

# 智能工程科学与工业运营硕士

MSC INTELLIGENT ENGINEERING SCIENCE AND INDUSTRIAL OPERATIONS

## WHAT IS IESIO 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，持续一学期的在岗学习项目，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。

本硕士项目同时融入了管理、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，使其不仅对先进的工程和工业理论、技术及其应用有充分了解，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。

## WHY CHOOSE IESIO 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。

## PART-TIME MODULE 非全日制课程结构

### 第一学年

- 大数据挖掘分析和管理/工业物联网
- 定制工业坊1
- 领导力
- 定制工业坊2

### 第二学年

- 材料科学与制造工艺
- 应用研究技术和方法
- 产业经济学/商业分析
- 控制和传感器技术应用 / 系统思维和建模

### 第三学年

- 在岗学习项目
- 工业研究项目

入学时间：2024年9月  
非全日制学制：36个月  
学费：CNY200,000（分3年支付）  
申请截止日期：2024年7月15日下午5点  
咨询电话：0512-88167111  
提交申请前咨询邮箱：pgenquiries@xjtlu.edu.cn  
提交申请后咨询邮箱：pgadmissions@xjtlu.edu.cn  
授课地点：苏州市太仓市

### 申请学术要求

本科专业为工程类，获得学士学位。

- a. 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：本科加权平均分75%及以上
  - 其他高校：本科加权平均分80%-85%及以上，视学校而定
- b. 英国：二级甲等荣誉学位或以上
- c. 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
- d. 其他地区：等同学历

### 申请语言要求

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

### 申请材料清单

- 英文个人陈述
- 校方出具完整盖章成绩单（中英文版）
- 学士学位证书（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）
- 两封英文学术推荐信（如已参加工作3年及以上，可提供一封雇主推荐信和一封学术推荐信）
- 英文个人简历
- 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

注：所有申请文件须为英文原件，学位证、成绩单原件非英文的，须提供原件及正规翻译机构（公司）提供的英文翻译件。

### 参考链接

非全日制项目官网及申请通道：

<https://www.xjtlu.edu.cn/zh/study/masters/msc-intelligent-engineering-science-and-industrial-operations-part-time>

英语语言先修课：

<https://www.xjtlu.edu.cn/zh/study/short-summer-courses-and-languages/presessional-english-programme>

国外学历学位认证教育部官网：

<https://zwfw.cscse.edu.cn/>



# 智能工程科学与工业运营硕士

MSC INTELLIGENT ENGINEERING SCIENCE AND INDUSTRIAL OPERATIONS

## WHAT IS ISESIO

The MSc in Intelligent Engineering Science & Industrial Operations (MSc ISESIO), 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 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 ISESIO integrates management, entrepreneurship, and innovation, preparing students for diverse roles in industry. 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 ISESIO

- **Industry-embedded internship 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.

## PART-TIME MODULE

### YEAR 1

- Big Data Mining, Analysis, and Management /Industrial Internet of Things
- Bespoke Industrial Studio 1
- Leadership
- Bespoke Industrial Studio 2

### YEAR 3

- Work-Integrated-Learning Project
- Industrial Research Project

### YEAR 2

- Material Science and Manufacturing Processes
- Applied Research Techniques and Methodologies
- Control and Sensor Technologies Applications /Systems Thinking and Modelling
- Industrial Economics /Business Analytics

Entry Date: September 2024

Duration: 36 months

Fee: CNY200,000 (Payment in 3 years)

Application Deadline: 5PM, 15th July 2024

Tel: 0512-88167111

Mail before submission: pgenquiries@xjtlu.edu.cn

Mail before submission: pgadmissions@xjtlu.edu.cn

Location: Taicang, Suzhou

## ACADEMIC REQUIREMENT

*Undergraduate Background in Engineering*

a. CHINA:

- Top 100 of 2023 Shanghai Ranking or World-class universities or First-class disciplines: 75 per cent or above
- Other universities: 80-85 per cent or above

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

c. NORTH AMERICA:

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

d. OTHERS: equivalent educational condition

## LANGUAGE REQUIREMENT

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

## DOCUMENT LIST

- Personal statement
- Full official academic transcripts of your studies with the University's stamps and grading system
- University degree certificates
- English qualification certificate (IELTS Academic, TOEFL iBT, PTE Academic or equivalent)
- Two letters of academic reference (If have graduated more than 3 years, you may provide 1 employer reference in place of 1 academic reference.)
- A CV
- China Mainland student: copy of your ID card (front and back) in one file; China Hongkong, Macau, Taiwan student: copies of your Passport (information page) and Mainland travel permit; International student: copy of your Passport (information page)

## REFERENCE LINK

**Official programme webpage:**

<https://www.xjtlu.edu.cn/en/study/masters/msc-intelligent-engineering-science-and-industrial-operations-part-time>

**Pre-sessional English (PSE) Course:**

<https://www.xjtlu.edu.cn/en/study/short-summer-courses-and-languages/presessional-english-programme>

