

Doctoral Program in Computer Science and Technology

1. Introduction

The School of Computer Science and Engineering at NUST consists of several teaching and research departments and laboratories, namely the Department of Computer Science and Technology, the Department of Software Engineering, the Department of Intelligent Science and Technology, the Department of Digital Media Theory and Engineering, the Department of Computer Network and Communication Technology, the Computer Science and Engineering Experimental Center, the Computer Application Institute, the Information Processing and Security Technology Institute, and the Intelligent Robotics Institute. The school also owns the Ministry-of-Education Key Laboratory of "Intelligent Perception and Systems for High-Dimensional Information", and the Jiangsu Key Laboratory of Image and Video Understanding for Public Safety.

The school has a national key discipline in "Pattern Recognition and Intelligent Systems", two Jiangsu provincial key disciplines in "Computer Science and Technology" and "Software Engineering". We own primary discipline doctoral programs in "Computer Science and Technology" and "Software Engineering", and secondary discipline doctoral program in "Pattern Recognition and Intelligent Systems" and the corresponding post-doctoral workstations. We also provide master programs in "Computer Science and Technology", "Pattern Recognition and Intelligent Systems", "Software Engineering", and "Biomedical Engineering". The school's programs are supported by the national "985" Project innovation Platform.

2. Research Directions

- (1) Pattern recognition and intelligent system
- (2) Computer science and technology
- (3) Software engineering

3. Duration of studies

Full time PhD students are expected to complete their studies and earn their degrees in 4 to 8 years, and they will be disqualified from the program after 8 years.

4. Credits requirements

Students are required to complete at least 18 degree credits from courses in Section 5 with a minimum of 16 coursework credits and 2 obligatory courses.

5. Curriculum

Course No.	Course Name	Semester	Credits
<i>I. Fundamental Courses</i>			4
L371A002	Chinese	Fall	2
L371A003	Introduction to Chinese Classics	Fall	2
<i>II. Core Courses</i>			6+
L113A010	Matrix Analysis and Computation	Fall	3

L113A011	Manifolds	Spring	2
B106B002	Advanced System Software Theory and Technologies	Spring	2
S106C006	Machine Learning	Fall	2
III. Major Electives			4+
L106C008	Information Security and Applied Cryptography	Fall	2
L106C007	Computer Vision	Fall	2
L106C009	Pattern Recognition	Spring	2
B106C002	Services Computing and Business Process Management(II)	Spring	2
IV. Thesis Credits			
L0000003	Dissertation Proposal II	Fall	2
L0000004	Academic Activities II	Spring	
Total Credits Required			18+
NOTE: Graduate students are usually expected to meet the course requirements in the first academic year, including: I. Fundamental Courses, II. Core Courses, and sufficient elective courses in III. Major Electives.			

6. PhD Dissertation Topic and Research Proposal

PhD dissertation proposal should be no less than 10000 words long and has at least 80 references, half of which must be published in the recent 5 years. A PhD student should choose a research topic for the PhD dissertation and spend no less than 2 years on the dissertation research and writing, all under an advisor's guidance.

Detailed regulations and requirements on PhD dissertation are documented in the "*NJUST Regulations about the Topic Selection, Research Proposal and Composition of Postgraduate Theses and Dissertations*". The PhD dissertation research proposal writing and defense should be completed in no later than the second academic year of the program.

7. Publication

To meet the degree requirements, a PhD student is required to have a certain number of academic publications related to the dissertation research. Detailed requirements are documented in "*NUST regulations on a postgraduate's publications of their research work*".

8. PhD Dissertation Requirements

Detailed regulations and requirements on PhD dissertation are documented in the "*NJUST Regulations about the Topic Selection, Research Proposal and Composition of Postgraduate Theses and Dissertations*", and "*NUST Style Sheet for Theses and Dissertations*". For a joint effort with others, or a follow-up of previous work, the student should clearly specify his/her contribution to the thesis.