

The international programmes at the School of Management Science and Engineering, Nanjing University of Information Science and Technology (NUIST), primarily consist of two major components: Sino-foreign cooperative programme and programmes for international students. These initiatives aim to cultivate high-caliber talents with a global vision through diversified training models and a robust support system.

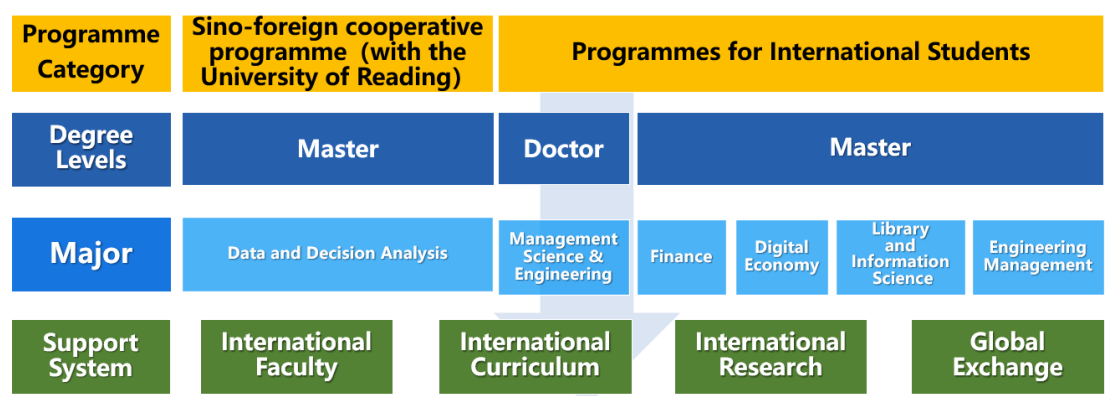


Fig 1. The framework of international programmes at the School of Management Science and Engineering

1. Joint Master’s Programme in Data and Decision Analysis, with the University of Reading

1.1 Programme Overview

The MSc in Data and Decision Analysis (DDA) is a Sino-foreign cooperative postgraduate programme jointly delivered by Nanjing University of Information Science and Technology (NUIST), China, and the University of Reading, United Kingdom. The programme was approved by the Ministry of Education of China in 2021. By combining the academic strengths and educational resources of both universities, the programme aims to develop internationally minded professionals with strong capabilities in data analysis, critical thinking, problem-solving, and evidence-based decision-making.

The curriculum integrates data analysis, statistics, decision science, business intelligence, information management, and management studies. Through coursework, case studies, practical assignments, group projects, and dissertation research, students

learn to apply analytical methods and decision-making tools to complex business, organizational, and managerial problems.

Graduates are well prepared for careers in data analysis, business intelligence, management consulting, digital transformation, financial analysis, operations management, information management, and other data-driven professional fields. The programme also provides a solid academic foundation for further doctoral study.

1.2 Duration and Training Mode

The DDA programme is a two-year, full-time postgraduate programme. Students may complete the programme through one of the following study pathways:

0+2: Students complete the entire two-year programme at Nanjing University of Information Science and Technology (NUIST). Teaching and academic support are jointly provided by NUIST and the University of Reading in accordance with the curriculum and quality assurance requirements.

1+1: Students spend one academic year at the University of Reading and the other academic year at NUIST. Depending on the approved study arrangement, students may choose to study at the University of Reading either in the first year or in the second year, while completing the remaining year at NUIST.

1.3 Academic Qualifications

Students who successfully complete all required courses and credits will receive a Certificate of Study from NUIST.

Students who meet the academic requirements of the University of Reading and successfully complete and defend their master's dissertation will be awarded a Master of Science degree in Data and Decision Analysis by the University of Reading.

The master's degree awarded by the University of Reading is eligible for official recognition by the Chinese Service Center for Scholarly Exchange under the Ministry of Education of China.

2. Programmes for International Students

2.1 Doctor degree programme: Management Science and Engineering

The PhD Programme in Management Science and Engineering at the School of Management Science and Engineering, NUIST, is dedicated to cultivating innovative

researchers and future academic leaders with a global perspective. The programme integrates management science, systems engineering, artificial intelligence, data science, operations research and decision analytics to address complex challenges in modern economic and social systems.

Students are encouraged to conduct interdisciplinary research in frontier areas such as intelligent decision-making, risk analysis and emergency management, digital governance, sustainable development, data-driven management, supply chain optimization and business analytics. Leveraging NUIST's strengths in atmospheric science, big data and artificial intelligence, the programme emphasizes the integration of advanced computational methods with management theories to develop innovative solutions for real-world problems.

Doctoral candidates receive rigorous research training under the supervision of internationally active faculty members and benefit from extensive opportunities for international collaboration, academic exchange and participation in high-impact research projects. Graduates are well prepared for careers in universities, research institutes, government agencies, and leading enterprises worldwide, contributing to scientific advancement and evidence-based management in the era of digital intelligence.

2.2 Professional master degree programmes: Finance, Digital Economy, Engineering Management, and Library and Information Science

2.2.1 Finance

The Master of Finance (MF) programme at the School of Management and Engineering, Nanjing University of Information Science and Technology, is committed to cultivating high-caliber applied financial talents with interdisciplinary perspectives and digital literacy. Leveraging the university's nationally renowned "Double First-Class" discipline of Atmospheric Science, the programme features a unique "Meteorology + Finance" cross-disciplinary orientation, focusing on cutting-edge areas such as climate finance, green finance, and risk management. The curriculum adopts a modular design, integrating artificial intelligence, financial technology, and quantitative analysis to strengthen students' digital and practical competencies. The

school has established close partnerships with internationally renowned institutions including the University of Reading and the University of Huddersfield in the UK. Our faculty team possesses extensive experience in international teaching and research, providing international students with high-quality academic support and a broad platform for career development.

2.2.2 Digital Economy

The Master's Programme in Digital Economy at NUIST aligns with the national strategy of advancing Digital China and the specific developmental demands of Jiangsu Province's economy. Leveraging the university's distinctive strengths in meteorology and environmental sciences, as well as premium platforms including the National College of Artificial Intelligence Industry and the Manufacturing Development Research Institute, the programme integrates digital economy with key sectors such as meteorology & environment, manufacturing, and finance. Centered on three research tracks—Industrial Digitalization, Data Factor Market, and Digital Economy Governance—it cultivates innovative, application-oriented and interdisciplinary talents.

Guided by the fundamental task of fostering virtue through education, the programme aims to nurture well-rounded socialist builders and successors with all-round development of morality, intelligence, physical fitness, aesthetics and labor literacy. Its overarching training objective is to develop professionals with solid theoretical foundations and research literacy in digital economy, proficient digital thinking and practical capabilities in digital economy-related businesses. Graduates will be competent for roles involving digital economy operations and management, digital industry administration, digital enterprise governance, and enterprise & industrial digital transformation. They will possess patriotism and innovative practical competence in the digital economy sector, with balanced development in morality, intellect, physical health, aesthetic taste and work ethics.

2.2.3 Engineering Management

This programme aims to cultivate high-level interdisciplinary talents who possess a solid theoretical foundation and broad professional knowledge in engineering management, and who are able to apply advanced scientific and technological methods

and modern management tools to analyze and solve practical problems in complex engineering systems, production systems, and service systems. Graduates will have the ability to conduct systematic analysis, planning, design, operation, and innovation. The programme also emphasizes developing global perspectives, cross-cultural communication skills, and teamwork spirit, enabling students to become familiar with international rules and competitive in the global arena.

Graduates are expected to work in institutions such as national meteorological departments, industrial and commercial enterprises, financial institutions, and research institutes, in roles related to information collection, data analysis, operations management, and decision support.

2.2.4 Library and Information Science

The master programme in Library and Information Studies aims to cultivate high-end international and comprehensive talents with multi-disciplinary systematic knowledge and skills in big data analysis, patent analysis, information behavior, as well as information thinking. The students will obtain the information management skills for understanding and forecasting the technological development and social change. At the same time, the data analysis skills enable students to carry out research projects independently.

Students in the programme should master systematic political and ideological theories, firmly establish a correct outlook on world and life, love the motherland, abide by laws and regulations, have good moral character, rigorous study style, be physically and mentally healthy, and have strong entrepreneur spirit and dedication. They should be familiar with the principles and policies of our Party and country, understand our national conditions, possess a global perspective, be proficient in using foreign languages, be familiar with international rules and have great international competitiveness.

In addition, the programme will develop a range of transferable skills that can be utilized in a wide variety of future careers such as research, analysis, problem solving and programming. There will also be the opportunity to improve presentation, communication and intercultural communication skills. Graduates of this programme

are expected to undertake the jobs related to information collection, analysis and management for institutions, such as national meteorological departments, industrial and commercial enterprises, financial institutions, and scientific research institutions.