MSDS

Master of Science in Data Science

School of Innovation, Technology, and Entrepreneurship

14-Month Full-Time Program

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1968 — 2018

CELEBRATING AND ADVANCING MANAGEMENT EXCELLENCE

ASIAN INSTITUTE OF MANAGEMENT

Eugenio Lopez Foundation Building
Joseph R. McMicking Campus
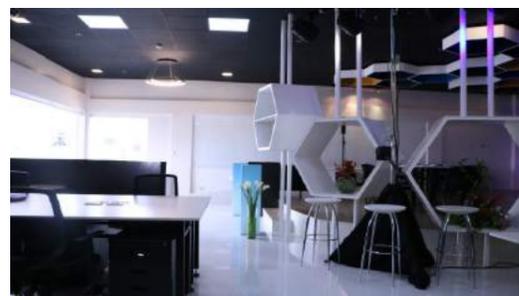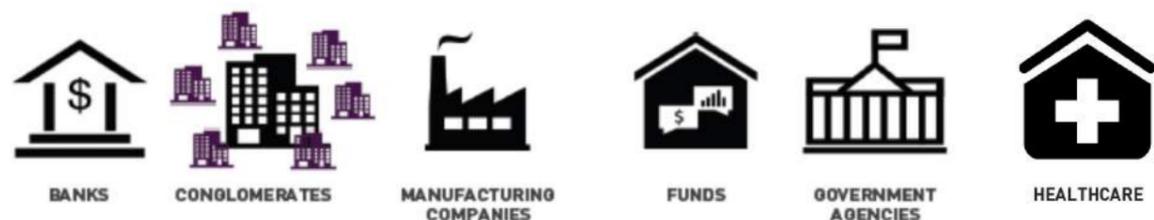123 Paseo de Roxas, Makati City
Philippines 1229

ASIAN
INSTITUTE OF
MANAGEMENT

MASTER OF SCIENCE IN DATA SCIENCE

The Asian Institute of Management's **Master of Science in Data Science** (MSDS) is a pioneering program designed from the practitioner's point of view.

Crafted by experienced scientists and international practitioners, the AIM MSDS curriculum is academically rigorous and concentrates on the techniques, models, and technologies used in the field of advanced analytics.

In this era of big data and digitization, the AIM MSDS program is intended to meet the demands and requirements of various global institutions and sectors. Its graduates will be capable of formulating the right questions and identifying the correct, innovative, and data-driven approaches to address highly diverse issues.

BANKS CONGLOMERATES MANUFACTURING COMPANIES FUNDS GOVERNMENT AGENCIES HEALTHCARE

MSDS students will have access to a world-class computing facility housed at AIM. The facility is part of the Institute's Analytics, Computing, and Complex Systems (ACCeSs) lab, which is AIM's interface with industry and government projects as well as world-class research, to further push the boundaries of Data Science and Complex Systems Science.

THE CURRICULUM

The MSDS is structured to guarantee that its graduates will acquire the proper fusion of hard and soft skills required of future data-driven leaders and thinkers.

First Term	Second Term	Third Term	Fourth Term
Programming for Data Science	Applied Computational Statistics	Big Data & Cloud Computing	Network Science
Mathematics for Data Science	Data Mining & Wrangling	Deep Learning	Data Science Elective
Intro to Data Science and the Fundamentals of Data Privacy	Machine Learning	Data Science Elective	Capstone Project
Data Visualization and Storytelling	Management Communications	Digital Marketing and Analytics II	Negotiating Change
Design Thinking	Managerial Accounting	Finance	Operations
Human Behavior in Organizations	Digital Marketing and Analytics I	Project Management	Strategic Management
	Economics for Business	Managing for Sustainable Development Impact	Innovation
	Econometrics		

PROGRAM STRUCTURE

14 MONTHS full time program

10 CORE DATA SCIENCE MODULES

2 ELECTIVES

4 TERMS

15 BUSINESS & MANAGEMENT MODULES

1 CAPSTONE PROJECT to work with real world problems

ADMISSION REQUIREMENTS

- Undergraduate degree with minimum course requirements or 2 years' work experience
- Completely filled out online application
- Updated Curriculum Vitae
- AIM Data Science Qualifying Exam, GMAT, or GRE Score Report
- Transcript of Academic Records
- Professional Recommendation (if self-employed, a Certificate of Business Registration is required)
- Valid government-issued ID or ID page of passport for non-Filipino applicants

MSDS is open to two kinds of candidates:

Fresh Graduates

Course requirements:

- ☐ Linear Algebra;
- ☐ Basic Calculus; and
- ☐ At least one of the following: computer programming, probability and statistics, econometrics, computational physics, applied mathematics, or artificial intelligence

With Work Experience

At least one of the following:

- ☐ At least two years of technical work experience, preferably in data analysis and/or data/computer engineering
- ☐ At least two years of work experience with Python, C/C++, SAS, Matlab, and other business intelligence and analytics tools

APPLICATION

Classes start on 4 March 2019.

Visit **msdsonlineadmissions.aim.edu** to fill out the online application form.

The Asian Institute of Management is a pioneering management school with an immersive, supportive, and practitioner-oriented culture that develops managers, entrepreneurs, and leaders who deliver meaningful growth to Asian businesses and societies.

Founded in 1968 by the Harvard Business School, along with leading academic institutions in the Philippines and prominent business leaders, the Asian Institute of Management is the first business school in Southeast Asian to earn accreditation from the Association to Advance Collegiate Schools of Business (AACSB).

Now celebrating its 50th year, the Institute continues to provide real Asian impact through its 43,000-strong alumni who lead, inspire, and transform.

AACSB ACCREDITED

aim.edu/msds

✉ msds@aim.edu

☎ +63.2.892.4011 ext. 3004

LEAD MENTORS

AIM is known for its practitioner-oriented approach and has therefore recruited the best domain experts in the region as mentors.

Christopher P. Monterola, PhD

is a Professor at the Asian Institute of Management. He heads the Institute's School of Innovation, Technology, and Entrepreneurship and is also the Executive Managing Director of the Analytics, Computing, and Complex Systems (ACCeSs) Laboratory at AIM.

Chris has published over 100 peer-reviewed articles in the field of Computational and Statistical Physics, Neural Networks, Predictive Analytics, Complex Systems, and Machine Learning. He has also led and managed multimillion-dollar research projects in both the public and private sectors in the Philippines and abroad.

Prior to joining AIM, Chris was a Senior Scientist and the founding head of the Complex Systems group at the Computing Science Department of the Institute of High Performance Computing, A*STAR, Singapore. He was simultaneously Adjunct Senior Research Fellow at the Complexity Institute, NTU, Singapore.

Chris has also taught at the University of the Philippines-Diliman and was a postdoctoral fellow at the Max Planck Institute for the Physics of Complex Systems in Dresden, Germany.

Erika Fille T. Legara, PhD

is an Associate Professor at the Asian Institute of Management. She is the Academic Program Director of the Institute's Master of Science in Data Science, the first data science graduate program in the Philippines.

Erika specializes in data-driven analytics and modeling, computational social science, network science, and agent-based modelling. Her current research is geared towards understanding complex systems through the data science lens and determining the mechanisms that drive and control them — from cities and societies, to financial and economic systems, to business institutions.

Erika obtained her PhD in Physics from the University of the Philippines-Diliman, garnering the Most Outstanding Graduate Student Award and the Edgardo Gomez Excellence in Dissertation Award in 2011.

Prior to joining AIM, Erika was a scientist at innovation think tank A*STAR, Singapore. At A*STAR, she was involved in multiple projects with various government agencies and industries, including multinational companies, either as a principal investigator, co-principal investigator, or research scientist.