



Master of Science in Business Analytics

Comprehensive Program Specification Document

Academic Year
2023 - 2024

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1.0 Program General Information

Program Title:	Master of Science in Business Analytics		
Program Code:	2.MS.0220		
Authoring Team:	Director of Academic Programs		
Academic Unit:	MSBA	Director of Academic Programs:	Dr. Valerie Lindsay
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1.1 Program Description

The Master of Science in Business Analytics (MSBA) program has been developed to educate future business leaders, who will contribute to the socio-economic development of the Emirate of Abu Dhabi and the UAE. The program contributes to several of the seven areas of ongoing economic policy of the Abu Dhabi Vision 2030, especially to 'build an open, efficient, effective and globally integrated business environment', 'develop a highly skilled, highly productive workforce', and 'drive significant improvement in the efficiency of the labor market'.

The MSBA has been designed by ADSM and accredited by the UAE Ministry of Education for business leaders and managers, in order to develop and inspire greater competitiveness in the increasingly important area of data-driven business. Our MSBA program has been constructed to enable business professionals to develop and enhance their data analytics skills and competencies, in solving business issues within their organizations. The ADSM MSBA will develop our student's specialist skills in Business Analytics enabling them to determine the measures of performance for the success of their organizations, using evidence-based data as a strategic asset in the decision-making process.

1.2 Program aim and goals

The MSBA program has specific goals, which are to develop;

- Graduates' abilities to appraise the theories and concepts of Business Analytics
- Graduates' competencies to apply the principles of Business Analytics to a business environment

- Graduates' knowledge and skills to analyse and transform data to solve business issues
- Graduates' ability to significantly contribute to a firm in an industry sector

1.3 Employer Engagement

ADSM seeks to achieve effective, profitable, and sustainable engagement with employers to meet their current and future workforce development needs. These will satisfy the aspirations of employees and help meet the targets set by the Abu Dhabi Vision 2030. This program aimed at employers' need for professional to analyze business data for effective business decisions. Such need is not currently fulfilled by any other higher education provider in the UAE.

ADSM association with the Abu Dhabi Chamber of Commerce and Industry has set the trajectory of MSBA program on a course that will help it to fill the needs of the evolving labor market of the Emirates. ADSM has relationships with the local employer community through its association with the Abu Dhabi Chamber of Commerce and Industry.

2.0 Program accreditations and UAE Qualifications Frame

2.1 National and International Accreditations

ADSM MSBA program is intended to give graduates the tools, research experience and background to work professionally in local or international organizations. Graduates will be knowledgeable and skilled to adapt to various environments and help organizations create competitive advantage. The program and its respective course learning outcomes are aligned with UAE as well as international standards.

ADSM adheres to the formal processes of accreditation under the UAE Ministry of Education (MoE) Standards for Licensure and Accreditation administered by the Commission for Academic Accreditation (CAA), the National Qualification Authority (NQA), as well as standards for the accreditation of National Qualifications Framework (QF Emirates).

The ADSM MSBA program is not interdisciplinary or jointly offered. Internationally, the program does not currently have any international accreditation, and does not have a delivery support partner.

However, ADSM MSBA program has been a member of the Association of Master of Business Administration ([AMBA](#)), the Business Graduates Association ([BGA](#)), the United Nations supported institution, Principles for Responsible Management Education ([PRME](#)).

2.2 Program Learning Outcomes and QF Emirates Framework

The ADSM MSBA Program Learning Outcomes (PLOs) are aligned to the QF Emirates strands: Knowledge, Skills and Aspects of Competence (see Table 1). The MSBA PLOs are also designed to meet the key competencies required so that the graduates demonstrate effective participation in the workplace, in learning, and in daily life.

Program-level outcomes. Students completing the MSBA program will be able to:	Knowledge (KN)	Skills (SK)	Aspects of competence			Core Life Skills (CLS)
			Autonomy & Responsibility (AR)	Role in Context (RC)	Self-Development (SD)	
MSBA - General Learning Outcome (GLO)						
GLO1 Critically appraise current issues in Business Analytics	KN1 KN2 KN3	SK1	AR2			CLS1 CLS2 CLS4 CLS5 CLS6 CLS7
GLO2 Critically examine large data sets within organizational contexts	KN1 KN3	SK1				
GLO3 Critically assess wide range of appropriate technology that transform new and abstract data in problem-solving solutions		SK2 SK3 SK4	AR1 AR3		SD3	
GLO4 Critically evaluate current research in advanced problem-solving that is used to interrogate large data sets	KN2 KN3	SK2 SK3	AR1 AR3			
MSBA – Big Data Management Learning Outcomes (BDLO)						

BDLO1 - Compare trending Big Data management technologies in addressing strategic business needs	KN2,KN3	SK3,SK4	AR1	RC1	SD3
BDLO2 - Propose strategic business solution/s to solve challenges in Big Data management	KN3,KN4	SK3,SK4	AR2,AR3	RC2	SD3
BDLO3 – Discover independent learning strategies to extend professional knowledge of Big Data management, relating to changing innovations, research, ethics, and standards	KN4	SK5		RC2	SD1,SD2,SD3
MSBA – Artificial Intelligence Management Learning Outcomes (AILO)					
AILO1 - Compare recent Artificial Intelligence management applications to recommend strategic business solution/s	KN2,KN3	SK3,SK4	AR1	RC1	SD3
AILO2 - Integrate Artificial Intelligence management applications to address changing business needs	KN3,KN4	SK3,SK4	AR2,AR3	RC2	SD3
AILO3 - Discover independent learning strategies to extend professional knowledge of Artificial Intelligence management, relating to changing innovations, research, ethics, and standards	KN4	SK5		RC2	SD1,SD2,SD3

Table 1. PLO Mapping against QFEmirates Standards

2.3 Course Learning Outcomes (CLOs)

Programs are made up of courses. Each course contains Course Learning Outcomes (CLOs). The mapping of the CLOs to PLOs (see Appendix 1). Students must pass all CLOs to obtain their qualification.

3.0 Program structure and degree completion sequence

The MSBA program is composed of courses that provide students with specialized knowledge in solving business problems through the use of analytical tools and methods. The total credit hours required to complete the program is 36 credit hours. These include five 3-credit hour common core courses, three 3-credit hour major-specific courses, two 3-credit hour major-specific elective courses, and a 6-credit hour individual major-specific Thesis. The MSBA program offers two concentrations, Big Data Management and

Artificial Intelligence Management. Prior to choosing a concentration, students must complete the five 3-credit hour common core courses. Then in each concentration, students must complete the three 3-credit hour major courses, select two 3-credit hour elective courses and complete the individual major-specific Thesis.

The sequence of the courses starts with the five common core courses, BUS 8401 Analytics in Business, BUS 8402 Research Methods for Business Analytics, BUS 8403 Maths and Statistical Foundations for Analytics, BUS 8404 Optimization and Decision Systems and BUS 8405 Machine Learning. These serves as an introduction to the program, preceding the major-specific courses and thesis. The thesis should be taken after completing all core common and major-specific courses.

3.1 Program Degree Completion

Full-time students will be able to complete the program in minimum of 18 months by taking two courses in each term. Part-time students will be able to complete the program by taking fewer courses per term. Table 2 and Table 3 show the individual courses on offered per Term for Fall as well as Spring intake, respectively for each concentration.

3.1.1 Big Data Management Program

<i>Code</i>	<i>Type</i>	<i>Title</i>	<i>Credits</i>
Term 1: Fall			
BUS 8401	Core	Analytics in Business	3
BUS 8402	Core	Research Methods for Business Analytics	3
Term 2: Winter Term			
BUS 8403	Core	Maths and Statistical Foundations for Analytics	3
BUS 8404	Core	Optimization & Decision Systems	3
Term 3: Spring Term			
BUS 8405	Core	Machine Learning	3
BDM 8501	Major	Data Management	3
Term 4: Summer Term			
BDM 8502	Major	Visualization	3

BDM 8503	Major	Data Strategy	3
Term 5: Fall Term			
BDM 8918	Thesis	Individual Consultancy Thesis I	3
	Major	Elective 1	3
Term 6: Winter Term			
	Major	Elective 2	3
BDM 8919	Thesis	Individual Consultancy Thesis II	3

Table 2. MSBA-Big Data Management study plan and program sequence (**Fall Intake**)

<i>Code</i>	<i>Type</i>	<i>Title</i>	<i>Credits</i>
Term 1: Spring Term			
BUS 8401	Core	Analytics in Business	3
BUS 8402	Core	Research Methods for Business Analytics	3
Term 2: Summer Term			
BUS 8403	Core	Maths and Statistical Foundations for Analytics	3
BUS 8404	Core	Optimization & Decision Systems	3
Term 3: Fall Term			
BUS 8405	Core	Machine Learning	3
BDM 8501	Major	Data Management	3
Term 4: Winter Term			
BDM 8502	Major	Visualization	3
BDM 8503	Major	Data Strategy	3
Term 5: Spring Term			
BDM 8918	Thesis	Individual Consultancy Thesis I	3
	Major	Elective 1	3
Term 6: Summer Term			
	Major	Elective 2	3
BDM 8919	Thesis	Individual Consultancy Thesis II	3

Table 3. MSBA-Big Data Management study plan and program sequence (**Spring Intake**)

<i>Code</i>	<i>Title</i>	<i>Credits</i>
BDM 8504	Digital Marketing Analytics	3
BDM 8505	Workforce Analytics	3
BDM 8506	Business Analytics Ethics & Policies	3
BDM 8507	Big Data Boardroom Analytics	3

Table 4. MSBA-Big Data Management Elective Courses

3.1.2 Artificial Intelligence Management Program

<i>Code</i>	<i>Type</i>	<i>Title</i>	<i>Credits</i>
Term 1: Fall Term			
BUS 8401	Core	Analytics in Business	3
BUS 8402	Core	Research Methods for Business Analytics	3
Term 2: Winter Term			
BUS 8403	Core	Maths and Statistical Foundations for Analytics	3
BUS 8404	Core	Optimization & Decision Systems	3
Term 3: Spring Term			
BUS 8405	Core	Machine Learning	3
AIM 8601	Major	Applied Artificial Intelligence	3
Term 4: Summer Term			
AIM 8602	Major	AI Business Application	3
AIM 8603	Major	AI Strategy & Change	3
Term 5: Fall Term			
AIM 8918	Thesis	Individual Consultancy Thesis I	3
	Major	Elective 1	3
Term 6: Winter Term			
	Major	Elective 2	3
AIM 8919	Thesis	Individual Consultancy Thesis II	3

Table 5. MSBA-Artificial Intelligence Management study plan and program sequence (**Fall Intake**)

<i>Code</i>	<i>Type</i>	<i>Title</i>	<i>Credits</i>
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Term 1: Spring Term			
BUS 8401	Core	Analytics in Business	3
BUS 8402	Core	Research Methods for Business Analytics	3
Term 2: Summer Term			
BUS 8403	Core	Maths and Statistical Foundations for Analytics	3
BUS 8404	Core	Optimization & Decision Systems	3
Term 3: Fall Term			
BUS 8405	Core	Machine Learning	3
AIM 8601	Major	Applied Artificial Intelligence	3
Term 4: Winter Term			
AIM 8602	Major	AI Business Application	3
AIM 8603	Major	AI Strategy & Change	3
Term 5: Spring Term			
AIM 8918	Thesis	Individual Consultancy Thesis I	3
	Major	Elective 1	3
Term 6: Summer Term			
	Major	Elective 2	3
AIM 8919	Thesis	Individual Consultancy Thesis II	3

Table 6. MSBA- Artificial Intelligence Management study plan & program sequence (**Spring Intake**)

<i>Code</i>	<i>Title</i>	<i>Credits</i>
AIM 8604	AI Innovation & Entrepreneurship	3
AIM 8605	AI in Society	3
AIM 8606	AI Ethics & Policies	3
AIM 8607	AI Boardroom Analytics	3

Table 7. MSBA-AI Management Elective Courses

4.0 Program admission requirement

4.1 Graduate Admission Requirement

For direct entry, applicants to the program are required to have;

- an earned Bachelor's degree recognized by the Ministry of Education in a relevant field such as Mathematics, Statistics, Computer Science, Engineering, Physics, Economics, Business, or a quantitative social science
- a minimum of a 3.0 cumulative GPA on a 4.0 scale, or equivalent, and
- a minimum score of 1400 on the English language portion of the EmSAT examination, or its equivalent on other national or internationally-recognized tests that are approved by the CAA, such as TOEFL scores of 213 CBT, 79 iBT, 550 PBT, or 6.0 IELTS (see Appendix 2).

For conditional entry, applicants to the program are required to meet the conditions as published within the policy P 401 Graduate Admission Policy.

4.2 Transfer Admission

Graduate students are typically expected to complete all degree requirements in residence at ADSM. Transfer credits for courses taken elsewhere are accepted as deemed appropriate by ADSM. (See P 402 Transfer Admissions Policy and P 401 Graduate Admission Policy)

5.0 Program teaching pedagogy

5.1 Teaching and Learning Methods

Over a duration of 11 weeks, the program will primarily be delivered through interactive lectures. This helps students to deepen their understanding of the key theories, approaches, and practices used in the real world. Lectures will follow the syllabus and draw upon the main textbook and other key readings.

It is important for students to understand the requirements of the QF *Emirates* Level 9 framework involving critical thinking skills, advanced knowledge and problem solving in complex environments. The student performance required at Level 9 should be clearly explained and frequently reinforced.

ADSM recognize that its students learn best through a variety of active learning strategies. ADSM embrace Adult Learning Theory (andragogy) as a recognized and well-respected approach to developing and extending students' knowledge and understanding. Faculty use their skills to determine the best match of the teaching and learning approaches to their courses. Students shall participate in active learning activities during the weekly sessions. These activities need to be pitched to address the Bloom's Taxonomy higher order thinking comprising of Analyze, Evaluate and Create levels in reflection of the QF *Emirates* level 9 strands. Typical student-centered active learning methods include, but are not limited to, the following:

Common:

Cooperative learning, Assessing peer feedback, Critical evaluation of the literature, Critique on an issue, Seminar presentation, Simulation, Case study, Problem-based learning (PBL), Performance tests, Web-based Skills Evaluation, Videotaped activity, Concept mapping, Critical appraisal, Survey, Thinking-Pair, Triads, Breakout sessions, and One-Minute paper.

Specific:

Critical incident analysis, Video skill assessment, Project based learning, Making databases, Visualization, and Quescussion.

Lastly, faculty integrate students' work experience within their industries or organizations into various learning activities. This integration supports the programs mission of making students better entrepreneurs in their organization.

5.2 Mode of Delivery

The MSBA program is offered in a traditional face-to-face teaching mode. However, in emergency situation, such as Covid-19 pandemic, its mode of delivery will be distance learning. Courses will be delivered over a 10-week period on weekdays from 4:30 pm to 9:30 pm. Each 3-credit course will consist

of 45 contact hours of lectures and other learning activities. Assessments are conducted outside the contacts hours.

5.3 Learning Management System (LMS)

Learning Management System (LMS) is a customized version of Moodle 3.7. A reliable LMS is essential to the delivery of the program and enables students to access information remotely.

This is an e-learning resource that hosts discussion forums, practice assessments and related reading. Independent learning is consistent with the requirements of graduate study. It provides a very effective basis for feedback and coaching improvements (formative assessment), and encourages student engagement outside of class contact time. (Refer to **Section 8.3.1** Assessment of Classroom for further discussion on LMS).

6.0 Program aspects of competencies

The MSBA program adheres to ADSM's P301 Grading and Assessment Policy. This governs the principles of assessment at ADSM, including the QF Emirates Level 9 compliance (see Appendix 3), and CoreLife Skills (see Appendix 4). Students are required to complete two summative assessments. These will range in their level of difficulties. The first assessment ranges from Lower to Moderate skills and is weighted at 40%. The second assessment is pitched at Moderate to Upper skills and is weighted at 60%. These assessments will offer students the opportunity to evaluate and synthesize industrial case studies (both international as well as GCC, especially UAE), against taught theories and concepts. Moreover, the students will also conduct guided research on a related topic in more depth and will be used to assess students' conceptual clarity and analytical ability.

Out-of-class assessments must be submitted through the ADSM LMS portal (specifically Turnitin through Moodle to validate plagiarism). Work must not be emailed to the instructor. Penalties will apply for submissions that are made after the submission due date.

7.0 Program quality assurance

7.1 Quality Assurance and Risk Management Office

ADSM ensures that each program meets the UAE's regulatory requirements. It adheres to the policies and procedures stipulated by its Quality Assurance and Risk Management Office (QARM). The QARM office is responsible for improving educational programs and ADSM's overall effectiveness. The QARM team are dedicated to supporting and promoting the practice of continuous improvement. The team works closely with the Academic Dean to identify the direct and indirect criteria that best measure the achievement of program and course learning outcomes (see P 106 Quality Assurance Policy). The QARM team members participate in academic policy formulation committees and work closely with the Academic Dean, Program Directors, and Director of Student Affairs to identify opportunities for improving the students' experience.

The QARM team conducts surveys to measure students' levels of satisfaction with their experience. The QARM team conducts several surveys regarding students, faculty, graduates, and alumni experiences. The QARM team analyzes program-related performance, assesses student achievement of learning outcomes, and ensures program planning and improvement activities are completed. The QARM team uses the Course Critical Self-Assessment Report (CSER) to examine how effectively the course met the learning outcomes and suggests improvements with time bound actions for the purpose of "closing the loop". In addition, the collection and analysis of survey data helps the Academic Dean evaluate the effectiveness of the program.

7.2 Institutional Planning

ADSM maintains a Strategic Plan that charts the progress towards achieving its goals. At the program level, the Academic Dean and faculty member discuss the incremental changes in the course syllabus to meet the relevant learning needs of students. Such improvement in the course syllabus requires the institution's Curriculum Development Committee (CDC) approval. The Academic Dean and Director of Academic Programs in consultation with external industry experts through the MSBA 'Academic Program Advisory Committee 'APAC', ensure that the curriculum of the program is relevant and up to date.

8.0 Program Student Services and Learning Resources

8.1 Student Services and Academic Advising

Students are supported through the work of ADSM's Student Affairs team. This includes, admissions, registrations, fees, scholarships and access to the Academic Support Center, that provides support and assistance with course work including research and writing skill.

In addition, students can seek academic advice, co-curricular help, and various forms of counselling from a dedicated Academic Advisor assigned to each of them. These supports are not limited to academic progression, maintaining a good academic standing and career related issues. Student needs to book appointment with their Advisor via LMS. Further references in P 417 Academic Advising Policy and P 408 Career Services Policy within ADSM Student [WebPortal](http://lms.adsm.ac.ae) (lms.adsm.ac.ae).

8.2 Learning Resources: Library

Students have access to excellent digital resources. ADSM is a postgraduate only institution and majority of its student body are working professionals who visit the campus only during the class hours. To cater to the needs of such a student body, ADSM focused almost exclusively on electronic resources (with 76,403,073 eBooks, ProQuest Business Premium Collection, LibriVox, public domain audiobooks; and Abu Dhabi Data, a platform of all Abu Dhabi Open Dataset). This can be accessed by busy professionals from off-campus sites (see P 601 Library Policy). The library supports both the faculty members and students in their research-based undertakings. Student satisfaction with Library services is measured through the annual Student Survey (refer to 7.1), which includes the questions mandated by the CHEDS (Center for Higher Education Data and Statistics).

8.3 Learning Resources: Technology

ADSM's campus offers a stimulating learning environment through well equipped, state-of-the-art facilities. All classrooms are equipped with computers that are connected to the internet and Smartboards. There are computer suites to carry out assignments, research and to browse the internet. There is high-



speed Wi-Fi internet access throughout the campus. The IT unit facilitates all technology requirements our students. This includes training for faculty and students in the use of the LMS as the official academic platform. ADSM regularly evaluates Help Desk Tickets and assesses the problems, issues, and needs of its user community. ADSM obtains feedback from students on IT services through the Annual Student Experience Survey.

Appendices

Appendix 1. MSBA Program CLOs vs PLOs

MASTER OF SCIENCE IN BUSINESS ANALYTICS

Core Courses

Analytics in Business		GLO1	GLO2	GLO3	GLO4
BUS 8401					
CORE					
CLO1	Critically appraise business analytics concepts for ethical decision making (KN1, SK1, RC1, SD3)	x			
CLO2	Critically examine the business impact on enterprise environment by using operational data (KN2, SK2, RC2)		x		
CLO3	Critically evaluate a wide range of business analytics approaches to organize and analyze business data (KN3, SK4, AR2, RC2, SD1)			x	
CLO4	Improve the organizational environments by critically analyzing a variety of business data to address dynamic changes (KN4, SK5, AR3, RC1, SD2)				x

Research Methods for Business Analytics		GLO1	GLO2	GLO3	GLO4
BUS 8402					
CORE					
CLO1	Critically analyze various business paradigms for identification of a business analytics problem (KN1, SK1, RC1, SD1)	x			
CLO2	Critically examine different research and business analytics approaches and methodologies to formulate high-level research aims, questions, and objectives in the form of a business proposal (KN2, SK2, RC2, SD2)		x		
CLO3	Critically evaluate advanced techniques for conducting ethical research using quantitative and qualitative data (KN3, SK4, AR1, RC2, SD2)			x	
CLO4	Construct a business research report documenting appropriate research design, argumentation, and visualization of data (KN4, SK2, SK5, AR3, RC1, SD3)				x

Maths and Statistical Foundations for Analytics		GLO1	GLO2	GLO3	GLO4
BUS 8403					
CORE					
CLO1	Critically examine the role of math & statistics in business analytics (KN1, SK1, SD1)	x			
CLO2	Critically evaluate appropriate statistical methods and tools for data analysis (KN2, SK2, RC1)		x		
CLO3	Integrate various statistical methods in solving business challenges (KN3, SK3, AR2, RC2, SD3)			x	
CLO4	Propose business solutions based on the results of the inferential statistics (KN4, SK2, SK5, AR3, RC2, SD2)				x

Optimization and Decision Systems		GLO1	GLO2	GLO3	GLO4
BUS 8404					
CORE					
CLO1	Critically examine various analytical and computational methods for informed managerial decision making (KN1, SK1, RC2, SD3)	x			
CLO2	Critically evaluate optimization problems using mathematical modeling techniques and concepts (KN2, SK3, SD1)		x		
CLO3	Construct optimal solutions for effective business operations (KN3, SK2, SK4, AR3, RC2, SD2)			x	
CLO4	Solve optimization problems using optimization and decision system models, methods, and approaches (KN4, SK5, AR1, AR2, RC1, SD3)				x

Machine Learning	
BUS 8405	
CORE	
CLO1	Critically analyze significant characteristics of data sets to adopt machine learning methods and principles (KN1, SK1, RC1, SD1)
CLO2	Critically appraise business problems to select and implement suitable machine learning methods (KN2, SK3, RC2, SD2)
CLO3	Critically develop advanced problem solving skills to train, test, and validate phases of learning algorithms (KN3, SK2, SK4, AR1, RC1, SD3)
CLO4	Formulate solutions to overcome challenges associated with new machine learning problem settings in a business environment (KN4, SK5, AR2, RC2, SD2)

GLO1	GLO2	GLO3	GLO4
x			
	x		
		x	
			x

MSBA – Artificial Intelligence Management

Data Management	
BDM 8501	
MAJOR-BDM	
CLO1	Critically examine highly specialized knowledge of data management (KN1, SK1, SD1)
CLO2	Critically analyse approaches of data management, practice, and policy to integrate into a business environment (KN2, SK2, RC2, SD2)
CLO3	Develop decision-making skills to address current and emerging challenges in data management (KN3, SK3, AR3, RC2, SD3)
CLO4	Propose data management solutions for a complex business environment (KN4, SK2, SK5, AR1, RC1, SD2)

GLO1	GLO2	GLO3	GLO4
x			

Visualization	
BDM 8502	
MAJOR-BDM	
CLO1	Critically distinguish between various types of visualization to represent a variety of organizational data (KN1, SK1, RC1, SD1)
CLO2	Critically evaluate data visualization techniques in solving analytical challenges (KN2, SK2, SD1)
CLO3	Build advanced data visualization dashboards to interpret complex data distributions (KN3, SK2, SK4, AR1, RC1, SD2)
CLO4	Propose ethical recommendations to overcome business challenges (KN4, SK5, SD3)

GLO1	GLO2	GLO3	GLO4
	x		

Data Strategy	
BDM 8503	
MAJOR-BDM	
CLO1	Critically appraise the role of data strategy by integrating analytics into decision making (KN1, SK1, AR3, SD1)
CLO2	Critically evaluate the key concepts and theories relating to the use and implementation of data strategy in a corporate culture (KN2, SK3, AR3, SD1)
CLO3	Determine the value of organizational uses of data strategies to overcome the data analytics challenges (KN3, SK4, RC1, SD2)
CLO4	Discover the role of a business manager in providing effective solutions using data strategies. (KN4, SK5, AR2, RC2, SD3)

GLO1	GLO2	GLO3	GLO4
x			

Digital Marketing Analytics	
BDM 8504	
ELECTIVE-BDM	
CLO1	Critically appraise highly specialized knowledge of digital marketing data sets (KN1, SK1, SD1)
CLO2	Critically assess digital analytics methodologies to overcome challenges of digital marketing analytics (KN2, SK3, SD1)
CLO3	Critically evaluate business requirements of digital marketing to suggest appropriate models (KN3, SK4, AR1, RC1, SD2)
CLO4	Propose ethical marketing analytics strategies to enterprise marketing problems (KN4, SK5, AR2, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	BDLO1	BDLO2	BDLO3
	x					
				x		
					x	
						x

Workforce Analytics	
BDM 8505	
ELECTIVE-BDM	
CLO1	Critically examine the fundamentals of workforce ethics in an enterprise (KN1, SK1, SK2, SD1)
CLO2	Critically evaluate data issues and ethical challenges to workforce analytics for optimized decision making (KN2, SK3, SD3)
CLO3	Critically develop an effective workforce plans for critical workforce engagement and retention (KN3, SK2, SK4, AR3, RC1, SD2)
CLO4	Critically propose recommendations for future workforce strategy implementation (KN4, SK5, AR2, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	BDLO1	BDLO2	BDLO3
	x					
				x		
					x	
						x

Business Analytics Ethics & Policies	
BDM 8506	
ELECTIVE-BDM	
CLO1	Critically examine the ethical context of data that may apply to business analytics in a business environment (KN1, SK2, SD3)
CLO2	Critically evaluate applications of business analytics that raise ethics and policy concerns (KN2, SK3, SD3)
CLO3	Propose ethical policies and procedures to address business analytics challenges (KN3, SK5, AR2, RC1, SD2)
CLO4	Formulate individual and ethical reasoning methods in the business analytics contexts (KN4, SK4, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	BDLO	BDLO2	BDLO3
x						
				x		
					x	
						x

Big Data Boardroom Analytics	
BDM 8507	
ELECTIVE-BDM	
CLO1	Critically appraise how executives understand and make data-sense decisions (KN1, SK1, SD1)
CLO2	Critically examine systems thinking and strategic perspectives to data analysis (KN2, SK2, AR3, SD1)
CLO3	Critically evaluate various alternative strategies applying big data techniques (KN3, SK4, AR2, RC1, SD2)
CLO4	Recommend optimal big data actionable solutions to maximize opportunities while minimizing risks (KN4, SK5, AR2, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	BDLO1	BDLO2	BDLO3
x						
				x		
					x	
						x

MSBA – Artificial Intelligence Management

Applied Artificial Intelligence	
AIM 8601	
MAJOR-AIM	
CLO1	Critically appraise the application of AI from business leader's perspectives (KN1, SK1, SD1)
CLO2	Critically examine modern AI techniques to design a safe and ethical AI-based enterprise culture (KN2, SK2, AR3, SD2)
CLO3	Integrate AI planning techniques to build various enterprise functions (KN3, SK3, AR2, RC1)
CLO4	Propose AI-based business intelligence and analytics solutions for enterprises (KN4, SK5, AR1, RC2, SD2)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
x						
				x		
					x	
						x

AI Business Applications	
AIM 8602	
MAJOR-AIM	
CLO1	Critically appraise contemporary AI business applications based on optimized data (KN1, SK1, SD1)
CLO2	Determine the strategic impact of implementing AI within various enterprise functions (KN2, SK3, SD1)
CLO3	Critically evaluate various AI techniques or models to gain enterprise strategic competitiveness (KN3, SK4, AR2, RC1, SD3)
CLO4	Discover a potential business strategy for implementing AI technology in an enterprise (KN4, SK5, AR1, RC2, SD2)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
x						
				x		
					x	
						x

AI Strategy & Change	
AIM 8603	
MAJOR-AIM	
CLO1	Critically appraise the role of AI strategy by integrating analytics into decision making (KN1, SK1, SD1)
CLO2	Critically evaluate key concepts, tools, and theories relating to the implementation of AI strategy in enterprises (KN2, SK3, RC1, SD2)
CLO3	Determine the value of AI strategy to overcome data analytics challenges (KN3, SK4, AR2, RC2, SD3)
CLO4	Discover the role of business analytics manager to support AI strategy (KN4, SK5, AR1, RC1, SD1)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
x						
				x		
					x	
						x

AI Innovation & Entrepreneurship	
AIM 8604	
ELECTIVE-AIM	
CLO1	Critical examine contemporary AI innovations and their prospects in global enterprise (KN1, SK1, SD1)
CLO2	Determine challenges in the process of initiating, designing, and presenting ideas for startups (KN2, SK3, RC1, SD3)
CLO3	Design an innovative AI product or service for the local market (KN3, SK4, AR1, RC2, SD2)
CLO4	Propose an innovative idea to potential investors or stakeholders (KN4, SK5, AR3, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
x						
				x		
					x	
						x

AI in Society	
AIM 8605	
ELECTIVE-AIM	
CLO1	Critically appraise the trending AI technologies that are transforming global society (KN1, SK1, SD1)
CLO2	Determine the impact of AI governance concerning to enterprise data (KN2, SK3, RC1, SD1)
CLO3	Propose ethical AI techniques to overcome challenges that improve quality and delivery of services to society. (KN3, SK2, SK4, AR3, SD3)
CLO4	Execute ethical solutions to address AI challenges in society (KN4, SK5, AR3, RC2, SD2)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
	x					
				x		
					x	
						x

AI Ethics & Policies	
AIM 8606	
ELECTIVE-AIM	
CLO1	Critically appraise broader perspective of AI theory, ethics, practices, and policies (KN1, SK1, SD1)
CLO2	Critically evaluate philosophical and conceptual foundations of responsible AI (KN2, SK2, SD2, SD3)
CLO3	Discuss practical and responsible aspects of AI ethics and policies implementation (KN3, SK3, AR1, RC1, SD3)
CLO4	Integrate AI ethics and policies for responsible use of AI in an enterprise (KN4, SK4, AR2, RC1, SD2)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
	x					
				x		
					x	
						x

AIM 8607	
AI Boardroom Analytics	
ELECTIVE-AIM	
CLO1	Critically appraise how executives understand and make data-sense decisions (KN1, SK1, SD1)
CLO2	Critically examine systems thinking and strategic perspectives to data analysis (KN2, SK2, AR3, SD1)
CLO3	Critically evaluate various alternative strategies applying artificial intelligence techniques (KN3, SK4, AR2, RC1, SD2)
CLO4	Recommend optimal AI actionable solutions to maximize opportunities while minimizing risks (KN4, SK5, AR2, RC2, SD3)

GLO1	GLO2	GLO3	GLO4	AILO1	AILO2	AILO3
x						
				x		
					x	
						x

Appendix 2. MSBA Program Admission Criteria

Conditional Admissions into the MSBA Program

Admission Status	Undergraduate CGPA	English Language Requirement (ELR)	Conditions to be Met During the First Term of Study
Conditional Academic	Between 2.5 and 2.999 on a 4.0 scale, or equivalent	a minimum score of 1400 on the English language portion of the EmSAT examination, or its equivalent, such as TOEFL scores of 213 CBT, 79 iBT, 550 PBT, or 6.0 IELTS	<ul style="list-style-type: none"> • Take a maximum of nine credit hours of credit bearing courses • Achieve a minimum CGPA of 3.0 on a 4.0 scale, in these courses
Conditional ELR	≥ 3.0 on a 4.0 scale, or equivalent	a minimum score of 1250 on the English language portion of the EmSAT examination, or its equivalent, such as TOEFL scores of 197 CBT, 71 iBT, 530 PBT, or 5.5 IELTS	<ul style="list-style-type: none"> • Achieve an EmSAT score of 1400 or equivalent • Take a maximum of six credit hours of credit bearing courses • Achieve a minimum CGPA of 3.0 on a 4.0 scale, in these courses

Admission in the Remedial Program

Undergraduate CGPA	English Language Requirement (ELR)	Conditions to be Met During the First Term of Study
Between 2.0 and 2.499 on a 4.0 scale, or equivalent	a minimum score of 1400 on the English language portion of the EmSAT examination, or its equivalent, such as TOEFL scores of 213 CBT, 79 iBT, 550 PBT, or 6.0 IELTS	<ul style="list-style-type: none"> • Take a maximum of nine graduate-level credit hours as remedial preparation for the Master's program, not for credit within the Master's program • Achieve a minimum CGPA of 3.0 on a 4.0 scale in these remedial courses in

Following the successful completion of the remedial courses by meeting the above conditions, students will be offered direct entry into the MSBA program.

Appendix 3. QF Emirates 5 Strands for Level 9

Level	1 - Knowledge (KN)	2- Skill (SK)
9	comprehensive, highly specialized knowledge in a field of work, discipline and/or professional practice, and at the interface between different fields, including frontier concepts and recent developments. (KN-9-1)	advanced skills required in research, analysis, evaluation and/or innovation of complex ideas, information, concepts and/or activities (SK-9-1)
	advanced knowledge of applicable research principles and methods (KN-9-2)	skills to develop new knowledge and procedures and to integrate knowledge from different fields using highly developed cognitive and creative skills and intellectual independence to the field of work or discipline (SK-9-2)
	critical awareness of knowledge issues, as the basis for original thinking; encompassing appropriate processes of enquiry and current processes of knowledge production (KN-9-3)	advanced problemsolving skills to analyse highly complex issues with incomplete data and develop innovative solutions and proposals relevant to an academic/ professional field, field of work or discipline (SK-9-3)
	detailed body of knowledge of recent developments in a field of work, and/or discipline (KN-9-4)	planning skills to develop and execute a major project or comparable activities (that includes a significant range of variables and complexity) with appropriately selected research methodologies producing sound conclusions (SK-9-4)
		highly developed specialist communication and information technology skills to present, explain and/or critique highly complex matters (SK-9-5)

Appendix 4. CoreLife Skills

The QF*Emirates* recognizes the key competencies required for effective participation in the workplace, in the learning and in daily life. These are generic skills rather than being specific to particular occupations, industries or disciplines, and are known, in the QF*Emirates*, as CoreLife Skills.

Generic Description	Detailed Description	Ref
Information	Collecting, analyzing, organizing and applying information in a given context	CLS1
Communication	Communicating information, concepts, and ideas	CLS2
Organising Self	The entrepreneurial spirit, creativity and discovery and the ability to self-organization and the organization of the events and activities	CLS3
Working with Others	Working with others in teams, including leadership	CLS4
Mathematical/Problem Solving	Solving problems including using mathematical ideas and techniques	CLS5
Technology (ICT)	Applying information and communication techniques	CLS6
Societal	Participating in social and civil life including ethical practice	CLS7

NQA expects that appropriate CoreLife Skills will be integrated into all qualifications recognized on the QF*Emirates* at every level (i.e. level 1 to 10). Qualifications developers should map where they are included, and therefore can be assessed, in every qualification. It is not expected that all seven CoreLife Skills will be integrated into small awards.