

CAREERS AND FURTHER STUDY

Graduates from this programme will be well prepared and qualified for highly technical or managerial roles in global companies and public institutions that are leaders in the data-driven information technology fields. Graduates could work in a range of sectors, including Artificial Intelligence, finance and insurance, manufacturing and services, health care, and urban planning industries. The programme also provides a solid foundation for postgraduate studies or a career in research.

Core Modules

- Programming with C++
- Computer Architecture and Operating Systems
- Introduction to Neural Networks
- Numerical Methods
- Design and Analysis of Algorithms
- Database Development and Design
- Pattern Recognition
- Signal and Image Processing
- Data Analytics and Visualization
- Applied Linear Statistical Models
- Machine Learning
- Security, Privacy and Ethics
- Reinforcement Learning
- Natural Language Processing

* Module name may be adjusted accordingly, subject to the final approval by ULTC

Sample Topics of Final Year Project

- Vision Based Positioning System for XJTLU Taicang Campus
- Research on Personal Credit Model Design and Default Prediction
- Deep Learning for Social Media Data Analytics
- Improving Sampling Efficiency of Reinforcement Learning in Robot Control or Atari Games
- Deep Learning in Image Processing
- AI and Emotion Robots (EmoBots)
- DNN Model Compression for Smart Devices
- JetX: Using Jetson Nano to develop A Machine Learning Prototype
- AI for Smart Sustainable Transportation
- AI for Portfolio Management

Contemporary Entrepreneurialism

- Creative Innovator's Toolkit
- Strategic Intelligence
- Digital Startup Lab
- Industry Readiness
- Team Technopreneurship

Postgraduate Study Opportunities

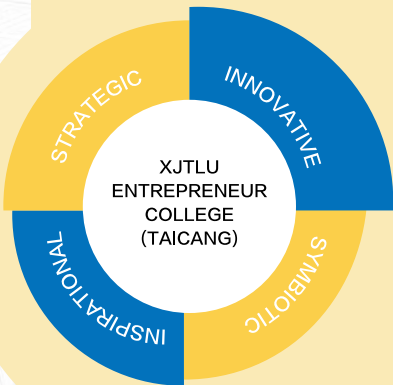
- Artificial Intelligence
- Computer Science
- Computer Engineering
- Software Engineering
- Scientific Computing
- Cognitive Computing
- Applied Statistics
- Data Science
- Block Chain
- Financial Engineering/Mathematical Finance

Professional Development Programme (PDP)

- Syntegrative Projects:
- Syntegrative Project Throughout the academic year
 - X3 Co-Venture
 - Summer Undergraduate Research Fellowship (SURF)
 - Internship
 - Summer Bootcamp
 - XJTLU Global Entrepreneurial Dream-Chasers Competition
 - Innovation Factory
 - Other Practical Projects

School Industry Partners

- Sugon
- SenseTime
- DeepBlue
- iFLYTEK
- Cambricon
- Suzhou SISPark
- Tencent Cloud
- Jianhua Consulting
- Taicang University Technology&Science Park
- AliCloud
- Hikvision
- Xuqiu Automobile Technology
- Bond
- Zhongke IIICC
- Crossover



BEng DATA SCIENCE AND BIG DATATECHNOLOGY WITH CONTEMPORARY ENTREPRENEURIALISM

Following XJTLU's exciting and innovative Syntegrative Educational Model, this programme is an equal collaboration between the university and its industry partner, Sugon, at the School of AI and Advanced Computing in XJTLU Entrepreneur College (Taicang). Students completing the degree programme will graduate equipped with the skills to pursue a career in big data, an emerging industry driven by rapid technological advancements. Graduates from this unique programme will meet the needs of a wide range of employers. The programme's unique educational model focuses on entrepreneurship and innovation, which provides students with the skills and abilities to think like an entrepreneur and supports your dream to become an industry leader in the future.

WHY STUDY BEng DATA SCIENCE AND BIG DATA TECHNOLOGY WITH CONTEMPORARY ENTREPRENEURIALISM AT XJTLU ENTREPRENEUR COLLEGE (TAICANG)?

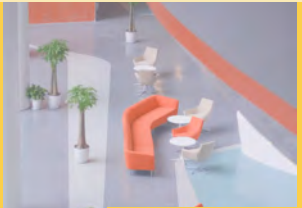
- Be part of a unique educational experience, preparing you to work in the fast paced, rapidly changing, smart technology driven industries
- Learn through practical applications, using your knowledge and skills in to solve real-world problems in a research and industrial setting
- Learn from industry experts as part of the unique industry-themed school's partnerships with leading businesses
- Gain valuable entrepreneur and leadership skills by studying the unique contemporary entrepreneur modules that are part of the programme, giving you a competitive edge in whatever career path you choose
- Graduate with world class qualifications, including two degrees: an XJTLU degree approved by the Chinese Ministry of Education and a globally recognised degree from the University of Liverpool, a member of the Russell Group of leading UK universities

WHAT YOU WILL LEARN

By the time you graduate from this programme, you will have:

- A strong understanding of AI, machine learning, and deep learning knowledge and application, such as computer vision, NLP and autonomous driving vehicle technologies
- The ability to carry out big data processing using a variety of computing platforms and statistical software for the collection, management, analysis and mining of big data
- A solid foundation in mathematics, statistics and computer science
- High-level communication, interpersonal, problem- solving and analytical skills that are transferable across a range of careers and industries

SCHOOL OF AI AND ADVANCED COMPUTING XJTLU ENTREPRENEUR COLLEGE (TAICANG)



The School of AI and Advanced Computing, was created with the participation of leading companies at the forefront of AI and computing development. As a result, AIAC has a robust business development strategy that is closely linked to the development of technology for the AI industry.

Website:
<https://www.xjtlu.edu.cn/en/study/departments/school-of-ai-and-advanced-computing>