

**Kassam, Meenaz**, PhD, University of Toronto, 1996; Assistant Professor in International Studies

**Katodrytis, George**, AADip, Architectural Association, UK, 1985; Associate Professor in Architecture

**Katsioloudes, Marios**, PhD, University of Pennsylvania, 1990; Professor in Management, Marketing and Public Administration

**Kawash, Jalal**, PhD, University of Calgary, 2000; Assistant Professor in Computer Science

**Keck, Stephen**, DPhil, University of Oxford, 1992; Associate Professor in International Studies

**Kennedy, Thomas**, MLA, Cornell University, 1991; Assistant Professor in Architecture

**Khalaf, Kinda**, PhD, The Ohio State University, 1997; Assistant Professor in Mechanical Engineering

**Khallaf, Ashraf**, PhD, Florida Atlantic University, 2004; Assistant Professor in Accounting and Finance

**Khamis, Mustafa**, PhD, University of California at Davis, 1985; Associate Professor in Biology and Chemistry

Khan, Sajid, PhD, University of Manchester, 2001; Assistant Professor in Management, Marketing and Public Administration

**Kharkhurin, Anatoliy**, PhD, City University of New York, 2005; Assistant Professor in International Studies

**Kherfi, Samer**, PhD, Simon Fraser University, 2002; Assistant Professor in Economics

**Khoury, Suheil**, PhD, Michigan State University, 1994; Associate Professor in Mathematics and Statistics

**Kim, Jong**, PhD, Emory University, 2005; Assistant Professor in Economics

Klein, Andrew, PhD, University of Illinois at Chicago, 2003; Assistant Professor in Management, Marketing and Public Administration

**Knuteson, Sandra**, PhD, Clemson University, 2004; Assistant Professor in Biology and Chemistry

Kocabas, Ibrahim, PhD, The Leland Stanford Junior University, 1990; Associate Professor in Chemical Engineering

Krieg, Ginger, MArch, Cranbrook Academy of Art, 2005; Assistant Professor in Architecture

**Kucuk, Ismail**, PhD, University of Utah, 2001; Assistant Professor in Mathematics and Statistics

#### L

**Landolsi, Taha**, PhD, University of Texas at Dallas, 1999; Assistant Professor in Computer Engineering

## Full-Time Faculty

Lanteigne, Betty, PhD, Indiana University of Pennsylvania, 2004; Assistant Professor in English

**Lea, David**, PhD, University of Ottawa, 1990; Professor in International Studies

**Leduc, Guillaume**, PhD, Carleton University, 1995; Assistant Professor in Mathematics and Statistics

**Lonnman, Bruce**, MAUD, Cornell University, 1986; Associate Professor in Architecture

**Loughlin**, **Kevin**, PhD, University of New Brunswick, 1970; Associate Professor in Chemical Engineering

**Love, Don**, PhD, Ohio University, 1997; Assistant Professor in Mass Communication

#### M

**Majdalawieh, Amin**, PhD, Dalhousie University, 2006; Assistant Professor in Biology and Chemistry

Majdalawieh, Munir, PhD, George Mason University, 2006; Assistant Professor in Management Information Systems

**Majeed, Tariq**, PhD, York University, 1991; Assistant Professor in Physics

Marshall, Timothy, PhD, University of Auckland, 1995; Assistant Professor in Mathematics and Statistics

McCallum, Brent, MS, American University, Washington, DC, 1993; Assistant Professor in Accounting and Finance (on leave Fall 2007)

McLaurin, J. Reagan, PhD, Memphis State University, 1994; Associate Professor in Management, Marketing and Public Administration

Mitchell, Kevin, MArch, University of Washington, 1996; Associate Professor in Architecture and Director, Graduate and Undergraduate Programs

Mitias, Peter, PhD, Louisiana State University, 1997; Associate Professor in Economics and Director, SBM Graduate Programs

Mohamed-Sayidina, Aisha, PhD,

University of Exeter, 1993; Assistant Professor in English

Mokhtar, Ahmed, PhD, Concordia University, 1998; Associate Professor in Architecture

Morey, Susan, PhD, Virginia Common Wealth University, 2002; Assistant Professor in Management, Marketing and Public Administration

Mosbo, John, PhD, Iowa State University, 1973; Professor in Biology and Chemistry and Vice Chancellor for Academic Affairs

Mourtada-Sabbah, Nada, PhD, University of Pantheon-Assas (Paris II), 1997; Associate Professor in International Studies and Assistant to the Chancellor for Development and Alumni Affairs

Moustafa, Amer, PhD, University of Southern California, 1999; Associate Professor in Architecture

**Musameh, Mustafa**, PhD, New Mexico State University, 2006; Assistant Professor in Biology and Chemistry

## N

Naumann, R. Earl, PhD, Arizona State University, 1981; Professor in Management, Marketing and Public Administration

**Noman, Laila**, PhD, University of Wales, 2000; Assistant Professor in English

## 0

Olson, Dennis, PhD, University of Wyoming, 1982; Professor in Accounting and Finance and Head, Department of Accounting and Finance

**Ozkul, Tarik**, PhD, Florida Institute of Technology, 1988; Associate Professor in Computer Engineering

#### p

Pallathucheril, Varkki, PhD, The Ohio State University, 1992; Associate Professor in Urban Planning and Coordinator, Urban Planning Graduate Program **Palmer-Baghestani, Polly**, PhD, University of Colorado, 1984; Assistant Professor in Writing Studies

**Pappalardo, Lucia**, PhD, Syracuse University, 1998; Assistant Professor in Biology and Chemistry

Picken, Gavin, PhD, The University of Leeds, 2005; Assistant Professor in Arabic Studies

**Pilkington, Mark**, MA, Royal College of Art, 1977; Associate Professor in Design

## 0

**Qadah, Ghassan**, PhD, University of Michigan, 1983; Associate Professor in Computer Engineering

**Qaddoumi, Nasser**, PhD, Colorado State University, 1998; Associate Professor in Electrical Engineering

#### R

**Rab, Samia**, PhD, Georgia Institute of Technology, 1997; Associate Professor in Architecture and Head, Department of Architecture

**Raddawi, Rana**, PhD, La Sorbonne Nouvelle University (Paris III), 1995; Assistant Professor in English

**Radnell, David**, PhD, Rutgers, The State University of New Jersey, 2003; Assistant Professor in Mathematics and Statistics

Randle, Jay, MLArch, North Carolina State University, 1971; Professor in Architecture

Rasheed, Hayder, PhD, University of Texas at Austin, 1996; Associate Professor in Civil Engineering

**Rehman, Habib-ur**, PhD, The Ohio State University, 2001; Assistant Professor in Electrical Engineering

**Richards, R. Malcolm**, PhD, University of Michigan, 1974; Professor in Accounting and Finance and Dean, School of Business and Management

Rifki, Fatih, PhD, University of North Carolina at Chapel Hill, 1998; Professor in Architecture and Dean, School of Architecture and Design Ronesi, Lynne, PhD, University of Connecticut, 2000; Assistant Professor in Writing Studies

**Rupasingha, Anil**, PhD, Texas A&M University, 1997; Assistant Professor in Economics

**Russell, Dennis**, PhD, University of Hawaii, 1981; Associate Professor in Biology and Chemistry

#### S

**Saad, Mohsen**, PhD, University of Delaware, 2003; Assistant Professor in Accounting and Finance

Sabet, Mehdi, MArch, Virginia Polytechnic Institute, 1978; Associate Professor in Architecture

**Sagahyroon, Assim**, PhD, University of Arizona, 1989; Associate Professor in Computer Engineering

Sahraoui, Sofiane, PhD, University of Pittsburgh, 1994; Associate Professor in Management Information Systems

Saifi, Ali, PhD, University of Sussex, 1978; Associate Professor in Mathematics and Statistics

**Sakhi, Said**, PhD, University of Montreal, 1994; Associate Professor in Physics

**Salamin, Yousef**, PhD, University of Colorado, 1987; Professor in Physics

**Saleh, Kassem**, PhD, University of Ottawa, 1991; Professor in Computer Science

Santosa, Sigit, PhD, Massachusetts Institute of Technology, 1999; Assistant Professor in Mechanical Engineering

Saravia, Antonio, PhD, Arizona State University, 2003; Assistant Professor in Economics

Sarnecky, William, MArch, University of New Mexico, 1999; Assistant Professor in Architecture

**Shanableh, Tamer**, PhD, University of Essex, 2001; Assistant Professor in Computer Science

**Shareefdeen, Zarook**, PhD, New Jersey Institute of Technology, 1994; Assistant Professor in Chemical Engineering

**Sheen, Mercedes**, PhD, University of Canterbury, Christchurch, 2002; Assistant Professor in International Studies

**Sheikholeslami, Ali**, PhD, University of California at Los Angeles, 1975; Professor in International Studies

**Sheil, Phil**, MFA, University of Calgary, 1995; Associate Professor in Design

**Shono, Sarah**, PhD, University of Texas at Austin, 2004; Assistant Professor in English

**Smith, Susan**, MA, University of Southern California, 1994; Assistant Professor in Mass Communication

**Spindler, Zane,** PhD, Michigan State University, 1968; Professor in Economics

Spraggon-Hernandez, Martin, PhD, HEC Montreal, 2007; Assistant Professor in Management, Marketing and Public Administration

Stevenson-Abouelnasr, Dana, PhD, Georgia Institute of Technology, 1984; Associate Professor in Chemical Engineering and Head, Department of Chemical Engineering

**Stewart, Tonya,** MFA, Cranbrook Academy of Arts, 2005; Assistant Professor in Design

**Storseth, Terri**, PhD, University of Washington, 1997; Assistant Professor in Writing Studies

**Sulieman, Hana**, PhD, Queen's University, 1998; Assistant Professor in Mathematics and Statistics

**Swanstrom, John**, MA, Humboldt State University, 1995; Assistant Professor in Design

**Sweet, Kevin**, MArch, Columbia University, 2003; Assistant Professor in Architecture

#### Т

Tabsh, Sami, PhD, University of Michigan, 1990; Professor in Civil Engineering and Head, Department of Civil Engineering

**Termos**, **Ali**, PhD, North Carolina State University, 2005; Assistant Professor in Economics

**Thompson, Seth**, MFA, Vermont College of Norwich University, 1997; Assistant Professor in Design

**Thompson, Winfred**, PhD, University of Chicago, 1987; Professor in International Studies and Chancellor

**Tijani, Olatunbosun**, PhD, University of Edinburgh, 2005; Assistant Professor in Arabic Studies

**Toledo, Hugo**, PhD, Auburn University, 1999; Associate Professor in Economics and Head, Economics

**Tuttle, Laura**, PhD, The Ohio State University, 2004; Assistant Professor in Accounting and Finance

**Tyson, Rodney**, PhD, University of Arizona, 1994; Associate Professor in English

## $\mathbf{V}$

Vali, Abid, MA, Loyola University of Chicago, 2002; Assistant Professor in Writing Studies

#### W

**Wahba, Essam**, PhD, University of California, 2004; Assistant Professor in Mechanical Engineering

**Wait, Isaac**, PhD, Purdue University, 2005; Assistant Professor in Civil Engineering

Wallis, Joseph, PhD, Rhodes University, 1984; Professor in Economics and Head, Department of Management, Marketing and Public Administration

## Full-Time Faculty

Walters, Timothy, PhD, University of Texas at Austin, 1996; Associate Professor in Mass Communication (Spring 2008)

Waxin, Marie, PhD, University of Marseilles, 2000; Assistant Professor in Management, Marketing and Public Administration

**Weiss, Gregor**, MArch, University of California at Berkeley, 1984; Associate Professor in Architecture

Williams, A. Paul, PhD, The University of Western Australia, 2004; Associate Professor in Management, Marketing and Pubic Administration and Associate Dean, School of Business and Management

Wills, Luis, PhD, University of Hawaii, 2005; Assistant Professor in Mathematics and Statistics

**Wunderli, Thomas**, PhD, University of Florida, 2003; Assistant Professor in Mathematics and Statistics

## X

**Xu, Xiaobo**, PhD, University of Mississippi, 2005; Assistant Professor in Management Information Systems

#### Y

Yesildirek, Aydin, PhD, University of Texas at Arlington, 1994; Associate Professor in Electrical Engineering and Mechatronics

#### 7

**Zantout, Zaher**, PhD, Drexel University, 1990; Associate Professor in Accounting and Finance

**Zayani, Mohamed**, PhD, Indiana University, 1996; Associate Professor in English

**Zeidan, Rabih**, MS, University of Houston–Clear Lake, 1987; Assistant Professor in Accounting and Finance

**Zikkos, Elias**, PhD, University of Cyprus, 2005; Assistant Professor in Mathematics and Statistics

Zoubi, Taisier, PhD, University of North Texas, 1992; Professor in Accounting and Finance

**Zualkernan, Imran**, PhD, University of Minnesota, 1991; Assistant Professor in Computer Engineering