



澳門科技大學
MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

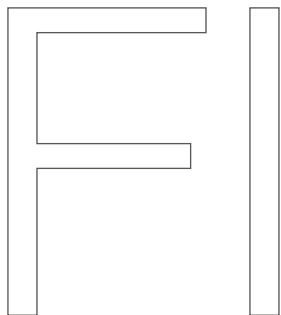
資訊科技學院

FACULTY OF INFORMATION
TECHNOLOGY



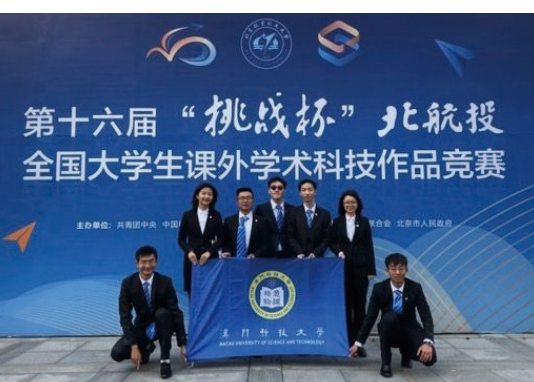
資訊科技學院

Faculty of Information Technology



澳門科技大學資訊科技學院創建於 2000 年，是大學最早的四個學院之一，擁有從學士、碩士到博士的完整人才培養體系。目前理學學士學位課程設有：計算機科學、電子與信息工程和軟件工程三個專業；理學碩士（資訊科技）學位課程設有：計算機與資訊系統、通訊工程和太空資訊技術三個專業，以及應用數學與數據科學碩士課程；而理學博士學位課程設有：計算機技術及其應用、電子資訊科技和太空資訊技術三個專業，先進網絡博士學位課程，以及人工智能博士學位課程。歷年來，學院已培養了近 1226 名理學學士，356 名理學碩士，以及 94 名理學博士。

2020 年，澳門科技大學理學學士學位課程的計算機科學專業，在泰晤士高等教育 (Times Higher Education) 發佈的 2021 年世界大學學科排行榜中，位列世界 101-125 區間；以及在上海軟科於 2020 年 06 月 29 日發佈 2020“軟科世界一流學科排名” (ShanghaiRanking's Global Ranking of Academic Subjects) 中，位列世界 151-

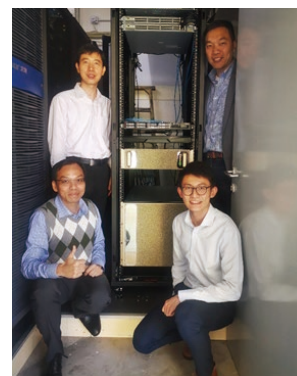


▲ 學生在第十六屆“挑戰杯”獲得全國二等獎
Students won the second prize of the 16th “TIAO ZHAN BEI”

資訊科技學院專利牆



▲ FI 學生代表科大參加第十四屆中國研究生電子設計競賽奪得全國一等獎
FI students represented M.U.S.T. to participate the 14th China Graduate Electronics Design Contest (CGEDC) and won the 1st class award



▲ 打造新一代人工智能超算平台
Create a new generation of artificial intelligence super-computer platform

200 區間，此次排名的對象為全球 4000 餘所大學。

近年來，資訊科技學院的研究取得長足進步。2018 / 2019 學年，學院的研究經費為五千七百四十萬澳門元 (56 個項目)，經費來源包括：澳門特別行政區科學技術發展基金、國家自然科學基金、澳門高等教育基金等。科睿唯安 (原湯森路透) 於 2019 年 05 月 09 日公佈“基本科學指標資料庫” (Essential Science Indicators, 簡稱 ESI) 的資料顯示，澳門科技大學的工程學首次進入相關學科領域全球高校及科研機構排名前 1%。學院的科研成果為此做出了重要貢獻。為了進一步推動研究項目的開展，學院還申請獲得七百多萬澳門元的經費，並於 2019 年建立了澳門最先進的 GPU 族服務器。

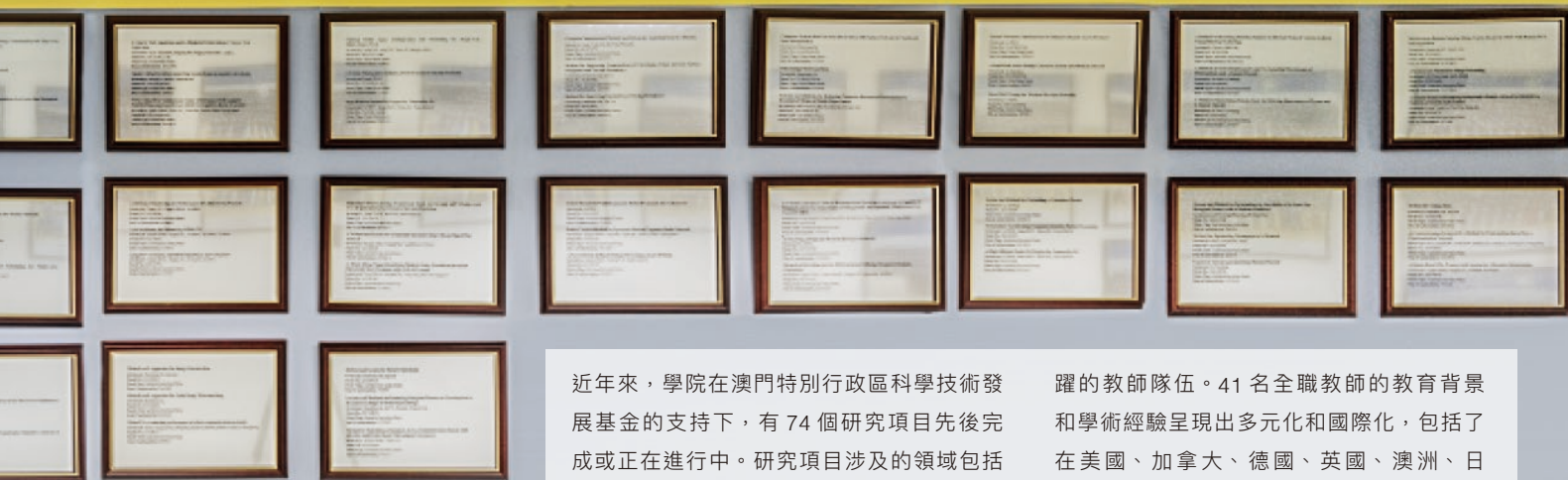
學院每年的畢業生到海內外繼續升學率逐年增加。2019 年約有 70% 的應屆學士學位課程畢業生於美國、英國、澳洲、香港、日本及澳門本地升讀研究生課程。我們很多準畢業生更於畢業前或於畢業不久就獲得公司聘

請工作，另有一些畢業生創立自己的公司，並且部分公司在澳門、香港或中國內地蓬勃發展。

每年我們的學生積極參加國內外各項比賽，不時贏得獎項。例如，我們的學生在 2019 年“華為杯”第十六屆中國研究生數學建模競賽中獲得全國一等獎、第十六屆“挑戰杯”獲得全國二等獎以及在第五屆“互聯網+”大學生創新創業大賽獲得全國銀獎等。

此外，學院於 2017 年建立了雲系統支持學院的教學工作。除了 5 個教學實驗室 (計算機網絡教學實驗室、信號處理教學實驗室、通訊教學實驗室等)，學院還建立了澳門智慧城市研究院以及 7 個科研實驗室 (機器學習與數據分析，計算機圖形圖像實驗室、空間探測實驗室、智慧城市與智能交通研究實驗室、澳門科技大學-遠光軟件人工智能聯合實驗室等)，還有新的實驗室正在建設中。這些實驗室為學生提供了良好的理論結合實際的學習環境。

Wall of Patents, Faculty of Information Technology



▲ 學生在第五屆“互聯網+”大學生創新創業大賽獲得全國銀獎
Students won the silver award of the 5th China “Internet+” College Students Innovation and Entrepreneurship Competition



▶ “華為杯”第十六屆中國研究生數學建模競賽中獲得全國一等獎證書

The certificate of the first prize of the 16th “HUAWEI CUP” China Postgraduate Mathematical Contest in Modeling

近年來，學院在澳門特別行政區科學技術發展基金的支持下，有 74 個研究項目先後完成或正在進行中。研究項目涉及的領域包括人工智能、計算機視覺、計算機圖形學、機器學習、計算機網絡與通訊、圖像與視頻處理、電力電子技術、智慧城市應用、應用數學、太空科學等。

多年來，學院人員除了在國際著名學術期刊上發表高水平論文外，亦已獲得 106 項專利，包括：澳洲創新專利、美國專利和中國發明專利的授權。與此同時，學院也與澳門的多個政府部門和公司合作開展應用性較強的研究工作，力爭將科研成果服務於社會。

除此之外，在過去的數屆澳門科學技術獎中，學院成員榮獲多項自然科學類、技術發明類和科技進步類等獎項。同時，我們亦有多位博士和碩士研究生獲得研究生科技研發獎。

隨著學院的發展，目前學院已建立起一支活

躍的教師隊伍。41 名全職教師的教育背景和學術經驗呈現出多元化和國際化，包括了在美國、加拿大、德國、英國、澳洲、日本、韓國、新加坡、香港、澳門和中國內地的多所著名大學的求學和工作經歷。教師們的專長和研究興趣涵蓋了計算機科學、軟件工程、電子工程、數學、太空科學等多個方面，涉及領域包括：人工智能、機器學習、大數據分析、知識工程、計算機視覺、網絡與通訊、操作系統、嵌入式系統、軟件工程、模式識別、圖像與視頻處理、計算機圖形學、雲計算、智慧城市、電子技術等。

學院著眼於培養資訊科技的一代新人，使他們能適應新世紀資訊科技發展的需要。學院所開設課程的主要特點是：

(一) 強調堅實的理論基礎；(二) 兼顧寬廣的知識面及與實踐的結合；(三) 引入國際知名教材，並不斷更新；(四) 注重培養學生實際應用及創新能力。

課程 Program	專業 Major	修讀年期 Duration of Study (Year)	授課語言 Medium of Instruction
理學博士 Doctor of Philosophy in Science	計算機技術及其應用 電子資訊科技 太空資訊技術	3	中 / 英 Chinese/English
先進網絡博士 Doctor of Philosophy in Advanced Networking		3	中 / 英 Chinese/English
人工智能博士 Doctor of Philosophy in Artificial Intelligence		3	中 / 英 Chinese/English
理學碩士（資訊科技） Master of Science (Information Technology)	計算機與資訊系統 通訊工程 太空資訊技術	2	中 / 英 Chinese/English
應用數學與數據科學碩士 Master of Science in Applied Mathematics and Data Science	-	2	中 / 英 Chinese/English
理學學士 Bachelor of Science	計算機科學* 電子與信息工程 軟件工程*	4	中 / 英 Chinese/English

* “計算機科學”及“軟件工程”專業範疇設有“人工智能”方向。
Major in “Computer Science” and “Software Engineering” have “Artificial Intelligence” direction.



▲ 學生在“華為杯”第十六屆中國研究生數學建模競賽中獲得全國一等獎
Students won the first prize of the 16th “HUAWEI CUP” China Postgraduate Mathematical Contest in Modeling



▲ 資訊科技學院張渡院長與一班獲獎學生合照
Professor Zhang Du, Dean of Faculty of Information Technology took photo with students who got the Scholarship and Grant Awards



▲ 周俊豪同學在 CPSCCom-2019 國際會議上獲得 IEEE 傑出論文獎
Mr. Junhao Zhou won the IEEE Outstanding Paper Award in CPSCCom-2019

The Faculty of Information Technology is one of the first four faculties established in the newly founded Macau University of Science and Technology in 2000. It offers a comprehensive suite of degrees: Bachelor of Science, Master of Science, and Doctor of Philosophy degrees. Currently, the Faculty offers three majors in the Bachelor of Science degree: (1) Computer Science, (2) Electronic and Information Engineering, and (3) Software Engineering. There are two Master's degree programs in the Faculty: Master of Science degree which includes three focus areas: (1) Computer and Information Systems, (2) Communication Engineering, and (3) Space Information Technology; and Master of Science in Applied Mathematics and Data Science. For Doctor of Philosophy in Science degree, there are three focus areas: (1) Computer Technology and Application, (2) Electronic Information Technology, and (3) Space Information Technology. In addition, the Faculty recently established two new PhD degree programs: Doctor of Philosophy in Advanced Networking degree, and Doctor of Philosophy in Artificial Intelligence degree. Over the years, 1226 BSc's, 356 MSc's, and 94 PhDs have graduated.

In 2020, the major Computer Science of the Bachelor of Science degree is ranking 101-125 at the Times Higher Education World University Rankings 2021. For the ShanghaiRanking's Global Ranking of Academic Subjects that announced on 29th June 2020, the Computer Science is ranking 151-200 of the around 4000 universities in the world.

The Faculty has made significant strides in its research programs in recent years. During the academic year 2018-2019, the Faculty's total research funding reached 57.4 million MOP for a total of 56 projects, with the funding support primarily from the Macao Science and Technology Development Fund, the National Natural Science Foundation of China, the Macao Higher Education Fund, and so forth. In the latest release of “Essential Science Indicators (ESI)” on May 9, 2019, by Clarivate Analytics (former Thomson Reuters), it is revealed that the Engineering field of M.U.S.T. has for the first time joined the rank of the top 1% among universities and research institutes across the world in the relevant area. Our research accomplishments have made significant contributions to this designation. To further accelerate the research momentum, the Faculty applied and was granted over 7 million MOP by the Macao Science and Technology Development Fund and the Macao Higher Education Bureau in 2019 to establish Macao's first NVIDIA's GPU cluster server.

The percentage of our graduates going overseas to continue their advanced studies has been steadily increasing over the years. In 2019, 70% of the BSc graduates choose to continue their postgraduate studies in US, UK (and other European countries), Australia, Japan, Hong Kong SAR, and Macao SAR. Most of our graduates have already obtained employment either before or soon after their graduation. Some of the graduates decided to have their own companies, which are flourishing in Macao, Hong Kong, or Mainland China.

Every year, our students participate in some of the top national and international competitions, and win prizes and awards. For example, our students won the first prize of the 16th “HUAWEI CUP” China Postgraduate Mathematical Contest in Modeling, the second prize of the 16th “TIAO ZHAN BEI”, and the silver award of the 5th China “Internet+” College Students Innovation and Entrepreneurship Competition.

The Faculty established a cloud system in 2017, with the help from industries, to support the teaching missions. Currently, in addition to 5 teaching laboratories (Computer Networks Laboratory, Signal Processing Laboratory, Communication Laboratory, etc.), the Faculty established Macao Institute of Smart City and 7 research laboratories (Machine Learning and Data Analytics, Advanced Computer Graphics and Imaging Laboratory, Space Exploration Laboratory, Intelligent Transport Systems Research Laboratory, M.U.S.T.-YGSOFT Artificial Intelligence Joint Laboratory, etc.). Additional new laboratories on cutting-edge research areas are being planned. Our aim is to provide students with an excellent teaching and learning environment, linking theory with practice.

In recent years, there have been a total of over 74 research projects, either completed or currently in progress, that are funded by the Macao Science and Technology Development Fund. The research areas of these projects include: artificial intelligence, computer vision, computer graphics, machine learning, computer networks and communications, image and video processing, power electronics, smart city applications, applied mathematics, and space science.

Over the years, our funded research has resulted in a significant number of journal publications (SCI and EI). It also led to an increase in the patents granted (106, including Australian Innovation Patents, US patents, and Chinese invention patents). Moreover, the Faculty is also collaborating with many departments of the Macao SAR

government, local and mainland industries and businesses in an attempt to convert our research results into practical products and services that can benefit the society and communities.

As a result of the aforementioned efforts, our faculty members won a number of awards in the categories of natural sciences, technical invention, and technological progress of the Macao Science and Technology Awards. In addition, a number of our PhD. and MSc students also received the Postgraduate Science and Technology Research and Development Award.

With the continuing development of the Faculty, we have now established an energetic and enthusiastic team of researchers and scholars. The 41 academic staffs in the Faculty have diverse and international background and experience in education, research and teaching, ranging from USA, Canada, Germany, Great Britain, Australia, Japan, Korea, Singapore, Hong Kong, Macao, and Mainland China. The expertise and research interests of the academic staff span many different areas of computer science, software engineering, electronic engineering, mathematics and space science, including: artificial intelligence, machine learning, big data analytics, knowledge engineering, computer vision, networks and communications, operating systems, embedded system, software engineering, pattern recognition, image and video processing, computer graphics, electronic technology, cloud computing, smart city, and so forth.

For our educational programs, the emphasis of the Faculty is on nurturing a new generation of leaders and practitioners in information technology and on enabling them to adapt to the needs of the rapid development of information technology in the 21st century. The features of our curricula are:

1. Emphasis on the theoretical foundations;
2. Broad view of the discipline and connection to practical issues;
3. Adopting international well-regarded curriculum, and keeping up with the continuous updates; and
4. Emphasis on cultivating students' practical and innovative abilities.

We seek to continuously improve our curricula, provide a quality learning and teaching environment, and offer help and support to nurture our students so that they can become well-prepared leaders and practitioners in the field.

查詢 Enquiries

地址 Address

澳門氹仔偉龍馬路 澳門科技大學 A 座 A206 室 / Room A206, Block A, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macao

電話 Tel

(853) 8897 2240 博士及碩士學位學位 Postgraduate Program

(853) 8897 2103 學士學位 Undergraduate Program

傳真 Fax

(853) 2882 3280

電郵 E-mail

fi@must.edu.mo

網站 Website

http://www.must.edu.mo/en/fi

