


MRES ENVIRONMENTAL SCIENCES


环境科学


硕士(研究型)


XJTU | MRES
ENVIRONMENTAL SCIENCES

 **START DATE**
September 2024

 **ATTENDANCE**
Full time

 **LOCATION**
Suzhou

 **DURATION**
Two years

 **SCHOOL**
School of Science

MODULES

YEAR 1 SEMESTER 1

Compulsory modules:

ENV401 RESEARCH PROJECT DESIGN AND MANAGEMENT

ENV403 COMMON RESEARCH ISSUES IN ENVIRONMENTAL SCIENCES

ENV407 FRONTIERS IN ENVIRONMENTAL SCIENCES

Optional Modules:

ENV405 ADVANCED STATISTICS IN ENVIRONMENTAL SCIENCES

BIO405 RESEARCH METHODS IN BIOINFORMATICS

CHE401 ADVANCED ANALYTICAL CHEMISTRY

ENV319 HUMANS AND ENVIRONMENTAL POLLUTION

ENV317 ENVIRONMENT AND SOCIETY

YEAR 1 SEMESTER 2

Compulsory modules:

ENV402 RESEARCH PROJECT (PHASE I)

YEAR 2 SEMESTERS 1 AND 2

Compulsory modules:

ENV404 RESEARCH PROJECT (PHASE II)

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

MRES ENVIRONMENTAL SCIENCES

The School of Science is home to the MRes Environmental Sciences. It aims to produce graduates specialised in different areas within the environmental sciences. Modules will cover the interdisciplinary knowledge and skills relevant to the field. The combination of these modules and a large research project will produce a coherent and comprehensive degree.

CAREERS

Graduates from this programme are well prepared to pursue a PhD at both domestic or international institutions. Other career opportunities include research scientists at research institutions, policymakers at governmental agencies, environmental educators at non-governmental organisations (NGOs) and environmental consultants in environment-related industries.

KNOWLEDGE AND SKILLS

By the time you graduate from the MRes Environmental Sciences, you will have:

- In-depth knowledge of the field of environmental sciences
- Cognitive skills required for research, such as evaluating existing studies, identifying research questions, deriving hypotheses, choosing proper research methods, and interpreting and presenting data concisely
- Advanced practical skills, such as data analysis, instrument and equipment operation, questionnaire/experimental design, and project management; and
- Communication and professional skills, such as scientific writing and presentation, career development, manuscript preparation, journal selection, peer review systems, and health and safety awareness

WHY SHOULD I STUDY MRES ENVIRONMENTAL SCIENCES AT XJTU?

- Gain in-depth interdisciplinary knowledge and necessary cognitive, practical, communication, and professional skills for future career development
- Work with a number of energetic, collegial, and intellectual colleagues from multiple countries
- Take advantage of over 20 million RMB cutting edge research equipment and over 2000 m² lab and outdoor research space on campus
- Produce a high-quality, potentially publishable thesis to increase the competitiveness during PhD applications and job hunting.
- Earn a globally recognized master degree from the University of Liverpool, a member of the Russell Group of leading UK universities



环境科学硕士(研究型)

环境科学研究型硕士专业旨在培养环境科学不同专业领域的高级人才。专业课程将涵盖与环境科学相关的跨学科知识和技能。学生在学习过程中需要完成一系列紧密联系的课程和一个大型研究项目。

知识与技能

本专业毕业生将具备以下能力:

- 深入了解环境科学知识领域的机会
- 所需的认知能力, 如评判他人的研究、确定研究问题、推导假设、选择合适的研究方法以及简明扼要的解释和呈现数据
- 数据分析、仪器设备操作、问卷/实验设计、项目管理等高级实践技能
- 沟通和专业技能, 例如科学写作和演示、职业发展、手稿准备、期刊选择、同行评审系统、以及健康和安全意识等

专业特色

- 获取深入的跨学科知识和必要的认知、实践、沟通和专业技能, 为未来的职业发展做好准备
- 与来自多个国家的众多充满活力、友善和有才智的同行进行合作
- 利用超过2000万元人民币的尖端研究设备和超过2000平方米的校园实验室和室外研究空间
- 撰写高质量、可发表的毕业论文, 以提高博士申请和求职期间的竞争力
- 获得利物浦大学全球认可的硕士学位, 利物浦大学是英国著名罗素大学集团的成员

就业

本专业毕业生可选择在国内外科研单位继续攻读博士学位。其他工作机会还包括成为研究机构的科研人员、政府机构的政策制定者、非政府组织(NGO) 环境教育专家, 以及环境相关行业的环境咨询人员等。

MASTERS

MRES ENVIRONMENTAL SCIENCES 环境科学硕士(研究型)

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Students entering this programme can enjoy the cutting-edge research facility and work with a number of research-active academic staff in the fields of

- Ecology
 - Biodiversity-Mechanism-Human influences
 - Landscape changes-Urbanization-Rural farming
 - Community ecology-species interactions-trophic dynamics
- Environmental Pollution
 - Soil nutrients and pollution-interactions and bioavailability
 - Air pollution-aerosol processes-air quality-human health
 - Pollutants across interfaces-continent/air/water/biota

环境科学研究型硕士专业旨在培养环境科学不同专业领域的高级人才。专业课程将涵盖与环境科学相关的跨学科知识和技能。学生在学习过程中需要完成一系列紧密联系的课程和一个大型研究项目。本专业所在的健康与环境科学系为学生提供了先进的仪器设备, 学生进入本专业后可以在选择以下方向与导师进行合作研究

- 生态学
 - 生物多样性-机制-人类活动
 - 景观变化-城市化-有机农业
 - 群落生态-物种交互-食物链
- 环境科学
 - 人类活动-土壤/水/大气污染
 - 污染物迁移-人类健康
 - 陆地/水体/大气/生物间的跨界面运输

课程

第一学年第一学期

必修课程

ENV401 研究项目设计和管理

ENV403 环境科学中常见研究问题

ENV407 环境科学前沿

选修课程

ENV405 环境高级统计学

BIO405 生物信息学研究方法

CHE401 高级分析化学

ENV317 环境与社会

ENV319 人与环境污染

第一学年第二学期

必修课程

ENV402 科研项目(阶段I)

第二学年第一和第二学期

必修课程

ENV404 科研项目(阶段II)