Master of Science in **Business Analytics**

Big Data Management

Artificial Intelligence Management

adsm

كـلـيـة أبـوظـبـي لـلإدارة

ABU DHABI SCHOOL OF MANAGEMENT

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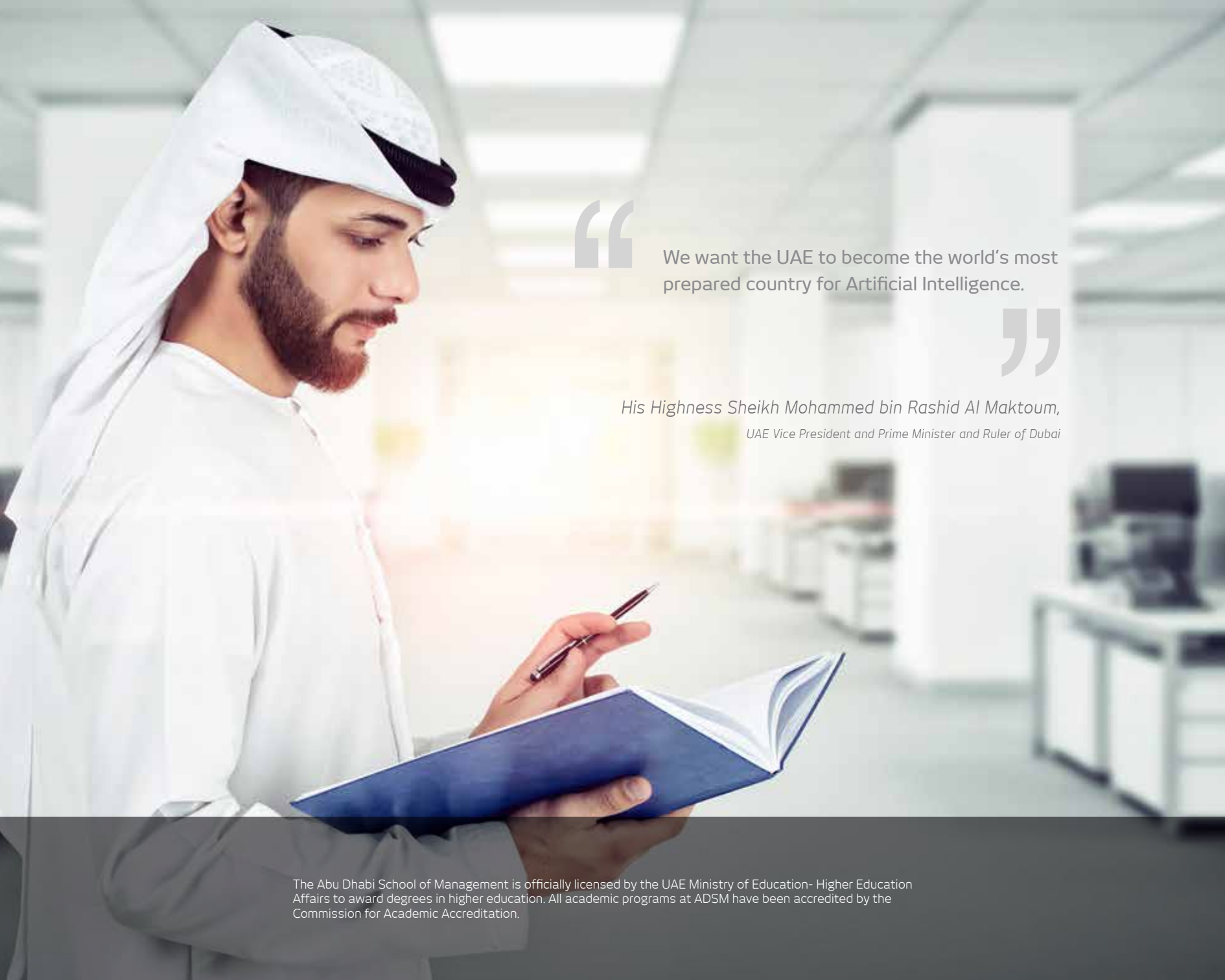

We want the UAE to become the world's most prepared country for Artificial Intelligence.

His Highness Sheikh Mohammed bin Rashid Al Maktoum,

UAE Vice President and Prime Minister and Ruler of Dubai

The Abu Dhabi School of Management is officially licensed by the UAE Ministry of Education- Higher Education Affairs to award degrees in higher education. All academic programs at ADSM have been accredited by the Commission for Academic Accreditation.

The Abu Dhabi School of Management

The vision of the Abu Dhabi School of Management is to be a center of excellence for entrepreneurship, leadership and management through the discovery and dissemination of knowledge. The School offers higher education that is aligned with the Abu Dhabi 2030 Vision. ADSM seeks to produce a new cadre of entrepreneurial managers – highly talented graduates equipped in the science of management, who take the lead in innovating, improving and enhancing their environments. Whether they find themselves in a start-up venture, a corporation, or a governmental organization, the alumni of ADSM attain and refine the knowledge and skills required to contribute to the economy and the community at large. The initial program offering of ADSM was an MBA program, which was launched in 2013. With the graduation of the first cohorts of this program, ADSM has worked to expand its program portfolio to new areas to meet the needs of the Emirate of Abu Dhabi, its residents, and the economy. In the Fall of 2016, ADSM launched the Master of Science in Quality and Business Excellence, and in Spring 2017, ADSM further expanded its program portfolio to offer a Master of Science in Leadership and Organizational Development program by introducing the Master of Science in Business Analytics program in Fall 2018.

Master of Science in Business Analytics (MSBA)

The emergence of big data and cognitive technologies will be the new norms of future business analytics in organizations. Governments and industries revolutionize their operations by optimizing such disruptive technology as strategic assets in their effective decision-makings. While such deployment creates exponential opportunity, future employees must acquire comprehensive managerial knowledge and, leadership skills in the trending management of big data and artificial intelligence. These analytics competencies will maximize the vast potential of expanding data opportunities to prescribe adding needs of the customers and business environment towards organization competitive advantage.

The MS Business Analytics program the specific goals, of developing:

- 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

Program Learning Outcomes

General Learning Outcome

- Critically appraise current issues in Business Analytics
- Critically examine large data sets within organizational contexts
- Critically assess wide range of appropriate technology that transform new and abstract data in problem-solving solutions
- Critically evaluate current research in advanced problem-solving that is used to interrogate large data sets

Big Data Management Learning Outcomes

- Compare trending Big Data management technologies in addressing strategic business needs
- Propose strategic business solution/s to solve challenges in Big Data management
- Discover independent learning strategies to extend professional knowledge of Big Data management, relating to changing innovations, research, ethics, and standards

Artificial Intelligence Management Learning Outcomes

- Compare recent Artificial Intelligence management applications to recommend strategic business solution/s
- Integrate Artificial Intelligence management applications to address changing business needs
- Discover independent learning strategies to extend professional knowledge of Artificial Intelligence management, relating to changing innovations, research, ethics, and standards

Program Structure

The MSBA program represents a focused collection of courses that provides students with specialized knowledge of business analytics. The MS in Business Analytics Program has two concentrations, Big Data Management and Artificial Intelligence Management. The student must choose one these concentrations when joining the program or after successfully completing the common core courses. The Program is structured around five components: the Bridging Program, the Core courses, the Major Courses, the Elective courses, and the Individual Consultancy Thesis.

The courses of the program consist of five core courses, three major courses and two elective courses, each of which is worth three credit points for a total of 30 credit hours. The Consultancy Thesis is worth 6 credit hours. Therefore, the total credit hours of the program is 36. The Bridging Program does not carry credit points, which some students must complete upon the recommendation of the Admission Committee. The Individual Consultancy Thesis is mandatory for graduation from the program. It entails a project that demonstrates the application of skills, knowledge, and competencies to a real-world situation using the business analytics theories, technologies, and models.

MSBA Big Data Management – Fall Intake

Term 1: Fall		
Core	BUS 8401	Analytics in Business
Core	BUS 8402	Research Methods for Business Analytics

Term 2: Winter		
Core	BUS 8403	Maths and Statistical Foundations for Analytics
Core	BUS 8404	Optimization & Decision Systems

Term 3: Spring		
Core	BUS 8405	Machine Learning
Major	BDM 8501	Data Management

Term 4: Summer		
Major	BDM 8502	Visualization
Major	BDM 8503	Data Strategy

Term 5: Fall		
Thesis	BDM 8918	Individual Consultancy Thesis I
Major		Elective 1

Term 6: Winter		
Major		Elective 2
Thesis	BDM 8919	Individual Consultancy Thesis II

MSBA Artificial Intelligence Management – Fall Intake

Term 1: Fall		
Core	BUS 8401	Analytics in Business
Core	BUS 8402	Research Methods for Business Analytics

Term 2: Winter		
Core	BUS 8403	Maths and Statistical Foundations for Analytics
Core	BUS 8404	Optimization & Decision Systems

Term 3: Spring		
Core	BUS 8405	Machine Learning
Major	AIM 8601	Applied Artificial Intelligence

Term 4: Summer		
Major	AIM 8602	AI Business Application
Major	AIM 8603	AI Strategy & Change

Term 5: Fall		
Thesis	AIM 8918	Individual Consultancy Thesis I
Major		Elective 1

Term 6: Winter		
Major		Elective 2
Thesis	AIM 8919	Individual Consultancy Thesis II

MSBA Artificial Intelligence Management – Spring Intake

Term 1: Spring		
Core	BUS 8401	Analytics in Business
Core	BUS 8402	Research Methods for Business Analytics

Term 2: Summer		
Core	BUS 8403	Maths and Statistical Foundations for Analytics
Core	BUS 8404	Optimization & Decision Systems

Term 3: Fall		
Core	BUS 8405	Machine Learning
Major	AIM 8601	Applied Artificial Intelligence

Term 4: Winter		
Major	AIM 8602	AI Business Application
Thesis	AIM 8918	Individual Consultancy Thesis I

Term 5: Spring		
Major	AIM 8603	AI Strategy & Change
Thesis	AIM 8919	Individual Consultancy Thesis II

Term 6: Summer		
Major		Elective 1
Major		Elective 2

Mode of Program Delivery

1. The MSBA program is offered in a face-to-face teaching mode.
2. The delivery of each course is designed to allow students to actively engage with the material and critically reflect on the content.
3. Courses will be delivered over a 10-week period on weekdays from 4:30 pm to 9:30pm.
4. Each course will have 50 contact hours.
5. Classes will be held over four terms in a year (Fall, Winter, Spring and Summer).
6. Full-time students will be able to complete the program in 18 months by taking an average of two courses in six consecutive terms.
7. ADSM normally has two intakes in the Fall and Spring Terms of each academic year, considering the specific nature of the MSBA program and to maintain a consistent student experience, courses are delivered in a specific and optimal sequence determined by the students' intake.

Big Data Management

The Master of Science in Business Analytics with Big Data Management concentration is designed to enable business professionals improve their data analytics skills and competencies to solve business problems in their organizations. This program will empower students to manage data-oriented systems and embed data driven decisions within an organization by bringing leadership skills and comprehensive knowledge from big data disciplines to the management table. Students will get a grasp on the emerging tools and technologies available to tackle challenges in Big Data Management.

Career:

- Gain competitive big data managerial skills and knowledge in using technology for the business benefit.

UAE National Strategy for Artificial Intelligence 2031:

- This concentration will put you on the path to align your Big Data Management competencies with the UAE National strategy for AI 2031.
- Apply your Big Data Management competencies and skills to adopt Big Data trends and methodologies towards improving efficiency for government and non-government services.

Gain the knowledge and skills to manage Big Data innovations with an MSBA in Big Data Management

Artificial Intelligence Management

The Master of Science in Business Analytics with Artificial Intelligence Management concentration is designed for students to understand the science behind Artificial Intelligence (AI) and the metrics to measure success with an organization. This program covers Artificial Intelligence in various businesses contexts to leverage AI in current business practices. This program will enable students to gain knowledge and competencies in AI oriented systems and embed intelligent-driven decisions within an organization. Students will grasp AI managerial skills and comprehensive knowledge from various management perspectives, all while learning the trends and technologies available to tackle challenges in Artificial Intelligence Management.

Career:

- Drive your career in to a wide range of opportunities in the field of Artificial Intelligence that align with the UAE National AI strategy.

UAE National Strategy for Artificial Intelligence 2031:

- Use AI Management to harness AI technologies and models and unlock new opportunities in an organization.
- Align your AI Management competencies and skills to adopt tools and methodologies related to Artificial Intelligence to expedite and ensure more efficiency for government and non-government services at all levels.

Lead AI innovations and drive better strategic decisions with an MSBA in Artificial Intelligence Management

Admission Requirements

Applicants to the MS BA 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 with 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.

Applicants with a degree in an area other than Mathematics, Statistics, Computer Science, Engineering, Physics, Economics, Business, or a quantitative social science but have relevant work experience or professional qualifications, may be considered, providing they complete the Bridging Program.

Applicants may be conditionally admitted the MS BA program in the following cases:

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	• 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	• 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 to the Remedial Program

Undergraduate CGPA	Conditions to be Met	
	Prior to the First Term of Study	During the First Term of Study
Between 2.0 and 2.499 on a 4.0 scale, or equivalent	• Complete four (4) 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.	• A minimum score of 1400 on the English language portion of the EmSAT exam, or its equivalent, such as TOEFL scores of 213 CBT, 79 iBT, 550 PBT, or 6.0 IELTS

Students will be required to successfully complete all remedial courses. Following the successful completion of the remedial courses by achieving a minimum CGPA of 3.0 on a 4.0 scale, or its established equivalent, in the four credits of remedial courses, students will be offered direct or conditional entry into the MSBA program.

In order to apply, students must pay a non-refundable application fee and submit the following:

- a completed Graduate Application form;
- an earned Bachelor's Degree recognized by the Ministry of Education;
- an official college or university transcript from all institutions of higher education attended;
- results of a standardized English test or another standardized, internationally-recognized test that is approved by the Commission for Academic Accreditation;
- Copy of valid passport and visa (if applicable);
- Emirates ID; and,
- 1 passport size photo.

Eligibility for Graduation

In order to be eligible for a Master of Science in Business Analytics degree, a student must:

I. Satisfactorily complete a minimum of 30 credit hours of coursework, including all core courses.

II. Successfully complete 6 credit hours of thesis.

III. Attain a minimum 3.00 cumulative grade point average on all credits earned at the School, based on a 4.00 scale.

IV. Not possess any missing grades or In Progress (IP) grades.

V. Fulfill all other requirements of the program as enumerated in Grading and Assessment Policy and the Academic Progress Policy.

VI. Be in good standing with all ADSM regulatory elements as outlined in the School's policies.

The Abu Dhabi School of Management attempts to ensure the information contained in this publication is correct at the time of production (Nov/2023). However, sections may be amended without notice by the School in response to changing circumstances or for any other reason. Visit the ADSM website or contact the School for any updated information.

Bring Leadership competence and comprehensive knowledge from Big Data and AI disciplines to the management table

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