

STUDY IN ONE OF THE MOST VIBRANT CITY IN THE WORLD

INTRODUCTION

Data science (DS) is concerned with the extraction of useful knowledge from data sets. It is closely related to the fields of computer science, mathematics, and statistics. It is a relatively new term for a broad set of skills spanning the more established fields of machine learning, data mining, databases, and visualization, along with their applications in various fields. In 2012, Harvard Business Review called the data science “The Sexiest Job of the 21st Century.”

Artificial Intelligence (AI) is the broad field conceived in 1956 as the automation or simulation of human intelligence. AI has two primary "levels". The first level, "narrow AI", concerns perception, statistical inference, and actuation, drawing on data science, sensors, and robotics. The second level, sometimes called "artificial general intelligence (AGI)", is concerned with more complex or flexible reasoning and decision making in less constrained domains.

The AIT Masters in DS & AI was designed in partnership with the Erasmus+ DS&AI consortium, a group of 15 European and Asian organizations with the mission of bringing European-standard advanced education to Asia. At AIT, we will prepare you to understand and execute projects using state of the art technology at both levels.

CONTACT

Ms. Pham Thi Thanh Thuy

National Coordinator of PMDS

Professional Master in Data Science and Artificial Intelligence

Asian Institute of Technology in Vietnam

6th Floor, FCC Building, 45 Dinh Tien Hoang,

Ben Nghe Ward, District I, Ho Chi Minh City

Email: pthuy@aitcv.ac.vn; Cell phone: +84 983 437 728



AIT
Asian Institute of Technology



GLOBALIZING YOUTH
REDEFINING TECHNOLOGY

ADMISSION REQUIREMENTS

To be eligible for admission to AIT Professional Master's, an applicant must:

1. Hold a Bachelor degree (from a four-year program), or its equivalent, in a relevant field of study.
2. Have above average undergraduate grades.
3. Have good command of English.
4. At least three-year working experience.

English Requirements prior to joining AITVN and AIT for Master's Program:

TABLE OF EQUIVALENCY IN ENGLISH PROFICIENCY TESTS

(Writing Band Section Only)

IELTS	AIT-EET	TOEFL Paper (Writing Band)	TOEFL CBT (Writing band)	TOEFL IBT (Writing Band)	CEFR
4.5	4.5	475 (49-51)	152 (17-19)	50 (12-13)	B2
5	5	500 (52-55)	173 (20-22)	60 (14-17)	B2
5.5	5.5	525 (56-58)	196 (23-24)	70 (18-20)	B2
6	6	550 (59-61)	213 (25-26)	80 (21-23)	B2

- » English test will be conducted by AIT Language Center (through AITVN) upon arrival.
- » AIT Entrance English requirement is 6.0. Conditional offers will be given to those with 5.0 and 5.5 on the condition that students continue to attend English classes and achieve required 6.0 or above before enrolling for thesis credits.

Selection

The selection to the program will be based on several criteria such as experience, accomplishments and level of responsibility of the applicant. In each group admitted, the School will seek a balanced mix of industries and specialist experience. The selection procedure emphasizes a dialogue with each applicant. The selected applicants will be informed of admission in July of the year.

Enrollment schedule

Application and Interview: From November, 2020

English Entry Test: Every Tuesday

Orientation and Start of Class: 18 December, 2020

TARGET STUDENTS

The program is designed for working professionals with a background in ICT who would like to extend their skillset to encompass data science. The program is initially designed for the Vietnamese professional market, but we will explore opportunities in countries such as Nepal, Myanmar, Thailand, Sri Lanka, India, Pakistan, China, Indonesia, and Malaysia.

PREFERRED BACKGROUND

- » To study DS&AI, students should come from one of the following backgrounds. Computer Science/Computer Engineering/ICT.
- » Engineering background with work experience, mathematical skills, and programming skills.
- » Diverse backgrounds such as business, finance, or other non-engineering fields. Candidates must take a foundation course in calculus, discrete mathematics, linear algebra, and basic computer programming.



Assoc. Prof. Dr. Chutiporn Anutariya
Associate Dean of SET

FoS: Computer Science and Information Management

Research Interests:

Learning Technologies and Massive Open Online Course (MOOCs), Database and Information Systems, Knowledge Representation and Knowledge Management, Open Data and Open Government Data, Semantic and Linked Data Technologies, Ontologies, Web and Mobile Technologies.



Prof. Matthew N. Dailey
Department Head ICT

FoS: Computer Science and Information Management

Research Interests:

Machine vision and learning, especially as applied to mobile robot perception and navigation, Robotics and intelligent systems; Combining statistical learning theory with computer vision and integrating the resulting technology into autonomous robot sensory and control systems; A diverse set of potential applications, including landmine removal, security systems, agriculture, and mobility or health care for the elderly.



Assoc. Prof. Dr. Vatcharaporn Esichaikul

FoS: Computer Science and Information Management

Research Interests:

Electronic Commerce/Electronic Business; Web-based Information Systems; Hypermedia; Data Warehousing/Data Mining Teaching Interests Management Support Systems; Information Systems Management; Electronic Commerce/Electronic Business; Strategic Information System; Human-Computer Interaction.



Dr. Mongkol Ekpanyapong
Department Head ISE

FoS: Microelectronics and Embedded Systems

Research Interests:

Physical VLSI Design, Computer Architecture, VLSI Design, and Compiler

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PROGRAM STRUCTURE

Master in DS&AI is of 30 credits which includes 24 course credits and 6 project credits. The program comprises of three semesters:

Semester	Period	Course
First semester	December 2020 to April 2021	Core and elective courses
Second semester	Late May to September 2021	Core and elective course
Third semester	October to November 2021	Individual project with industry
Graduation	December 2021	Project defense and graduation ceremony at AIT.

Teaching Schedule

- » The program is conducted during non-working hours (weekends and evenings).
- » Language of Instruction: English

COURSE STRUCTURE

Core Courses

- » Data Modeling and Management
- » Machine Learning
- » Business Intelligence and Analytics
- » Computer Programming for Data Science
- » Mathematic Foundation for Data Science

Elective Courses (Choose two)

- » Computer Vision
- » HCI and Information Visualization
- » Recent Trends in Machine Learning
- » Multi-criteria Optimization and Decision Analysis (MODA)
- » Software Development and Project Management (SDPM)