

# School of Environment

## Master Program for International Students

### I Subject and Major

Environmental Science and Engineering

### II Credits Requirement

During the study for master degree, at least 23 credits are demanded to acquire the degree (no less than 13 credits for examination courses, self-study courses excluded), which includes at least 4 credits for public compulsory courses, no less than 19 credits for subjective specialized courses (containing at least 2 credits for compulsory study, 3 credits for basic theory courses, 12 credits for basic theory and specialized courses of the subject or other relevant major and 2 credits for social practice).

### III Curriculum Plan

#### 1. Public Compulsory Courses (4 credits)

- Basic Chinese / Chinese 2 credits (examination)
- Chinese Culture and Society 60610082 2 credits (examination)

Requirement for Chinese courses: level of Chinese courses should be selected based on grade of the Chinese level test taken when entering the university.

#### 2. Subjective Specialized Courses (≥19 credits)

##### (1) Compulsory study (2 credits)

- Literature Review and Research Proposal 69990021 1 credits (investigation)
- Seminars 69990031 1 credits (investigation)

Requirement for literature review and research proposal: written and oral report should be delivered according to related regulars

Requirement for seminars: attending at least 10 times of approbated and checkable seminars or activities.

##### (2) Basic theory courses (selection from the following courses ≥3 credits)

- Numerical Analysis A (taught in Chinese) 60420044 4 credits (examination)
- Numerical Analysis (taught in English) 60420254 4 credits(examination)
- Other mathematical graduate courses
- Advanced Environmental Chemistry 70050323 2 credits (examination)
- Fundamentals of Environmental Biotechnology 70050313 3 credits (examination)
- Other relevant basic theory courses offered by chemistry department, chemical engineering department, biology department, department of hydraulic engineering, department of civil engineering etc.for graduate students

**(3) Basic theory courses and specialized course of the subject or other relevant subjects (≥12 credits, including ≤4 credits courses from other departments)**

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|--|----------|---------------------------|
| ● Advanced Wastewater Treatment  | 80050233 | 3 credits (examination)   |
| ● Advanced Water Supply Engineering  | 80050203 | 3 credits (examination)   |
| ● Advanced Water Distribution System and Management  | 80050193 | 3 credits (examination)   |
| ● Groundwater Pollution Control Technology   |          | 3 credits (examination)   |
| ● Air Pollution Chemistry  |          | 3 credits (examination)   |
| ● Air Pollution Control Technology   | 80050283 | 3 credits (examination)   |
| ● Integrated Solid Waste Management  | 80050273 | 3 credits (examination)   |
| ● Hazardous Waste Disposal Technology  | 80050263 | 3 credits (examination)   |
| ● Environmental Management and Policy  | 80050213 | 3 credits (examination)   |
| ● Environmental Remote Sensing and Application   | 80050223 | 3 credits (examination)   |
| ● Restoration Ecology and Application  | 80050243 | 3 credits (examination)   |
| ● Global Environmental Issues  | 80050253 | 3 credits (investigation) |
| ● Other Chinese or English graduate student courses offered by Department of Environmental Science and Engineering |          |                           |
| ● Other relevant specialized course for master students in chemistry department and biology department             |          |                           |
| ● Courses in humanities, social science, economics, management   |          |                           |

**(4) Social Practice (2 credits)**

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|-------------------|----------|---------------------------|
| ● Internship      | 80050291 | 1 credits (investigation) |
| ● Social Practice | 69990041 | 1 credits (investigation) |

Demand of internship: with the agreement from supervisor and teaching director of the department, students should take part in the internship in environmental protection enterprises, organizations and designing institutes to experience the production, research and management, which should take at least 2 weeks in total, and report is demanded for investigation of the internship.

Requirement of social practice: with the agreement from supervisor and teaching director of the department, students should take part in the social practice within the territory of China, which should take at least 3 weeks in total, and report is demanded for investigation of the social practice.

**3. Self-study courses**

Systematic self-study on research topic related specialized knowledge should be developed under the guidance of supervisor, which can be listed into master program.

**4. Restudy courses**

All master students lack of bachelor level basis to the subject should restudy relevant courses under the guidance of supervisor. Restudy courses could not be listed in the total credits demand.

#### IV Thesis

Preparation for thesis should begin as early as possible. Working plan and topic choosing report of the thesis should be fulfilled before the end of the second semester and be submitted to the department teaching office for keeping on record.

Thesis for international master students can be written in English, which should include a Chinese abstract of at least 3000 characters. Other demand conforms to the relevant regulation of the university.

Note: this master program was discussed and approved by degree committee of Department of Environmental Science and Engineering on Jun.19<sup>th</sup>.2009, and should be applied for international master student who entered school after Jun.19<sup>th</sup>.2009.