
| RESEARCH ARTICLE

Entrepreneurship Education: A Pathway to Enhancing Employability within the Evolving Market Landscape

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| ABSTRACT

It has been established in the body of knowledge that a knowledge-based economy requires educational institutions to provide knowledge and to instill entrepreneurial intentions among its students and young graduates. Universities in the developed economy provide highly skilled and qualified human capital and help develop new ideas, innovation, and enterprising knowledge. A considerable number of high-ranked and well-rated universities and business schools have developed and run entrepreneurial programs (Babson, USA; Cranfield) despite the conventional approach adopted by the public and private providers of knowledge, entrepreneurship is stated as a priority in the Fifty Economic Plan (FEP) of the UAE. The entrepreneurial gap is partially responsible for the high unemployment rate in the Gulf, and the UAE is of no exception. Based on intensive review of the related body of knowledge and meaningful benchmarking, the paper has proposed an employable program along the way to transform business education to impactful and applied education.

| KEYWORDS

Entrepreneur, Impactful, Education

| ARTICLE INFORMATION

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1. Economic Growth and the Entrepreneurship Model:

In an attempt to develop a nation, the necessity for education is not to be undervalued. Education is the principal influence when concerning the growth and development of the economy (Nkang, 2013). Today's knowledge-based economy requires educational institutions to provide knowledge and to instill the entrepreneurial intentions among university students and young graduates (Lee, 2015). Following the Bolton Report of 1970 in the UK, entrepreneurship education has been the center of attention among researchers and educators, and several countries in Europe, Asia, Latin America and North America have taken a series of steps in building the entrepreneurial spirit among their young graduates (Mason, 2011). The Babson University College in the USA, Stockholm, School of Business in Sweden, Cranfield, School of Business in the UK and the National University of Singapore could be cited as real players on development of the entrepreneurship spirit, intentions and activities. Entrepreneurship is often associated with economic development. The productivity, asset-utilization, profitability and employment opportunities provide strong justifications for the entrepreneurial model. The Global Entrepreneurship Monitor (GEM) report mentions that China is favorably categorized as a country with relatively high entrepreneurial intention in an efficiency-driven economy.

The GCC countries' economies have been affected adversely by reliance on oil and the lack of a diversified economy. According to the World Bank Report (2021), the fiscal deficit among the GCC countries reached 13.2% in 2020 during the period of low oil prices,

which implies that public finances for some governments are not sustainable. The current situation under the COVID 19 pandemic necessitates the need for reducing dependence on oil to create sustainable economic growth. The GCC states are continuously making efforts both in the public and private sectors to boost their entrepreneurship and direct young national citizens in the labor market. One of the strategic goals of the UAE and the Saudi Vision 2030 is nurturing and supporting innovation as well as educational entrepreneurship. Bahrain has launched the (Wedha Wadha) campaign to provide creative entrepreneurs. The national youth program in Kuwait offers support to the youths enrolled in entrepreneurship programs. Qatar national vision 2030 aims at promoting youth entrepreneurs. According to the published statistics (Ennis, 2015), only 46% of the youth in Qatar are in employment and only 49% of the youth in Oman are employed. Although the GCC countries have made efforts to reshape the labor market and to tackle unemployment, some barriers inhibit the youth from sustainable entrepreneurship. According to Sindakis and Theodorou (2017) and Hvidt (2015), the GCC countries use less than 0.5% of their combined GDP in research and education which is below the world average of 2.3% with a negative deviation of 78%.

The development of GCC economies cannot be achieved without an optimal balance and relationship between oil revenues and funding of non-oil economic sectors. Investment in non-oil industries can promote sustainable entrepreneurship. Callen et al. (2014) proved that diversification of output is closely associated with high GDP and lower economic volatility. The experiences of other countries provide evidence that entrepreneurship is an active arm to realize diversification, lower economic volatility, and promote the private sector. Nader Kabbani and Nejla Mimoun (2021) argued that one of the three pillars to achieve successful diversification is building a capable and motivated workforce outside the public sector, including entrepreneurs. The GCC countries with no exception are making efforts in reshaping and reforming of their financial and economic model from dependence on natural wealth to one based on the capitalistic economic model. This model has special connotations in one of the world's youngest workforces with more than 50% of its population aged below 25 (WEFR, 2020).

2. The Role of Universities in the Development of Entrepreneurial Leadership:

Universities under the era of knowledge-based economy not only provide highly skilled and qualified human resources, but they also help develop new ideas and businesses (Tippel et al. 2012). The traditional role of the universities has been reshaped by giving room for supporting innovative strategies for interconnecting with business and industry. A considerable number of high-ranked and well rated universities and business schools have adopted entrepreneurship programs, and by virtue, they are providing society with future entrepreneurial leadership. Babson College (USA) invented the methodology for entrepreneurship education nearly a half-century ago. Unlike other schools that teach entrepreneurship as a solid discipline, Babson College (BC) integrates Entrepreneurial Thought and Action (ETA) among the full range of its undergraduate, graduate and executive education offerings. The outcomes of the Babson model are clients having both the business skills and entrepreneurial mindset to excel in any size or type of organization (Babson College, 2022). At the rankings and ratings level, its undergraduate program has been ranked No. 1 in entrepreneurship since 1994 (28 years) by U.S. News and World Report, and ranked No. 1 Best Business School for ROI by payscale. The MBA program has been ranked No. 1 in entrepreneurship since 1994 by U.S. News and World Report. Babson is accredited by the AACSB, NEASC and the EQUIS. The new core curriculum which has been developed by BC aims to prepare Babson's students to be the entrepreneurial leaders of the future, add increased focus on integrated sustainability and experiential learning. Babson college (ETA) programs and model have been implemented by a number of business schools in the world. The Global Network of the Babson college comprises of 35 member institutions from 22 countries, including large universities, business and engineering schools, law colleges and liberal arts schools. Babson membership provides the joiner with leading entrepreneurship education tools and resources to help advance institutions' teaching methods and develop the capability of the teaching staff. The Babson model has been awarded a 2022 Innovation in International Education and Strategic Partnership (IIE Andrew Heiskell Award). The Cranfield University (UK) model on entrepreneurial education is built around the theme of empowering entrepreneurs to reach their full potential by providing an epicenter for entrepreneurial activity, bringing together like-minded people and providing them with all the tools they need to bring their ideas to life (Cranfield University Website, 2022). The Cranfield program on entrepreneurship is offered at the graduate level (MSc. in Management and Entrepreneurship). The Cranfield program is ranked 6th in the UK and 28th in the world by QS World University Rankings: Masters in Management Ranking 2022. Cranfield program not only provides management skills and entrepreneurial qualities, the Cranfield assessment provides an evidence that it offers networking opportunities to enable graduates to start and run businesses effectively and imaginatively. The thrust of the program is built around 40% theory and 60% projects. The average age of enrolled students is 26 years, with 88% international students.

Review of the academic programs offered by Saudi Arabia Universities showed that there are a good number of HAIs which are promoting critical thinking ability and strategic ability to their students (Brunel, 2019). There are a number of HAIs in KSA which are offering training programs of different levels on entrepreneurial leadership. King Fahad University has incepted its Entrepreneurship Institute (EI) with the vision of supporting young Saudi entrepreneurs. The KFUEI is not focusing only on academic but mentorship programs are also offered. The King Abdulaziz City for Science and Technology (KACST) has formed several institutions in collaboration with the World Bank to promote research on entrepreneurship. King Abdulaziz Research

Accelerator (KAUACC) assists young entrepreneurs to help them develop Entrepreneurial Leadership. KAU offers an entrepreneurship program in collaboration with Babson College. The program is designed and delivered by the Babson college experts who empower entrepreneurial leadership.

The lessons that could be derived from the experiences of the KSA Universities that the structural syllabus and case studies approaches are highly ranked with a weighted mean of 4.33 and 4.12 respectively (Al Mahadi, 2019). The striking feature of the KSA programs is that entrepreneurship leadership is institutionalized in most universities under sponsorship and executive education is common rather than exception.

3. Business Education and Entrepreneurial Leadership in the UAE:

Over the past decade (2010-2020), the UAE labor market has witnessed a marked increase in the proportion of skilled workers, engineers, scientists, business graduates, and a broad spectrum of other professionals commonly referred to as 'Knowledge Workers.' This trend is expected to continue as the UAE is targeting to achieve the strategic goals of vision 2030.

The number of licensed higher education institutions in the UAE reached 74 in the academic year 2021/22, with an average growth rate of 17%. The alarming feature is that the growth rate from the base year 2000 soared from 275% in 2009 with steady growth rate peaking to 400% in 2015. The range of growth rate for the period 2009-2015 is 11-48%. As per the CAA (2020), the HAIs could be classified into Federal (6.7%), local government (23%), private (60%) and semi-local government (11%). With respect to geographical distribution of licensed HAIs, Abu Dhabi and Dubai have a lion share of 40% and 38% respectively, coming to the total of 78%. Sharjah and Ajman (15%) accommodate the largest private universities and local government universities.

As of December 2021, there were 1,228 active programs across licensed HAIs. Based on the degree level, the currently active CAA accredited programs could be categorized into 76 PhD programs, 358 Masters, 47 PG Diploma, 143 Diploma/Associate, 17 Certificates and 583 Bachelors. It can be observed that the largest number of programs are bachelor's degrees in a wide variety of specializations (47.5%) and master degrees (29%), coming to the total of 76.5%. The most widely offered areas of specialization are business and management (286 programs), Engineering (261), Health Sciences (152), Law (97), and Education (79). The remaining 353 programs are in the areas of Media, Art and Design, IT and Social Sciences.

Based in the data disclosed by the CAA (CHEDS), there were 131,314 students across various HAIs in the UAE in Fall 2020. Nine universities were taking the lion share of enrollment (67%). Within the nine universities, the Federal HAIs enrollment was around 37% of the total enrollment. The data showed that the number of students enrolled in HAIs in the Northern Region, mainly Ajman, Sharjah, RAK and Fujairah were around 33,000 by the end of December 2020. With respect to distribution of enrolled students across various areas of specialization, 26% in Business Administration (33,616), 20% in Engineering, 9% in IT, 9% in Humanities, 5% in Law and 6% in Media. We can observe the correlation between the number of offered programs and enrolled students. It can be observed that around 111,000 students were pursuing Bachelors degrees in a wide variety of specialization (85%). Thus, 47% of the offered academic programs attracted 85% of the total enrolled students. This poses a question on the ability of the labor market to provide equal and fair opportunities to the new job seekers. The UAE labor market has grown from 1.30 million in 1995 to 4.50 million in 2019 (pre-COVID), with an average annual growth rate of 8.5%. Much of this growth was due to the large influx of migrant labor, which now account for nearly 90% of the total UAE labor force.

With respect to the distribution of labor force across different economic sectors, most UAE nationals work in the public sector. According to the recent Federal Government Report (2021), more than 65% of the government jobs were held by nationals. The proportion of nationals has gradually increased in the banking sector, which may be largely attributed to the Emiratization Policy (Ration Approach) and the financial incentive associated with the banking jobs.

The unemployment rate in the UAE from 1999 to 2021 (22 years), reveals that the unemployment was ranging between 1.64% and 3.19%. The year 2016 showed the lower rate, whereas the year 2021 showed a higher unemployment rate of 3.19%. Throughout the period (July 2021, Statista; Economy and Policies) the unemployment rate depicts the share of a country's labor force without jobs but available and actively seeking employment. The UAE's unemployment rate is quite low, and the GCC region has one of the lowest as benchmarked worldwide. On the other continuum, the youth unemployment rate was ranging between 5% and 10.6% for the period 1999 to 2021. The year 2021 witnessed the highest unemployment rate among youth population (The ILO estimates, 2022 July).

Since 2010 (post-financial crisis), the UAE government has been making extensive efforts to boost the participation of UAE nationals in the private sector through the Emiratization program. Within the Emiratization program, the government has established the 'Entrepreneurial Leave Program – ELP.' The ELP aims to nurture the entrepreneurial spirit among Emiratis, and the competent ones could blossom into successful entrepreneurs.

Entrepreneurship is a priority in the 'Fifty Economic Plan – FEP' of the UAE. Its main pillars aim to stimulate entrepreneurship and SMEs, spread the culture of entrepreneurship among future generations and establish the position of the UAE as a global hub and destination for entrepreneurship (FEP, 2022). The UAE ranked forth globally in the Global Entrepreneurship Index 2020, and this achievement reflected the national efforts that have been intensified over the past decade at the level of institutionalization, ecosystem, funding and legislation. The employment strategy of 2031 aims to build knowledge-based economy by promoting entrepreneurship and increase the participation of the UAE's citizen (Employment Strategy Document, 2031). This calls for a new education initiative to develop entrepreneurial spirit and to tackle youth unemployment in the UAE and in the larger Gulf Region.

Table No: 01

Entrepreneurship Academic and Executive Programs Offered by Business Schools in the UAE (Outside the Free zone).

S. No.	Type of the program	UAEU	ZU	HCT	HAMD. Uni	Dubai Uni.	KU	Skyline	Total
1.	Bachelor (BA, BSc. Program)	-	✓	✓	-	✓	-	✓	4
2.	Minor Program on Entrepreneurship (Business)	✓	✓	-	-	-	-	-	2
3.	Track of Program	✓	-	-	✓	-	-	-	2
4.	Executive Education	✓	✓	✓	-	-	✓	-	4
5.	Minor Program for all Uni	✓	-	-	-	-	-	-	1
6.	Industry Sponsorship	✓	✓	✓	-	-	✓	-	4

Table 1 shows that the four federal HAs offer bachelor's degrees on entrepreneurship and the UAEU offers a concentration track and a minor in entrepreneurship. The minor function, allowing students from across all university colleges to learn how to apply their various skills to a business setting, and develop a business idea. It is obvious that the role of the private HAs is confined to the bachelor program offered by Dubai University and Skyline University. The Federal HAs programs are built around the premise that a well-rounded entrepreneurship education requires the collaboration of industry, foundations and business associations. The executive education programs offered by the Federal HAs are highly associated with industry collaboration and sponsorship.

Table No: 02

Entrepreneurship Academic and Executive Education Programs offered by Selected GCC Universities

	Qatar Uni.	King Abdulaziz Uni.	King Fahad Uni.	EFFAT Uni.	King Saud Uni.	King Abdallah Uni.	Mohd. Bin Sultan Uni.	Kuwait Uni.	Sultan Qabus Uni.
1. Academic program		✓	✓	✓		✓	✓		-
2. Minor Program	-	-	-	-	-	-	-	-	-
3. Executive Ed.	✓	✓	✓	✓	✓	✓	✓	✓	✓
4. Institutionalization	✓	✓	✓	✓	✓	✓	✓	✓	-
5. Sponsorship	✓	✓	✓	✓	✓	✓	✓	✓	-

Table 2 shows that KSA Universities are putting efforts on entrepreneurship education as benchmarked with other GCC countries. It is apparent that the offered entrepreneurship programs are lacking behind the vision of the GCC countries and the youth unemployment rate in the GCC countries, which ranges between 11% and 12% (except Qatar; 0.20%).

4. The College of Business Administration at Ajman University (AU) Model on Entrepreneurship Development Education:

4.A. Justification and Rationale

Ajman University is the first and the oldest private university in the GCC countries (1988). AU continues to be a pioneer for inclusion, innovation and social impact. In 2020, AU became one of the first six higher education in the World to receive global accreditation from the QAA (UK). AU is globally ranked by QS World University Rankings (750) and rated by QS Stars University Rating (5 stars) over the last five years. A number of AU programs have earned prestigious international accreditations.

Accreditation, Rankings and Ratings

- QS World University Rankings 2023 lists AU in the top 700 universities worldwide, which is among the top 2.25% globally.
- AU ranked by QSWUR 2023 as having the world's 4 th most international students and 7 th most international faculty.
- QS Arab World Rankings 2022 lists AU as 30 th overall.
- QS Rankings 2021 'Top 50 Under 50' names AU as one of the top 150 young (under 50 years) universities in the world.
- QS Rankings 'Best Student Cities' listed Dubai/Sharjah/Ajman region as the 60 th best student destination in the world.

Within the competitive, internationalization and spirit of excellence, the College of Business Administration (CBA) was established as a pioneer school in practical and career-focused education and training. In line with the AU vision, the vision statement of the CBA: 'To be the premier institution in the UAE providing cutting edge and socially responsible business education' the mission statement of the CBA has operationalized the AU mission by making more emphasis on employability. The vision and mission statements of the CBA have been articulated into strategic goals: 'Maintain and enhance a practice-oriented business curriculum that adheres to national and international quality standards.'

The CBA is one of the very few business schools in the MENA region providing locally and international (AACSB) Bachelor of Sciences (BSc.) degrees. The CBA offers an MBA with three areas of specialization and a DBA program. The CBA's undergraduate BSc. programs are professionally aligned with the respected professional degrees (ACCA, CPA (Australia), CIMA, DMI and CFA). The number of students enrolled in the CBA programs are growing steadily, from 716 in 2015/16 to 834 in 2021/22 with a growth rate of 16.5%. The market share of the CBA in business education enrollment in the UAE was around 2.48% in the academic year 2021/22 (Fall). It is worthy to note that the share of the AU in the higher education market is around 5.4%.

There is an allegation in the body of knowledge that 95% of students taking critical thinking courses are capable of doing critical thinking which supports them to innovate business and take strategic decisions (Bura Brunel ac. UK, 2019). This is a common factor in all programs offered at AU. Education of potential entrepreneurs is not only about teaching students how to operate a venture (Cathy, 2005), but about learning to create and sustain a business (Dahleez, 2009). Thus, the individual ability to think more creatively and objectively is the seedbed to launch academic program with economic and social impacts. Garavan and O'cinneide (1994) cited that the University environment is one which can mold young minds. This can serve as a dual-edged sword in connection with entrepreneurship education. The strategic goals of AU (Building impactful and long-lasting ties with the external communities) in connection with the CBA strategic goal (develop strategic engagement initiatives that build sustainable ties with distinguished partners in the UAE and beyond) furnish a strong foundation for impactful entrepreneurial education program. This is applicable to all colleges at AU.

The experience of developed countries proved the success of university's influence on entrepreneurship promotion. A report published by the Stockholm School of Economics (SSE) concluded that 20% of students who have taken the small business option have started their own firms. In the UK, a similar result at the Cranfield School of Management (SOM) showed that 50 students taking the first credit course offered in entrepreneurship and small venture, about half subsequently opt for the longer follow-up option on the same topic (M. Harper, 2004). Researchers have documented the impact of entrepreneurship education program on entrepreneurial intention (Guerrero, Rialp and Urbano, 2008), other studies, for instance, showed that EEP have a favorable effect on the perceived attractiveness and feasibility of a new venture (Zhang et al, 2014). Dickson, Solomon and Weaver (2008) and Cope (2007), documented the relationship between the EEP and the student's intention to startup a new business after their graduation from the program, regardless of area of specialization.

4.B The Structure of the Minor Program:

4.B.1 Benchmarking:

Entrepreneurship education covers the entire range of business disciplines, including innovation and technology. Scholars (Solomons, 2002; Vesper and Gartner, 1997) found that the growth of university level entrepreneurship program has tended to broaden the view of entrepreneurship from one of new business entry to include other topics such as family business, managing of growth, social entrepreneurship and business negotiations. To develop a minor program on entrepreneurship, a critical benchmarking has been conducted. The benchmarking covers the minor programs offered by Boston University (Minor in Innovation and Entrepreneurship); MIT (Minor in Entrepreneurship and Innovation); Maastricht University (Entrepreneurship Minor); Waterloo University (Minor in Entrepreneurship); University of Nebraska (Minor for Business and Non-based Business Students); Pennstate University (Entrepreneurship Minor) and Zayed University (Minor in Innovation and Entrepreneurship).

The benchmarking shows that there is an increasing demand and interest in entrepreneurship education from beyond the business school in areas such as Engineering, Law, Science, IT, Pharmacy and Media. The enrollment rate at Zayed University, the UAE University and Western Universities provide an evidence of the demand and potential sustainability.

The benchmarking shows that the minor in entrepreneurship is open to all undergraduate students who wish to leverage their academic and technical background with the business skills required to move ideas from concept to commercial. The experience of the UAEU and ZU provides an evidence that the minor is attracting both male and female students across the university colleges, except the College of Medicine (UAEU).

The total credit hours of the entrepreneurship minor program are ranging between 12 and 24 credit hours. The majority of the minor programs are structured around 18 credit hours (Boston, MIT, UAEU, ZU etc.). The point of agreement in the majority of the programs is that the program is structured around obligatory courses (4 out of 6; 67%) and elective courses (2 out of 6; 33%). Through the elective portion of the minor, students will be exposed to think, and act in creative, innovative and proactive ways on enterprising within the context of their background (Media Business Entrepreneurship; Intellectual Property Strategy; Family Business Management; Social Entrepreneurship; Managing of Growing Venture; Business Ethics; Commercialization and Enterprising of Invention; Global Creative Industries; Venture Capital).

4.B.2 The CBA Minor in Entrepreneurship (CBAME)

In line with the AU vision and the CBA vision and mission statements, the CBAME intends to enhance academic degree with the business skills required to move ideas from concept to commercialization, enterprising, organizational and social success. Thus, the CBAME is a great complement to any major.

The objectives of the CBAME:

1. To develop an entrepreneurial mindset and spirit in students.
2. To provide students an understanding of the concept and process of new venture creation.
3. To equip students to think critically, objectively and innovatively to generate new business models.
4. To enable the students to view their chosen profession which is in tune with the labor market and national agenda.

4.B.3 Program Learning Outcomes (PLOs)

Upon successful completion of this program, the students will be able to:

1. Develop business ideas and turn it into a new venture.
2. Demonstrate the ability to recognize business opportunities.
3. Understand entrepreneurial strategies that will help the transition from academic life to enterprising.
4. Develop analytical thinking skills to formulate solutions for business problems at start-up and growing stage.

4.B.4 Degree Requirements:

Required credit hours: 15 hours, classified into 12 hours from the obligatory part of the minor and 3 hours from the elective portion.

Required Obligatory Courses			12 Credit Hours
S. No.	Code	Title	Credit Hours
1.	CBAME 1	Entrepreneurial Venture Creation	3
2.	CBAME 2	Entrepreneurial Family Business Management	3
3.	CBAME 3	Entrepreneurial Growth Management	3
4.	CBAME 4	Practice-based Entrepreneurial Competencies	3
			12

Elective Courses (3 Credit Hours):

1. Entrepreneurship and Intellectual Property Strategy
2. Media Business Entrepreneurship
3. Technology and Innovation
4. Venture Capital
5. Entrepreneurial Strategy

Course Learning Outcomes (CLOs) of the Required Obligatory Courses

1. Entrepreneurial Venture Creation

To investigate the entrepreneurial process of new venture creation

Objectives:

1. It aims at enabling students to turn an idea into a revenue-generating business, in various context.
2. The course addresses student potential concerns and doubts about whether you have what it takes to be an entrepreneur.

CLOs:

Upon completion of the course the student will be able to:

1. Identify the relevant data to diagnose a business problem and generate sensible decision alternatives.
2. Develop rigorous business plans that achieve viability status as scrutinized by real investors.
3. Promote an innovation process with an impact on the market. In particular, creativity, design thinking and user experience.

2. Entrepreneurial Family Business Management

CLOs:

Upon completion of the course the student will be able to:

1. Exhibit a deep understanding of central characteristics, opportunities and challenges that different types of family firms face and how they are different compared to non-family firms in the GCC countries.
2. Describe and integrate main theories, models and concepts within the field of family firms and explain how these can be applied to understand different types of entrepreneurial family firms.
3. Demonstrate an advanced ability to analyze common themes essential for building and financing entrepreneurial family firms.
4. Critically evaluate the role of the organization culture.

3. Entrepreneurial Growth Management

CLOS:

Upon completion of the course the student will be able to:

1. Critically analyze a variety of leadership and management styles in the context of the dynamic of a growing SME.
2. Analyze and explain the growth strategy.
3. Explain the optimal utilization of resources and its importance for firm growth.
4. Critically describe different kinds of venture capital in different growth stages.
5. Understand and demonstrate the growth models and growth pathology.

4. Practice-based Entrepreneurial Competencies (PBEC)

Rationale:

The main goal of entrepreneurial education is to develop some level of entrepreneurial competencies (knowledge, skills and attitude). We believe that students, potential employees and business founders want to learn how to be entrepreneurs and create a job instead of needing to get a job. The 2020 World Economic Forum Report under the title 'Schools of the Future' highlights the urgent need for a more relevant curriculum to prepare students for the future. Under the theme of 'Going Beyond Content,' the entrepreneurial skills/risk taker has been considered to be the most important attributes of those seeking employment and employability.

How to make students more entrepreneurial is probably the most difficult and important question in this domain. Many educators claim that the only way to make people more entrepreneurial is by applying a learning-by-doing approach (LBD). There is increasing consensus among top business schools (Babson, Cranfield, London Business School etc.) that letting students work in interdisciplinary teams and interact with people outside the university is a powerful way to develop entrepreneurial competencies among students. The worldwide assessment of entrepreneurial education programs provide evidence that entrepreneurial competencies do not lend well to traditional lecture-based courses and their associated assessment methods.

It is obvious that there are encouraging trends and some exceptional best practices in institutions in the UAE that have made a clear commitment to entrepreneurship development (Sheikh Mohammed Bin Rashid Foundation for SMEs; Future Foundation, Federal Youth Professional School, Lootah Group, Sheikh Khalifa Fund for SMEs). The minor program will utilize the best practices of applied learning and teaching to create more and better opportunities for students to learn the future entrepreneurship competencies. This represents another form of dialogical interaction between industry and students. As per the CAA standards (2019) and inline with international standards, the student is assigned to the entrepreneurial activities for 16 weeks under the direct supervision and lecturing of internal and external sources. As the student will be attached to the industry, the course will be delivered outside the classroom. The three core courses of the minor will be taken as a prerequisite for the PBEC. The AU Innovation Centre will be involved in the implementation of the PBEC course at different level.

CLOs:

Upon completion of the course the student will be able to:

1. Analyze, prioritize and determine the feasibility of new product and business ideas.
2. Assess the required resources and make sound investment and resource allocation decisions.
3. Learn how to exploit disruptive opportunities to build successful ventures.
4. Determine the risks of starting a new venture and the risks associated with growth pathology.
5. Keep good interpersonal relations.
6. Solve creative business problems.

Course Learning Outcomes (CLOs) of the Elective Courses

1. Entrepreneurship and Intellectual Property Strategy

CLOs:

Upon completion of the course the student will be able to:

1. Understand the intellectual property and how it impacts the success of entrepreneurial activities.

2. Understand the value of intellectual property.
3. Know how invention and innovation are created, protected and managed.

2. Media Business Entrepreneurship

CLOs:

Upon completion of the course the student will be able to:

1. To explore, validate and prepare new business concepts to launch media business in a dynamic environment.
2. Critically analyze the criteria of successful new media entrepreneurs and the impactful models.
3. Demonstrate a range of new media models and entrepreneurship spirit from non-profit to for-profit from citizen journalism to social media.

3. Venture Capital

CLOs:

Upon completion of the course the student will be able to:

1. Understand the history of private equity and venture capital within the context of the current regulatory and Islamic and interest-based financing.
2. Understand the role of venture capital in supporting the entrepreneurail process and growth.
3. Understand the process of venture capitalist investment decisions.
4. Develop a finance case to raise money from venture capital organization.

4. Entrepreneurial Strategy

CLOs:

Upon completion of the course the student will be able to:

1. Critically evaluate relevant theories, concepts and models underpinning entrepreneurial strategy.
2. Strategically assess major emerging trends that may impact entrepreneurial success.
3. Demonstrate advance ability to understand the methodology for evaluating the factors that are most important for a successful entrepreneurial venture.
4. To understand the core strategic choices faced by the SMEs at various stages of development.

Matrix on Direct Relationship between the PLOs & the CLOs of the Required Obligatory Courses

	PLO 1	PLO2	PLO3	PLO4
CBAME 1				
CLO 1	√			
CLO 2	√			
CLO 3	√			
CBAME 2				
CLO 1		√		√
CLO 2		√		√
CLO 3		√		√
CLO 4		√		√
CBAME 3				
CLO 1				√
CLO 2				√
CLO 3				√
CLO 4				√
CLO 5				√
CBAME 4				
CLO 1	√	√	√	√
CLO 2	√	√	√	√
CLO 3	√	√	√	√
CLO 4	√	√	√	√
CLO 5	√	√	√	√
CLO 6	√	√	√	√

Note: The Elective Courses satisfy all the program learning outcomes.

4.B.5 Admission:

The CBAME is open to all undergraduate students across all university colleges. It required a successful completion of 70% of the study plan of student's specialization, 100% completion of the university requirements and the AGPA of 2.50 and above. For Arabic-based programs, the student has to show evidence of an English Proficiency. All requirements of the minor must be completed with an AGPA of 2.00 as a minimum.

4.C The opportunities available to students in the program:

1. Guest speakers as an integral part of the course structure.
2. Onsite visits to entrepreneurial ventures as a vital part of the core courses.
3. The program is housed by the CBA which launch well regarded functional programs and staffed with high caliber at the academic and administrative level.
4. The competitive advantages of the proposed program in terms of structure, inclination to industry practice and venture creation and model of delivery under high degree of diversification at faculty, student and gender level.

4.D Collaboration and Relation with Industry:

The benchmarking analysis of the similar Entrepreneurship education programs launched by American, European, Asian and Gulf HAIs, provides an evidence that collaboration and funding from outside parties are considered to be important elements in the development and support of entrepreneurship programs. To create a mutual interest, universities have made a fruitful combination between academic programs (BA, BSc., MSc.) and executive education in entrepreneurship (KSA universities, UAEU, ZU, Babson college, London School of Business). Collaboration with local business groups like chamber of commerce or municipal innovation centers can offer important resource funding and development opportunities.

At the regional level, history proves that the Islamic Development Bank Group (IsDBG) has provided significant support to a number of entrepreneurial education programs in its member countries. At the global level, the World Bank Group (WBG) and the Babson College are in active collaboration with Saudi Universities (KAZU, KFU) on the promotion of entrepreneurial education in the Saudi economy. The Babson College has committed itself to provide support to the CBA programs on entrepreneurship.

It is documented that the UAE is one of the world's youngest workforces with more than 50% of its population aged below 25 years. In light of the directives of the 2030 vision and the 50-year strategic plan, the entrepreneurship education programs are well qualified to secure sponsorship, industry interlinkage and support and fruitful collaboration with leading business schools and influential players in the regional labor market.

At the UAE level, there are a number of foundations and organizations that provide support and sponsorship to entrepreneurship education programs:

1. Sheikh Muhammad Bin Rashid Fund (SMBRF) for SMEs:

SMBRF for SMEs aims to finance innovative pilot projects (both small and medium) for Emirati investors through dedicated efforts and devoted focus. The goal is not just to provide funds, but to prepare a generation of entrepreneurs. As the organization encourages citizens to enter the entrepreneurial sector, the minor will be in competitive advantages to gain its sponsorship, cooperation and support.

2. Khalifa Fund for Enterprise Development (KFED):

The KFED aims at encouraging entrepreneurship inculcating the culture of innovation and supporting the SMEs. It aims to boost the efficiency and capability of entrepreneurs and SMEs by offering financing, training and networking opportunities with various stakeholders. The KFED provides services to all emirates since 2011. KFED programs are inline with the National Agenda for Entrepreneurship and SMEs in the UAE. The National Agenda is structured around four interrelated directives:

1. Strengthening the UAE's status as a destination for global business and entrepreneurship.
2. Enabling entrepreneurs and SMEs projects achieve accelerated growth.
3. Encourage entrepreneurs and SMEs to innovate and increase productivity.
4. Enhance the culture of entrepreneurship amongst different sectors of society.

Within the four directives, KEFD has seven themes.

3. Abdalla Al Ghurair Foundation for Education (AGFE):

The AGFE was established in 2015 as a non-profit, philanthropic organization. Through a pledge of one-third of his personal wealth, AED 4.20 billion, the AGFE seek to support generations of Emiratis and Arab Youth by providing them the skills they need to become the future leaders of the region. Based on the directives and scope of the AGFE, the proposed Minor program has a potential to get support and sponsorship.

4. Dubai Future Foundation (DFF):

The DFF programs connect corporate and government entities with leading startups, ideators, researchers, entrepreneurs and students of all ages, to solve challenges, create solutions and co-create a better tomorrow (DFF; website). Capacity-building and entrepreneurial activities are a part of the initiatives of DFF.

5. Federal Youth Authority (FYA) (Youth Age Group 15-35):

The FYA plays a distinct new role ensuring that UAE ministries, decision-makers and policies are connected directly to the voice, values and needs of the youth. The FYA was established in 2016 to create and implement a National Youth Strategy (NYS) that cultivates the optimal ecosystem for all youth to succeed in productive, healthy and characterized focused lives (FYA website). The FYA aims to harness the energy, talents and ideas of the youth into innovative market opportunities for the next 50 years (22-72). The FYA is investing in professional development of youth, youth talents, youth projects, young pupil's capacity and in entrepreneurial activities (Youth Professional School). Entrepreneurial thinking, risk bearing, critical thinking, problem solving and interpersonal skills have been categorized by the FYA as skills needed for future workforce in the UAE. The Youth Professional School (YPS) programs could be taken as a platform to establish profound relationship between the minor program and industry.

6. Lootah Group of Companies (LGC):

LGC was formed in 1973 and it has been consistently growing to become an international corporation with a strong and wide presence. LGC has a wide range of economic sectors including construction, industry, real estate and joint ventures, international investment, Agri/farming, health care, education and medical sector. Following Abdellatif AlGameel of KSA initiative and programs, Lootah Group is sponsoring programs on mitigation of skill gaps between the academia and the labor market.

4.E SWOT Analysis of the Minor in Entrepreneurship Program:

1. Strengths:

- Male constitute around 44% of the student body (Student Availability).
- Availability of competent, qualified and committed faculty and support staff.
- It will be the first minor program on entrepreneurship to be offered by a private HAI in the country and the region at large.
- AU and the CBA have strong association with the industry.
- AU houses Ajman University Innovation Centre (AUIC).
- Increasing the student retention rate at the university level as the unused capacity of the university is around 25%.
- Create employment and self-employment opportunities for the AU graduates.
- Practice-oriented academic program.
- Make the student passion his/her career with a minor in entrepreneurship at mere 18 credit hours and at affordable costs.
- The program will broaden the educational experience of the AU graduates.
- The program creates interlinkages between the offered programs and increases efficiency and effectiveness of AU's resources.
- The program is inline with the directives of the UAE strategic vision of 2030; the employment strategy os 2031 and the Fifty-year plan of the UAE.

2. Weaknesses:

- More costs to the CBA in terms of new faculty, administrative staff and other resources.
- The new program may increase the Faculty/Student Ratio which is continuously under review by the CAA and the AACSB.
- Female students constitute 56% of the student body at the AU level.
- Accommodation of the minor credit hours (18) into academic programs across all colleges.
- Implementation of the program in the Arabic-based colleges with 28% contribution to AU's student body.

3. Opportunities:

- The minor program on entrepreneurship at the AU level could create market growth in entrepreneurial tracks and executive education.
- To attract more local students to join business and non-business academic programs under the incentive of 2031 employment, 2030 vision and the Fifty-year plan.
- The program will enhance the industry relations with an impact on research and consultancy work and realization of the AU vision and mission statements and the articulated strategic goals of the CBA.

4. Threats:

- More similar minor programs to be launched by competitive HAIs (Increasing competition).
- Entry of foreign HAIs in the free-zones offering major entrepreneurship programs.
- Expected change of students' perception on the usefulness of the program on self-employment opportunities.
- Economic downturn which is the common phenomenon in the MENA region (post-covid), adversely affects the entrepreneurship opportunities and success and therefore students' response to the proposed minor.

4.F Projection of Enrollment during the First Five Year Plan and the Financial Implications:

To maintain an institutional effectiveness base for the proposed minor program, gradual and practical projection and realistic planning approach are used in estimating the number of students to be enrolled. The records for the last seven years (2015/16 – 2021/22) for enrollment rate across colleges of the university are used as one of the surrogate measures to develop the enrollment and student intake in the base year. To provide a solid base for projection, the enrolled students have been split into students who have completed 70% or more of the study plan and students who have completed less than 70% of the study plan. As the program will be housed in the CBA for all enrolled AU students (across all the offered academic programs) the projection will stick to medium range along the way to consider the expected CAA ceiling approach on business schools' enrollment (CAA, May 2021).

Based on the current records (Fall 2022/23), the total number of students enrolled with 70% or more degree of completion is 1,307. Business and engineering students are 611. The Arabic-based programs (Media, Law and Humanities) are 420. Medical students (Pharmacy & Dentistry) are 273. Based on the benchmarking with the minor programs of the UAEU and ZU, the entrepreneurship minor program is highly attracting business and engineering students. The projection will be based on the following rate:

Business and Engineering = 4% = (0.04) (611) = 24
Arabic-based programs = 2% = (0.02) (440) = 09
Medical program (Pharmacy) = 1% = (0.01) (79) = 01
Dental program = 0.05% = (0.005) (192) = 01
Enrollment in the base year = 35

Projection of Enrollment for the 1st Five Year Plan:

A. Lowest Range

	Year 1			Year 2			Year 3			Year 4			Year 5		
	O.	N.	T.	O.	N.	T.	O.	N.	T.	O.	N.	T.	O.	N.	T.
Students	0	35	35	35	35	70	35	40	75	40	40	80	40	45	85
Credit hours	210			630			675			720			763		
Rate per Cr. Hr. (AED)	1,000			1,000			1,000			1,000			1,000		

Anticipated Revenue	210,000	630,000	675,000	720,000	763,000
No. of Sections	4	4	6	6	6
Opp. Cost per S. (VC)	13,500	13,500	13,500	13,500	13,500
Opp. Cost = VC =	54,000	54,000	81,000	81,000	81,000
Other Costs	80,000	80,000	80,000	100,000	100,000
Surplus/Deficit	76,000	496,000	514,000	539,000	582,000

B. Mid-Range Projection

- Business + Engineering 5% = (0.05) (611) = 30
- Arabic-based programs 3% = (0.03) (440) = 13
- Medical programs 1% = (0.01) (271) = 03
- Enrollment in the (BY) = **46**

The Financial Projection of the Mid-Range Projection:

	Year 1	Year 2	Year 3	Year 4	Year 5
Old	0	46	46	46	50
New	46	46	46	50	50
Students Total	46	92	92	96	100
No. of Sections	4	4	4	4	6
Credit Hours	276	828	828	864	900
Rate per Hour	1,000	1,000	1,000	1,000	1,000
Revenue	276,000	828,000	828,000	864,000	900,000
Total Costs	154,000	154,000	154,000	180,000	180,000
Surplus	122,000	674,000	674,000	684,000	720,000

Conclusion:

There is an allegation in the body of knowledge that 95% of students taking critical thinking courses are capable of practicing critical thinking which supports them to innovate business and be capable of taking strategic decisions. This is a common factor in all higher education providers in the UAE and the GCC universities at large.

Entrepreneurship education covers the entire range of business disciplines. To develop an employable program, a critical benchmarking exercise has been conducted. The benchmarking covered well ranked academic institutions in the West, Far East and Gulf Countries. Ajman University has been taken as a case study. Thus, the objectives and program learning outcomes are in line with the AU Vision and the CBA Vision and Mission Statements.

The paper provides an evidence of the demand of the program, employability, industry collaboration mechanism and financial effectiveness.

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