

28 FAQs about BEng Internet of Things Engineering with Contemporary Entrepreneurialism

About the Programme - BEng Internet of Things Engineering with Contemporary Entrepreneurialism

1. What is the curriculum of IoT Engineering programme?

Year 1 Prerequisites	Linear Algebra, Calculus, Multivariable Calculus, Physics
Year 2 Core	Introduction to Internet of Things
Modules	Big Data Analysis
	IoT in Organizations
	Engineering Mathematics
	Electrical Circuits
	Electronic Circuits - Analogue and Digital
	C++ Programming Language
Year 3 Core	IoT Control Technology
Modules	Data Structure and Algorithms
	Sensor Technology
	Introduction to Networking
	Computer Architecture and Operating Systems
	Requirement Analysis and Design of Mobile Applications for IoT
	Wireless Sensor Networks and Communication Protocols
	Machine Learning for IoT
Year 4 Core	Final Year Project
Modules	Cloud Computing
	Data Visualisation
	Pattern Recognition
	Programming Mobile Applications for IoT
	Information Security Technology of IoT

For more information, https://www.xjtlu.edu.cn/zh/study/undergraduate/internet-of-things-engineering



2. Does the IoT Engineering programme focus more on hardware or software?

IoT Engineering programme is an interdisciplinary field covering multiple science and engineering disciplines. It includes software courses such as C++ programming, study of computer architecture, as well as practical aspects related to hardware, such as embedded systems, sensor technology, RF engineering, and identification.

3. What is the difference between IoT Engineering programme and Computer Science, Electronic Engineering, Communication Engineering programmes?

The curriculum of IoT Engineering programme encompasses computer science, electronics and telecommunications, making it a highly interdisciplinary field.

4. What are the degrees and certificates for graduates?

Upon graduation from the Internet of Things Engineering programme, students will receive a degree certificate issued by Xi'an Jiaotong-Liverpool University and the University of Liverpool, a diploma from Xi'an Jiaotong-Liverpool University, as well as certificates related to innovation, entrepreneurship, internships, and practical training.

5. Which universities can be applied after graduating from IoT Engineering?

The top universities in the UK, North America, Europe and around the around world. Currently, the majority of our graduates choose to further their studies in interdisciplinary fields similar to IoT. Some students opt for business-related majors, while a few pursue more specialized areas of study. For your reference: <u>Annual Career and Employability</u> Analysis Report of the School Class of 2023 Undergraduates (IoT)

6. How many graduates received the offer from top 10 QS world ranking universities?

In class of 2023, 100% of the graduates received the offers from the world top 10 QS ranking universities.

7. What are the job prospects after graduation?

Careers in IoT are diverse and continually expanding as the technology finds new applications across various sectors. Some of the careers (with annual average salary) include, but are not limited to:

Hardware Engineer \$120,000 Software Engineer \$110,000 Systems Architect \$110,000 Data Scientist/Analyst \$123,000



Network Engineer \$100,000 Cyber Security Specialist \$125,000 Quality Assurance (QA) Engineer \$90,000 Technical Support Engineer \$95,600

8. What is Block Teaching?

The Taicang campus currently adopts a modular teaching model, dividing each semester into two modules, each lasting approximately 6 to 7 weeks. Teaching methods include lectures, seminars, tutorials, and laboratory work.

9. What teaching model does IoT Engineering programme adopt, 4+0 or 2+2?

The current undergraduate IoT Engineering programme is a 4+0 model.

10. What is the ENT module?

The ENT modules are offered by Entrepreneurship and Enterprise Hub (EEH) at the Taicang campus and it is an integral part of the degree certificate awarded by the Ministry of Education. The undergraduate curriculum structure at Taicang comprises a major field of study (75% of the total credits) and a minor in innovation and entrepreneurship (25% of the total credits). All undergraduate students at Taicang are required to complete all ENT modules during their second to fourth year. Upon successful completion, students will receive a Xi'an Jiaotong-Liverpool University certificate in innovation and entrepreneurship.

11. What is the Professional Development Programme (PDP)?

The Professional Development Programme (PDP) is one of the distinctive features of the Taicang College. It is delivered by college faculty in collaboration with industry mentors, providing students with opportunities to learn in real industry settings through partnerships with industry enterprises. As an integral part of Syntegrative Education, the PDP serves as a bridge connecting campus with industry, and classroom with the real world.

12. Is it mandatory to take PDP?

The Professional Development Programme (PDP) encourages students to independently select diverse projects that align with their interests, upon completing the 90-hour internship requirement stipulated by the Ministry of Education.



1. When to choose the IoT Engineering programme?

The programme selection usually takes place in the second semester of Year 1, typically in late March. Please follow IoT WeChat public account for more information.

- **2.** Will the IoT Engineering programme admission be based on scores or voluntary? Admission based on voluntary preferences.
- 3. What are the entry requirements for the IoT Engineering programme? What modules should be taken in Year 1 and what are the grade requirements?

The prerequisite modules for IoT Engineering programme include Mathematics and Physics.

- ✓ In the first semester of Year 1, you need to select prerequisite module(s).
- ✓ In the second semester, once you choose IoT Engineering as your major, the system will recommend one preparation module (physics) for you.
- ✓ Upon passing the prerequisite and preparation modules, you will be able to progress into our programme.
- 4. Is there any additional entrance test or other threshold for enrolling Internet of Things Engineering programme?

Currently no.

- 5. Is there a limit on the number of applicants for IoT Engineering programme? Currently no.
- 6. Can liberal arts students choose the IoT Engineering programme? Does the IoT Engineering programme have high requirements for Mathematics and Physics?

We welcome all students who are interested in the Internet of Things Engineering to join us. Prerequisite courses in mathematics and physics are required in Year 1.

About the School of Internet of Things (IoT)

1. What is the contact information for School of IoT?

The contact information for School of IoT is as follows: Send email to IoT@xjtlu.edu.cn or call us at 0512-88973355.



2. What is the faculty diversity ratio of the School of IoT?

Currently, about 60% of the faculty at School of IoT are from countries such as the US, the UK, Egypt, South Korea, Australia, and Mexico, while 40% are from China. Each faculty has a diverse and outstanding research background, with remarkable achievements in fields such as IoT, wireless communication, 5G/6G network architecture, software engineering, health informatics, autonomous vehicle, digital signal processing, data security, machine learning, and information systems.

3. What are the laboratories and workspaces in the School of IoT?

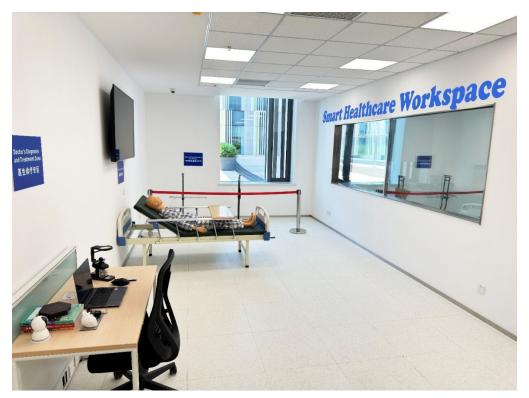
There are following laboratories and workspaces:

Integrated Sensing and Action Center (ISAC) Workspace



• Smart Healthcare Workspace





• Smart Home Simulation Space

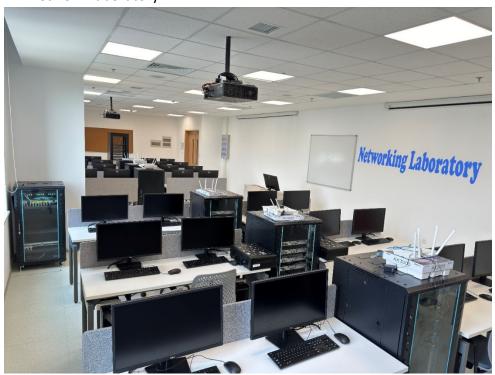


• Cloud Empowered IoT Wireless Communications Laboratory





Network Laboratory



For more information: <u>laboratories and workspaces</u>

4. Which companies does the School of IoT cooperate with?

The current partners with School of IoT include: Advantech(China)Co., Ltd.Beijing Branch, Matebot AI Technologies Limited, Shanghai Taopin Electronic & Technology Co., Ltd., Ennoconn (Suzhou) Technology Co., Ltd. and so on.



The list is updated on the website periodically: <u>Industry, Business and Community - Xi'an Jiaotong-Liverpool University (xitlu.edu.cn)</u>

5. What is the mode of cooperation with industries?

The cooperation between the college and the enterprise includes the curriculum level, the professional level and the college level.

- Curriculum level: Corporate involvement in the design, teaching (guest lecture) and evaluation of the course;
- Professional level: Enterprises participate in the discussion and establishment of the college's talent training objectives, and the construction, revision and improvement of the professional outline;
- College level: including co-construction of laboratories, cooperation in scientific research projects, student competitions, scientific research forums, industry mentors, joint holding of industry conferences and forums, and support and services for students' employment and entrepreneurship.

6. Can students do research with faculty from Year 2 or earlier? What are the channels to apply?

Students can start applying to work on research projects with faculty as early as the summer after their first year, or earlier if they identify a possible supervisor. Currently, School of IoT offers the SURF research projects, as well as the school Syntegrative research projects, which will also be encouraged to transition into fourth year capstone projects/final year project.

7. Does the School offer internships? Do students have research opportunities? How many people are there in a class?

School of Internet of Things has collaborations with several enterprises for research, providing students with opportunities to participate in research projects.

About XJTLU Entrepreneur College (Taicang)

1. Where is XJTLU Entrepreneur College (Taicang)?

XJTLU Entrepreneur College (Taicang) locates in the Science and Education Innovation Zone of Loujiang New Town, Taicang City. Taicang is under the jurisdiction of Suzhou City, Jiangsu Province, about 60 kilometers away from XTPU campus in Suzhou.



2. What about the surrounding facilities of Taicang campus? What are the local industrial characteristics and industrial needs?

The total area of Taicang Campus is about 546 mu, of which the teaching area covers about 479 mu and the dormitory living supporting area covers about 67 mu. The supporting area around the campus covers a total area of about 1,000 mu. The whole area is planned according to XJTLU's understanding of the future university and its campus and the educational philosophy of integrated education. It will reflect the elements of "future", "symbiosis", "sharing", "science and technology" and "ecology", covering the fields of learning, research, training, innovation, production, housing and business. Fully demonstrate the integration characteristics of future international universities with enterprises, industries, communities and societies.

There are three main advantages of local industry:

• Town of German enterprises in China



• Unique port advantages



Natural geographical





3. What student clubs are there in Taicang campus?

At the Taicang campus, there are currently 54 student clubs, divided into five categories: functional, academic, community service, recreational, art, and sports.

Functional Clubs: Dream Chaser Club, UniSight Crew Club, etc.

Academic Clubs: Chip Club, GMaster Club (TC), etc.

Community Service Clubs: Animal Welfare Club, EvoLens Club.

Recreational Clubs Light & Shadow club, XEC Aerospace Model Sports Club, etc.

Art Clubs: Sky Sound Music Club, Street Dance Club, MOVIE@XJTLU, Instrumental Troupe, Drama troupe, etc.

Sports Clubs: TC Badminton Club, Entrepreneur College Football Club (ECFC), Taicang Tennis Club, XJTLU-TC Basketball Team, etc.

For more information, please visit <u>XJTLU Student Engagement - XJTLU Student Engagement</u>