

Teaching Assistant Position

Position Title

Teaching Assistant – IOT314TC Signal Processing for IoT

Position Type

Teaching Assistant (TA)

Module Information

- **Module Code:** IOT314TC
- **Module Title:** Signal Processing for IoT
- **Credits:** 5
- **Location:** XJTLU Entrepreneur College (Taicang Campus)
- **Number of Positions:** 1

Position Overview:

The School of Internet of Things (IoT) at Xi'an Jiaotong-Liverpool University (XJTLU) invites applications for a **Teaching Assistant (TA)** position for the undergraduate module **IOT314TC – Signal Processing for IoT**.

This module equips students with a comprehensive understanding of modern signal processing principles and techniques underpinning contemporary Internet of Things (IoT) systems. Students will explore digital signal processing algorithms, signal filtering, modulation and demodulation, resource-aware system design, and the application of artificial intelligence (AI) to signal processing for IoT.

The module combines theoretical foundations with practical implementation, enabling students to design, analyse and develop efficient signal processing systems for real-world IoT applications while gaining experience with modern AI-assisted signal processing tools and software.

Responsibilities:

The Teaching Assistant will support the module leader in delivering high-quality teaching and student support, including:

- Assisting with lectures and in-class teaching activities
- Supporting tutorial sessions and student discussions
- Delivering tutorial classes independently
- Delivering laboratory practical sessions

- Assisting with marking coursework and laboratory reports
- Providing academic support and responding to student enquiries
- Supporting the maintenance of learning materials and online teaching resources

Teaching Workload

Activity	Contact Hours
Lectures (attendance and co-teaching)	20 hours
Tutorials	12 hours
Laboratory Sessions	24 hours
Total Contact Hours	56 hours

Requirements:

Applicants should ideally possess:

- A strong foundation in digital signal processing
- Knowledge of Internet of Things (IoT) systems
- Familiarity with topics such as digital filtering, FFT, modulation and demodulation
- Experience with MATLAB, Python, or other signal processing software
- An interest in AI-assisted signal processing techniques
- Good communication, organisational and interpersonal skills
- The ability to work independently and collaboratively within a teaching team

How to Apply:

Applicants should submit the following documents to the School office (IOT@xjtlu.edu.cn):

- Curriculum Vitae (CV)
- Academic transcript (optional)
- A brief statement outlining relevant coursework, teaching experience, or technical skills (optional)

教学助理岗位

岗位名称:

《物联网信号处理》课程助教

岗位类型:

教学助理 (Teaching Assistant, TA)

课程信息:

- 课程代码: IOT314TC
- 课程名称: Signal Processing for IoT
- 学分: 5
- 授课地点: 西浦创业家学院 (太仓校区)
- 招聘人数: 1 名

岗位简介:

物联网学院现公开招聘 **物联网信号处理 (IOT314TC)** 课程助教。

本课程旨在帮助学生系统掌握现代物联网系统中的信号处理理论、算法与工程实践，涵盖数字信号处理、滤波、调制与解调、资源受限系统设计，以及人工智能在物联网信号处理中的最新应用。

课程同时强调理论与实践相结合，引导学生运用现代 AI 工具和软件设计、分析及实现高性能、低功耗的物联网信号处理系统，为未来从事物联网系统设计、智能设备开发及科研工作奠定坚实基础。

岗位职责:

助教将在课程教师指导下承担以下工作:

- 协助课堂教学及教学组织
- 协助课堂讨论及答疑
- 独立开展 Tutorial 教学
- 指导实验课程 (Laboratory Sessions)
- 协助课程作业及实验评阅

- 为学生提供课程学习支持
- 协助维护教学平台及课程资料

工作安排：

工作内容	工作时数
课堂协助	20 小时
辅导课	12 小时
实验课	24 小时
总计	56 小时

任职要求：

申请者应满足以下条件：

- 具有较扎实的数字信号处理基础
- 熟悉物联网系统相关知识
- 了解数字滤波、FFT、调制与解调等核心内容
- 熟悉 MATLAB、Python 或其他信号处理开发工具
- 对 AI 辅助信号处理具有一定了解者优先
- 具有良好的沟通表达能力及团队合作能力
- 能够按时完成课程教学及实验指导工作

申请方式：

请将以下材料发送至学院官方邮箱（IOT@xjtlu.edu.cn）：

- 中英文个人简历
- 成绩单（可选）
- 简短说明相关课程学习或教学经历（如有）