

Computer Science and Technology (Data Science and Engineering)

Program Objective

The program object is to prepare the students the basic theories and applications of data science and engineering, as well as the basic knowledge of computer science and software engineering. Meanwhile, prepare the students have the strong abilities to analyze and solve practical engineering problems using the data engineering techniques with strong technical innovation and team cooperation ability.

Main Courses

Higher mathematics, linear algebra, probability theory and mathematical statistics, data structure, advanced language programming, database principle, operating system, computer network and communication, Python programming, NoSQL database technology, foundation of data science, the introduction of data mining, Hadoop and Spark technology, data science and engineering practice, handheld program development, cloud computing, Web application design and development, network programming

Program Requirements

Through the study, students are required to have the following capabilities: (1) basic technical capabilities to manage, analyze and process the massive data; (2) strong data security consciousness and law consciousness; (3) to master the basic computer programming languages, hardware system, operating system, network system theory, have strong ability of computer application; (4) with good capabilities of research, design, development and application of big data systems; (5) with the basic ability to engage in e-commerce, the Internet of things, cloud computing and big data industry;

Faculty

The program has the 16 faculty members in which 3 professors, 8 associate professors and 5 lecturers. Most of the faculty members have Ph.D. degrees. Of all members, one teacher obtained his Ph.D. in PSU, 5 teachers studied abroad or worked in foreign countries as visiting scholars. These teachers can teach in English. They not only have ample experience in teaching, but are also good at doing research to support teaching.

Length, Credits and Degree

The length of curriculum is normally four years. Minimum credits for graduation: 165 credits. Qualified students will be granted Bachelor Degree of Engineering.

Instruction Language

- All the courses are delivered in English except some of Chinese language courses.
- Dissertation is required to be written in English