Overview of the School of Information Technology

As IT shapes the future of global development, Mapúa's School of Information Technology (SOIT) prepares you to be tech-forward. With programs accredited by ABET's Computing Accreditation Commission, the SOIT carries Mapúa's standard of achievement as the Philippines' premier technological school.

SOIT's curriculum, crafted by industry experts, emphasizes mastering the latest tools and languages in IT. Our courses will develop your analytical mind, tackling real-world challenges through global industry applications.

Mapúa is a recognized Center of Excellence for IT education. We ensure you graduate prepared for any field in information technology. Join the university's legacy of high-caliber professionals today and become an innovator in tech!

About Mapúa University

Founded in 1925 by Don Tomas Mapúa, an architecture graduate of Cornell University in the United States and the first registered architect of the Philippines, Mapúa University is the Philippines' premier engineering and technological school.

Mapúa is a topnotch, globally recognized University. In 2022, it has realized its vision of becoming one of the best universities in the world, placing 1501+ in the Times Higher Education (THE) World University Rankings 2023.

Mapúa has been recognized as a top 100 university in Southeast Asia, placing in the Quacquarelli Symonds (QS) Asia University Rankings for the fifth straight year in 2022. In 2020, it has been named as a 4-Star institution under the QS Intelligence Unit (QSIU) QS Stars Rating System, coming from 3 Stars in 2017. The University garnered high ratings under eight performance categories: 5 QS Stars rating under Employability, Facilities, and Social Responsibility categories; 4 QS Stars rating under Teaching and Inclusiveness categories; 4 QS Stars rating under the Program Strength category for its Bachelor of Science in Computer Science program; and 3 QS Stars rating under Internationalization and Academic Development categories.

The University unceasingly fosters its tradition of excellence in engineering, sciences, architecture and design, information technology, media studies, liberal arts and education, business, and health sciences.

Mapúa's undergraduate programs are recognized by various local and international accreditation bodies. It is the first school in Southeast Asia to obtain accreditation from the United States-based ABET (www.abet.org). To date, the University offers 11 engineering programs accredited by the Engineering Accreditation Commission of ABET, namely, Biological Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Environmental and Sanitary Engineering, Industrial Engineering, Manufacturing Engineering, Materials Science and Engineering, and Mechanical Engineering. It also offers 3 computing programs accredited by the Computing Accreditation Commission of ABET, namely, Computer Science, Information Systems, and Information Technology.

It also has the most number of engineering programs recognized as Centers of Excellence by the Philippines' Commission on Higher Education (CHED): Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Environmental and Sanitary Engineering, and Mechanical Engineering. Mapúa is also a named Center of Excellence for Information Technology Education with Computer Science, Information Systems, and Information Technology as program offerings in the field.

Championing sustainable engineering and innovations, Mapúa advocates for environment protection and preservation. Mapúa was granted an ISO certification on environmental management systems (ISO 14001:2015), testifying to its dedication in reducing its carbon footprint, and has upgraded its ISO certification on quality management systems (ISO 9001:2008 to 9001:2015), demonstrating its processes and management systems' adherence to international standards. For five straight years, Mapúa has been included in the THE Impact Rankings, a global performance table that evaluates universities based on their alignment with the United Nations' Sustainable Development Goals, since its inception in 2019.

Mapúa programs are powered by cutting-edge 21st century innovations for teaching and learning. Through the Cardinal EDGE (Education in a Digital and Global Environment), Mapúa provides a virtual classroom that can deliver real-time video conferencing across 100 classes involving 2,300 students in a single period. It launched Digital Day, initiative to continuously deliver classes in the event of sudden face-to-face class suspensions due to unforeseen situations such as calamities and threats and Digital Rush, its online

undergraduate classes scheduled from 7 a.m. to 9 a.m. and from 7 p.m. to 9 p.m., for its students to avoid the traffic rush hours.

The University also established Mapúa ÚOx or Ubiquitous Online Experience to offer asynchronous fully online graduate and undergraduate programs that allow students to learn at their own pace and space. It houses a total of 9 fully online master's degree programs in engineering and IT: Master of Engineering (MEP) programs in Computer Engineering, Electrical Engineering, Electronics Engineering, and Industrial Engineering; Master of Science (MS) programs in Computer Engineering, Electrical Engineering, Electronics Engineering, and Mechanical Engineering programs; and Master in Information Technology (MIT). Mapúa is the first to offer CHED-approved fully online bachelor's degree programs in engineering and information technology in the country, namely, Computer Engineering, Electrical Engineering, Electronics Engineering, Industrial Engineering, Computer Science, and Information Technology.

The University ensures its graduates are of high caliber, ready to take lead roles in the global arena. To date, it has produced a total of 400 board topnotchers across 11 of Professional Regulation Commission (PRC)-administered licensure examinations since 2000. Its students are also prepared for the world of practice through their exposure to international programs, such as, international on-the-job trainings, international plant visits, summer school, English camp, study abroad program, and dual-degree programs. Mapúa also exposes them to research, development, and innovation (RDI) initiatives as their training ground to become future enablers of state-of-the-art solutions to problems of industries and communities.

Want to learn more? **Click here to inquire**!

Timeline

1925

- Don Tomas Mapúa, the Philippines' first registered architect, founded Mapúa Institute of Technology on January 25, with Architecture and Civil Engineering as its initial programs.

1926

- The Philippine Government recognized Mapúa as a legitimate learning institution.

1928

- Mapúa opened its high school department in Doroteo Jose Street, Manila.

1929

- Mapúa had its first licensed civil engineers with an average passing rate of 92%.

1930

- Mapúa Civil Engineering graduates topped the board examinations, a preview of Mapúa's future as a premier engineering and technological school in the Philippines. • Mapúa joined the National Collegiate Athletics Association (NCAA).

1940

- Mapúa offered Electrical Engineering and Mechanical Engineering. It was the first private institution in the Philippines to offer these programs.

1941

- Mapúa had its first high school graduates.

1949

- The Mapúa Cardinals won their first NCAA basketball championship.

1960

- From 75 students and 15 college instructors in 1925, Mapúa grew to 15,713 students and 336 instructors.
- Architecture and Planning students dominated the top 14 places in the architectural board examination.

1963

- Mapúa became the first educational institution in Southeast Asia to acquire an electronic digital computer – the IBM 650.

1967

- Oscar Mapúa Sr. assumed office as the second president of Mapúa.
- Mapúa started using computers for its administrative and management operations.

1968

- Mapúa offered engineering testing services.

1977

- Mapúa graduates consistently ranked number one in the board examinations and surpassed the national passing percentage for Civil Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, and Mining Engineering.

1986

- Mapúa instituted the Center for Continuing Education and Special Competencies (CCESC), providing both engineering and IT trainings and certifications.

1989

- Mapúa offered Master of Science in Chemistry, its first graduate program.

1996

- Mapúa published its first two SCOPUS-indexed papers, reflecting its ability to produce papers of higher scientific quality.

1997

- Mapúa established the Office of Social Orientation and Community Involvement Program (SOCIP) to deliver community extension services for the welfare of people and planet.

1999

- The Yuchengco Group of Companies, headed by Ambassador Alfonso T. Yuchengco, took over the ownership of Mapúa.

2000

- Dr. Reynaldo B. Vea became Mapúa's third president.

2002

- Mapúa pioneered the Quarter System or Quarterm in the Philippines.
- Mapúa opened its extension campus in Makati, which housed the School of Information Technology and the E.T. Yuchengco School of Business and Management.

2003

- Mapúa was granted full autonomous status by the Commission on Higher Education (CHED) for its high-quality education.
- Mapúa started offering consultancy services through Mapúa TechServ.

2004

- Mapúa Cheerping Cardinals became NCAA's first cheerleading competition champion.

2005

- Mapúa offered its first two doctorate degrees, the Doctor of Philosophy in Chemistry and Doctor of Philosophy in Environmental Engineering.

2006

- Mapúa was the first Philippine institution to adopt the Outcomes-Based Education (OBE).

- Mapúa opened the Malayan High School of Science, its wholly owned science high school in Pandacan, Manila.

- Mapúa founded Malayan Colleges Laguna, carrying its renowned topnotch education in engineering, maritime, and technological programs in Southern Luzon.

2008

- Mapúa offered Bachelor of Science in Biological Engineering, the first in the Philippines.

2009

- Mapúa's Civil Engineering program was granted Level IV accreditation by the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA). This demonstrates its prestige and authority as a very high academic program in the country.

2010

- Mapúa became the first school in Southeast Asia to receive accreditation from the Engineering Accreditation Commission of ABET (ABET-EAC) for its Computer Engineering, Electrical Engineering, and Electronics Engineering programs. This international accreditation provides assurance that these programs meet the quality standards of the professions for which they prepare graduates.

- Mapúa started offering international academic programs: international on-the-job (OJT) trainings, international plant visits, and student exchange. Industrial Engineering students have been sent to Singapore for Mapúa's first international OJT.

2011

- ABET-EAC granted accreditation to five more Mapúa engineering programs: Chemical Engineering, Civil Engineering, Environmental and Sanitary Engineering,

Industrial Engineering, and Mechanical Engineering. The Computing Accreditation Commission of ABET (ABET-CAC) also granted accreditation to two of Mapúa's computing programs: Computer Science and Information Technology.

- Two students taking up MS Environmental Engineering and BS Environmental and Sanitary Engineering went to Chung Yuan Christian University in Taiwan for Mapúa's first international research internship.

2012

- Mapúa started its patenting services.

- Industrial Engineering students went to Taiwan for Mapúa's first international plant visit.

2014

- Mapúa received full accreditation from the Philippine Technological Council – Accreditation and Certification Board for Engineering and Technology (PTC-ACBET) for its Civil Engineering, Electrical Engineering, Electronics Engineering, and Industrial Engineering programs. PTC is the umbrella organization of 13 professional engineering organizations in the country. PTC is a provisional signatory member of the Washington Accord.

- Mapúa recorded six first placers in licensure examinations for chemical engineers, civil engineers, electrical engineers, mechanical engineers, sanitary engineers, and geologists.

2015

- Mapúa opened the Yuchengco Innovation Center (YIC) to actively participate in the global conduct of research.

2016

- Four more programs of Mapúa were granted PTC-ACBET accreditation: Chemical Engineering, Computer Engineering, Mechanical Engineering, and Environmental and Sanitary Engineering programs. Mapúa now has eight engineering programs with full accreditation from the PTC-ACBET.

- Mapúa's Computer Science, Information Systems, and Information Technology programs received accreditation from the Philippine Computer Society Information and Computing Accreditation Board (PICAB). PICAB is a provisional signatory member of the Seoul Accord.

- CHED granted Center of Excellence (COE) status to eight of Mapúa's undergraduate programs: Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Environmental and Sanitary Engineering, Information Technology, and Mechanical Engineering. Mapúa currently has the most number of engineering programs with COE status.

- Mapúa opened its Senior High School, supporting the country's implementation of the K to 12 system of basic education.

- Mapúa's Team Aguila ranked 2nd among 35 competitors in the Prototype Gasoline Category on the seventh year of Shell Eco-Marathon (SEM) Asia. The annual energy efficiency competition challenges students from different colleges and universities from 17 participating countries across Asia and Australia to build a car designed to run the longest distance with the least amount of fuel.

2017

- On May 18, CHED granted university status to Mapúa. Mapúa Institute of Technology became Mapúa University.

- Helen Yuchengco Dee assumed office as the new chairperson of Mapúa University Board of Trustees.

- Mapúa became the institution to have the most number of ABET-accredited programs in a single campus in the country, with 11 ABET-EAC-accredited engineering programs: Biological Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Environmental and Sanitary Engineering, Industrial Engineering, Manufacturing Engineering, Materials Science and Engineering, and Mechanical Engineering; and three ABET-CAC-accredited computing programs: Computer Science, Information Systems, and Information Technology.

- Mapúa was awarded an overall rating of three stars for excellence by Quacquarelli Symonds (QS). The University received a five-star rating for three major categories: employability, social responsibility, and facilities. It has also earned four stars in inclusiveness and teaching categories.

- Mapúa had its first application for patent in the University's Universal Structural Health Evaluation and Recording System (USHER).

- Mapúa moved to transform the university into a Digital, Research-Driven, Outcomes-Based, and International Domain (D.R.O.I.D.).

- Mapúa established Digital Days, delivering simultaneous online lectures to about 2,300 students in about 100 classes in a single timeslot.

- Mapúa launched Digital Academics, its online education platform, with the initial offering of fully online Master of Engineering in Industrial Engineering program, the Philippines' first fully online graduate program in engineering.

2018

- Mapúa University entered the list of QS Asia Top 500 Universities, earning a spot in Rank 401-450.

- Mapúa implemented Digital Rush, a set of fully online courses offered to undergraduate students during the morning and evening rush hours. This enables students to avoid traffic.

- Mapúa launched the Master in Business Analytics (MAN) program, the Philippines' first graduate program in business analytics.

- Mapúa became the first university in the Philippines to be granted an ISO certification on environmental management systems (ISO 14001:2015) by TÜV-SÜD. Mapúa also upgraded its ISO certification on quality management systems, from 9001:2008 to 9001:2015.

- Mapúa University opened its subsidiary school in Davao City, the Malayan Colleges Mindanao, offering programs in engineering and architecture, arts and sciences, and computer studies.

2019

- Mapúa University was included in the Sustainable Development Goals (SDGs) ranking in the first ever Times Higher Education (THE) University Impact Rankings. Mapúa placed 301+ for the SDG Partnership for the Goals. The 2019 THE University Impact Rankings recognized universities across the world for their social and economic impact, based on the United Nations' Sustainable Development Goals.

- Mapúa's BS Civil Engineering program was recognized by United Kingdom's Institution of Civil Engineers (ICE). Recognition is given to civil engineering degrees accredited by the Accreditation Board for Engineering and Technology, Inc. (ABET), ensuring graduates of the programs their global professional qualification.

- Mapúa University unveiled its project Universal Structural Health Evaluation and Recording System or USHER, a major breakthrough in disaster preparedness that determines the structural integrity of buildings and other infrastructure in hopes of reducing casualties in the event of a devastating earthquake.

- Mapúa kicked off its first Paskong Mapúan, an annual university-wide tradition of celebrating Christmas and of thanksgiving.

2020

- Mapúa entered the global Times Higher Education (THE) Impact Rankings 2020, ranking in five Sustainable Development Goals out of 17: SDG 6–Clean Water and Sanitation (Rank 101-200 out of 330 institutions); SDG 7–Affordable and Clean Energy (Rank 201-300 out of 361 institutions); SDG 8–Decent Work and Economic Growth (Rank 401+ out of 479 institutions); SDG 12–Responsible Consumption and Production (Rank 301+ out of 360 institutions); and SDG 17–Partnership for the Goals (Rank 601+ out of 806 institutions). Overall, Mapúa placed 601+ out of 766 participating institutions worldwide.

- Mapúa University, through its Center for Continuing Education and Special Competencies (CCESC), launched its CyberSecurity Academy to address the need for cybersecurity professionals in the face of increased threats and attacks on the digital space.

- Mapúa University introduced eSalba, a mobile and web-based application aimed at reducing disaster and health risks in the island province of Marinduque. eSalba was designed to help local government units in improving the disaster and health resiliency capabilities of 54,000 households in Marinduque.

- Mapúa University has started offering six Commission on Higher Education (CHED)-approved fully online bachelor's degree programs in Computer Engineering, Electrical Engineering, Electronics Engineering, Industrial Engineering, Computer Science, and Information Technology, with credentials equal to their regular undergraduate program counterparts.

- Mapúa University was rated a 4-Star institution under the QS Intelligence Unit's (QSIU) QS Stars Rating System. The QSIU is an independent organization

providing global intelligence in line with the higher education sectors around the world.

2021

- Mapúa has been included in the 2021 QS Asia University Rankings, ranking in the Top 501-550.

- Mapúa Makati has transferred to its new location at Pablo Ocampo Sr. Extension.

- Mapúa has entered the global Times Higher Education (THE) University Impact Rankings for second year straight, increasing its significance by ranking in six of the 17 SDG categories (from five SDGs in 2020): SDG 3 – Good Health and Well-being (Rank 601- 800); SDG 6 – Clean Water and Sanitation (Rank 301-400); SDG 7 – Affordable and Clean Energy (Rank 401+); SDG 8 – Decent Work and Economic Growth (Rank 601+); SDG 12 – Responsible Consumption and Production (Rank 301-400); and SDG 17 – Partnerships for the Goals (Rank 601-800). It placed 801-1000 out of 1,115 participating universities from 94 countries.

2022

- Mapúa partnered with Arizona State University, through Cintana Education, as it launches its programs in business and health sciences.

- Mapúa improves to Rank 601-800 in the THE Impact Rankings 2022, its third straight appearance in the rankings.

- Mapúa realized its vision of becoming one of the best universities in the world, placing 1501+ in the THE World University Rankings 2023. It also ranked in three subject areas—Computer Science (801+), Engineering (1001+), and Physical Sciences (1001+).

- Mapúa emerged as a top 100 Southeast Asian university, marking its fifth straight appearance in the QS Asia University Rankings.

- In partnership with the Fintech Alliance Philippines and powered by the Cambridge Centre for Alternative Finance at the University of Cambridge Judge Business School, Mapúa launched its Fintech and Regulatory Innovation (FTRI) Program.

- Mapúa ÚOx won the Gold Award for Digital Readiness from the prestigious Wharton-QS Reimagine Education Awards 2022, giving the Philippines its first top-category award in the global competition.

2023

- On its 98th founding anniversary, Mapúa commences its centennial celebration by unveiling the logo and theme, "Always Building the Future."

- Mapúa launches its undergraduate program on Energy Engineering, the first of its kind in the Philippines.

- Mapúa has produced its 400th topnotcher in 11 of Professional Regulation Commission-administered licensure examinations since 2000.

- Mapúa places in the THE Impact Rankings for the fourth straight year, landing in the 801-100 bracket.

- Mapúa debuts in the THE Asia University Rankings, placing in the 601+ bracket and joining three other Philippine universities in the rankings.

2024

- Mapúa, for the second year in a row, is recognized by the THE World University Rankings as one of the best schools in the world, placing 1501+, and joining four other Philippine universities. It also secured positions in three subject areas, clinching the top spot in the country for Physical Sciences (Rank 801-1000) and sharing the top spot in Computer Science (Rank 801-1000) and Engineering (Rank 1001+) with other esteemed local universities.

- Mapú expanded its School of Health Sciences in collaboration with Arizona State University with the launch of two new programs: BS Physical Therapy and BS Pharmacy. Strengthening its commitment to healthcare education, the university has also established its School of Medicine, further advancing its role in shaping future medical and health professionals.

- Mapúa University, Mapúa Malayan Colleges Laguna, and Mapúa Malayan Colleges Mindanao became the first school system in the country to receive certifications from Quality Matters (QM). QM is an internationally recognized organization that evaluates and awards innovative, top-tier online courses from institutions around the globe, ensuring they meet the demands of today's digital learning environment.

2025

- Mapúa marks a century of shaping future leaders, innovators, and changemakers. As it celebrates this milestone, the university reaffirms its commitment to academic excellence, cutting-edge research, and global competitiveness.

- For the third consecutive year, Mapúa is recognized in the Times Higher Education (THE) World University Rankings, placing 1501+ globally alongside four other top Philippine universities.

- Mapúa continues to lead in specialized fields, securing the highest rank in the THE-WUR by Subject among Philippine universities in Physical Sciences (Rank 801-1000), Computer Science (Rank 801-1000) and Engineering (Rank 1001-1250).

About CSS181-3 Artificial Intelligence 3

CSS181-3, titled "Artificial Intelligence in Computer Science," is a course offered at Mapúa University as part of the Bachelor of Science in Computer Science program. This course delves into the principles and applications of artificial intelligence (AI), covering topics such as machine learning, intelligent systems, and data mining. It is designed to equip students with the knowledge and skills necessary to design and implement AI-driven solutions.

According to the curriculum, the course is typically taken in the later years of the program, building upon foundational courses like Data Structures and Algorithms, Discrete Structures, and Software Engineering. Students engage in both theoretical learning and practical applications, often involving programming assignments and projects that utilize AI techniques.

For detailed information about the course structure, prerequisites, and specific content, it is advisable to consult the official Mapúa University curriculum or contact the School of Information Technology directly.