Internationalizing a Master of Design Program in Strategic Foresight and Innovation

by

Ramtin Lotfabadi

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Abstract

This study establishes a framework for a strategic and normative plan for creating a graduate level Master of Design program in the Dubai International Academic City (DIAC) free zone. The program investigated for internationalization is the MDes in Strategic Foresight & Innovation at OCAD University. Drawing from foresight methods, the research is grounded in a contextual understanding of societal, academic and business implications of internationalizing a Canadian graduate level program for the Middle Eastern market. The report makes a number of recommendations for adapting the SFI program for international implementation, and for the design of a manageable and sustainable prototype that leverages hybrid distance education. The objective of launching a sustainable and scalable pilot program in DIAC that grows over time, is to provide graduate level education in strategic thinking and design of innovation, to a broader developing region in much need of quality higher education.

Acknowledgments

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To My Family

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Introduction

Overview

This study investigates internationalization of graduate level Canadian Art & Design education, with a goal of better understanding key challenges and opportunities faced by universities aiming to expand to new global, competitive and fluctuating economies. The study elicits insights into broad contextual implications and provides a foundational set-up that informs strategic design and planning for eventual change in curricula, delivery mechanisms and business decisions. The investigation specifically looks at implications and innovation opportunities in delivering the OCAD University Master of Design in Strategic Foresight and Innovation program in the United Arab Emirates, particularly in the Dubai International Academic City (DIAC) free-zone.

Key questions

1. How does foresight inform opportunities for educational innovation in the Middle Eastern market by forming an OCAD University Strategic Foresight & Innovation graduate program in the Dubai International Academic City (DIAC) free zone?

2. What are key societal, curricular and business considerations of such expansion?

Context and rationale

Canadian universities are under considerable challenge to maintain financial stability and sustainability while ensuring growth, relevance and competitive advantages in the higher education arena. Some difficulties faced by post-secondary educational institutions include increased costs of operation; limited government funding; highly regulated tuition frameworks;

issues of relevance and discontinuity from market demands and capacities; increased competition from disrupting bodies such as community colleges, emerging players in distance education, corporate learning bodies and professional programs.

Meanwhile most countries in the Middle East have experienced challenges in utilizing their young human capitals, resulting in large unemployed and an under-trained young workforce. For example Turkey, one of the significant potential markets and a rapidly growing and developing country with one of the largest youth ratios in the world, faces significant challenges in meeting high demands for university and college enrollment. Each year close to 2 million students take the University Entrance Examination of which an approximate 400,000 students are placed in the post-secondary programs of all the universities including approximately 250,000 students admitted for distance education programs. The total enrollment in the private universities accounts for only about 5 percent of the total which does not sufficiently meet existing demands. This demonstrates a shortage of higher education opportunities beyond Turkish state universities.

In the wider neighbouring region we observe similar patterns, demographic realities and a substantial deficit in higher education opportunities.

This investigation seeks to understand the role of North American universities in the higher education sector in the Middle East and future opportunities for establishing mutually beneficial linkages between the two systems, hence reaching a singularity and complementary system that thrives on interoperability and exchange. The insights from this study contribute to strategic planning and provide more certainty around innovative implementations.

The goal of this investigation is generating knowledge toward innovation and design intervention in post-secondary internationalization, specifically launching a Master of Design program in the Dubai International Academic City (DIAC). The insights from the research set the stage for strategic planning by examining a single graduate program as a case study – Master of Design in Strategic Foresight and Innovation at the Canadian OCAD University. The investigation draws from existing organizational knowledge, regional expertise and the understanding of complex interrelated academic, business and cultural systems.

The findings can benefit universities seeking to invest and succeed in new global academic ventures. The immediate application and the key purpose of this study is to understand challenges and opportunities, frame the right questions and reach answers, and to offer OCAD University an actionable framework, evidence and insight that informs planning for internationalization of the SFI program in new global markets, in this case the developing economies of the Middle Eastern region by establishing an active presence in a free-zone within the UAE.

Structure of report

1. An overview of the objectives and research approach
2. A general understanding of the student recruitment market – facts, figures and demographics
3. The free zone of Dubai International Academic City and a landscape of university operations
4. Broad overview of cultural and social characteristics

Approach and Methodology

Rationale for filling the gap between social sciences research and an actionable plan

The fundamental purpose of this study is to produce a research and innovation proposal with the goal of understanding challenges and opportunities of internationalizing a graduate level design program modeled after the Master of Design in Strategic Foresight and Innovation program at OCAD University, by investigating a case study of developing a pilot program in the United Arab Emirates.

One way of framing the purpose of this study, is that it seeks to "set the stage for the production of a practical, actionable plan", in which the findings in the context of internationalization is in essence a proposal on "why would we do this", "what do we need to know" and "what do we do next". This is the fundamental characteristic that differentiates this study from a rigorous research exercise grounded in the social sciences and research methods therein. Arriving at answers to, or understanding these questions, will require us to take a rigorous 'design' approach, and while taking a traditional research approach grounded in social sciences methods is undoubtedly highly advantageous in understanding specificities of social phenomena, in practical terms it may be too distant and abstract for basing an actionable business plan on.

The approach in this investigation is based on a contention that a purely theoretical research outcome is not desirable for three reasons: (1) A learning objective of the very program, for which this required report is written, is ensuring that it is actionable and that foresight and proposed

innovations bring real-life value to the problem area; (2) Universities in North America are in dire need of ensuring sustainability and relevance in the competitive domain of post-secondary education, while there is a shortage and void of institutions offering quality higher education in the developing parts of the world. OCAD University can benefit from an actionable proposal that positions the institution in an advantageous place compared to competitors. There is an element of "business urgency" to applying design thinking, foresight methodologies and innovation in the problem areas and this study and proposal seeks to play a role in propelling action; (3) It is absurd to produce research for the mere sake of producing research that looks introvertively academic into matters that require action. As such this report is closer in character to an elaborate introduction to and set up for a business plan, than to a social sciences research endeavor.

This report builds on five primary interconnected groups of research methods, oriented toward a design planning outcome:

1. Literature review

2. Online ethnography

3. Foresight methodologies

4. Stakeholder consultation and interaction with domain experts preceding commencement of this study

5. Personal experience

1. Literature review

This study draws from literature in three main areas of investigation:

– body of literature on the cultural and educational landscape in the Middle Eastern region,

demographic trends and particularly observations on risks and challenges of developing academic programs in new cultural contexts

– understanding complex systems and applying systems theories in teaching and learning with consideration to interconnected parts as opposed to building on isolated subjects and parts

2. Online ethnography

Online ethnography was used to:

– review the practice, existing precedence and cases, internal and external reflections on the success (or failure) of North American academic programs in the region

– fact find and gather relevant user experiences, view-points and media reports

3. Foresight methodologies

Of the five phases of complementary foresight processes introduced by Miles (2002) pre-foresight, recruitment, generation, action, renewal, this study draws from methods introduced in the third and fourth phases – generation and action:

Generation phase:

– Scanning

– Analytical brainstorming

– Trend, drivers and stakeholders extrapolation

– Analyzing main issues and interrelations

– Visioning, intuition, and creative thinking

Action phase:

 – Prioritizing and decision making

 – Innovation and change, and proposal for action

 – Backcasting as a planning method, but in analytical way rather than in workshop setting

Referring to above list of foresight methods is substantiated by going back to the five broad groups of methods outlined at the outset: (i.) literature review, (ii) online ethnography, (iii.) foresight methodologies and (iv.) stakeholder consultation and interaction with domain experts preceding commencement of this study and (v.) personal experience. To gain a better understanding of the taxonomy of foresight methods specifically used in this study, we may plot the methods on Popper's Foresight Diamond, positioned against 4 vertexes of (a) Creativity, (b) Interaction, (c) Evidence and (d) Expertise. Each vertex represents an approach or mode of techniques used in foresight.

Figure 1. Popper's Foresight Diamond

4. Stakeholder consultation

This investigation does not explicitly rely on expert interviews, rather aggregates conversations and interactions with stakeholders, domain experts, and past and present colleagues. Engagements include conversations with infrastructure providers (IP's) in Dubai academic free zones, faculty and administrative leaderships of the Strategic Foresight and Innovation program during the launch of the SFI at OCAD University, and feedback from academic collaborations with colleagues in the program.

5. Personal experience

Some of my observations, familiarity and first hand experience with existing Middle Eastern

education systems and environments, and cultural and societal realities and norms, have contributed to this study. Additionally, many gatherings and observations from numerous interactions with Western visitors in the region have contributed to a deeper and more accurate understanding of an outsider's point of view of countries and the overall cultural landscape within the Middle East. Furthermore working in various administrative capacities in universities across Ontario over the past decade, has enabled me to comment with a degree of certainty on matters related to administrative and academic oversight, strategic planning and governance.

Broader Middle East – A Rapidly Developing Region

Expanding a North American graduate level program in design, or any academic program for that matter, into a new market requires relevant knowledge about the market from which students are admitted. In this section we will look at the market region, outlining some facts and realities about a region that is rapidly growing and is hungry for growth opportunities and innovative solutions for problems that are complex and interconnected with deep social, cultural and economic realities.

The region that we define as the student recruitment market spans from Arabic speaking North West African countries to the Eastern regions of Pakistan, and from North to the Commonwealth of Independent States (CIS). The goal is to gain a better understanding of this market, select a suitable location that is central to this region, UAE, and investigate expansion opportunities of a graduate level Design program in the region.

Numbers and figures

Looking closely at the Global Median Age map, a fact of significant interest is that the Middle East is at the epicentre of the developing world with an age median of 20-30 years. Avoiding conflicting definitions of the traditional Middle East, Middle East as defined by Western countries, Greater Middle East and potential confusion with inclusion of some former Soviet Republics, Central Asia, Afghanistan and Pakistan, we outline the "Region" of interest to this study as a collective of the following countries with age median of 20-30 according to the Global Median Age map (see below).
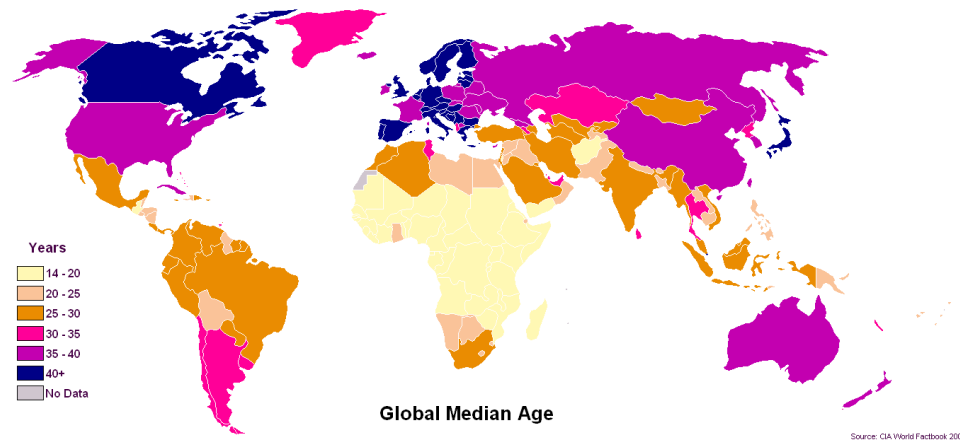
Figure 2. Global Median Age

4Wikimedia Commons – http://en.wikipedia.org/wiki/File:Median_age.png

Countries	Population Estimate
5 of 7 Northern African countries, (some in "Greater Middle East"): Algeria, Egypt, Libya, Morocco, Tunisia	**165 Million**
Commonwealth of Independent States (CIS), former Soviet Republic, (some in "Greater Middle East"): Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Azerbaijan and Georgia	**275 Million**
Traditional definition of the Middle East, and Turkey, Afghanistan, and Pakistan	**560 Million**
Total Population Estimate:	**1 Billion**

Table 1. Regional Population Estimate

National Accounts, United Nations Statistics Division

http://unstats.un.org/unsd/snaama/selbasicFast.asp

The World Bank: World Economic Indicators Database

http://siteresources.worldbank.org/DATASTATISTICS/Resources/POP.pdf

An important correlation is that this region of developing countries also appears on the medium

and high human development on the map of the United Nations Human Development Index.
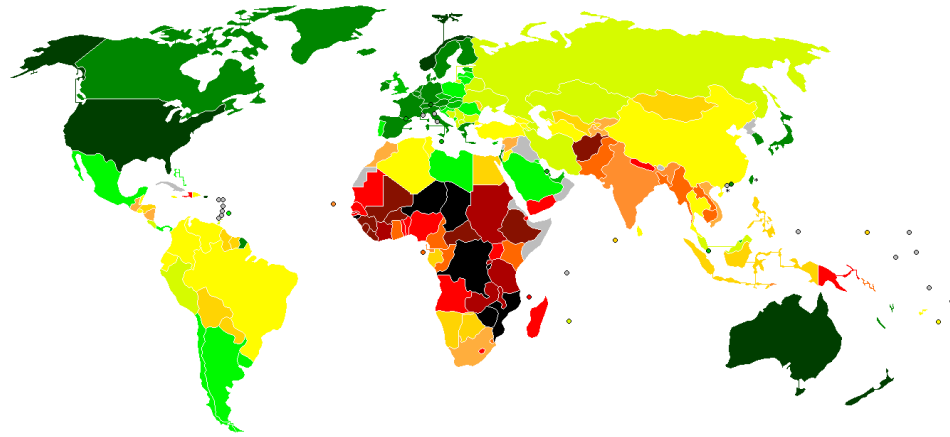
Figure 3. United Nations Human Development Index (population)
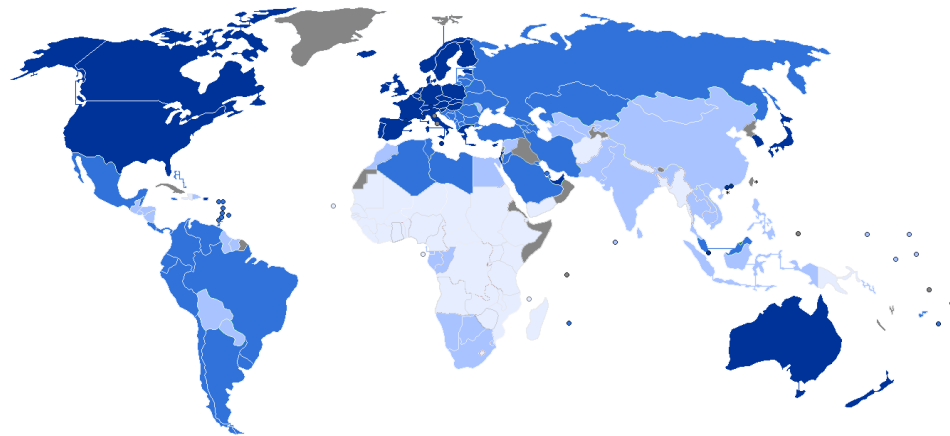
Figure 4. United Nations Human Development Index (relative)

0.900 and over	0.650–0.699
0.850–0.899	0.600–0.649
0.800–0.849	0.550–0.599
0.750–0.799	0.500–0.549
0.700–0.749	0.450–0.499

Very High (Developed Country)
High (Developing country)
Medium (Developing country)
Low (Developing country)
Data unavailable

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Demand for higher education and a shortage of university opportunities

The broad developing region of 1 billion population has been experiencing explosive population growths during the past few decades and shows a very unique landscape of higher education, opportunities and enormous economic and developmental potentials. High birth rates have transformed demographics into youth-dominant populations, creating potential work forces in the hundreds of millions. One of the major elements directly relating the economic growth of Middle East, CIS countries, particularly Turkey and Iran is the increase in skills and education of the young population through international expansion of universities and higher education projects, either local or via exchange and visiting student programs.

Despite considerable investment in youth development programs, such as education and job training programs, these regions have not been able to utilize their young human capitals and lag behind many other developing countries such as India and China. This has resulted in a huge surplus of unemployed and an under-trained young work force. Lack of proper skills and training/education programs have resulted in youth unemployment rates in excess of 25% or more in these regions. This can approximately translate into more than 1 trillion dollars of unrealized GDP – a conservative estimate based on (100 million unemployed youth multiplied by $10,000 GDP per capita).

In order to achieve long term political and economic stability, many Middle Eastern and CIS countries have been developing and implementing youth education and training programs. Meeting requirements of training such huge young work force demands creation of educational and skills-training infrastructures never seen before in the history of these regions. This directly translates into creation of millions of new university spaces specifically tailored to meet the particular needs of such countries to fill the rapidly ballooning vacuum of expert work force.

The estimated number of high school students in the Middle East (including Turkey) and CIS is in excess of 40 million with high rates of youth reaching high school age every year. The capacity of higher education institutes, on average, in these regions is roughly about half of the number of applicants, leaving 50% of applicants without access to higher education. For instance in the more populous countries of the Middle East such as Egypt, Iran, Turkey and Saudi Arabia with a combined population of about 260 million and university age population of more than 25 million, the capacities of higher education institutes can only accommodate about half of the applicants and each year a very significant number of high school graduates are left behind, unable to attend post-secondary institutions.

Statistics show that countries in the Middle East and CIS have not been able to meet educational/skills-training demands of their growing youth work force and thus have to partially rely on foreign sources to train their youth, if they are to achieve sustained economic growth and regional and global competitiveness.

Offering Western post-secondary programs in these regions can alleviate some of the educational demands of these countries for many decades to come. As millions of people reach university age every year, the outlook for success and expansion of universities with a mandate of internationalization in the target region is worthy of serious consideration.

Two market examples representing regional demands – Turkey and Iran

Any attempt to compare two countries and people such as Turkey and Iran, with thousands of years of history of civilization, yields incomplete knowledge and may be rightfully deemed reductionistic. A European would perhaps most certainly agree that there is significant variation in culture between the French, Brits and Germans. This is true everywhere and a comparison between Turkey, Iran and Arabic speaking countries such as North African countries and those in the Gulf Cooperation Council (GCC), is no exception to this. They are all different, yet there are many important similarities.

It is the very basic collection of similarities and high level homogeneity between countries in the region that we may draw from, to better understand the regional market realities with respect to higher education. We will find that though in many ways different and with individual quirks and characteristics, there are deep fundamental similarities that outline the shape of the market.

A broad understanding of two representative countries such as Turkey and Iran as a small sample-set of neighbouring countries in the region, is helpful in understanding the region at large. Having noted that, the two countries alone, makes up a lucrative market with a total population of over

150 million, approximately half of which is under 30 years of age, and with very large demand for higher education. There are many similarities between Turkey and Iran, particularly related to demographic realities, the cultural landscape, population distribution, religious persuasions and demand for higher education.

Turkey is one of many growing economies in the broader developing region of the Middle East and neighbouring countries. With a GDP-PPP of over one trillion dollars, it also is the strongest economy in the region. As such it cannot be assumed that it is a country that represents all challenges and growth realities of neighbouring countries, however in terms of youth demographics and access to higher education, it is fairly comparable to other countries in the regions such as Egypt, Iran, The Commonwealth of Independent States (CIS) and Syria. Iran is a country of similar population to Turkey. Iran's economy is the 18th largest in the world by purchasing power parity (PPP) and is a mixture of state ownership of oil, natural resources, mining, heavy industrial manufacturing and other large enterprises, village agriculture, and small-scale private trading and service ventures.

Estimate:	Turkey	Iran
Population	73 million (18th)	75 million (17th)
Area	783,562 km2 (37th)	1,648,195 km2 (18th)
GDP (PPP) - Total - Per Capita	$1.116 trillion $14,580	$863.5 billion $10,864

Table 2. Turkey & Iran - Population, Area and GDP (PPP)

Higher education in Turkey

Turkey, a country of 73,000,000, has a young population with just under 50% under 30 years of age. As of 2004 there are 54 state and 23 private universities in Turkey. Private universities were established in 1986. Admission to higher education is centrally governed as with many countries in the region, and based on a yearly nationwide examination. The examination, named the Student Selection Examination, consists of verbal and quantitative parts. Each year close to 2 million students take the entrance examination and only an approximate 400,000 students are placed in the two- and four-year programs of all the universities including approximately 250,000 students admitted for distance education programs. In other words 10 per cent of the students were admitted in a four-year undergraduate program; 10 per cent in a two-year undergraduate program; and 10 per cent in programs offered by the open university which provides distance education. The total enrollment in the private universities accounts for only about 5 percent of the total. This demonstrates a shortage of higher education opportunities for prospective students beyond Turkish state universities. There are a total of 82,000 students enrolled in Master programs and 24,000 students in the PhD programs.

- Each year more than 1.5 million university applicant students are rejected

- Annually about 1.5 million students graduate from Turkish high schools

- Each year approximately 350,000 students graduate with a 2 or 4 year degree

- There are only an approximate 20,000 seats available for graduate studies each year

- Tuition at private universities can reach up to $15,000 US per annum

- At the graduate level state universities are practically free at all levels including MBA programs, while private universities charge tuition in a wide range up to $20,000 per

year.

Baris Tan reports in the Global Guide to Management Education (2006) that despite a very high demand, the capacity at the universities can only handle 10% of the prospective students and given the limited number of seats available at the universities, "Turkey is faced with the challenge of reconciling quantity with quality in higher education." One of the main implications of this trend is the need for educating future academics and scholars in all fields of higher education. This requires starting new doctoral programs and increasing the number of participants without sacrificing the quality.
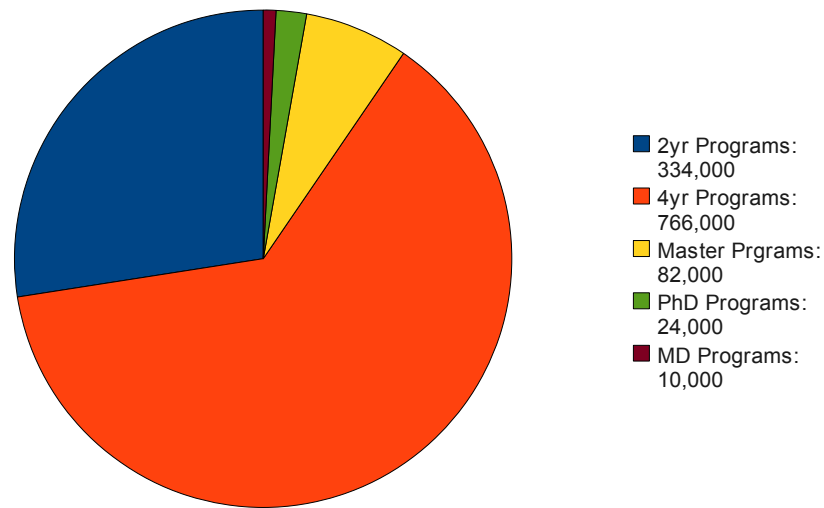
Figure 5.University Degree Offering Proportions in Turkey

University student population distribution in Turkish universities, based on report, A Global Guide to Management Education 2006, Dr. Baris Tan , Graduate School of Business, Koc University

Similar student demand in the wider regional market such as neighbouring Iran

Primary education in Iran is compulsory and primary, secondary and higher education is free, although private schools and universities with tuition are common. According to government figures, over 95% of Iranian children currently receive primary and secondary education. The schools are single-sex. There are over 115,000 schools throughout Iran, teaching over 18 million children.

There are approximately 3.5 million students enrolled in universities in Iran, about 1.7 million in various programs in the Azad university and the remainder in state universities. Established in 1982, Azad University is a private chain of universities with over 400 branches across the country and around the world. The annual undergraduate enrollment numbers are approximately 300,000 in Azad universities, and 250,000 in 96 state universities. Each year approximately 1.2 million university applicants are rejected due to lack of capacity and/or qualification.

A February 2010 report released by the Ministry of Higher Education (sanjesh.org) outlines that each year 45,000 students enroll in graduate studies in state universities across the country. In 2010 the total number of applicants to graduate studies in state universities across the country were 770,000 which has not changed since the previous year. Female vs. male distribution is almost equal at 50%.

There are a total approximate number of 385,000 applicants to graduate studies in the private chain of universities, Azad University, of which 43% are female and 57% constitute male applicants. This difference in ratio between the free state universities and paid private universities

may be a result of economic status of dependencies of the genders. However the ratio varies in different programs and disciplines. For example of the 164,000 applicants to medicine, 73% are female and 27% male.

Overall the total number of graduate enrollments in either university system in Iran is approximately 100,000 which translates to 12% of total number of applicants. This figure has dramatically increased over the years with the private university chain growing capacity to accommodate more and more students. There are quality and reputational implications in this growth which is a ripe subject of further study and research, but the key takeaway is that 88% of applicants looking for opportunities in the graduate studies pool are rejected, and there is no significant differentiation in terms of reputability of schools. There are "better" and more reputable universities, but the system of teaching, education and research is fairly homogeneous across the board with no alternative available to students other than that of the Iranian university system.

In a paper on Higher Education for Development , presented at the National Commission for UNESCO , M. Tavakol from Tehran University, highlights 5 key basic components playing a leading thread in achieving development goals in the higher education system in Iran: higher education, relevance, quality, quantity, equity . The considerations include the evaluation of higher education based on relationship with societal expectations in light of "ethical criteria, political neutrality, the culture of critique, an ever more strengthened link between societal problems and the job market as well as the adoption of long-term orientations with respect to societal needs and objectives, which would include respecting cultures and environmental

support". Key problem areas are to be focused on in such assessment such as eradication of poverty, eradicating prejudice, violence, illiteracy, hunger, corruption and diseases, which is primarily brought about by adopting an inter- and transdisciplinary approach to analyzing problems. Tavakol calls for educational systems to be constituted by motivated scholars and professionals with great compassion for humanity and wisdom.

Existing landscape of local and western universities in the GCC

With an estimated total 40 million in population, The Gulf Cooperation Council (GCC) refers to six Middle Eastern countries namely Kuwait, Bahrain, Saudi Arabia, Qatar, Oman and the United Arab Emirates (the seven states of UAE are Abu Dhabi, Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah and Umm al-Quwain). Compared to the region at large, GCC is not a populous region, however it is geographical situated at the centre of the broader region of the Middle East, hosting a high density of Western universities. There are numerous international universities in the GCC, particularly in the UAE.

According to the Bertelsen's 2009 Harvard report on best practices in the Dubai Initiative, since the 1990s, there has been a boom in private higher education in the GCC. The United Arab Emirates has the largest number of private higher education institutions. In addition to a wide range of universities operating in the Knowledge Village (2003) and the Dubai International Academic City (2007), there are a large number of universities that operate outside of these free zones (listed as follows in Bertelsen's 2009 Harvard report):

- American University in Dubai (1995) originally affiliated with the American Intercontinental U

- American University of Sharjah (1997) advised by the American University

- Dubai School of Government (2005) collaborating with Harvard Kennedy School

- Université Paris Sorbonne Abu Dhabi (2006)

- Michigan State University Dubai (2008)

- New York University Abu Dhabi (2010)

- Arab Open University (2002) working with the UK Open University in Kuwait

- Gulf University for Science and Technology (2002) in Kuwait collaborating closely, including credit transfer, with the University of Missouri St. Louis

- Kuwait Maastricht Business School, local counterpart of the Maastricht School of Management

- American University of Kuwait (2004) advised by Dartmouth College

- Australian College of Kuwait (2004) collaborates with the University of Tasmania and others

- Box Hill College for Women (2007) collaborates with the Box Hill Institute in Melbourne

- American University of the Middle East (2008) advised by Purdue University

"A prominent example is Education City (1998-) in Qatar with campuses from Virginia Commonwealth, Weill Cornell Medical College, Texas A&M, Carnegie Mellon, Georgetown University School of Foreign Service and Northwestern. Oman has around 19 private higher education institutions. Saudi Arabia is also following the trend of private higher education, one example of which is the Taif Private University, collaborating with the University of Arizona. An example of non-Western affiliation is AMA Bahrain, a branch of the AMA Computer University in the Philippines (2002)."

There are a number of factors, which together drive the development of private higher education in the Gulf region and developing countries: demographics, public finance, and employability,

among others. The demographics with large proportions of children and young people constitute a challenge for higher education. Because of previous investments in primary and secondary education, these groups are now aspiring for tertiary education. Previously, the national public higher education system could absorb secondary school graduates, which is no longer possible for demographic and educational reasons. Capacity and spending in the national public higher education cannot be increased sufficiently.

Aging populations and depleting natural resources, coupled with extensive environmental degradation, have prompted many developed countries to make the transition from product-based economies to knowledge based economies. Therefore, in many G20 countries promotion of knowledge-based economy has become the corner stone of future growth and prosperity. This is especially true for countries, such as Canada, with a relatively small work force compared to that of many other bigger economies such as the US, Germany, France, the UK, and the BRIC countries (Brazil, Russia, India, China).

In fact development indicators such as KEI (Knowledge Economy Index) and KI (Knowledge Index) have become the standard yardsticks to assess economic development and compatibility. According to the World Bank, education, innovation, information and communication technologies define the fundamentals of a knowledge-based economy. Thus developed nations, especially G8 and G20, have allocated sizable portions of their respective GDP outputs in education and advanced technologies. Therefore as emerging economic heavy weights – such as China and India – become the new hubs for production of consumer goods, more advanced economies move towards economies based on knowledge as their new "products" as well as a

tool to generate new technologies, and thus, more jobs. Expansion of Western universities into the region is hence inline with laying down the foundations of new advanced economies that are conducive to promotion of the main pillars of knowledge based economies. These are outlined as Education, Innovation, Information and Communication technologies all of which are directly related to training a highly educated and skilled workforce.

Western universities in the UAE

In recent years a growing number of Western universities have begun operating in the United Arab Emirates. Tables in Appendix I. demonstrate existing universities in the region based on select criteria such as the language of English, those offering advanced degree designations, tuition, curriculum and licensing bodies.

Summary overview of landscape of UAE universities with English as core language of
curriculum

Total Canadian universities operating in UAE	4
Total American universities operating in UAE	21
Total British universities operating in UAE	14
Total Australian universities operating in UAE	3
Total English speaking universities from US, UK, Canada or Australia in UAE	**42**
Total Universities offering any Master degree designation in UAE	**106**
Total Universities offering MBA designation in UAE	**54**
Total Universities offering MSc in UAE	**29**
Total Universities offering MA in UAE	**13**
Total Universities offering MEng in UAE	**4**
Total Universities offering MEd in UAE	**5**
Total Universities offering MDes in UAE	**0**

Table 3. Total Graduate Degrees in the UAE
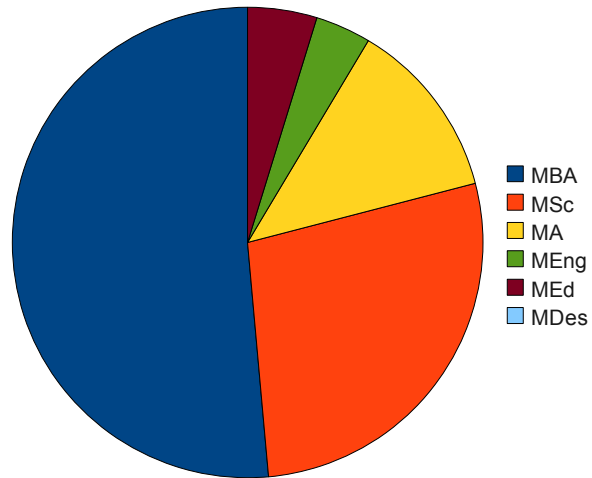
Figure 6. Proportion of Graduate Degrees
Offered by English Language Universities

More than half of the graduate degree programs are MBA, and MSc degree programs constitutes

more than a quarter of the total share. This underscores the significant attention and resources

dedicated to science oriented disciplines and in recent years, the MBA designation. MA is one of

the minorities in the list, and there is no known Master of Design offering, which further

emphasizes that this field of study and research is relatively unknown. It also presents an

opportunity to introduce and frame the MDes designation as a fresh alternative to traditional

graduate programs.

Dubai International Academic City (DIAC) Free Zone

Dubai International Academic City (DIAC) was established in 2007 by the government owned holding company TECOM Investments with a goal of creating a central destination for higher education in the broader Middle Eastern region and providing the infrastructure and services required to enable academic institutions to operate academic programs. DIAC spreads over an area of 129,000,000 square feet. The project was launched in May 2006 as a new free zone where educational institutions from former Dubai Knowledge Village would eventually migrate. DIAC has 31 academic institutions from 11 different countries operating in its premises, hosting approximately 18,000 international students. UAE free zones are designated jurisdictions which provide business zoning that is less restrictive for foreign operations, offering alternatives to municipal regions where less prohibitive and different governing laws apply.

31 higher education institutes in DIAC (Dubai International Academic City)	Institutions expected to move to DIAC currently based in DKV (Dubai Knowledge Village)
Al Ghurair University American University in Dubai American University in the Emirates Azad University Birla Institute of Technology & Science, Pilani – Dubai British University in Dubai Dubai Aviation College Dubai English Speaking College French Fashion University Dubai French School Dubai, secondary school German School Dubai, primary school Hamdan eTQM University Heriot Watt University Dubai Higher Colleges of Technology, Dubai Men's College campus Hult International Business School Dubai Institute of Management Technology Dubai JSS Academy Dubai Mahatma Gandhi University Dubai Manipal University Dubai Michigan State University Dubai Murdoch University Dubai National Institute for Vocational Education Dubai Rochester Institute of Technology Dubai St Joseph University Dubai S P Jain Center of Management Dubai SZABIST Dubai UAE Academy of Hospitality Universal Empire Institute of Medical Sciences Universal Empire Institute of Technology University of Waterloo Dubai Zayed University Academic City	American University in Dubai Dubai Aviation College Dubai Police Officers' Academy Dubai University College Institute of Management Technology, Dubai International Centre for Biosaline Agriculture St Petersburg State University of Engineering and Economics UAE Academy of Hospitality

Table 4. Universities in the DIAC and Knowledge Village

Requirements for the DIAC approval & KHDA academic permit

- An acknowledgment that the investor and the home institution covenant comply with

laws of UAE and the Emirate of Dubai, and the regulations issued by KHDA.

- Business Plan including the following:

  ○ Name of the university and a description of history, mission and vision, legal status and staffing profiles

  ○ Name of the university branch

  ○ Legal status of the university branch and legal relationship with home university

  ○ Proposed location and size of the the university branch

  ○ Proposed programs to be conducted over a five year period

  ○ For each program, description of target market and evidence of student and employer need

  ○ Projected yearly enrollment at the university Branch for 5 years

  ○ Proposed admission criteria

  ○ Proposed tuition and other fees

  ○ Confirmation from the the university that the programs offered at the branch are the same as that offered at the university home, and that the students at the branch will have access to similar learning resources

  ○ Confirmation of the language to be used in teaching, materials and assessment

  ○ Letter from home university confirming that the home university would quality assure all academic programs at the branch university

  ○ Responsibility matrix clearly outlining the roles, responsibilities and accountability of any investor supporting the operations of the branch university and a letter from the home university confirming its academic responsibilities towards the branch

university

- ○ Financial projections for five years including projected income (profit & loss) statements for five years and cash flow statements

- ○ Letter from the home university confirming the availability of adequate funds for meeting the CAPEX and OPEX requirements of the Branch the university

- Copy of any applicable accreditation status or equivalent approval including ministerial approvals, external accreditation and professional body accreditation

[Aggregated from License Guidelines: LG 7.1, Dubai Technology and Free Zone Authority, Government of Dubai. Infrastructure Provider Guidelines: LG 7.1, Dubai Technology and Free Zone Authority, Government of Dubai. Dubai International Academic City Academic Application.]

Space and licensing considerations

Approximate costs

Lease Rate	CDN $40 per square feet per year
Minimum leasable area (undergraduate)	18,000 square feet – 20,000 square feet
Minimum leasable area (graduate)	3,000 square feet
License Fee (Undergrad)	CDN $27,000 per Year
License Fee (Grad)	CDN $13,500 per Year
Application Fee	CDN $5,374 (one-time)
Registration Fee	CDN $950 (one time)

- SQM (53 SQF) per student is a common way of allocating space

- For 50 students in a graduate program considering 2600 SQF plus 600 SQF the common

areas which makes 3200 SQF

- Estimated total comes to CDN $150,000 per year per for space alone

- Total cost of space and license will arrive at CDN $170,000

- With contingency and utility and other common costs a total CDN $250,000 annual investment is not uncommon.
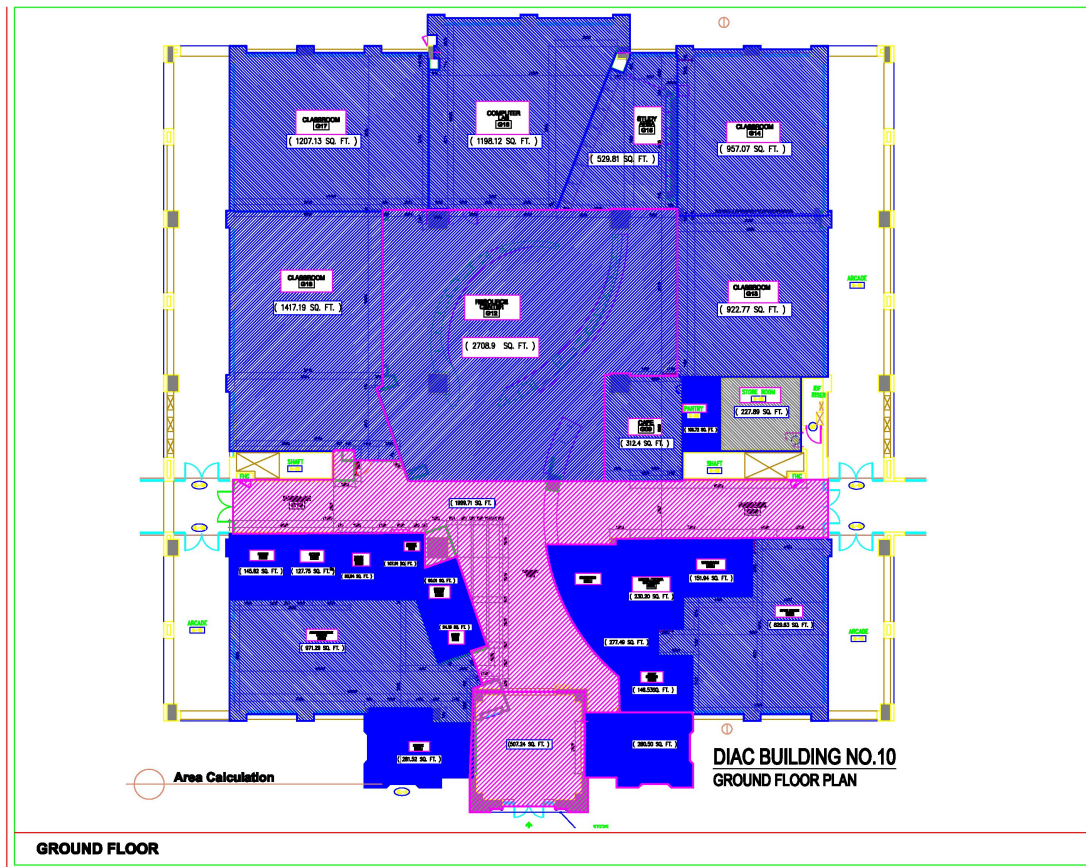
Figure 7. Sample DIAC Space Plan and Classroom

DIAC Canadian priority institutions as of 2010

In the view of DIAC the following Canadian Universities add value to the growth of the higher education sector in Gulf region and are hence defined 'priority Canadian institutions'. There are a total of 10 institutions identified as of 2010. A pre-approval can only be granted after reviewing the business & academic plans of the proposed university if it is not on the list. This is up to the jurisdiction of both DIAC higher education committee and Dubai Knowledge and Human Development Authority (www.khda.gov.ae).

#	University	Preferred Programs – I	Preferred Programs - II	Preferred Programs - III	Preferred Programs - IV
1	University of TORONTO	Science & Engineering : (chemical, civil, computer, electrical, industrial, materials, mechanical, and mineral)	Education	Law: Master of Laws (LLM) Doctor of Juridical Science (SJD) Masters in Studies in Law	Public Health: Global Health Occupational and Environmental Health Public Health Policy Social & Behavioural Health Science
2	University of BRITISH COLUMBIA	Natural Sciences	Engineering	Life Sciences & Biomedical	Arts & Humanities
3	MCGILL University	Engineering (Architecture, Chemical, Civil, Computer, Electrical, Materials, Mechanical, Mining, Software), Bioresource Engineering	Environmental Sciences, Food Science or Nutritional Sciences	Communication Studies Economics Language & Literature Linguistics Philosophy Political Science School of Social Work Sociology	Education
4	MCMASTER University	Biochemistry and Biomedical Sciences, Geography and Earth Sciences, Life Sciences, Medical Radiation Sciences, Medical Physics and Applied Radiation Sciences, Physics & Astronomy, Psychology, Neuroscience & Behavior	Chemical Engineering Civil Engineering Computing and Software Electrical and Computer Engineering Physics Materials Science and Engineering Mechanical Engineering	Art and Design, Economics, History and Classics, Linguistics, Modern Languages and Cultural Studies, Philosophy, Political Science	-
5	University of ALBERTA	Chemical & Materials Engineering Civil & Environmental Engineering Electrical & Computer Engineering Mechanical Engineering Mining & Petroleum Engineering	Agricultural Food and Nutritional Science Human Ecology Renewable Resources Rural Economy	Art and Design, Economics, History and Classics, Linguistics, Modern Languages and Cultural Studies, Philosophy, Political Science	-
6	University of MONTREAL	Arts and Science	Continuing Education Centre for Teacher Training Department of Didactics Department of Administration and Educational Foundations Department of Psycho pedagogy and Andragogy	Institute of Urban Planning School of Architecture School of Landscape Architecture School of Industrial Design Interior Design Program	Law of Business & International Trade
8	SIMON FRASER University	Environmental Studies	Continuing Education: Career and Life Planning Community and Urban Planning Dialogue, Negotiation and Civic Engagement Health and Wellness Languages and Cross-Cultural Communication Seniors Program	Applied Sciences: Computing Science Engineering Science	Communication, Art & Technology
7	YORK University	Environmental Studies: Community Arts Practice Ecosystem Management International Project Management Urban Ecologies Urban Sustainability	Science & Engineering	Education	Health
9	CARLETON University	Engineering and Design: Civil and Environmental Engineering Electronics Mechanical and Aerospace Engineering Systems and Computer Engineering	Geography and Environmental Studies, Earth Sciences	Public Affairs	Science
10	DALHOUSIE University	Law	Engineering : Biological Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, Food Science, Industrial Engineering, Mechanical Engineering, Metallurgical Engineering and Mining Engineering	Architecture and Planning: Bachelor of Community Design, Bachelor of Community Design Honours, Master of Planning, Master of Planning Studies, Bachelor of Environmental Design Studies, Master of Architecture	Computer Science

Table 5. DIAC Canadian Priority Institutions

The 10 DIAC priority Canadian institutions have been chosen by DIAC, however it is unclear

what the selection criteria is seen to be. A common thread is the common and rather traditional

emphasis on science, health, engineering and law. Presently design is not emphasized and Arts is not seen as a priority.

Common study and cooperation patterns

Graduate on-campus, distance education and blended program delivery can be based on a common and fairly standard "0.5 + 1.5 + 0.5" course pattern, which refers to the proportions and distribution of study location. In the case of a two year graduate program a university may consider a half year preparatory learning program, followed by one and a half year in the region or via distance learning and a half year thesis or Major Research Project period in Canada.

Another model that is suitable for a one and a half year executive style master program is based on a half a year preparatory period (not part of the degree program requirement, but a prerequisite to admission) followed by a one year full-time course work and a double semester thesis/MRP visit abroad or "(0.5) + 1 + 0.5".

- Pre-university preparation period (6 months);
- Mother university oversees and monitors all academic aspects of recruitment and admission, program delivery, assessment, degree granting, etc. over the course of study;
- Students who successfully complete the full course requirements may be eligible to relocate abroad and register directly with the mother university and spend a thesis semester and/or self-study period towards a final completion of the degree program.

Common admission requirements

Admission requirements and selection to the graduate programs should generally be consistent with and adhere to policies guiding admission to Ontario universities as well as those of OCAD University graduate programs specifically, however meeting the minimum requirements for admission should not provide guarantee of admission into any program. Where applicable the regional office can facilitate and offer a pre-university preparation semester/year to ensure student proficiency in oral and written communication in English and fulfillment of academic prerequisites including portfolio development and communication/presentation skills, in meeting all Ontario post-secondary entrance requirements and OCAD University admission requirements into the graduate program.

Precedence and problem-cases

> "Overseas Branch Campuses Should Start Small, Assess Demand, Proceed Carefully according to research carried out by Kevin Kinser and Jason E. Lane, both with the Institute for Global Education Policy Studies at the State University of New York at Albany, who studied more than 40 such institutions in 10 different countries. Successful overseas branch campuses start modestly, pay close attention to student demand, and are opened only after careful analysis."

Michigan State University

According to a July 2010 report in the Chronicle of Higher Education, a Washington D.C. based publication of news and information on colleges and universities, Michigan State University has been struggling to maintain its undergraduate program offering in DIAC, resulting in the

cancellation of all its undergraduate degree programs.

Michigan State U has been offering these programs for two years but the campus has not been able to attract enough students to become either financially or intellectually viable. Michigan State University began with a business plan seeking to recruit 100 to 200 students for each graduating class within 5 undergrad programs. The vision was to generate revenue and cover costs through collection of tuition only. The university continues to offer two graduate programs and look at local recruiting of students as international, exchange and study-abroad students.

The total loss exceeded $4 million, $2.7 million of which was a loan from the Dubai Holding, the government-owned corporation that governs and manages the physical infrastructure an campuses in the Dubai International Academic City.

Simply observed, the student recruitment model for covering large costs of operation was insufficient and there are other universities in the region that struggle with the same challenge. Some universities operate in Dubai or Abu Dhabi such as New York University or Texas A&M University in Qatar and the reason they are successful is widely attributed to the governments' underwriting assistance, covering all costs of operation from physical campus construction to faculty and administrative salaries. They also contribute a significant amount of wealth into research.

A saturation of the education market in traditional programs paired with rising tuition rates, as well as the global economic downturn are also known to be contributing factors, however a more

obvious analysis of the circumstances surrounding the failure of Michigan State U in operating its

undergraduate programs are the following:

1. Cost of operation in the region is high and should not be underestimated and tuition alone
    is not sufficient in breaking even, unless paired with significant commitments from local
    investment and/or the government.

2. The program offering needs significant rethinking and change. The traditional model of
    on-site classroom offering does not always work, given the cost of tuition and living
    expenses for a demographic of prospective students seeking to live in the UAE.

George Mason University

George Mason University is another example of the difficulties faced by universities. In recent

years, enrollment didn't grow at nearly the pace university officials had expected, and George

Mason was pressured when investors decided to dramatically reduce subsidies. The university,

which was based in the Ras-Al-Khaimah province, was funded by a government-supported

foundation known as the RAK Education Company (Edrak). As with several similar

arrangements in the Gulf, the university offered its name, expertise and support but did not

contribute to the operational costs. The goal, however, was that the university would be self-

sustaining through tuition revenues within five years of its founding and there was increased

uncertainty on part of investors that George Mason would meet this obligation. Once again,

unaffordable tuition rates, traditional programming and on-site program delivery at high

operational costs contributed to challenges with sustainability of quality. In September of 2010,

the Khaleej Times reported that some branches in Dubai had to shut operations and relocate to

another emirate as they did not meet the requirements of the education authority in Dubai.

Broad Look at Regional Socio-cultural Characteristics

As with any society and culture the broader Middle East cannot be trivially described, and any attempt to characterize the region with all its enormous variances, subcultures and nuances will unavoidably appear shallow and reductionistic. As the "cradle of civilization" with a written history of several thousand years, perhaps the most simple yet accurate characterization of the society at large, is its "complexity". But as simple and clear as the word complexity appears, even complexity itself is more complex in a region that has been shaped over thousands of years of thought, events, change and historic feedback.

The other significantly important issue to recognize is the diversity within the region, where in some countries such as Iran or Turkey, one may encounter tens if not hundreds of distinct sub-cultures, dialects and cultural attributes, which again prevents one from hastily drawing broad generalizations about the region.

However it is necessary to provide some important characteristics that distinguish the socio-cultural attributes of the Middle East, from those of the West, which will aid in successfully establishing educational programming in the Middle East. Following are some commonly acknowledged characteristics that differ from those in the West, and without a doubt will impact the implementation of any Western degree program in the region, particularly provisioning a graduate program for a broader market of the Middle East, from planning and development, to day-to-day operations.

Contradictions and equilibriums in the culture and society

Characteristic description:

Possibly the deepest and most interesting complexity, that is seen almost everywhere in private and public life, is the peculiar "contradiction" which appears as paradoxical dichotomies, but is united at core. Understanding the paradoxes, and reconciling them from within by reaching a state of equilibrium and harmony can be one of the hardest exercises for a non-acquainted person seeking to extend and adapt itself to the East.

Take traffic for example, which can be described as chaotic, where seemingly expressions of impatience and anxiety is everywhere in driving and honking and maneuvering. Yet in joining a ride with a local driver, one cannot help but noticing in disbelief a state of collective relaxation and inner order;

- Consider the behaviour of many men which may appear rough or even harsh at first sight, yet the man may publicly express sensitive emotions without reservation in religious gatherings and observations where emotionally rich rituals are observed;

- Observe women who may appear extraordinarily committed to humility and modesty, yet dress with utmost formal flamboyance, vibrancy and richness in exclusive gatherings and functions; and

- Take school children who behave with unmatched respect at the presence of a teacher, but may display some of the most outrageous behaviour as soon as the master steps out.

There are thousands of such attributes and characteristics. Even proverbs and expressions are seemingly contradictory and "Escherian":

- Count the chickens at the end of Autumn. (they may be plenty early on, but won't all

survive... a rather negative outlook to the future)

- A good year can be foretold from its good Spring. (you can tell what will happen, right at the outset... a rather positive outlook to the future)

A wise person, will explain this phenomenon by suggesting that "both are right, depending on the occasion".

Potential implications:

- Confusion and a sense of loss around judgment, decision making and interpretation

- Potential reduced confidence – What does one believe? Does one empathize, or not? Shall one accept the generosity, or not?

- Adopting a more broad-minded approach to "reading" people, and a deep necessity of being open to ambiguity is important. For example in the West, if someone shouts over the telephone, we may hastily assume the person is angry, without paying much attention to cause or content. In the East speaking loud in the headset could be angry, but could also be strongly expressive, happy or a manifestation of certainty in conversation, so special care needs to be given to initial judgment and reaction.

Risks and success to operating an academic program in DIAC:

- No particular risk exists to the implementation of an academic program in DIAC, where a willingness to absorb and adjust to contradictions is harnessed.

The thriving religion and the religious identity

Characteristic description:

Religion is alive and very much present in the lives of a large majority of people in Middle

Eastern countries of Muslim majority. Rituals and references are strongly present in language to spiritual metaphors and the terms and expressions take real meaning. An expression such as "May God give him health." is no different in feeling or emotional charge than an actual prayer, hence transcending mere habitual and conventional expression. While there are extreme forms of expression of religion, by far the vast majority follow the basic version of rituals that includes daily prayers and annual fasting. Societies function fairly organically and naturally in this regard as they have for many centuries, so there is a general sense of stable tranquility and peace in daily life. As with Christianity, Judaism or other faiths in the region, Islam is not in conflict with learning or higher education. There is emphasis throughout religious scriptures in support of learning and combined with a public understanding of the necessity of higher education, there is overall deep regard for academic learning.

For the most part religion and religious beliefs should be respected as is common across all societies. There is a strong sense of pride and people are very protective of their spiritual life.

Potential implications:

- Religion is an important integrated part of life in the Middle East, and there is a strong collective sense of protection around this spiritual identity which in almost all Arabic countries eclipse national identities. Forming a strong understanding of Islam can be helpful in communication and social interaction. For example improving relationships, scheduling meetings outside of prayer time and showing respect for rules that disallow drinking in public, can all contribute to a healthier sense of social connection.
- Religion has a strong presence in school systems and local universities for example

there are elective courses for science degrees on the history of Islam or Theology, but

for a Western curriculum offered by a Western university, religious integration is not a

requirement, as such where there is an understanding that a Western university offers its

core curriculum, there is no expectation to adapt the curriculum to include religious

teaching or elective credits. For example none of the American universities in DIAC, are

affected by the curricular requirements of local universities in a Middle Eastern country.

- Offering a service whether educational or commercial, in a country where Islam plays a

  key cultural role, has an impact on dress code. Dress code is overall more conservative

  in the society, however the rules that apply in DIAC are comparable to codes of proper

  behaviour in most North American universities and include: No inappropriate physical

  contact between males and females; Inappropriate dress for males and females is

  prohibited; No fighting, assault or any acts of violence; No harassing, threatening,

  bullying or intimidating others; No possessing, using or distributing illegal substances;

  No smoking in non-designated areas; No possessing of firearms, explosives or weapons;

  No gambling; No raising false alarms; etc.

The 2010-2011 Campus Guide of Middlesex University in Dubai, describes particulars about

dress code as follows:

> "The dress code is similar to most cosmopolitan cities with a few variations with respect
> to the cultural and religious foundations of the United Arab Emirates. Shorts, skirts, and
> short-sleeved shirts are considerably acceptable, but with common sense. Revealing or
> tight fitting clothes should be avoided. There is no requirement for women to cover up.
> Those who do, do so out of choice and respect for their heritage and religion. UAE
> national women wear the "abaya", a long black robe that covers their clothes, and a
> headscarf, called "shayla". The national dress for men is the "dishdasha" or "khandura",
> an ankle length robe, usually white. Dishdashas are usually worn with a white or red-
> checkered headcloth ("gutra") and a twisted black rope-like coil ("agal") which holds

the gutra in place; under the headdress is a skull cap ("gafia"). "

It is important to understand that these traditions are not mandatory to observe, and most certainly not in DIAC as explained above. However it is completely possible that some male or female students admitted to the program may choose to wear clothes that is consistent with traditions and beliefs.

Risks to operating an academic program in DIAC:

- No particular risk to the program unless the program builds a reputation for consciously disrespecting religions and general codes of conduct. For example if a drawing and painting class is developed and all the models are continually nude, there may be repercussions if the university does not proactively explain the curricular rationale to local academic governing bodies for emphasizing this aspect of learning. Again, it is important to realize that this is a highly unlikely scenario or occurrence for a graduate level program in design, strategy and innovation.

- Faculty, teaching facilitators and administrators whom are in contact with students, either remotely or on-site, should be conscious of being respectful to various cultures and beliefs. This is no different than observing and adhering to social norms in Canada, but it is particularly important since students are international and there is broader diversity of heritage, race, culture and belief.

Women in education and job environments

Characteristic description:

Many women stay home and take care of the family, as there is little rush or social push for both

parents to work, send kids to daycare and so on. The pace is different but also so is the definition of care and home-based learning . Women enroll in higher education which is highly valued and seen as an important accomplishment. Female enrollment in some countries such as in Iran exceeds male enrollment. However the marketplace and job environment is not reflective of this distribution, mostly because of opportunities that are not available, but also because women see education as a way to secure an asset, knowledge, social status and a stable and successful marriage, rather than fulfilling a hunger for working in aggressive male dominated employment markets. Traditionally most teaching positions in early childhood education and elementary school systems are operated and taught by women, but this is not the only sector that sees women as active participants. There is a slow but growing trend in all sectors particularly medicine, where women take on jobs that have traditionally been held by men.

In terms of student admission, and supporting students to, through and beyond the university experience in the DIAC free zone and in a graduate level design program, it is important to understand that women enrolling in a program in Dubai academic free zone, will most certainly not bear much resemblance with women in rural and underprivileged areas and countries. One cannot assume that because women and men in and around UAE cities dress a certain way that is consistent with tradition and beliefs, that (a) the students enrolled in a graduate program at a Canadian university in DIAC would be made up of the same demographic, or (b) that there will be an influence by or expectation from women (or men) in the society of the female participants in the program to adhere to such traditions. Referring to Western university campus guides describing DIAC for students and faculty, such as the 2010-2011 Campus Guide of Middlesex University in Dubai, validates this reasoning.

Potential implications:

There are three main factors that help us better understand that female participation in the Canadian program in DIAC, will be fairly comparable to female participation in the program in Toronto, hence requiring no significant change in planning or programming.

1. The population makeup of the local society of the UAE is about a quarter or less local citizens, as further explored in the trends section, such that 15-20% of the total population are UAE citizens and the rest include significant numbers from countries within the Middle East, North Africa, East Asia, Eastern and Western Europeans.

2. The vision for implementing a graduate program in DIAC is to recruit qualified students from a wide range of cultures world-wide with the main market being the UAE and the Middle East at large. This represents a wide and diverse group of possibilities for prospective student recruitment in the program. With female enrollment in higher education in many programs exceeding 50%, women will arrive from very diverse backgrounds, which in principle is similar to the multicultural environment of Toronto.

3. DIAC is an academic space designed for international academic program offering. Over the past decade, its predecessor Knowledge Village, with its many hundreds of universities and colleges has been a model of success in diverse offering of university education from around the world, delivered to students from around the world.

Politics and governance

Characteristic description:

The landscape of regional politics is complex and a result of hundreds of years of evolved

complexity. The Middle East is a mosaic of cultures and peoples which cannot be defined as nation-states with cultural or religious homogeneity. This model of coexistence is fundamentally different from those of European states. In the earlier part of the 20th century the region was divided into states that resemble the European landscape of sovereign countries with political and cultural borders and boundaries. The socio-cultural region of Middle East is inherently different from Europe in that political governance in the region is best defined in the context of governance of people and territories in a confederated structure and process. Hence governance in most countries has its roots in a collective and confederated political system coexisting with modern governance led by political bodies similar to those in Western countries. In the United Arab Emirates, the complex combination has resulted in a framework of federal, presidential and elected monarchy while monarchies in each individual Emirates maintain ultimate governing authority as head of state and government in form of absolute monarchies. Each emirate has a provisional Constitution that defines the powers within the political system.

The Ministry of Higher Education and Scientific Research in the UAE is the government ministry that oversees higher education in the Emirates and is responsible for the general planning of higher education and scientific research in the UAE. In DIAC, institutional assessment and the offering of licenses for operation in the education free zones is managed and overseen by the Quality Assurance International Board which is a process separate from the accreditation overseen by the Ministry of Higher Education and Scientific Research (MOHESR).

The question of political impact on the creation of a Canadian graduate design program in the

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education free zone of DIAC, has two key dimensions:

1. The political system of governance, that is the monarchy and the ministry leading higher education, MOHESR, encourages development and increase of Western participation in the higher education landscape of UAE. This is evident from the investment in infrastructure and commitment in the creation of DIAC. Higher education in the realm of "innovation" specifically, is a top priority for the government, as seen in the Dubai Open Forum on Education and Innovation (2010) hosted by the government and with the support and participation of academic groups such as the Harvard Graduate School of Education.

2. A graduate program on design of sustainable solutions for environmental, ecological and economic issues, global warming, water scarcity, population increase, health issues and political polarization and impact on local economies, undoubtedly has "political" overtones but only if solely looked at from a "political" lens. However this does not have to be the case by default. Observing the large majority of projects selected and carried out by students in the Canadian SFI program since 2009, the common thread is that none of the projects are particularly controversial even if placed in the landscape of the Middle East. They are designed plans and solutions for betterment of life. This attribute is encouraged by local authorities such as MOHESR and government led forums. For example the issue of accessibility for people with disabilities, health services reform and innovations, design research for architecture, mobile technology development, entertainment for children, locally grown cooperative food sharing programs, or matters of curriculum in higher education, all have a key focus of improving life and society for people.

Potential implications:

- Training faculty and facilitators and ensuring that there is preparation and a willingness to understand sensitivities particularly around respecting religious beliefs is essential. A simple way of looking at this is the common saying often heard in the West that, "it is rude to talk about politics and religion". This consideration is part of a social culture and spirit of exchange, and though it is not always accurate or representative, or necessarily advised in academic environments, it is a simple guide that can be followed. It ultimately becomes important to choose priorities with care and attention, and with the goal to sustain a positive and impacting graduate program.

Risks and success factors associated with operating an academic program in DIAC:

- There are significant opportunities for gaining access to financial support in form of grants, capital contribution and infrastructure support from the local Emirates and governing bodies.. For example New York University in Abu Dhabi (NYUAD), created in partnership with the Abu Dhabi government a liberal arts, science and engineering university in Abu Dhabi and subsequently a world center for advanced research and scholarship. This partnership with the government paved the way for a commitment on both sides to "building a U.S.-style, research-focused educational institution", as framed and communicated by NYU (nyuad.nyu.edu).

- DIAC presents a very tolerant and inclusive culture of academic freedom and there is no known risk to the academic integrity and quality of a graduate program in design, operating in the free zone of DIAC, and in an environment where tens of other Western universities have successfully operated over the past decade.

- There is political turbulence in the Middle East, however the GCC and particularly UAE has a highly stable and strongly autonomous political landscape.

- Given the present composition of faculty at OCAD University, there is no risk to either faculty or the sustainability of the program, in offering the SFI program as is, but with adjustments to curriculum and the program, planning and training as suggested in the section on recommendations, an OCAD University led program can be positioned as the leading example of a successful and inclusive program in DIAC.

Cultural characteristics – protection of personal boundaries

Characteristic description:

Protection of personal boundaries which are cautiously opened overtime and not immediately exposed is a visible cultural attribute. People are generally thoughtful and careful about what they say and expose especially to a foreigner they don't know. It is considered to be a wiser and safer thing to do. This may perhaps be because of a deep realization of difference and history of conflicts. It is most certainly a protective mechanism. One must say that this attribute is not much different from being a visible minority with a strange accent, and entering a remote area in rural North America, as there is a realization of difference and people may present their best, but cautiously and conservatively approach the situation, without carelessly divulging or acting.

Potential implications:

- There is rarely any issue with hospitable welcoming behaviour, but there can be misunderstandings, however for the most part there is deeply rooted tolerance for someone who is a "foreigner" and doesn't know the "ways". Mostly this characteristic

of difference is seen as "special" and normal.

- It is implicitly expected that the same degree of caution and reservation is exercised by the guest or foreign individual.

Cultural characteristics – patterns of physical and emotional expressions

Characteristic description:

Traditional patterns of physical and emotional expressions are different. For example in the West if a woman says thank you to a man, the man expresses himself openly, and through body language and behaviour demonstrates intention of his good will. In the East, traditionally, it is not uncommon to see the reverse, where for example a woman expresses gratitude for something such as a held door, or assistance and the man may move back or seemingly retreat to avoid further interaction. While this may appear absurd, it is rooted in respect between genders and a social sense of protection. Similarly there are many pattern differences associate with commonly accepted norms, issues such as:

- How long should one look at someone - if male - if female?

- Does one look at someone in conversation, if so is it a stare, straight on, from the side?

- A firm handshake, not always a good sign, confidence can go in contrast to humility.

- When do men and men, or women and women kiss/touch cheeks?

- When do we stand as gesture of respect, when to semi-stand, when to sit?

- When do men hold hands?

- How far behind someone should one walk as gesture of respect?

- Letting women go first?

- Attention to household pets and comparisons with humans – not appropriate?

- Motion of hand and finger for calling someone over can be misperceived.

- Laughing loud publicly can be frowned upon.

- Showing affection in public, for married and non-married couples has its own ways.

Potential implications:

- A behaviour may be interpreted as unwelcoming, rude or inadequate

- Sometimes even "thank you"s are lost in the process and there is a general sense of silence, which may be seen as uncomfortable

- Learning the respect codes for a foreign person goes a significantly long way, partly because it is unexpected, and as a result there can be extreme positive reaction and feedback from society that views such effort as highly respectful and considerate

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Cultural characteristics – respect for all

Characteristic description:

Strong social emphasis on respect for elders, and in its general form for anybody, for example:

- standing up when one sees someone;

- showing different degrees of respect depending on age, or even a sense of formality with people of "lesser" societal statuses;

- using "plural" pronouns to call an older person, but even children in the presence of their parents or guests, let alone teachers, or official verbal and written communication;

- use of surname as opposed to first name is almost always the proper norm.

- common expressions that may appear over the top and excessive, for example somebody sits in the front seat of a car and turns around to say, "Sorry that my back is turned to you ".
- repetitive insistencies on allowing others through the door first, or paying for somebody's meal or beverage, etc.

Potential implications:

- It is desirable and polite to push pack with some level of intensity, so for example showing more respect, or standing and allowing the other person through the door first particularly if the person is a guest is absolutely advised, even if there is a small back and forth, it is more appropriate than not allowing for the "battle" or exchange to live
- This culture or respect ultimately contributes to a general sense of social comfort and kindness

Cultural characteristics – written communication extremely polite

Characteristic description:

Written communication can be extremely polite and often times drawn out and extensively complementary. For example it is not uncommon to start a formal employment letter that requests permission for overtime work as follows: "With salutations and offering of respect and greetings to his highness Engineer Lotfabadi, and with wishes of his well being and happiness, this humble servant submits with deepest gratitude his request for overtime to your respectable office..."

Potential implications:

- Such communication may appear artificial and not genuine, resulting in mistrust and miscommunication.
- It is expected to deliver words and communication with some degree of commitment to the tradition of respect, so corresponding with a "higher than usual" emphasis on respect is advised

Cultural characteristics – regard for kindness
Characteristic description: There is strong regard for kindness, and while in some Western professional environments particularly commercial spaces "kindness" can be perceived as weakness, in the East kind communication is regarded in high esteem and an important part in fostering "a circle of generosity and kindness", serving two purposes: a wish for being generous but also a wish to receive generosity.
Potential implications: - There is an opportunity for foreign participants to "fit in" and make their surroundings comfortable by adopting the spirit

Cultural characteristics – attitude and view to "change"
Characteristic description: The word "change" brings with it a completely new meaning than understood in Western societies. Change is much more "drawn out" and brings cultural attributes of patience and extreme forms of resilience with it. The rate of social change is hence slow, as is a person's need

to change certain behavioral patterns or appetite for newness, whether in consumed commodity or ideas. This in return impacts the word "innovation", which would usually resonate a sense of "fresh newness of ideas that produce added value". In traditional Eastern societies the very value proposition may be questioned, for if rate of change is small and the necessity for change is less, "new" is not as significantly important. Patience is a big virtue and mankind can afford to wait and although newness is welcome to many aspects of life, value is not intrinsic in newness, rather in traditional virtues, perhaps more spiritual evolutions and so on.

Potential implications:

- This may impact the motivation to or reward for "innovation". This sentiment, may be labeled "resilience", even though "resilience" should not be in conflict with "innovation".

- A strongly felt trend is that this phenomenon is changing and in many cases are no longer visible, such as in large urban city-life. Media and communication platforms such as the internet have played a large part in building awareness about the "global pace" and younger generations have formed a different understanding of life changes. Urban life demands such different outlook.

Cultural characteristics – valuing history

Characteristic description:

The value of history and its place in people's identities is profoundly strong. While the individual and social identity is defining of character, the historic and contextualized human identity is in many ways even stronger and more present in a person. This history can go back

by several thousand years whereby national identity shapes a large set of social and personal behaviours. The word "old" and "wise" can be synonymous, in that for example there is a traditional expression of well wishes where a person, usually older person, "wishes a younger person to become old", which directly translates to a desire to see wisdom in a person. Similarly this wisdom is seen in history as it is said that, "As stated in wise history..." followed by a proverb or expression rooted in ancient past. Political and religious history is often just as pronounced as social and traditional history is. This sentiment often brings much controversy and friction.

Potential implications:

- An acknowledgment of a culture's history and an active awareness of its impact can be of tremendous help in communication and understanding the people of a region. Conversely if one dismisses the importance or demonstrates indifference to this reality, there will most certainly be negative repercussions in communication. For example if a Persian person from Iran insists on his or her differentiating characteristics from Arabs, or Vice versa, this person should be heard and understood in order for one to be able to positively contribute or facilitate a discussion, academic or otherwise, as to the person, this is much more than a point of view or opinion.

Cultural characteristics – influence of family relations on daily life

Characteristic description:

Eastern families tend to have profound and present influence on the individual. This is often a subject of endearing, occasionally bitter, sensationalization in cinema and entertainment media.

Understanding the dualities and impacts of this social phenomenon, the good and the bad, is important as it affects pace and priorities of life, business relationships, marriages, social conflict, individual well being, decision making frameworks and more. For example the importance and priorities of family whether paternal, maternal, individual through marriage or by extensions, can take precedence over those of an individual. Rooted in communal survival and defense mechanisms, and extended into present era life, this phenomenon has certain advantages in fostering a sense of social and individual responsibility, while it can hinder the individual's ambitions and desires. It is not uncommon to hear reflections on a young person's behaviour such as, "How can this young couple feel good about going for weekend entertainment, when her (or his) mother's back is in such pain?!". This, obviously an exaggeration to demonstrate a point, is not too far from representing a strong attitude toward the virtue of adhering to family desires and callings, by deferring to a mix of fallacies including Appeal to Authority (argumentum ad verecundiam) in this case the authority being a family elder. At the other end of the spectrum, less individual loneliness and abandonment is experienced by a large majority, whereby neglecting the needs of those in close relation is socially unacceptable.

Potential implications:

- What the family thinks and says is of significant importance and recognizing and adjusting to this can be helpful in forming stronger understandings and relationships with members of the society.

- Family values such as respect for elders, continual engagement and participation in family rituals and affairs, helping those in need particularly parents and younger

siblings, all remain strong in social norms, however newer generations particularly those with access to new media, are adapting to change and the form of family engagement is changing. There is a growing understanding around the value that individual growth and development brings to the whole – family included. Modern educational systems and employment that relies on individual thinking and competencies have propelled a sense of value for the individual and its desires. Reduced interactions between neighbours and relatives in larger urban centres are strong testament to this trend. This trend can compromise or alter the way family members interact and awareness of this change can help form a better understanding of the society

- Young people live with their families longer and it is sometimes accepted to stay with family even after marriage

Cultural characteristics – deep social respect to educators and education

Characteristic description:

Unequivocally, deep social respect is given to educators, followed by those with education, even though the economic status and financial realities of educators are often not reflective of this high social place. Teachers are often positioned at a high social place with those in the medical profession, and the "nobility" of their occupation is an example of quality and virtue in the society. This also underscores high social regard for advanced degrees and designations. There is a continually felt sense of interest and expression of interest in knowledge and people with knowledge are held at high esteem, and academic achievements, enlightenment and all forms of knowledge are seen as strong virtues. It is a status symbol to be called Doctor or Engineer and the titles are frequently used to refer to people.

Potential implications:

- The interest crosses boundaries affecting interest in global knowledge.

- With higher education at advanced levels becoming more attainable to public, desire to graduate with higher and distinguished designations is growing. The social fabric at large contribute to the demand of such designations.

Cultural characteristics – science vs. arts and humanities

Characteristic description:

Generally science is very highly regarded and often times there is a reductionistic way of describing science by its emphasis on "theory", "formulation", "lab work" and other measurable academic content and knowledge. The result is that attaining "scientific knowledge" is generally deemed more difficult and respectable than knowledge in the arts and humanities. Arts and humanities are seen as default programs reserved for those who were not successful in the sciences. Much of this has to do with two particular fields: medicine and engineering. Medicine is seen as extremely respectable and important for its power to heal, which is significant given histories of poverty and struggle. Engineering is seen as important because of its active role in construction and industrialization of the economy.

Potential implications:

- Framing a graduate program as a true interdisciplinary program that brings all domains together is highly advised, particularly domains that respond to a societal need for construction and betterment of life through health and medical sciences.

- Selection of projects and application of methodologies and theory in addressing real world problems is desirable for any program, in order to better inform the public of applications, employability, power in entrepreneurship and overall contribution to betterment of life.

- A more significant weight on theory in a program is desirable to respond to a common regional view of rigor and scientific value, as seen in the trends and present landscape of academic participation (for example higher focus and attraction to scientific streams, engineering and business disciplines)

- Command on innovation methods should not be reduced, rather focused in order to respond to less emphasis on the term "foresight". A larger weight may be given to methods of research, design and innovation that spawn strategic development. Foresight techniques which are undoubtedly of strong value, may be presented and taught in a hybrid context of innovation, design and research techniques.

General Trends in the Region of Middle East

SOCIAL TREND
Trend Summary: Increased exposure and attraction to urban lifestyles, modeled significantly after Western-style city-life
Trend Signals: • Urban, city and public infrastructure development, modeled after Western developments • Modernized banking systems, equity exchange markets and financial centres and systems that are similar in hard structure as well as governance to those of Western counterparts • Development of shopping centres and entertainment environments such as malls and cinemas with strong commonalities with those of the West
Trend Implications: • Growing public expectation and demand from governance bodies, of improved management standards, human resource infrastructures, overseeing policies, and an inclusive and interconnected supporting ecosystem • Demand for strategic development and necessity of preparing with strategies that foster innovation, effective management and sustainable growth • Demand for trained work forces that can support growing infrastructures • Competition for quality commodity, but also quality human support

TECHNOLOGICAL TREND
Trend Summary: Increase in demand on and expectations of communications networks including satellite systems, cellular phone networks, internet infrastructure and broadcast systems
Trend Signals: • Increased youth participation in social networks • Surge in mobile device and cellular phone sales and consumption • Surge in number of broadcasting networks and channels • Growth in broadband capacity and global connectivity
Trend Implications: • Demand for strategic communication • Demand for education and training that meets requirements of a knowledge driven economy • Increased demand on innovation and strategic development to support growth and manage complex infrastructures • Augmented relevance of technology and media free zones

SOCIAL & VALUE-BASED TREND

Trend Summary:

Increased awareness of significance of big local and global issues with high degrees of complexity and impact on life:

- Environmental and ecological

- Global warming

- Water scarcity

- Global increase in fossil fuel dependencies and demand, limited supply and enormity of impact

- Population increase

- Security

- Economic Integration and globalization

- Health issues, rise of obesity

- Political polarization and impact on local economies

- Migration trends, from rural to urban, from urban to international domains

The primary driver of this trend is global and local media which emphasize the enormity of global issues.

Trend Signals:

- Increased local and global media coverage

- Youth engagement, interest and conversations

Trend Implications:

- Need to develop strength in addressing complex dilemmas in all facets of society and human life

- Need for attracting talent with competence in foresight and design of solutions that are transformative

- Integrated thinking in education, where attention to sustainability, design thinking and strategic development is intrinsic in curriculum and culture of learning

- Need for systems thinking at the core of design, management, innovation and education for the understanding of interrelations of complex problems

SOCIAL & EDUCATIONAL TREND
Trend Summary: Growing interest in the Arts as a domain of disciplines that develop and educate for "innovation"
Trend Signals: • Arts is gradually seen beyond the production of traditional art • Artistic expressions are encouraged and seen as a value that can propel creative development in learners • There is an element of "trendiness" in participation in artistic endeavors, particularly amongst the young, and most particularly in upper echelon families that enjoy bigger economic freedoms • There has been a shift in early childhood education, whereby an emphasis of arts is completely normal and unlike decades ago, no longer unaccepted or frowned upon as a redundant activity
Trend Implications: • Interest in interdisciplinary studies at a post-secondary university level in programs that bring in elements of arts in education of a range of subjects • Increased interest in the inclusion of roots of arts education, particularly creative thinking and expression

SOCIAL & EDUCATIONAL TREND
Trend Summary: Increased awareness of the value of strategic thinking in decision making on matters with broad global impact, particularly economical problems
Trend Signals: • A rise of interest in university programs that offer a strong element of strategic thinking in their respective curricula and teaching, such as MBA programs which promise equipping learners with the skills required to think strategically in problem solving • The relatively unknown term strategy is now becoming synonymous with "big thinking", "leadership", "business success" and "distinct abilities in a knowledge economy"
Trend Implications: • A gravitation toward programs and education that present skills and professional competence in strategic thinking and clarity around this domain • A rise of employment opportunities for those that offer proven abilities in strategic development

POLITICAL TREND
Trend Summary: Encouragement of entrepreneurship by local governments and leading bodies, in a wide range of social, economical and business fields
Trend Signals: • Emergence of numerous speeches, forums and conferences on the subject in the region • Funds and grant allotments to entrepreneurship
Trend Implications: • Advanced fields of graduate and post-graduate study and research which lean on curriculum that enables and develops entrepreneurship, become more in demand, contributing to the growth of a true knowledge economy • Ripple effects in the employment landscape, where self employment through innovative and independent means, become more attractive, disrupting the "father-to-son" business model centred on trade and industrious skills

EDUCATIONAL & VALUE-BASED TREND
Trend Summary: Students and families desire to stay close to families during the higher education phase of students' development
Trend Signals: • Cultural and political polarizations contributing to the amplification of differences, rather than focusing perceptions on a sense of integration and mutual understanding • Apprehension of families in sending children to the West due to societal perceptions of the West that includes risks of exposure to alcohol, gambling, relationships and other matters that are culturally less tolerated • Fears of no return of children once in the West, something detrimental to families with significant capital and local investments
Trend Implications: • Families and students seek alternatives to receive quality education, but in places geographically and culturally closer • United Arab Emirates such as Dubai, becomes a more obvious choice to further university education in, as a result of secure economic climate, being central in the regional market of the Middle East and student and family entry requirements not being as strict • Many knowledge-based services and global educational players will consider UAE as the regional market looks increasingly more favorably to UAE

EDUCATIONAL & ECONOMIC TREND

Trend Summary:

Foreign institutions facing increased complexity and scrutiny in investment, participation and establishment of branches, partnerships and satellite campuses in the region

Trend Signals:

- Competition has grown for share in the regional market, and local governing and ruling bodies take a more selective approach in choosing institutions that are desirable to the local and regional demographics

- Dubai has introduced a stricter selection process and quality control has become ever more important, while institutions that are less equipped to compete have moved to less developed UAE Emirates such as Ajman, Fujairah and Umm al-Quwain. For example George Mason University was moved to The Ras Al Khaimah Emirates

Trend Implications:

- There will be different tiers and levels of quality (or perceived quality) in the clusters of universities grouped in the different free-zones, for example more reputable schools will operate in Dubai or Abu Dhabi

SOCIAL TREND
Trend Summary: Inter-demographic dynamics with potential for negative interactions and potential for challenges in cultural integration
Trend Signals: • Rise of regional sociopolitical conflict • Heightened exposure to and awareness of cultural differences • 15-20% of the total population of 4.4 million are UAE citizens and the rest include significant numbers from countries within the Middle East, as well as India, Pakistan, Bangladesh, Afghanistan, North Africa, Philippines, Eastern and Western Europeans. The majority of UAE citizens are Sunni Muslims with a very small Shi'a minority. Many foreigners also are Muslim, although Hindus and Christians make up a portion of the foreign population in the UAE that is rapidly growing.
Trend Implications: • Opportunity of focusing on facilitation skills and emphasizing importance of collaboration • Impact on academic project development, group work and collective learning in that choosing research projects, and selection of group compositions, have to be done with consideration to social nuances, cross-cultural exchange and teaching values that encompass integration and understanding

EDUCATIONAL TREND

Trend Summary:

Shifting of student interest from traditional programs such as engineering, management and MBA disciplines, toward newer creative and interdisciplinary fields of study

Trend Signals:

- Growing realization that traditional disciplines may not offer adequate tools and preparation for addressing the challenges that are larger and global

- Unemployment and resulting highly competitive job markets in the region

- Awareness among youth of global economic challenges

- Strong interest in advanced education as a way to secure jobs and improve personal economic conditions, and a strong need for differentiation of career skills

Trend Implications:

- Demand for degree programs that can methodically offer skills in social innovation and strategic development

- Programs such as Strategic Foresight and Innovation may be framed as the alternative and premium option, and a skill-based advanced degree that enables a learner to compete by leveraging design thinking and knowledge, rather than mechanical skill-sets within pure sciences or a traditional MBA disciplines

EDUCATIONAL & SOCIAL TREND
Trend Summary: Increased enrollment of women in post-secondary, graduate and post-graduate degree programs
Trend Signals: • Over recent decades there has been a steady surge in female enrollment in higher education in most countries across the Middle East
Trend Implications: • Emergence of a more inclusive perception on matters within governance and the society • A more inclusive distribution of the work force and employment opportunities

EDUCATIONAL TREND
Trend Summary: Increase in linguistic competencies of students aspiring to study in the West or in Western universities
Trend Signals: • Increase global media exposure • Cultural trendiness of command on the English language • Expansion of social media and internet properties predominantly in the English language
Trend Implications: • Preparation and evaluation of students to meet the language admission criteria can go beyond linguistic abilities, rather address specialized communication skills, critical thinking, acuity in judgment

EDUCATIONAL & ENVIRONMENTAL TREND
Trend Summary: Growing academic interest in environmental and ecological sustainability as a fundamental way of addressing sustainability, particularly economic sustainability
Trend Signals: • Awareness of the inadequacy and insufficiency of traditional education and degree programs in solving complex problems and questing for alternate interdisciplinary learning • Increased social awareness of the gravity of the issues, resulting in a desire to participate in learning that can address problem areas, but also respond to emerging employment and business opportunities
Trend Implications: • Deeper interest in environmental impact of learning and benefiting personally from looking to environmentally conscious projects and occupations • Opportunities around project positioning in areas of research and higher learning (positioning a Strategic Innovation degree program with existing examples of student and faculty work around environmental initiatives)

EDUCATIONAL TREND
Trend Summary: Increased concern with respect to practical applicability of graduate education, as it is perceived a "necessity" and for the mere benefit of designation and title, rather than meaningful skill-based competencies
Trend Signals: • A growing perception that one needs an advanced degree to be employable, which has resulted in a growth of advanced designations in recent years, which in turn has created a counter reaction on part of employing bodies, skeptical of the "real value" of advanced degrees, particularly MBA designations
Trend Implications: • Framing a new program centred on strategic innovation with real applicability in all areas of problem solving, hence the direct benefit to a person's growth and development, as well as clear benefits to organizations and the growing economy • Increased hunger for learning from practitioners and experts in fields of professional work • True growth in a knowledge based economy, where creation of research, design incubation and commercialization of research and design to local markets is invested in

EDUCATIONAL TREND
Trend Summary: Increased interest and awareness of importance of interdisciplinary studies at the post-secondary level
Trend Signals: • Emergence of new schools and disciplines with a focus on diverse interdisciplinary thinking
Trend Implications: • Deeper interest in programs that offer a true interdisciplinary curriculum and training, and can prove the applicability of the education in markets • Growth opportunities of integrated design and systems thinking beyond "Design" degree programs and into other programs and disciplines, hence more desirably positioning specialized "Design" programs

EDUCATIONAL TREND

Trend Summary:

Increased desire to study in highly reputable institutions with an ever increase in number of universities and colleges that offer advanced degrees

Trend Signals:

- A decade ago, the question was "what degree do you have", now it has shifted to "where did you study"

- Increase of total universities in the region resulting in students choosing and considering options with more care

- The "Class" of the institution, the "high-end effect", where the more reputable the university, the more perceived "value" and quality of education

Trend Implications:

- Growing competition for academic or professional association with prestigious and reputable universities that can trigger positive reactions and attraction to institutions that are less known

- Space-sharing or co-location with established partner institutions

- Mergers of institutions that go beyond academic partnerships

EDUCATIONAL & SOCIAL TREND
Trend Summary: Growing wealth among the wealthy and the ability to pay large amounts of money for advanced degrees without any significant barrier
Trend Signals: • Increase in income gap between the rich and the poor • Increased private ownership in areas of international business and trade • Increased private ownership of academic institutions
Trend Implications: • Institutions that are positioned as elite and reputable, have a larger opportunity to charge higher tuition, particularly in perceived "luxury, non-commodity fields such as Art and Design", for example in recent years the perception in many families has evolved to openly concent to their children participating in "Art" degree programs. This effect may impact a program such as Strategic Foresight and Innovation, which has its roots in "Design", a term that technically sits at a closer proximity to "Art", than "Science". The result of this phenomena is that cohorts from wealthier social and economical backgrounds, may more readily and liberally take interest in a graduate program in Design

Issues – Challenges & Opportunities

Proposition – A graduate design program for the Middle East

The objective is to launch a graduate design program for the Middle Eastern market. In essence the value proposition is to target a fresh and receptive market with a demand, educationally and socio-industrially, for the introduction of Strategic Foresight and Innovation in a proxy with closer geographic proximity to the region of the Middle East. This proposition is grounded in a belief which is validated throughout this study, that an adapted version of the SFI program at OCAD University is a highly suitable and desirable graduate level program in the target region and such development would benefit the international community as well as OCAD University.

Undoubtedly there will be issues

In a process of foresight and innovation generation, often times solutions emerge from the synthesis and simultaneous analysis of trends, and applying deep understanding of contexts surrounding problem frames to idea generation. As Russell Ackoff describes, there is a natural tendency to tackle the problem in an area where the problem appears to be, rather than going back to seeing the problem as a sub-problem within a system of issues (problematique), and hence seeking solutions beyond the immediate proximity of an individual problem area.

For this reason, categorizing problems in a table and proposing solutions of singularity for each problem area is not only an impossibility by definition, but will likely yield incomplete or misleading solutions.

The following table attempts to intercept "solution finding" to problems, by examining a broad

set of affecting "challenges" within the operating region and at the mother institution, and

respectively seek a set of relevant "considerations and opportunities". This, in turn will allow for

an extrapolated proposal of potential solutions to the interconnected problem areas.

Potential Challenges "in market region and at mother university"	Considerations and Opportunities "staging for solutions and recommendations"
Competition from other prominent Western universities in the region	• Differentiation of the SFI program as a completely different alternative to traditional graduate degree programs • Exploring partnership opportunities with prominent and known institutions in the region
Budgetary challenges at public Canadian universities	• Taking small and safe steps, avoiding ambitious developments such as creation of a physical campus in the DIAC, depending on tuition as sole stream of income and shifting already thin Canadian resources to the region • Leveraging existing resources such as local space and technological facilities for potential distance education delivery, joining marketing and outreach campaigns by localizing content • Using online properties in a consolidated way, such as merging digital communication platforms and Learning Management Systems

Potential Challenges "in market region and at mother university"	Considerations and Opportunities "staging for solutions and recommendations"
Cost of operation in a traditional model in the Dubai International Academic City Free zone	• Launching a program that leans heavily on remote participation and distance education, as opposed to on-site learning • Managing all attributes of admission, evaluation and assessment and student support within a distance education model and within available capacities in the programs • Reducing physical presence to two key functions: (1) a lightly staffed liaison office that governs a single classroom space (2) a lightly staffed and appointed academic liaison, faculty or facilitating scholar whose primary role is on-site facilitation of program courses • Consideration should be given to space sharing opportunities with local universities, particularly those with known international reputations
Awareness of the program, its relevance and appeal	• See marketing opportunities
Awareness and perception in the market region of Canadian education as a world leader; OCAD University's visibility in the region (not one of the chosen 10)	• Partnership development with more visible and prominent institutions from the US and UK is advantageous • Representing the institution in the context of introducing advantages of life in Canada • Offering cooperation patterns that allow for a research or thesis/MRP semester to take place in Canada

Potential Challenges "in market region and at mother university"	Considerations and Opportunities "staging for solutions and recommendations"
Availability of financial and human resources in Canadian universities dedicated to internationalization	• This ongoing problem which is predominantly fiscal, can be addressed by taking smaller steps forward in order to not burden the existing infrastructure with more responsibilities and accountability • Reducing regional activity and leveraging distance education is an approach that the course delivery models after teaching locally in Canada with existing resources. • Sessional and guest faculty can be a designated to teaching in order to avoid stretching existing limited resources
Potential technology limitations and available infrastructure where current e-learning and collaborative systems are poorly designed and systems such as Blackboard are unsuitable for distributed learning	• A complete study of technology infrastructures such as high definition, broadcast standard conferencing tools is required • New viable distributed learning management platforms should be researched and piloted • Implementation of a system in pilot is highly desirable, and the relationships required to test and try various systems can be negotiated and brokered through partnerships with commercial infrastructure providing companies such as Tandberg's video conferencing solutions and Telepresence systems
Lack of existing policy and a model of governance	• This is an area strongly in need of attention at senior leadership levels of universities, from an academic and administrative perspective

Potential Challenges "in market region and at mother university"	Considerations and Opportunities "staging for solutions and recommendations"
Weather and geographical conditions in the UAE: The climate in Dubai is dry and rain is very rare. Hottest months are the summer months during which average temperature often tops 45 to 50°C during the day with high humidity. Teaching and resourcing a program during the months of summer can pose many challenges and impact quality, rigor and commitment of learners, educators and facilitators.	• Summer months may be used for "travel abroad" or exchange offerings, individual project work or independent study and research, or non-facilitated distance education offered directly to students over broadband and remotely • Host facilitated sessions in the evening, which is mid-morning time in Canada
Timezone and differences in working hours	• There is an 8 hour time difference between Toronto and Dubai, which means that there can be operational challenges when courses are offered remotely and at the mother institution. • Host facilitated course sessions in the afternoon and evening, in such a way that teaching commences in the morning in Toronto by faculty, equaling a mid afternoon start in Dubai
Proximity and distance to Canada	• The need to remain in constant contact via an active physical presence in the region is of significant importance. • Active presence of an academic facilitator with management and decision making authority is needed, who brings confident command on curricular matters as well as cultural attributes, and with knowledge of local relationships.

Potential Challenges "in market region and at mother university"	Considerations and Opportunities "staging for solutions and recommendations"
Linguistic limitations	• Though English is spoken and well understood in the region, particularly in Dubai, there are potential limitations and barriers when dealing with local business and government representatives who may have limited abilities in communicating in the English language • Over recent years with a surge in international business in the UAE and English language growing to become a norm in communication, it is highly unlikely that some existing limitations would be barriers significant enough to stall progress or create challenges
OCAD University's academic designation of faculty and a regional perception that "all faculty must have doctoral degree designations" as such OCAD University will not be favorably looked upon until it can address this gap. It is commonly expected that graduate, even post-secondary teaching must be carried out by professors with a PhD designation.	• A university or post-secondary institution, no matter how well known and reputable is expected to assign teaching faculty that meet this criteria, as such it behooves OCAD University to reach out to guest or sessional faculty, or enter partnerships and relationships with other institutions that can accommodate this need

Table 6. Potential Challenges, Considerations and Opportunities

Internationalization of OCAD University

OCAD University is Canada's oldest and largest post-secondary institution for contemporary artists and designers. In its 135 years of existence, OCAD University has educated and employed many of Canada's most highly regarded and best known artists, designers, and art and design educators. With over 3500 and over 350 faculty members, OCAD University is the fourth largest independent art and design institution in North America.

OCAD University's Strategic Plan elaborates among principle strategies, on internationalization by underscoring the importance for developing a coordinated strategy to maximize opportunities for international engagement, specifically calling for "finding means, real and virtual, to contribute to learning opportunities and research in its partner nations as well as at its Canadian site".

One area of emphasis is the potential to build strategic relationships with institutions around the globe to increase the university's capacity and profile, enhance its ability to attract international faculty and research projects and engage effectively with the complex worlds of art and design.

Two areas of implementation – internationalization & capacity building

Responding to the vision in the OCAD University strategic plan, key initiatives are defined in 2006-2012 timelines of implementation. Leveraging new strategic relationships and partnerships in tandem with existing resources at OCAD University, it is clear that exploring innovative ways of actualizing mandated initiatives in two key areas – internationalization and capacity building –

is key to the realization of the strategic vision.

Some priorities identified that address internationalization in tandem with the priority of building capacity, is the materialization of an active plan to recruit international students, along with forming partnerships with corporations and philanthropic individuals, and developing revenue generating streams.

When combining the mandates of internationalization and capacity building, and finding common ground that responds to both strategic priorities, we can see complementary opportunities that merge both arenas into a common strategy.

Forming strong cultural and academic exchange in regions such as the Middle East is one such opportunity. Creation of a satellite international academic and research centre, physical and/or virtual, in the the region is hence a natural strategic step that should be seriously considered. Such presence:

- Delivers revenue-generating targeted academic programs in the region to international students;
- Recruits international students and scholars;
- Creates a strong network of partners, affiliates, parents and supporters;
- Develops an internationally recognized identity and brand
- Calls for OCAD University to emphasize the importance of quality and credentials of faculty, enhancing international reputation while leveraging the reinforcing feedback back into local institutional growth and reputation

(Some content aggregated and reused with permission from OCAD University's strategic plan, 2006, Leading in the Age of Imagination)

Master of Design in Strategic Foresight & Innovation

There is greater awareness of the practical value of creative methodologies and applications.

> "Designers and artists are not only creating new knowledge and building capacity in their own fields, they are also working as partners in health and wellness enterprises. They are contributing to materials science and biotechnology applications, to reframed economic models and processes, to new modes of learning, and to multicultural exploration and expression. Visual communication design has become more strategic and concept-driven, making use of both new and traditional media to solve problems and influence audiences in ways that were not previously possible. Environmental and industrial designers have expanded their toolbox with new technologies and are partnering with scientists, urban planners and private industry to recognize and address the more complex and perplexing issues of the day, from environmental sustainability to economic models, from cultural diversity to health and wellness. As the applications of "design thinking" have expanded, so, too, has the need to be more socially responsible. The ability to make sense of complexity, think strategically and innovatively, and develop solutions of sustainable value is critical to the ongoing success of our [global] society, culture, economy and environment."

OCAD University is best positioned to lead a Master of Design in Strategic Foresight and

Innovation that integrates knowledge and methodology from a number of disciplines: design, business, science and technology and the social sciences. Through design and systems thinking in a co-creative environment, the designer, the business person, the social scientist, and the engineer will develop together the skills required for true socio-technological innovation.

The outcome of this thinking was the design and development of an innovative new program (2008) that would enable OCAD University's students with the tools required to address the complex problems. A Master of Design (MDes) in Strategic Foresight and Innovation program was developed as a trans-disciplinary discipline connecting design with social science, technology, and business, where design would in essence be a systems interconnection linkage between design thinking, strategic and iterative methodology, and design for humans. The program's core product is empowering and enabling leaders and emerging leaders in a wide range of societal sectors, business, government, non-profit enterprises, science and art. According to the plan designed by the creators of the very program, the strategic objectives are:

1. To graduate leaders in social innovation that develop strategic innovations which create sustainable value, economically and ecologically, and which address pressing societal issues pertinent to their particular area of interest in the public, private or voluntary sectors.

2. To enable students to explore and test new methods of organization, creation and production.

3. To enable students to develop strategic, innovative and anticipatory solutions (strategic foresight) and plans for design or policy innovations, or organizational or infrastructural change.

4. To integrate relevant disciplinary knowledge from design, business, science/technology and the social sciences which will facilitate the development of sustainable innovation.

5. To enable students to navigate complex problems through the study of systems theory and the analysis of relevant systems including ecological, social, economic and political organizations.

6. To enable students to develop an ethical sensibility that promotes socially and ecologically sound responses to complex global issues.

(Content aggregated and reused with permission from "Brief for the Standard Appraisal of a Proposal for a Master of Design in Strategic Foresight and Innovation, 2008")

Graduate Design Program for the Market

The question of implementing a successful graduate degree program modeled after and inspired by the Master of Design program in Strategic Foresight and Innovation originating at OCAD University, in the UAE, should be examined and addressed with attention to following key determinants:

Local institutional capacity

It is important to understand the weight that an international program would exert, on local capacity and resources for implementation and sustained management of the program in the UAE, and understanding requirements therein to arrive at key considerations for OCAD University in its present position. This pivotal piece is addressed in the section on Co-located Distance Education where it is concluded that an on-site model of positioning the program in a satellite campus in Dubai, is not feasible and financially viable, partly because of tremendous strain it will place on local capacity such as faculty and staff resources. A sustainable and more effective approach is to deliver education remotely, via Distance Education, and by creating facilitated episodic sessions led by design mediators and an on-site faculty who take a cultural and academic design-mediating role.

An alternative model is concluded to be preparatory training in advance of admission to the program emphasizing linguistic and communication competencies, and training for a deep appreciation for the program objectives and real world applications. This training would precede a full international recruitment process into the program and can serve as a second stream and in tandem with regionally implementing a full-time program. OCAD University seeks to absorb

international students into various programs including the Strategic Foresight and Innovation program. The preparatory program which can also be delivered via distance education and without requiring a regional office, should be a revenue generating program that offers complete introductory training in three areas of Communication, English and Portfolio Development. Special consideration should be given to making this a mandatory non-credit program in order to enhance the quality of students entering the graduate degree program. A deeper and more fundamental mandate of this preparatory program is to build a strong appreciation for the value and applications of Strategic Foresight and Innovation for students that seek to join SFI.

Regional supply and demand: Enrollment appetite and existing competition and offerings

An aggregation of the identified STEEP-V and Educational Trends – as well as a closer look at the regional demographics in the market space, offer a stronger sense of certainty with respect to the success of such program. There are however conditions and attributes that need to be met as further presented in the section on recommendations and considerations.

Industries and domains that benefit from the program applications

Supply and Demand also refers to the question of supply and demand in the job market, which are:

- "What are the industries and domains in need of strategic development innovation services?"
- "What is the industry demand and what kinds of competition do prospective graduates face in the market as they seek employment or projects to professionally apply their knowledge and learning?"

Understanding of societal, economical, cultural and educational trends in the target region and corresponding key challenges, potential issues and opportunities

The trends scanning area and the section on Issues, Challenges and Opportunities, further explores and describes potential barriers and respective opportunities and tactics to address them.

Localization and adaptation of curriculum and content and building an understanding of which attributes of the program, if any, should be re-framed

This speaks to adjustment and adaptation opportunities with respect to content and curriculum.

Presently the Strategic Foresight and Innovation program at OCAD University follows the learning objectives and outcomes, based on values and philosophical objectives as outlined in the following table (aggregated and reused with permission from "SFI Curriculum Map, 2010"):

Table 7. SFI Program Curriculum Map

Learning outcomes

	Business and Design Thinking	Understanding Systems	The Human Factor	Research Methodologies Commun'ns	Strategic Commun'ns	Innovation Leadership	Foresight Studio	Business Model/ Policy Innova'n Studio	Innovation Studio	Major Project	Degree of Emphasis (Total Points)
Priorities / Purposes / Values											
Social Betterment	2	3	2	2	2	3	3	2	2		21
Environmental Sustainability	1	3	0	0	1	2	2	2	2		13
Socio/Economic Sustainability	3	2	1	2	3	3	2	3	1		20
Inter/Transdisciplinarity	3	2	3	3	2	1	2	2	3		21
Collaboration / co-creation	3	2	2	3	2	2	3	2	3		22
Priorities Totals	12	12	8	10	8	11	12	12	12	0	97
Subjects / Innovation Methods											
Design Thinking	3	2	1	3	2	1	3	2	2		19
Research Methods	1	2	2	3	1	1	2	1	1		14
Foresight Methods	0	1	0	2	0	1	3	1	1		9
Innovation Process	2	1	0	1	2	2	1	2	3		14
Innovation Skills/Knowledge											
Business Thinking	3	1	0	0	3	2	1	3	2		15
Leadership / intra- and entrepreneurship	1	0	0	0	2	3	0	2	3		11
Policy Innovation	0	0	0	0	0	1	0	3	2		6
Strategic Planning	0	0	0	1	3	2	1	3	1		13
Organizational Change	1	2	2	2	2	2	3	2	2		17
Impact Analysis/Implementation Planning	1	3	1	0	2	2	3	2	3		17
Facilitation / consensus building	1	1	1	3	2	3	1	1	1		14
Theory/Knowledge											
Human/Social Sciences	0	0	3	2	0	1	0	0	0		6
Systems	1	3	2	1	0	1	2	1	1		12
Organizational Structures	1	3	2	1	0	3	1	1	2		15
Leadership Ethics	1	0	0	0	0	3	0	0	1		5
Intellectual Property	0	0	0	0	0	2	0	0	3		5
Presentation Skills											
Written Communication	2	2	3	2	3	2	3	3	2		22
Verbal Communication	3	2	2	3	3	2	2	2	1		21
Visual Communication	3	3	1	2	2	2	3	2	3		21
Subject Totals	24	26	20	26	28	38	29	31	34	0	256
Pedagogical Approach											
Theoretical (e.g. seminar, textual)	2	2	3	2	2	2	2	1	1		17
Exploratory (experimental / creative)	2	3	2	3	2	2	2	2	2		20
Applied/Project-based (studio)	3	2	1	3	3	3	3	3	3		24
Pedagogy Totals	7	7	6	8	7	7	7	6	6	0	61

The program curriculum map outlines the program objectives and priorities as summarized in the following table, and assigns a corresponding degree of emphasis on each priority, which is achieved through a collective emphasis from the courses:

Key program priorities and principle values	Degree of emphasis (total points)
Social Betterment	21
Environmental Sustainability	13
Socio/Economic Sustainability	20
Inter/Transdisciplinarity	21
Collaboration/co-creation	22

Table 8. Program priorities and degrees of emphasis

Subjects are grouped into key competencies that are summarized in table below:

Areas of subject concentration and core competencies	Associated weight
Innovation Methods	
Design Thinking	19
Research Methods	14
Foresight Methods	9
Innovation Process	14
Innovation Skills/Knowledge	
Business Thinking	15
Leadership / intra- and entrepreneurship	11
Policy Innovation	6
Strategic Planning	13
Organizational Change	17
Impact Analysis/Implementation Planning	17
Facilitation / consensus building	14
Theory/Knowledge	
Human/Social Sciences	6
Systems	12
Organizational Structures	15
Leadership Ethics	5
Intellectual Property	5
Presentation Skills	
Written Communication	22
Verbal Communication	21
Visual Communication	21

Table 9. Areas of Subject Concentration and Associated Weights

Applying this model in its original state directly to a program designed for the UAE, while possible, is not advised. However it can be adjusted so that the curriculum, learning objectives and core competencies as outcome of the program, better respond to trends, challenges, opportunities, cultural nuances and practical considerations.

Constants

Some program priorities, principle values , degrees of emphasis and areas of core competencies

may remain unchanged and constant, regardless of the context in which the program is delivered and taught. For example Pedagogical Approach is one such constant, where distribution of emphasis on the components are of essence in keeping with the core values of the program, and hence can remain unchanged.

- Theoretical (e.g. seminar; textual)

- Exploratory (experimental / creative)

- Applied/Project-based (studio)

Presentation Skills is another such constant where the three attributes can be retained in respective formats and degree of emphasis:

- Written Communication

- Verbal Communication

- Visual Communication

Variables

Factors that need adjustment in order for the program to better adapt to regional differentiators are as follows:

Present taxonomies	Present weight	Alternate taxonomies	Proposed weight
Innovation Methods	19	Methodology	15
Innovation Skills/Knowledge	15	Projects Applications	15
Theory/Knowledge	6	Theory	10

Table 10. Proposed Adjustments in Subject Taxonomies

1. Command on innovation methods should not be reduced, rather focused in order to respond to less emphasis on the term "foresight". A larger weight may be given to methods of research, design and innovation that spawn strategic development. Foresight techniques which are undoubtedly of strong value, may be presented and taught in a hybrid context of innovation, design and research techniques.

2. Projects and application of methodologies and theory in addressing real world problems is desirable in order to better inform the public of applications, employability, power in entrepreneurship and overall contribution to betterment of life.

3. A more significant weight on theory is desirable to respond to a common regional view of rigor and scientific value, as seen in the trends and present landscape of academic participation (for example higher focus and attraction to scientific streams, engineering and business disciplines)

A review and adjustment of the values of the program is advised. This is a natural derivation of observing the social trends as described in the trends section, and potential marketing and communication challenges. Rather than attributing a weight to the various subject objectives, we can draft the table with indicators of suggested weight increase or decrease in form of arrows as seen in the following table:

Areas of subject concentration and core competencies	Proposed change in associated weight
Innovation Methods	
Design Thinking	▲
Research Methods	▲
Foresight Methods	▼ ▼
Innovation Process	▲ ▲
Innovation Skills/Knowledge	
Business Thinking	▲ ▲
Leadership / intra- and entrepreneurship	
Policy Innovation	▼ ▼
Strategic Planning	▲ ▲
Organizational Change	▼
Impact Analysis/Implementation Planning	
Facilitation / consensus building	▲
Theory/Knowledge	
Human/Social Sciences	
Systems	▲ ▲
Organizational Structures	▲
Leadership Ethics	▼ ▼
Intellectual Property	▼

Table 11. Proposed Weights of Subject Concentration and Core Competencies

▲ Green arrow pointing up, represents degree of proposed positive change in emphasis on subject competency

▼ Red arrow pointing down, represents degree of proposed negative change in emphasis on subject competency

What would the program look like?

As with creating and operating any physical campus in any location around the world, cost of on-site physical delivery of a graduate program in a Dubai free zone, or any other country or region in the Middle East is significant. Once all costs are factored in, the operation may quickly be

considered a high risk and expensive venture for institutions and departments with smaller

operating budgets. The graduate program doesn't have to be in the Dubai International Academic

City, though there are obvious advantages such as reputation of the area as a "university-centric"

zone and the surrounding wealth, the quality of neighbouring universities, proximity to all

countries where the market of the broader Middle East is defined, security and a relatively lenient

and accommodating attitude to Western investing institutions.

Hybrid solution of locally facilitated distance education AND on-site sessions AND traditional models of distance education

Piloting a hybrid solution that blends traditional distance learning, locally facilitated on-site

sessions and on-site classes is the most desirable model for launching a successful program in

DIAC. We will refer to this model as "Co-located Distance Education". The full-time program is

delivered via distance education technology platforms from the mother university, by faculty at

OCAD University, and to the "academic meeting zone" within a free zone in Dubai. An exclusive

space within the Dubai International Academic City is assigned, which may be shared with other

institutions and is the primary locations where select sessions, some or all classes are held. The

three types of interaction in this model are:

1. Traditional distance education, where digital technology platforms, individual and
   independent study and assigned reading material is assigned remotely by leading faculty
   to students;

2. "Broadcast quality" remote lectures delivered over broadband and through advanced
   digital platforms, by faculty at OCAD University directly to a DIAC classroom where
   students are present and can engage with the faculty, all facilitated by an academic

facilitator and expert design mediator; and

3. On-site lectures, offered in DIAC and led by the faculty with the aid and support of the facilitator.

Physical space may have less of a central role in this process, and serve in two simultaneous capacities as a lightly staffed liaison and communication office that governs all marketing and recruitment affairs, while hosting the academic sessions episodically and with varying degrees of frequency, managed by a facilitating scholar whose primary role is the facilitation of the academic engagements.
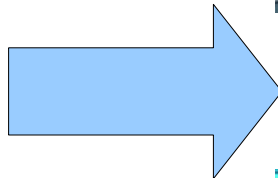
Figure 8. Illustration of How the Program Could Look

Photo credit – By densaer, The Howling Phaedrus

http://www.flickr.com/photos/densaer/2610548767/

Video Conference (wide)

Creative Commons

Photo credit – ekai, Eddie Codel

http://www.flickr.com/photos/ekai/3642506635/

http://www.flickr.com/photos/ekai/3642505555/

Open Video Conference

Creative Commons

The following table suggests distributions and weights of courses in three columns: (a) distance education and without locally hosted and facilitated sessions, (b) co-located and facilitated sessions with faculty teaching from remote location and (c) on-site delivery. The distribution is assigned based on proposed indicators of suggested weight increase or decrease in subjects and core competencies, as well as experiences from the OCAD University 2009-2011 program at the Toronto campus in the following formats:

- in-class activity, group work and student engagement;

- lecture-style presentations, assigned readings on theory and context, personal reflection;

- independent studies.

Areas of subject concentration and core competencies	% all on-site	% on-site facilitated	% all distance education
Design Thinking	10	80	10
Research Methods	20	70	10
Foresight Methods	10	70	20
Innovation Process	10	80	10
Business Thinking	0	70	30
Leadership / intra- and entrepreneurship	0	60	40
Policy Innovation	0	60	40
Strategic Planning	10	70	20
Organizational Change	10	60	30
Impact Analysis/Implementation Planning	0	60	40
Facilitation / consensus building	10	80	10
Human/Social Sciences	10	70	20
Systems	10	60	30
Organizational Structures	0	40	60
Leadership Ethics	0	20	80
Intellectual Property	0	40	60
1600 TOTAL POINTS	**100**	**990**	**510**

Table 12. Distributions and Course Weights Based on Delivery Mode

This suggests the following distribution of all on-site, on-site facilitated (or co-located) distance education vs. all distance education:
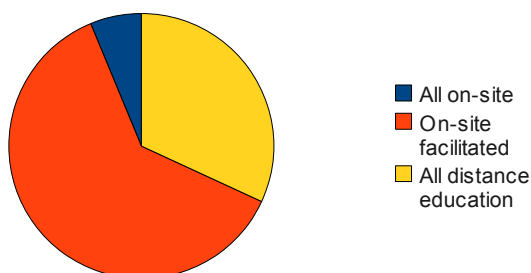

Figure 9. Distributions Based on Delivery Mode

This distribution assumes that respective weights for areas of subject concentration and core competencies are equal at 100 points, which is inaccurate and insufficient. However this approach gives us a start to a rough approximation of how much of the program is seen as co-located facilitated learning, and how much of the program may be delivered through technologically enhanced distance education models and to what extent on-site interaction is necessary. This can also kick-start a conversation and further thinking on how much of the on-site facilitated sessions are "bundled" and grouped together to reduce the frequency of group interaction while increasing the density of the experience by touching on multiple courses toward the beginning, middle and/or end of the program, thereby achieving learning that is grounded in synthesized systemic curricula. See below table for what a schedule based on a (0.5) + 1 + 0.5 cooperation study pattern may look like, in which students spend half a year in a non-credit preparatory program, one full year on credit courses and half a year on a thesis or MRP. Notice that in this model, the student participates in the 0.5 year thesis/MRP work remotely and not at the mother institution as international student. However it is entirely possible to allow for the converse, so that eligible students are admitted to study as international students at the Toronto campus for research internships or thesis/MRP work, giving the student a well rounded international academic experience. Also note that model is based on a three-semester plus a half-year thesis/MRP study, correlating to the earlier recommendation on ratio in areas of subject concentration and core competencies for on-site vs. facilitated vs. distance learning.
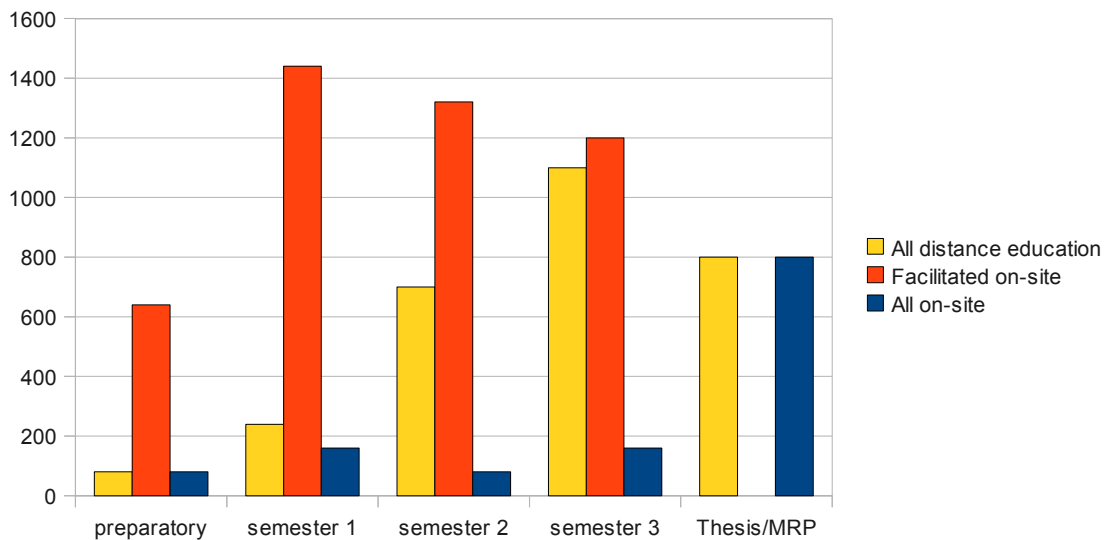
Figure 10. Distributions of Delivery Modes in Full Program Cycle

y-axis at 1600 represents total 1600 points in areas of subject concentration and core competencies, as illustrated in

Table 12. Distributions and Course Weights Based on Delivery Mode

A typical semester cycle would be based on a mix of distance, facilitated distance and on site programming, taking into consideration logistics and costs such as faculty travel time and associated costs and conveniences in the case of on-site delivery. For example it is more feasible to arrange on-site delivery of courses in the beginning and at the end of each semester in a 14 week cycle, in a way that requires faculty to travel once per semester in a back-to-back semester arrangement. This translates to 3 travel times per year.

- At the beginning of each semester one or two faculty are present on-site to lead intense orientation sessions to the program and deliver an engaged overview of the overarching objectives in a semester. Faculty give introductory lectures to the semester courses and position students on the right path to learning.

- At the end of each semester and in the final week, new faculty (one or two) arrive on site

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to provide a bridge with subsequent courses in the next semester, while acting in the capacity of secondary academic advisory, coaching and critiquing the final project in each course while facilitated learning and remote contact with faculty of the course in progress continues. This period, allows for arriving faculty to take a week and observe the program in its final stage and in advance of teaching a follow up course in the subsequent semester. This approach also ensures continuity and oversight throughout the semester, while integrating the courses, highlighting the interaction and interconnected nature of the courses in the program which is of great significance in the SFI graduate program.

Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug

Figure 11. Distributions of Faculty Presence On-site During Credit Course Cycle

The result of this approach in terms of on-site presence is illustrated in below chart.
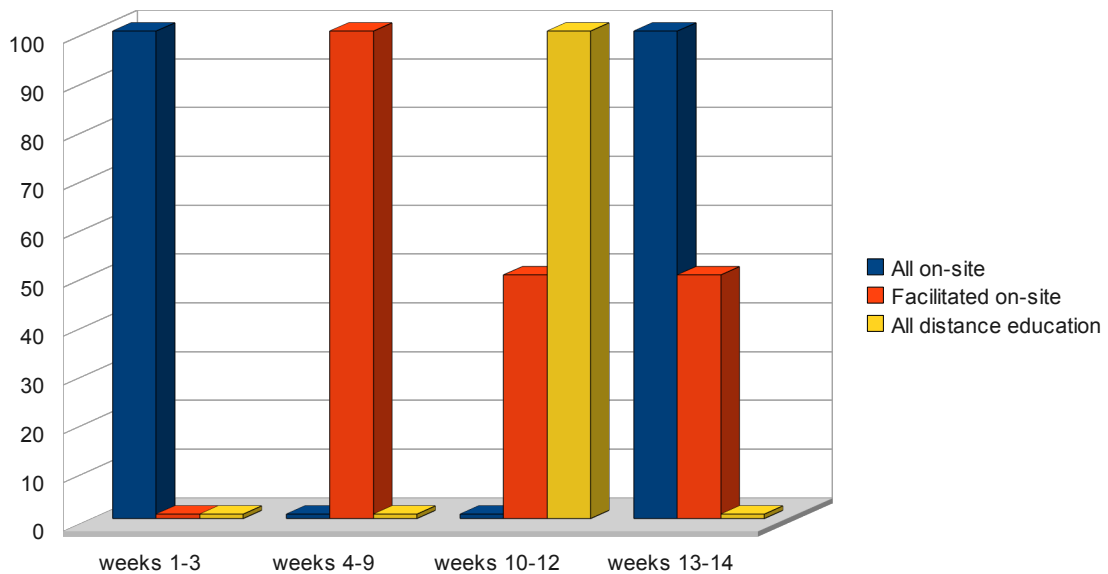
Figure 12. Distributions of Delivery Modes in Single Course Semester

y-axis represents percentage distribution of course weights based on delivery mode

An important consideration is to position the sequence of courses in the program semesters in a way that encourages a systemic continuity while accounting for faculty expertise in the subject area. For example a natural flow which will also take into account the expertise of faculty, would be to follow a research methods course with a foresight and scenario planning course, not only offering a solid theoretical framework and scientific base for foresight practice, but to demonstrate applications and the value of research in the larger context of the program. Another example is to ensure that a systems course is preceded by a foundational course in design thinking, where principles of design is covered in an earlier stage, leading to a deeper understanding of the necessity and value of systems thinking. This approach would further signal the importance of taking a systemic approach in the understanding of design and faculty will play a pivotal role in bridging potential gaps in this important learning.

Course Group A	Research Methods				Foresight	
Course Group B	Principles of Design (Thinking)				Systems	
	wk 1-3	**wk 4-9**	**wk 10-12**	**wk 13-14**	**wk 1-3**	**wk 4-9**
Faculty A	███					
Faculty B				███	███	███

Table 13. Faculty Presence, Continuity and Overlap in Single Course Semester

Following the on-site portion of interaction, the facilitated co-located distance education kicks in and the continuity is preserved through in class sessions that are taught by faculty remotely, but facilitated on-site.

Technology

The remote engagement happens over broadband and through advanced "broadcast quality" platforms on high definition (HD) screens similar in infrastructure and appearance to those of mega-conferences. The data streaming is predominantly IP and ISDN-based over the H.323 standard. This protocol is accessible to anyone with high speed Internet connection. Web-conferencing and use of distributed online learning management systems is used for the non-facilitated distance education portion of the program. What is of significant importance is the selection of a robust system that emphasized usability and interaction design, and properly addresses the shortcomings of traditional online enterprise forums and software such as Blackboard and Desire2Learn. The visual streaming service needs to be integrated with any LMS and cannot exist in isolation. Such integrated system would allow for faculty feedback, engaged offline discussions, information management and access to repositories of information such as online libraries, research networks and inter-institutional communication platforms.

Reliability of the system is of utmost importance and the program cannot afford to deal with issues related to connectivity, up-time, audio and video loss, equipment operation problems and technical support latencies on either side. Therefore 100% continued access to support, oversight and management of the entirety of the system is a must. Hoping that faculty or students could resolve potential technical issues with training or collaboration is not advised and will inevitably consume resources and time that should be concentrated on uninterrupted program delivery.

Key Recommendations for Building an Actionable Plan

An actionable design plan may be built on five main steps.

1. Defining the core values as the principle guide

2. Adapting the SFI program for better international adjustment

3. Establishing strategic partnerships and clear differentiating communication

4. Designing a manageable and sustainable prototype of the program

5. Ongoing research, tracking and tweaking and continual evaluation

1. Principle Guides

Quality over profit

It is important to design governance where academic and teaching quality is advanced and protected from profit-seeking pressures and unstable finances. A key element of such governance will be stronger, more independent leadership, such as a board composed of experienced and visionary educators.

The international program will not be able to contribute to human and socio-economic and scholarly development unless academic and teaching qualities grow in tandem with increase in revenue and profitability.

Developing a full cost recovery model of higher education and solely relying on tuition funding can potentially raise issues of access, social equity and financial stability, which can be addressed

with academic and administrative oversight and policy on financial aid and endowments. The concept of endowment is part of local regional culture, and can be explored and adopted to stabilize the finances where necessary.

The key recommendation that stands out from this reality, is to emphasize a single, portable program with consideration given to highest possible academic and research standards, that can serve to raise the profile of the institution, while generating enough financial resources to be self-sufficient. Hence a smaller pilot implementation is an appropriate part of a strategic design plan.

Policy development and governance

The program can be sponsored by an academic unit and have an advisory committee (internal and external members) to guide development, and ensure support from within (no conflicts with regular credit programs). The international program can be expected to operate as a revenue generating and cost-recovery unit that supports the marketing of the program, with attention to retaining the integrity and standards of the Canadian institution. An international programming committee should lead the implementation of an annual review process, to first and foremost oversee quality and integrity of the program, and secondly establish real target revenue and overhead costs of delivering programs. This review process can inform annual planning and budgeting.

Prior to implementation, the program office could consult with the internal stakeholders to ensure a strong understanding of:

1. the needs and expectations of faculty;

2. the benefits and entitlements of the students;

3. possible limitations and constraints on service offerings to students;

4. the overhead costs to provide for the identified needs, benefits, and entitlements, and

5. a schedule of direct costs that may be incurred by individual courses, such as hiring additional staff to provide support for classes.

Strengthening faculty

OCAD University has a very strong roster of professional art and design practitioners and educators, however with the academic designation of some faculty not meeting the regional perception that "all faculty must have doctoral degree designations", there can be cause for concern. As such OCAD University will likely face a reputational challenge and will not be favorably looked upon until it can respond to this gap. It is commonly expected that graduate, even post-secondary teaching must be carried out by professors with a PhD designation. A university or post-secondary institution, no matter how well known and reputable is expected to assign teaching faculty that meet this criteria, as such it behooves OCAD University to reach out to guest or sessional faculty, or enter partnerships and relationships with other institutions that can positively contribute to this need.

2. Program Adjustments and Developments

Curricular adjustments

The challenges and issues related to delivering a program in Strategic Foresight and Innovation in the region is not only structural. It is also cultural.

Content and curriculum adjustments refers to the development of an integrated curriculum based

on human and social development drivers. There are cultural and societal implications and design

of curriculum needs to take into account the very people expected to enroll in the international

graduate program, consider relevance in the context of trends and regional realities, and

ultimately design for human needs. A further consideration needs to be given to systemic design,

where design of curriculum and the interrelations between various subjects and parts, follow the

way people are driven to learn and achieve insight into complexities of problem areas. The

section on "A Master of Design program in the UAE" looks at proposed adjustments based on

variable elements in the curriculum, learning objectives and outcomes of the program.

Adjusting the name to a derivative of "Strategic Design and Innovation" as opposed to SFI

The issue of framing the program in a context of applications, and real life value to a broad range

of sectors, calls for all elements of the program, including the program title to be carefully

adjusted. A deep cultural attribute dominant in the Middle Eastern way of life, thinking and

culture which impacts many facets of societal living, is the view of the word "future". One of

these characteristics is a strong sense of deterministic conviction that mankind cannot alter future,

though it may impact future. Hence any degree of certainty in one's ability to predict or shape the

future through methodic study and research can appear fraudulent. Though this is not the promise

of the Strategic Foresight and Innovation program at OCAD University, and though there is

explicit acknowledgment of humans' inabilities to "predict" the future, for a new program to grab

hold in the region, the word "foresight" and its connotations will likely overshadow the methodic

research, design and innovation toward strategic development. Therefore it is advised to leverage

the power of highly desired and representative words such as innovation, design and strategy in

framing and branding the program with an appropriate title – for example Strategic Design, Strategic Innovation, and so on.

Curricular and research project selection

Strategic selection of research and academic projects with attention to following important priorities is advised:

- Projects that are inspired by local awareness of complex problems in need of design and intervention;

- Projects that bring an attractive appeal and potential for highly visibility of innovation;

- Projects with least potential for generating socio-political friction;

- Projects that offer real value to the society toward shaping a better future.

A needs analysis will have to be done in order to understand direct applications, but an overview of the application sectors and industries or complex problem area may be outlined to offer a clear perspective on how this degree program can contribute to addressing a broad base of problems.

- Water Resources and Supply

- Sustainable Food Sources

- Health Care

- Energy Sources

- Product Design and Development

- Climate Change and Impacts

- Strategic Planning, Decision Analysis, Economic Sustainability and Development

- Ecological and Environmental Systems

- Urban Studies and Planning

- Collaboration, Facilitation, and Peace/Conflict Studies

- Economics and Revitalizing Business Modeling, Innovation and Entrepreneurship Studies

- Leadership Studies, Organizational Development and Optimization

- Strategic Development in Media and Communications

- Travel, Tourism and Hospitality

3. Strategic Partnerships and Communication

Reputation investments and partnerships

The social and educational trends around attraction to and desire for enrolling in programs offered by reputable and world renowned universities, speaks to the importance of actively seeking to create partnerships with visible and recognizable names in the region, such as a prominent university institute, Stanford d.school, Institute of Design at Stanford. Such partnership goes a long way in attracting the right participation and enrollment in the program, as well as regional interest, confidence and support.

Marketing and outreach

- Distance marketing can be limiting and in the early stages where local and regional trust need to be established, the proximity can pose operational problems. As such, local representation and management of information campaigns is advised through the

establishment of a local branch recruitment and communication office in Dubai and with

a strong Canadian presence and oversight.

- Localization of some Marketing and Communication content e.g. web, video and media

- Forging relationships with Art & Design organizations and institutions in the GCC for

  cross-promotional benefits

- Development of strategy to access local and regional grant and budget allotments and

  systems for research and expansion

- Strategic outreach to wealthier cohorts and fostering a culture of pride in sharing and

  doing social good

- Identification of institutions and governing bodies with economic and policy influence

  and preparation of exclusive presentations tailored to local authorities and ruling bodies

- Inclusion of highly accomplished student representation in the communication and

  marketing of presentations

- Developing interview and strategic media connections with locally known and trusted

  Western broadcast networks such as the BBC

- Demonstration of local relationships by space sharing, tours and workshops with local

  experts such as seniors in the financial sectors

- Active participation in exhibitions in higher education in the region at large

Positioning and framing the program

For the successful framing and positioning of a program, expanding the understanding of "what

the program does", is an integral part of demonstrating "what the program is". This may not be a

challenge, or may be a different challenge in the process of launching an MBA program in the

region, where there is a sizable existing perception around "what it is" by all segments in the society, but for a design program such as Strategic Foresight and Innovation, the task of introducing the program is challenging in a different way.

A recommended approach is to demonstrate, in action, what the program offers in way of skills and knowledge and the great ensuing impact. Segmentation and development of outreach strategies to exclusive private sectors such as heavy industries, higher education, technology and financial sectors, is very helpful, especially when applications of the program are shown within these sectors, such as innovation for economical development and business applications. This approach ensures the positioning of the program that is branded and understood by sectors it serves and problems it solves, and its real (perhaps material) value, rather than a broader understanding of the necessity of Design. The key message in this positioning is "making the region desirable for a brighter future" and explicitly outline the sectors which the program serves and impacts.

It would be important to frame the program in a way that it is understood in a context of employment opportunities and entrepreneurship, with life-changing and societal applications, commercial benefits and job opportunities. Creation of research and design incubation and commercialization of research and design is another way of demonstrating real applications of the education. Mentorship and internship/residency as part of the process of learning is another possibility in raising awareness in the industry, while demonstrating a commitment to delivering education that is applicable to students.

4. Designing a small scale pilot program

Prototyping with small cohort of students in a full-time program

Risks will be significantly reduced and mitigated if the program development for adoption abroad begins in a small scale and with a "try-and-learn" pilot spirit. This is an essential part of the design process. The complexity of implementing a program abroad is significant enough to ensure a secure way of kick-starting the process. At bare minimum, the pilot can be an extension of a research project whereby the outcome is measured and reported on based on a "learning and understanding" criteria. Transparency with the student cohort and in relation to communication and development of such an initiative is absolutely paramount to the success of such a pilot.

A key consideration is to ensure that the program is offered full-time in its first pilot implementation to ensure reception by international students whom otherwise may be challenged to participate in a part-time program in a different country form their principal residences.

Over a five year horizon and following the successful implementation of the pilot, the program can grow from a hybrid facilitated distance education program to a full-time offering delivered entirely on-site.

Relying on co-located distance education, hybrid modes of delivery and facilitated episodic
       learning

Cost of on-site delivery of a full-time graduate program in DIAC is significant and high. Once the cost of faculty salaries, administrative operation, space and utilities, student and staff support

among other costs, are all factored in, the operation may quickly be considered a high risk and expensive venture for institutions and departments with smaller operating budgets.

Hence piloting a hybrid solution that blends distance learning with facilitated on-site sessions is advised. Such sessions can be "meeting zones" within a free zone in Dubai. The Dubai International Academic City is a good candidate provided cost of leased space is within budgetary constraints. It is entirely possible (and there is precedence for this) to explore space sharing or sub-leasing opportunities with other institutions, particularly those with a reputable brand.

Taking small and safe steps, avoiding ambitious developments such as creation of a physical campus in the DIAC, depending on tuition as sole stream of income and shifting already thin Canadian resources to the region , are all ways to ensure the goals of the pilot are achievable.

Other considerations are entirely local so leveraging existing resources such as local space and technological facilities for potential distance education delivery, joining marketing and outreach campaigns and using online properties in a consolidated way, such as merging communication platforms and Learning Management Systems, are other ways to reduce cost and liability.

This speaks to the necessity of prototyping a program that leans heavily on remote participation and distance education, as opposed to on-site learning. Reducing physical presence to two key functions is desirable: (1) a lightly staffed liaison office that governs a single classroom space and (2) a lightly staffed and appointed academic liaison, faculty or facilitating scholar whose primary role is on-site facilitation of program courses.

An active presence of an academic facilitator with management and decision making authority is needed, who brings confident command on curricular matters as well as cultural attributes, and with knowledge of local relationships.

Redefining role of on-site mediator and facilitator in co-located distance education

The role of a teacher and principal lecturer is traditionally clear. It is that of a conveyor, interpreter and guide of knowledge. Meanwhile teaching assistants and supporting classroom facilitators, becomes that of a support service provider, marking papers, grading reports, invigilating evaluation sessions.

This is where the role of a "facilitating educator and cultural mediator" may be transformed to mentorship, model of knowledge and trusted mediator. The facilitator has "been through it all", "knows it all", is familiar with cultural nuances and differentiating points, is a graduated expert able to play as role model in broad learning and rather than emphasizing a specialized approach to learning and points of disjoint singularities, it facilitates broad and systemic thinking. As such for educating facilitators to be systems thinkers is paramount to the success of this model.

The pyramid of learning is reversed so that "big picture" learning and systems thinking takes precedence over specialized component learning. The learning is comprised of a "learn the contours before anything approach", that is forming confidence with a whole system before looking at the focal points and starting learning at a "macro-curriculum" level, then co-constructing learning of foci and specializations. The co-construction process can then take place

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in a community (more than one person) and in a systems and cultural context. On another level, the student takes on the role of an observer, and participates in recording the dynamic and registering the interaction between the academic role-model (facilitator) and the senior educator. This awareness helps seeing a dimension of discourse that is desirable as an outcome of the totality of learning. Finally we have arrived at a model that may also provide an opportunity for partnered teaching where faculty with desired academic credentials work together with faculty with professional background and experience in practice. Cultural nuances and potential challenges are mitigated and a systems approach to teaching and learning is underscored.

5. Ongoing Research and Evaluation

Tracking and tweaking

Active and ongoing research, evaluation and tracking that feeds back into the operation, communication strategies and marketing campaigns, is essential in order to refine the ongoing program development and delivery. This is particularly important in order to better adapt to rapid societal change. Trends change, international relations evolve and can radically transform due to political and economic developments, trade relations can particularly be affected by such transformations.

Planning and executing any plan with market and content complexities, cannot be a static single-action activity. Any vision and associated execution plan will require a long-term strategic plan, however active research, foresight and design needs to be built into the philosophy of the operation, enabling the international operation of the program to adapt to ongoing change and anticipate challenges and new opportunities. Ongoing surveys, conversations with stakeholders

including the governments, youth demographics, faculty and academic mediators, industry and

research partners and employers needs to systemic design in order to ensure sustainable growth

and positive impact. Analytical evaluations of social value and return on investment in tandem

with dialogical and generative design with stakeholders are some key research and activities that

will inform strategic decision making and development. This process requires a research strategy

which is beyond the scope of this report.
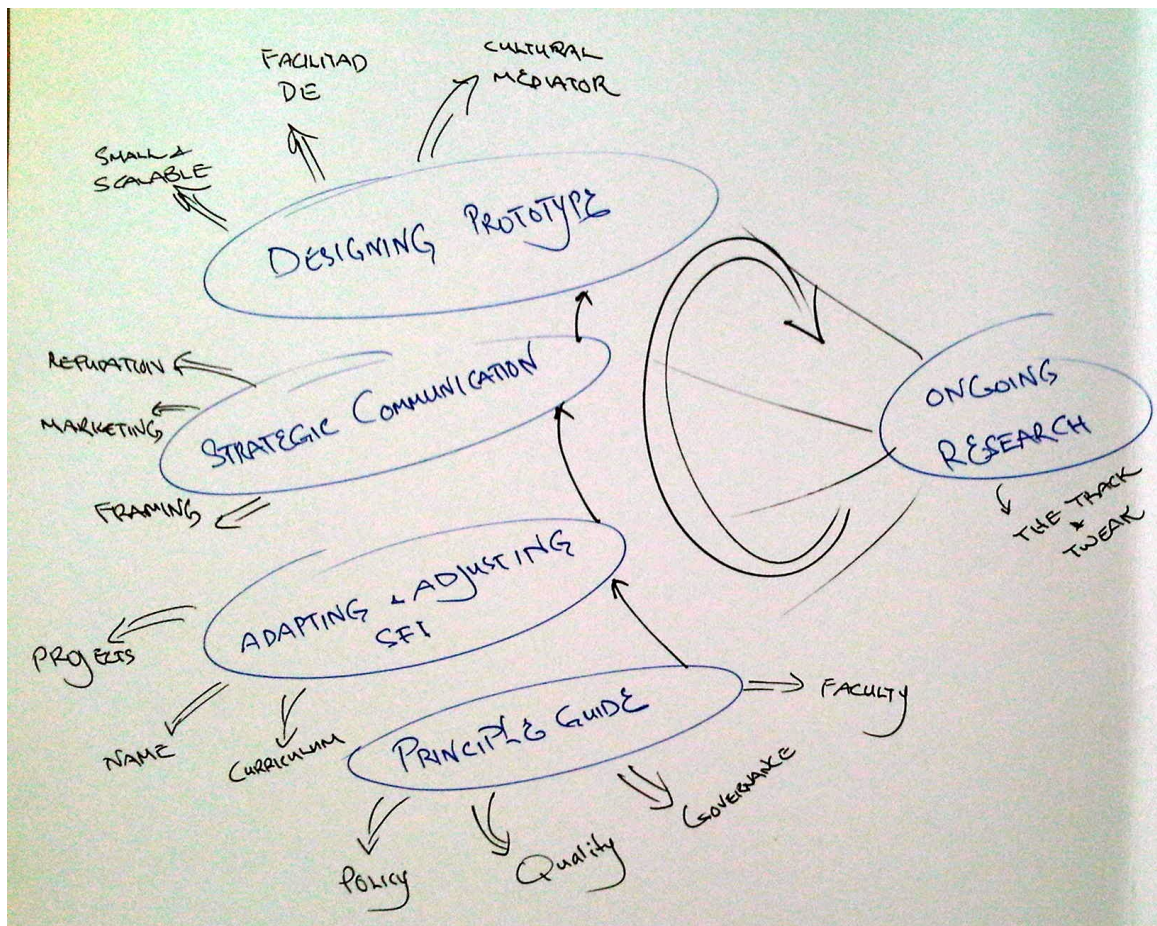
Figure 13. Steps in Building an Actionable Design Plan

Conclusion

Internationalizing the OCAD University Strategic Foresight & Innovation graduate program in the Middle Eastern market, requires foresight and strategic innovation grounded in contextual understanding of societal, academic and business implications. Such understanding informs the opportunities for educational innovation and planned strategic design.

The Middle East is at the epicentre of a developing world with an age median of 20-30 years . The regional market spans from Arabic speaking North West African countries to the Eastern regions of Pakistan, and from North to the Commonwealth of Independent States (CIS). The total population in this region is estimated at 1 billion . Offering university programs in these regions can alleviate some of the educational demands of these countries for many decades to come. As millions of people reach university age every year, the outlook for success and expansion of universities with a mandate of internationalization in the target region is worthy of serious consideration. In Turkey and Iran alone, two countries with high population of prospective applicants for graduate studies in the region, an approximate total of 90% of applicants that constitute well over 1 million people are rejected each year.

Along with population demand, there are many societal, economic and educational trends that speak to the demand for a high quality graduate program in design in the region. There is a shift of student interest from traditional programs such as engineering, management and MBA disciplines, toward newer creative and interdisciplinary fields of study, and growing academic interest in environmental and ecological sustainability as a fundamental way of addressing large scale problems, such as economic sustainability. Increased desire to study in highly reputable

institutions with an ever increase in number of universities and colleges that offer advanced degrees is felt across the board. There is awareness among industry leaders and decision makers of the value of strategic thinking in decision making on matters with broad global impact, particularly economical problems .

There are many Western universities in The Gulf Cooperation Council (GCC), particularly in the United Arab Emirates (UAE), operating in partnership with local universities or autonomously in free zones. Although tuition rates make enrollment in these universities inaccessible to many people in the region whose economic status does not permit them to participate in the Western education systems, these universities offer some relief and respond to some of the demands for university education in the region.

Over 100 Western universities in the UAE offer graduate degree programs of which half of the master degrees are MBA's. No university offers a Master of Design, and there is presently no program that compares with the Strategic Foresight and Innovation graduate program offered at OCAD University. Many of these universities operate in free zones, designated jurisdictions which provide business zoning that is less restrictive for foreign operations, offering alternatives to municipal regions where less prohibitive and different governing laws apply. One such free zone, the Dubai International Academic City (DIAC), has 31 academic institutions from 11 different countries operating in its premises, hosting approximately 18,000 international students.

There are many advantages to operating within the Dubai International Academic City, such as the reputation of the area as a "university-centric" zone, surrounding wealth, the quality of

neighbouring universities, proximity to all countries where the market of the broader Middle East is defined, security and a relatively lenient and accommodating attitude to Western investing institutions. However there are potential cost barriers to large scale operation. As such piloting a hybrid solution that blends distance learning with facilitated on-site sessions is the the most desirable model.

Physical space may have less of a central role in this process, and serve in two simultaneous capacities as a lightly staffed liaison and communication office that governs all marketing and recruitment affairs, while hosting the academic sessions episodically and with varying degrees of frequency, managed by a facilitating scholar whose primary role is the facilitation of the academic engagements.

A full-time program may be delivered entirely via Distance Education, however this is not advised, as a key learning objective within the program is the value of interactive exchange and collaboration. For reasons stated earlier in the section on recommendations, it is strongly advised that an on-site facilitation component is created, allowing for episodic interactions and exchange. A small meeting zone should be allocated in a free-zone and/or in partnership with other institutions, to house the sessions. It is strongly desirable for this centre to be equipped with stable and state-of-the-art communication devices similar to a those seen in enterprise media or broadcast studios. The same centre can serve as a lightly staffed liaison office that regionally oversees and represents the program. It is possible that fiscal realities are prohibitive and OCAD University may look for other ways of facilitating exchange and interaction, at which point a "Study at OCAD U" semester may be designed whereby students come to OCAD University as

international students for a one or two semester-long academic visit for the latter part of their study and/or research.

The existing SFI program should be adjusted to serve a vast market need of the Middle Eastern region, which cannot take place without consideration to framing the program in cultural and social contexts while adhering to principle values, guides and core objectives of the program. Strengthening faculty, adapting the curriculum, selection of professional and academic projects and strategic communication of the messaging will all build the framework for designing an actionable plan and launching a sustainable and scalable pilot.

Following charts illustrate two parallel projected processes into a desirable future:

1. An external impact projection and trajectory over 20 years

This illustration looks at desirable outcomes and maps the external impacts over a course of 20 years of operating the program. The spectrum of reach is projected starting with "infancy of design and minimal awareness around design", gradually growing to local awareness in small business, employment, entrepreneurship and small-scale innovations such as consumer product design. This awareness extends over the next decade into regional acceptance and creation of industry norms such as strategic development and design for architecture, transport, urban planning, travel and tourism and social initiatives such as regulations on smoking and accessibility.

Eventually the collective of graduates, researchers and faculty engaged in or educated by the

program, through a larger degree of social awareness are able to exert higher impact and create change and social innovations in arenas such as environmental initiatives, betterment and optimization of water systems and alternative energy. The strength of the program is visible and felt as graduates and young scholars grow to impact industry as professional practitioners at a deep level.

Figure 14. External Impact Projection and Trajectory

Organizational Strategic Development

Policy Development for Medium and Large Businesses

Financial Optimization

Inclusive Design and Accessibility

Mobile Tech Solutions

Product Development

Interaction and Communication Design

Environmental and Experience Design

Business Management

Advertising and Marketing

Increase in Employment Opportunities and Demand for Design

Small Business Innovation

Architecture

E-government

Travel and Tourism

Urban Planning and Design

Alternative Energy R&D

Large Scale Environmental Initiatives

Water Systems and Irrigation

2011
2015
2019
2023
2027
2031

INFANCY OF DESIGN

ADVOCACY FOR DESIGN

AWARENESS OF DESIGN

LOCAL DESIGN IMPACT

IMPACT ON LOCAL TRENDS

REGIONAL IMPACT

IMPACT ON LOCAL & REGIONAL TRENDS

GLOBAL AWARENESS

GLOBAL IMPACT & CHANGE

IMPACT ON GLOBAL TRENDS

2. An optimized operational planning scenario with a growth trajectory of 10 years

This illustration maps a shorter timeline of 10 years within which key milestones are identified for the program that can yield desired results and impacts. In operational terms the goal of the program is to grow from a pilot that leverages a hybrid model of distance education technology at a small scale and with a small cohort, to the development of increased capacity for full on-site program delivery. Technology aided distance education is leveraged for cross regional engagements but is not serving core teaching curriculum. The program grows over time as the significance of impact of the program and its graduates are felt in the region and industry, as partnerships with industry leaders are forged, and as partnerships with prominent academic and research institutions are developed. Increased visibility of the projects which graduates, researchers and faculty contribute to, is key to outreach and communication of the value proposition of the graduate program in the region. A key milestone in the process is the 5 year projection when significant partnerships must be developed with the governing bodies for access to resources, capital infrastructure and space. This ensures sustainable growth of the program, eventually leading to a centre of research and learning that is seen as an integral part of strategic development and design in the region.

Figure 15. Optimized Operational Planning Scenario

Academic Partnerships with Prominent Universities

High Level Presentation TO UAE Governing Bodies

Technology Preparation

Internal Policy Development

Curricular Planning

Space Negotiations

Contractual Agreements

Marketing, Outreach

Research, Development, Design

Significant Partnerships with Local Governments

Local, Regional Grant Application Development

Outreach to Globally Recognized, Prominent Scholars and Designers

Research Incubation

Industry Partnerships

Internship Program Development

Job Placements

Development of Full Council/Governance Body
Including Regional Decision Makers

Exchange Programs for Study Abroad

Inaguration of the Physical Space for
Full On-site Delivery and Research Centre

2011   2013   2015   2017   2019   2021

PROGRAM DELIVERY IN PILOT

HYBRID DISTANCE EDUCATION
& CO-LOCATED FACILITATED LEARNING

DE REDUCTION

INCREASED ON-SITE DELIVERY

START ON-SITE PROGRAM

START ON-SITE RESEARCH CENTRE

START ON-SITE STRATEGIC SERVICE PROVISION

EXCEEDING 100 GRADUATES

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While the goal of this academic exploration and extension is to provide quality education in strategic thinking and design of innovation, to a region much in need of educational opportunities, a higher motivation and purpose is grounded in a commitment to improving life for all and a strong sense of humanistic responsibility that all global citizens should feel. A positive long term outcome of this educational expansion, is the impact produced by trained strategic thinkers that can play active and systemic roles in improving quality of life in the region.

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Appendix A: Western Universities Operating in the United Arab Emirates

Lists partially compiled from the Dubai FAQ online service in addition to individual university websites.

Canadian and Australian Universities in the UAE

University Name	Emirate	Curriculum	Degrees	Tuition Fees (AED)
Canadian University of Dubai	Dubai	Canadian	Diploma, BSc, MBA	30,000-60,000
Emirati Canadian University	Umm Al Quwain	Canadian/UAE		
Islamic Studies School Abu Dhabi	Abu Dhabi	Moroccan/Arabic	BA	
Murdoch University Dubai	Dubai	Australian	MBA, MEd, BCom, BSc, Bachelors	40,000-84,000
University of New Brunswick Dubai	Dubai	Canadian	BISc, MBA	25000
University of Southern Queensland Dubai	Dubai	Australian	BBA, BIT, BMC, MBA, MIT	
University of Waterloo Dubai	Dubai	Canadian	BE, BEng, CFA, PRM	72000
University of Wollongong Dubai	Dubai	Australian	BBA, BCom, BIT, MBA, DBA, PhD	41,100-43,350

Table 14. Canadian and Australian Universities in the UAE

UK Universities in the UAE

University Name	Emirate	Curriculum	Degrees	Tuition Fees (AED)
British University in Dubai	Dubai	UK	MSc, MEd, PhD, PGDE	80000
Cass Business School Dubai	Dubai	UK	Executive MBA	90000
Coventry University Dubai	Dubai	UK	BEng, MBA	
Exeter University Dubai	Dubai	UK	EdD	
Heriot Watt University Dubai	Dubai	UK	BA, BBA, BSc, BEng, MA, MSc, PhD	25,000-98,000
London Business School Dubai	Dubai	UK	Executive MBA	216000
Manchester Business School Dubai	Dubai	UK	MBA, DBA	106,000-112,000
Middlesex University Dubai	Dubai	UK	BA, BSc, MA, MSc, MBA, TESOL	30,000-46,000
Nottingham University Dubai PGCE	Dubai	UK	PGCE, PGCEi	
Stafford University Dubai	Dubai	UK	Bachelor, Master, PhD, LLB, MBA	
Strathclyde Abu Dhabi	Abu Dhabi	UK	MBA, MSc	25,000-40,000
Strathclyde Dubai	Dubai	UK Scotland	MBA, MSc	42,500-55,000
University of Bolton RAK	Ras Al Khaimah	UK	BA, BEng, BSc, MA, MBA, MEng, MSc	12,000-36,000
University of Bradford Dubai	Dubai	UK	Executive MBA	40000
University of Dubai	Dubai	UK/US	MBA	
University of Sunderland PGCE	Dubai	UK	PGCE	30,000-35,000

Table 15. UK Universities in the UAE

US Universities in the UAE

University Name	Emirate	Curriculum	Degrees	Tuition Fees (AED)
Al Hosn University	Abu Dhabi	Arabic/US	MBA, MEng, BEng, MEd, BEd, BBA	20,000-50,000
American InterContinental University Dubai	Dubai	US	BBA, BBA, BIT, MBA, MEd, MIT	
American University Dubai	Dubai	US	BArch, BBA, BFA, BIT, BSc, MBA	50,000-70,000
American University of Sharjah in Abu Dhabi	Abu Dhabi	Arabic/US	Foundation, Bachelors, Masters	
American University RAK	Ras Al Khaimah	US	BSc, BBA, MSc	21,000-40,000
American University Sharjah	Sharjah	Arabic/US	BA, BSc, MA, MSc, MBA	60,000-75,000
Biotechnology University College Dubai	Dubai	UAE/US	BSc	
Boston University Dental School Dubai	Dubai	US	Postgraduate	170,000-230,000
Dubai Aerospace University	Dubai	US		25,000-100,000
Duke University Dubai	Dubai	US	Masters, MBA, EMBA	
Fuqua School of Business Dubai	Dubai	US	MBA, EMBA	
George Mason University RAK	Ras Al Khaimah	US	BSc	21,000-52,000
Griggs University Dubai	Dubai	US	MBA	
Harvard Medical School Dubai	Dubai	US	Postgraduate	
Hult Dubai	Dubai	US	MBA	170000
Masdar Institute of Science and Technology	Abu Dhabi	UAE/US	MSc, ME, MEng, PhD	
Michigan State University Dubai	Dubai	US	BSc, MSc, MA	50,000-60,000
New York Institute of Technology Abu Dhabi	Abu Dhabi	US	MBA, Master, Bachelor degrees	
New York University Abu Dhabi	Abu Dhabi	US	BA, BS/BSc	150000
Preston University Ajman	Ajman	US	BBA, BA, BIT, MBA, MSc, PhD	10,000-20,000
Rochester Institute of Technology Dubai	Dubai	US	MBA, MEng, MSc	58,520-65,400
Skyline University College	Sharjah	US	BBA, MBA	30,000-45,000
Syracuse University Dubai	Dubai	US		
University of Atlanta Dubai	Dubai	US		
University of Connecticut Dubai	Dubai	US		
University of Dubai	Dubai	UK/US	MBA	
University of Jazeera	Dubai	Arabic/US	BBA, BSc	28,500-42,750
University of Maryland Dubai	Dubai	US		
University of Phoenix Dubai	Dubai	US	Bachelors, Masters, MBA	
UNLV Dubai RAK	Ras Al Khaimah	US		
Vanderbilt University Abu Dhabi	Abu Dhabi	US		

Table 16. US Universities in the UAE

Universities in the UAE offering MBA

University Name	Emirate	Curriculum	Degrees	Tuition Fees (AED)
Abu Dhabi University	Abu Dhabi	UAE	MBA	
Abu Dhabi University Al Ain	Al Ain	UAE	MBA	
Ajman University Fujairah	Fujairah	UAE	MBA	30,000-80,000
Ajman University of Science and Technology	Ajman	UAE	MBA	30,000-80,000
Al Ain University of Science and Technology	Al Ain	UAE	MBA	
Al Hosn University	Abu Dhabi	Arabic/US	MBA	20,000-50,000
American InterContinental University Dubai	Dubai	US	MBA	
American University Dubai	Dubai	US	MBA	50,000-70,000
American University of the Emirates	Dubai	UAE	MBA	
American University Sharjah	Sharjah	Arabic/US	MBA	60,000-75,000
Amity University Dubai	Dubai	Indian	MBA	25,000-50,000
Canadian University of Dubai	Dubai	Canadian	MBA	30,000-60,000
Cass Business School Dubai	Dubai	UK	MBA	90000
Coventry University Dubai	Dubai	UK	MBA	
Duke University Dubai	Dubai	US	MBA	
Emirates MCC University	Ras Al Khaimah	Indian	MBA	
European University College Brussels Dubai	Dubai		MBA	
Fuqua School of Business Dubai	Dubai	US	MBA	
Griggs University Dubai	Dubai	US	MBA	
Hult Dubai	Dubai	US	MBA	170000
INSEAD Abu Dhabi	Abu Dhabi		MBA	265000
International Academy Ajman	Ajman	Indian/Malaysian	MBA	7,000-20,000
International Academy RAK	Ras Al Khaimah	Indian/Malaysian	MBA	7,000-20,000
Islamic Azad University	Dubai	Iranian	MBA	
London Business School Dubai	Dubai	UK	MBA	216000
Mahatma Gandhi University Dubai	Ras Al Khaimah	Indian	MBA	
Manchester Business School Dubai	Dubai	UK	MBA	106,000-112,000
Manipal University Dubai	Dubai	Indian	MBA	26,000-35,000
Middle East University RAK	Ras Al Khaimah	Indian	MBA	
Middlesex University Dubai	Dubai	UK	MBA	30,000-46,000
Murdoch University Dubai	Dubai	Australian	MBA	40,000-84,000
New York Institute of Technology Abu Dhabi	Abu Dhabi	US	MBA	
PIM International Center Dubai	Dubai	Sri Lanka	MBA	
Preston University Ajman	Ajman	US	MBA	10,000-20,000
Pune University Dubai	Dubai	Indian	MBA	
Pune University RAK	Ras Al Khaimah	Indian	MBA	20,000-25,000
Rochester Institute of Technology Dubai	Dubai	US	MBA	58,520-65,400
Sikkim Manipal University RAK	Ras Al Khaimah	Indian	MBA	
Skyline University College	Sharjah	US	MBA	30,000-45,000
Stafford University Dubai	Dubai	UK	MBA	
Strathclyde Abu Dhabi	Abu Dhabi	UK	MBA	25,000-40,000
Strathclyde Dubai	Dubai	UK Scotland	MBA	42,500-55,000
SZABIST Dubai	Dubai	Pakistan	MBA	18,150-24,200
UAE University Al Ain	Al Ain	UAE	MBA	
UAEU College of Business and Economics	Al Ain		MBA	
University of Bolton RAK	Ras Al Khaimah	UK	MBA	12,000-36,000
University of Bradford Dubai	Dubai	UK	MBA	40000
University of Dubai	Dubai	UK/US	MBA	
University of New Brunswick Dubai	Dubai	Canadian	MBA	25000
University of Phoenix Dubai	Dubai	US	MBA	
University of Sharjah	Sharjah		MBA	26,000-73,000
University of Southern Queensland Dubai	Dubai	Australian	MBA	
University of Wollongong Dubai	Dubai	Australian	MBA	41,100-43,350
Zayed University Academic City	Dubai	UAE	MBA	

Table 17. Universities in the UAE offering MBA

Universities in the UAE offering MSc

University Name	Emirate/Town	Degrees	Qualifications	Tuition Fees (AED)
Abu Dhabi University	Abu Dhabi	UAE	Msc	
Abu Dhabi University Al Ain	Al Ain	UAE	Msc	
Ajman University Fujairah	Fujairah	UAE	Msc	30,000-80,000
Ajman University of Science and Technology	Ajman	UAE	Msc	30,000-80,000
American University RAK	Ras Al Khaimah	US	Msc	21,000-40,000
American University Sharjah	Sharjah	Arabic/US	Msc	60,000-75,000
British University in Dubai	Dubai	UK	Msc	80000
Hamdan eTQM University	Dubai		Msc	23,220-48,000
Heriot Watt University Dubai	Dubai	UK	Msc	25,000-98,000
International Academy Ajman	Ajman	Indian/Malaysian	Msc	7,000-20,000
International Academy RAK	Ras Al Khaimah	Indian/Malaysian	Msc	7,000-20,000
Islamic Azad University	Dubai	Iranian	Msc	
Khalifa University of Science	Abu Dhabi	UAE	Msc	
Khalifa University Sharjah	Sharjah	UAE	Msc	
Manipal University Dubai	Dubai	Indian	Msc	26,000-35,000
Masdar Institute of Science and Technology	Abu Dhabi	UAE/US	Msc	
Michigan State University Dubai	Dubai	US	Msc	50,000-60,000
Middlesex University Dubai	Dubai	UK	Msc	30,000-46,000
Preston University Ajman	Ajman	US	Msc	10,000-20,000
Pune University Dubai	Dubai	Indian	Msc	
Pune University RAK	Ras Al Khaimah	Indian	Msc	20,000-25,000
Rochester Institute of Technology Dubai	Dubai	US	Msc	58,520-65,400
Strathclyde Abu Dhabi	Abu Dhabi	UK	Msc	25,000-40,000
Strathclyde Dubai	Dubai	UK Scotland	Msc	42,500-55,000
SZABIST Dubai	Dubai	Pakistan	Msc	18,150-24,200
UAE University Al Ain	Al Ain	UAE	Msc	
University of Bolton RAK	Ras Al Khaimah	UK	Msc	12,000-36,000
University of Sharjah	Sharjah		Msc	26,000-73,000
Zayed University Academic City	Dubai	UAE	Msc	

Table 18. Universities in the UAE offering MSc

Universities in the UAE offering MA

University Name	Emirate	Degrees	Qualifications	Tuition Fees (AED)
Abu Dhabi University	Abu Dhabi	UAE	MA	
Abu Dhabi University Al Ain	Al Ain	UAE	MA	
American University of the Emirates	Dubai	UAE	MA	
American University Sharjah	Sharjah	Arabic/US	MA	60,000-75,000
Hamdan eTQM University	Dubai		MA	23,220-48,000
Heriot Watt University Dubai	Dubai	UK	MA	25,000-98,000
International Academy Ajman	Ajman	Indian/Malaysian	MA	7,000-20,000
International Academy RAK	Ras Al Khaimah	Indian/Malaysian	MA	7,000-20,000
Michigan State University Dubai	Dubai	US	MA	50,000-60,000
Middlesex University Dubai	Dubai	UK	MA	30,000-46,000
University of Bolton RAK	Ras Al Khaimah	UK	MA	12,000-36,000
University of Sharjah	Sharjah		MA	26,000-73,000
Zayed University Academic City	Dubai	UAE	MA	

Table 19. Universities in the UAE offering MA

Universities in the UAE offering MEd

University Name	Emirate	Curriculum	Degrees	Tuition Fees (AED)
Al Hosn University	Abu Dhabi	Arabic/US	MEd	20,000-50,000
American InterContinental University Dubai	Dubai	US	MEd	
British University in Dubai	Dubai	UK	MEd	80000
Murdoch University Dubai	Dubai	Australian	MEd	40,000-84,000
Zayed University Academic City	Dubai	UAE	MEd	

Table 20. Universities in the UAE offering MEd

Universities in the UAE offering MEng

University Name	Emirate	Degrees	Qualifications	Tuition Fees (AED)
Al Hosn University	Abu Dhabi	Arabic/US	MEng	20,000-50,000
Masdar Institute of Science and Technology	Abu Dhabi	UAE/US	MEng	
Rochester Institute of Technology Dubai	Dubai	US	MEng	58,520-65,400
University of Bolton RAK	Ras Al Khaimah	UK	MEng	12,000-36,000

Table 21. Universities in the UAE offering MEng