

Doctoral Program in Environmental Science & Engineering

1. Introduction

Nanjing University of Science & Technology (NUST) was one of the earliest universities to establish the major of Environmental Engineering (EE) in China. The major was established in 1979 and started to recruit undergraduates in 1980. We began to offer master and doctoral programs in EE in 1987 and 2000 respectively, master program in Environmental Science (ES) in 2003, and doctoral program and postdoctoral fellowship in Environmental Science & Engineering (ESE) in 2010 and 2012 respectively. EE was also elected as a key discipline of the “Tenth, Eleventh and Twelfth 5-Year Guideline” of Jiangsu province as well as of the Ministry of Industry and Information Technology.

2. Research Directions

- (1) Wastewater treatment and resource reuse engineering
- (2) Air pollution control engineering
- (3) Environmental biotechnology
- (4) Environmental monitoring technology

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>			8+
L113A012	Intelligent Optimization Algorithms	Spring	2
L113A014	Wavelet Analysis	Fall	3
L102B006	Structures & Materials	Spring	2
L102B003	Application & Theory of Water Treatment	Spring	2
L102B004	Air Pollution & its Control	Spring	2
L102B005	Environmental Chemistry	Fall	2
S103C005	Journal-Style Scientific Writing Skills	Spring	1
<i>III. Major Electives</i>			4+
L102C006	Fundamentals & Materials of Membrane Separation	Fall	2
S102C005	Ecomaterials	Spring	2
L102C005	Environmental Biotechnology	Fall	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.