申请学术要求

本科专业为工程类，获得学士学位。

中国
- 2023上海软科前100高校或世界一流大学建设高校或就读学科为一流建设学科：本科阶段加权平均分75%及以上
- 其他高校：本科阶段加权平均分80% – 85%及以上，视学校而定

英国
- 二级甲等荣誉学位或以上

北美
- GPA成绩3.0及以上（总分4.0）或
- 本科后2年GPA成绩3.2及以上

申请语言要求

- 雅思：6.5分 （各小分不低于6分）
- 托福： 90分（各小分不低于21分）

申请文件清单

- 个人陈述
- 校方出具完整盖章成绩单（中英文版）
  学士学位证书或在读证明（仅限在读学生）（中英文版）
- 英语语言成绩证书（学术类雅思、托福iBT或学术类PTE成绩）
- 两封学术推荐信
- 个人简历
- 中国大陆学生：身份证正反面复印件
  中国香港、澳门或台湾学生：护照信息页及大陆往来通行证复印件
  国际生：护照信息页复印件

费用及奖学金

人民币200,000元，按学年支付
具体奖学金政策请参照官网

项目申请指南

学院邮箱：ime@xjtlu.edu.cn
地址：江苏省苏州市太仓市陆渡街道111号

学院公众号

项目咨询群

第一学年课程

- 材料科学与制造工艺
- 领导力
- 应用研究技术和方法
- 产业经济学/商业分析
- 大数据挖掘、分析和管理/工业物联网
- 控制和传感器技术应用/系统思维和建模
- 定制工业坊 1
- 定制工业坊 2

第二学年课程

- 实习/在岗学习项目（6个月）
- 工业研究项目

多元化师资

朱雨逸 Yuyi Zhu
智能制造设备和工艺
涂层和氧化

陈伟 Wei Chen
智能传感器
及数字化技术

杨悦 Yue Yang
硬脆材料的精加工
切割 CFRP 和先进材料

Kazi Mostafa
图像处理
机器人学

罗杨 Yang Luo
制造企业的能源捕获和再利用
建立工厂、工艺和产品层面
的能源消耗模型

陈益 Yi Chen
人工智能、机器人
和自主系统

黄龙 Long Huang
基于模型的系统工程
多相流体流动与传热

郑羽帆 Yufan Zheng
调度和流程规划优化
快速成型制造

Andrew Tan
制造过程的智能技术转型
制造工艺优化

Sze-Hong Teh
非线性动力学
动态系统与控制

项目概况

智能工程科学与工业运营硕士专业（MSc IESIO）由西交利物浦大学智造生态学院开设，专业课程以制造工程为根基，探索多学科和跨学科知识。本专业由西浦创业家学院（太仓）的六个学院与行业合作伙伴共同开发，旨在培养掌握先进科技、拥有工业管理能力和组织领导能力的毕业生，为工业问题和社会挑战提出解决方案。

课程内容囊括先进制造、机器人、物联网和大数据分析等方面的前沿知识，重点关注如何应用技术解决运营问题。本专业课程的独特之处在于定制工业坊，学生可以在行业专家的指导下深入现实工业场景。此外，持续一学期的行业实习或工学结合项目，以及为期六个月的工业研究项目也是本专业重要组成部分，旨在促进理论技能的实际应用。

智能工程科学与工业运营硕士专业同时融入了管理、创业和创新教育，为学生不同发展方向或创新创业做好准备，致力于培养未来工业领域的领导者，使其不仅对最先进的工程和工业理论、技术及其应用有充分了解，同时还兼具管理、领导和创业能力，以适应现代工业不断发展的需求。

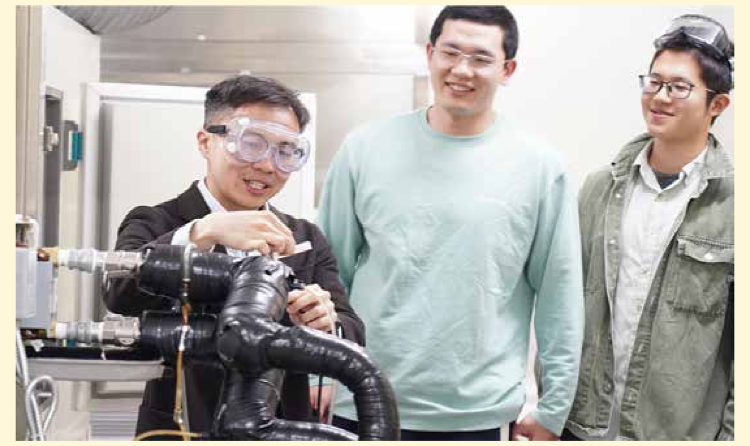
项目特色

工业嵌入式实习计划：
通过工业嵌入式行业实习计划，在真正的工业项目中进行实践学习，直接与学院的行业伙伴合作，将知识与技能应用于实际的工业场景。

管理、创业和创新知识融合：
本专业将管理、创业和创新思维创新知识以及技能进行“智能交错”，综合全面的课程将助力学生在不同的行业中脱颖而出，或为学生的创业之旅增添独特优势。

定制工业坊：
在行业专家的带领下，在定制工业坊体验实践学习。在这些工作坊中，学生直接向众多行业专家学习实际经验和知识，从而提高实践技能，并加深对行业的理解。

多学科专业合作：
智能工程科学与工业运营硕士专业课程来自西浦创业家学院（太仓）的六个学院，多学科合作保证了综合教育，旨在培养跨学科的领导者，使其能够应对现代工业的挑战和机遇。



Xi'an Jiaotong-Liverpool University 西交利物浦大学

XJTLU | SCHOOL OF INTELLIGENT MANUFACTURING ECOSYSTEM

MSC INTELLIGENT ENGINEERING SCIENCE AND INDUSTRIAL OPERATIONS

智能工程科学与工业运营硕士

西浦创业家学院（太仓）

智造生态学院

入学时间：2024年9月
全日制学制：24个月；非全日制学制：36个月
学习地点：江苏省苏州市太仓市
申请截至日期：2024年7月15日17:00

Academic Requirement

Undergraduate Background in Engineering
Full time: Bachelor Degree in Engineering discipline
Part time: Bachelor Degree in Engineering discipline

CHINA
- Top 100 of 2023 Shanghai Ranking or World-class universities or First-class disciplines (MoE, People's Republic of China): 75 per cent or above (Weighted Average Mark)
- Other universities: 80 – 85 per cent or above (Weighted Average Mark), depending on your undergraduate institution

UK
- Upper second class honours (2:1) or equivalent

NORTH AMERICA
- 3.0 Cumulative GPA (out of 4) or
- 3.2 Cumulative GPA in the final two years of your undergraduate programme

Document List

- Personal statement
- Full official academic transcripts of your studies with the University's stamps and grading system
- University degree certificates (if received) or
- Enrolment Status Letters (if you are a graduating student)
- English qualification certificate (IELTS Academic, TOEFL iBT, PTE Academic or equivalent)
- Two letters of academic reference
- A CV
- China Mainland student: copy of ID card (front and back) in one file
  China Hongkong, Macau, Taiwan student: copies of Passport (information page) and Mainland travel permit
  International student: copy of Passport (information page)

Fee and Scholarship

CNY 200,000 (Payment in academic year)
Please refer to the official university web-

Language Requirement

- IELTS: 6.5 (minimum of 6.0 in each section)
- TOEFL iBT: 90 (minimum of 21 in each section)

HOW TO APPLY

EMAIL: ime@xjtlu.edu.cn
Address: 111 Taicang Avenue, Ludu Community, Taicang City, Suzhou, Jiangsu, the People's Republic of China

Official Account *Consultation Group*

Stage 1 Modules

- Material Science and Manufacturing Processes
- Leadership
- Applied Research Techniques and Methodologies
- Industrial Economics/ Business Analytics
- Big Data Mining, Analysis, and Management or Industrial Internet of Things
- Control and Sensor Technologies Applications/ Systems Thinking And Modelling
- Bespoke Industrial Studio 1
- Bespoke Industrial Studio 2

Stage 2 Modules

- Internship/ Work-Integrated-Learning Project
- Industrial Research Project (6 months)

Diverse Faculty

朱雨逸 Yuyi Zhu
Materials characterisations; Alloy manufacturing;Process optimization

陈伟 Wei Chen
Particle physics and bulk solids handling;Advanced miner processing technology

杨悦 Yue Yang
Finish machining of hard and brittle material;Cutting of CFRP;and advanced material CFRP

Kazi Mostafa
Intelligent manufacturing devices and processes;Image processing

罗杨 Yang Luo
Energy capture and reuse within manufacturing enterprises;Real-time energy management Eco-intelligent manufacturing

陈益 Yi Chen
Artificial Intelligence;Industry 4.0;Robotics and autonomous systems

黄龙 Long Huang
Cyber Physical Systems;Model Based System Engineering;Multiphase fluid flow and heat transfer numerical modelling

郑羽帆 Yufan Zheng
Computer-aided process planning for hybrid and intelligent manufacturing system (CAPP);Additive Manufacturing

Andrew Tan
Systems thinking for manufacturing processes and supply chain; Manufacturing process optimisation

Sze-Hong Teh
Nonlinear dynamics and control of nonlinear systems

WHAT IS IESIO

The MSc in Intelligent Engineering Science & Industrial Operations (MSc IESIO), offered by the School of Intelligent Manufacturing Ecosystem, combines manufacturing engineering with a transdisciplinary approach. Developed in collaboration with six schools at XJTLU Entrepreneur College (Taicang) and key industrial partners, it aims to produce graduates who are skilled in advanced technologies, engineering management, and organisational leadership, and ready to tackle industrial and societal challenges.

The curriculum includes cutting-edge knowledge in manufacturing, robotics, the Internet of Things (IoT), and big data analysis, with a focus on applying technologies to operational problems. Unique features include the Bespoke Industrial Studios, where students engage with real-world scenarios under the guidance of industry experts.
The programme also includes an internship within the industry or a semester-long work-integrated-learning project, coupled with a six-month industrial research project in the second year, fostering practical application of skills.
MSc IESIO integrates management, entrepreneurship, and innovation, preparing students for diverse roles in industry or as entrepreneurs. This holistic programme is designed to create future leaders equipped with technical, managerial, and leadership expertise, suitable for the evolving needs of modern industries.

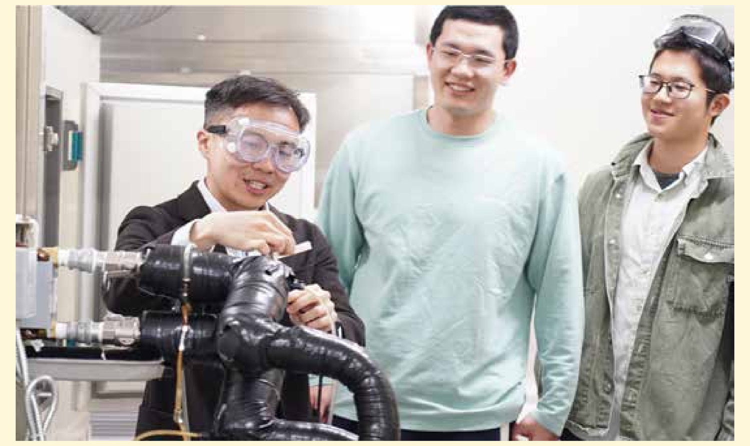
WHY CHOOSE

Industry-embedded IInternship Scheme
Gain practical experience through a unique internship that integrates real-world projects and collaboration with industry partners, and apply your knowledge and skills in actual industrial settings;

Blend of Management, Entrepreneurship, And Innovation
The programme interweaves management principles with entrepreneurial and innovative thinking. This multifaceted approach prepares you for diverse industries or entrepreneurial ventures, providing a competitive edge;

Bespoke Industrial Studios Experience
Acquire hands-on learning in the Bespoke Industrial Studios, led by industry professionals. Gain practical exposure and insights, learn from experts in the field, and enhance your skills and industry understanding;

Collaboration Across Disciplines
Benefit from collaboration among five schools and the Entrepreneurship and Enterprise Hub (EEH) at XJTLU Entrepreneur College (Taicang). This multidisciplinary cooperation ensures a comprehensive education, fostering transdisciplinary leaders ready for modern industry challenges and opportunities.



MSC INTELLIGENT ENGINEERING SCIENCE AND INDUSTRIAL OPERATIONS

智能工程科学与工业运营硕士

XJTLU ENTREPRENEUR COLLEGE (TAICANG)

School of Intelligent Manufacturing Ecosystem

Entry Date: Sept. 2024
Full-time Duration: 24 months
Part-time Duration: 36 months
Location: Taicang, Suzhou City, Jiangsu Province
Application Deadline: 5PM, 15th July 2024

MSc IESIO