



# **Master Program in Fishery Science**

Wuxi Fisheries College of Nanjing Agricultural University

March, 2019

## **Table of Contents**

I	Program Description	5
II	Education Plan	6
III	Profiles of Instructors	8
IV	Financial Aids	11
V	Application	11
VI	Admission	14
VII	Registration	14
VIII	Contact	14
IX	Previous Activities in the 2015/2016 Master Programs of Fishery Science	15

## Wuxi Fisheries College of Nanjing Agricultural University

Nanjing Agricultural University (NAU), founded in 1902, is a state key university and a "211" project university under the Ministry of Education of China. With agriculture and life sciences as its orientations, NAU has a harmonious development of diverse branches of learning including agriculture, science, economy, management, engineering, art, law, etc.. During it's over 100-year of education, NAU has graduated more than 200, 000 talents including 51 academicians.

Wuxi Fisheries College of Nanjing Agricultural University (WFC), located in Wuxi City of Jiangsu Province, was jointly established by Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences (FFRC) with NAU in 1993, and started MSc education in 1996. Currently, it provides 2 PhD programs and 2 MSc programs respectively in aquaculture and hydrobiology, with the PhD program in aquaculture being the fist-class discipline; besides, it has one postdoctoral station for aquaculture. Meanwhile, WFC is among the first institutes that set up Professional Master's Program (PMP) in fishery science. So far, it has fostered 63 Ph.D degree students, 582 master degree students and over 1,300 bachelor degree students. The international academic education program was launched in 2011. There are 46 international students studying in the college.

In 2011, WFC obtained the certification of ISO9001 quality management system. It has 26 professors, 36 associate professors, 6 doctoral supervisors, 30 master's supervisors. Since its establishment, it has undertaken over 1600 national-level, provincial and ministerial-level, and international projects, and it has won 9 national, 64 provincial and ministerial level awards for S&T progress, and over 300 patents for invention. 2700 scientific papers have been published. There are 7 cultured species bred by research scientists. Since 1981, WFC began to organize international training programs, so far, over 2780 fishery technicians and officials from about 128 countries have been trained here. Meanwhile, WFC has dispatched over 50 fishery experts to more than 30 developing countries, like South Africa, Egypt, North Korea, Laos, Bangladesh, Iran, Myanmar, Tajikistan, Namibia, Mozambique, to provide technical consultation and trainings. In 2014, WFC was designated as the FAO Reference Centre for Aquaculture and Inland Fishery Research and Training, and established two international joint laboratories.

A team of high-level, reliable English proficiency and rich management experiences has been forged during the long period of international training and education. The

postgraduate education programs of WFC are based on supervisor-responsible system and allocated with professional management team to make full advantage of team-leadership. WFC also strictly adhere to the quality management standard of ISO9001 system for its course arrangement to teaching evaluation; it demonstrates the Chinese characteristics while absorbing the merits of world famous universities, and strives for high quality and utmost effect.

Wuxi Fisheries College was jointly established by Nanjing Agricultural University and Freshwater Fisheries Research Center of Chinese Academy of fishery Sciences. So it has a very strong scientific research strength with advanced experiment equipment and other perfect facilities for teaching, research, practice and living. It has two campuses with an area of 26 ha in total. It has a library with over 30,000 books and periodicals. It has its own periodical publication, the "Scientific Fish Farming". In addition, the college has 15 multimedia classrooms, 2 multi-function halls, 5 meeting rooms, 1 dormitory building, and a hotel with 71 standard rooms, a Chinese restaurant, a western restaurant and a Halal restaurant. The outdoor football ground, basketball court, tennis court, and the indoor gym, badminton court, table tennis rooms, billiards room, etc. are open to all participants. Moreover, the college has one bus, one minibus, and 4 cars.

If you attend the programs, you will love the campus environment for study, research and living, and you will enjoy it here!

# Academic Education Programs Sponsored by Ministry of Commerce PRC

Academic Education Programs sponsored by the Ministry of Commerce of People's Republic of China is designed to foster high-end business officials and managerial personnel for the recipient countries, offering one-year and two-year master programs as well as three-year doctoral programs for the purpose of educating high-end and inter-disciplinary talent working in the applied fields of government, trade, foreign affairs, agriculture, technology, education, culture and health, building intellectual capacity and facilitating the economic and social development of the recipient countries. These programs provide assistance to governmental officials, research fellows, and senior managerial personnel on their master and doctor education in China, which are fully conducted in English. Admission requirements include a bachelor's degree, relevant working experiences, and decent physical conditions, essential for the high-compact curriculum needed for the degrees.

Starting from 2008, a number of 1,695 students from developing countries have attended

these programs, until now, except for those who are in the middle of their studies, 835 of them have graduated and obtained master degrees. These graduates are now working in their specialties back in home and undertaking an increasingly significant role in the economic development cooperation between China and their home countries.

As for the positive effects and good results brought by these programs in strengthening economic ties and friendship between China and the recipient countries, the Ministry of Commerce of People's Republic of China will continuously intensify its efforts in enlarging the enrollment scale and improving the quality of education.

According to the requirement of the Ministry of Commerce, P.R. China, Wuxi Fisheries College of Nanjing Agricultural University will undertake 2019 Professional Master Program in Fishery Sciences from Sept. 10, 2019 to Sept.9, 2019. This program aims to help the developing countries to foster talents through utilizing its advantages of research and education in fishery and aquaculture. The orientations of research cover aquaculture technology, nutrition of aquatic animal and feed development, fish genetic breeding, healthy aquaculture, fish diseases prevention and treatment, fishery environmental protection, fishery economics, bio-technology, etc. It is committed to meet the urgent needs of vast developing countries for highly educated and skilled talents in fishery. The duration of this program is two years. Qualified participants will be granted with the master degree certificate of agriculture. We believe that by attending this program and achieving the degree, you will embrace a successful career and brighter future.

## I Program Description

## **Prospective Students:**

Our prospective students are mid-to-senior level officials or managers from the government, the media, NGOs, and other public sectors, who have demonstrated superior performance, both academically and in their work. By the time of matriculation, each must have obtained an undergraduate bachelor's degree in the case of our master program and a master's degree in the case of our doctoral program.

## **Program Objective:**

To cultivate senior inter-disciplinary and practical fishery talents and practitioners for the developing countries with the following capabilities:

 A profound knowledge of basic theories and professional knowledge of fishery science, familiar with the world fishery S&T development and equipped with a comprehensive knowledge structure;

- A spirit of innovation and practices, capable of independently engaging in aquaculture technology research, application, development, dissemination and extension, professional education of the fishery field and rural developing tasks;
- Good at innovative thinking, able to carry out independent basic research in fisheries and aquaculture.
- A rigorous style of study, good morality, committed to promoting the development of fisheries and agricultural industries through strengthening S&T cooperation between his/her country and China.

#### **Enrollment Plan:**

In 2019 we have planned to enroll 20 students in this master program, majoring in fishery science.

#### **II** Education Plan

Our master degree program is a two-year full-time program. Students enrolled in this program are expected to complete the coursework, conduct research based on lab work or investigation, and write a thesis within two years.

Language of instruction: While all non-Chinese speaking students are required to take one course on the Chinese language learning, the language of instruction of the program is English.

## 1) Orientation

Before formal coursework starts, admitted students are required to take a one-week orientation session in China. The orientation session, led by prominent scholars and managerial staff, serves as a general introduction to China, the program and the college.

## 2) Formal Coursework

Our formal coursework covers the contents of general situation of agriculture and fishery, basic theories of fishery science, practical technologies, etc.. A more schematic layout of the coursework is listed as follows:

Туре	Course title	Credits	Credi t	Instructor's Name
	General Situation of China's Agriculture	2	32	GE Xianping
	Agricultural communication technology and application	2	32	YUAN Yongming
	Fishery extension theory and practice	2	32	MIN Kuanhong
	Fishery S&T and fishery industry development	2	32	ZHU Jian
Compulsory	Aquatic animals breeding science	2	32	FU Hongtuo
	Aquatic animal culture and enhancement	2	32	YOU Yang
	Feed and nutrition for aquatic animals	2	32	XIE Jun
	Chinese language	2	32	ZHANG Lin
	Thematic seminars	2	32	XU Pao, et al
	Fishery economy and management	1	16	YUAN Xinhua
	Fishery resources management and utilization	2	32	CHEN Jiazhang
Optional	Aquatic product safety and quality control	2	32	WU Wei
- Production	Fishery environment monitoring and protection	2	32	YANG Jian
	Fishery laws and regulations	2	32	JIANG Gaozhong
	Aquatic animal disease and control	2	32	XIE Jun

All the students should attend and pass the compulsory courses, as well as a research (practice) part for 6 credits. Requirement for total credits is 30.

Classes will incorporate a mix of lectures, seminars, lab work, case discussions, tutorials, study tours and presentations.

## 3) Field Study

Field trips will be arranged for students to visit China's fishery management agencies, fishery institutions for research, education or technical extension, fish farms, hatcheries, and processing plants in some of the major fishery and aquaculture areas such as Jiangsu Province, Zhejiang province, Shanghai city and Beijing city, to gain first-hand knowledge on fishery and aquaculture practices under various changing conditions in the reform and opening-up process of China.

## 4) Independent Research

Students are required to come to WXFC with practical problems to be addressed which have to do with the fishery and aquaculture development of the student's own country. With the guidance of a supervisor, a student is expected to carry out independent research on a prudently selected research topic related to fishery, including the design of necessary experiment or practices, lab work, result analysis, etc., based on which the final thesis would be written.

### 5) Thesis

Master thesis: By the end of the first semester, a student shall choose or be allocated with a professor as his/her supervisor, and determine the subject matter on the basis of a real problem to be solved in his/her own countries. In the second semester, students are expected to draft the research plan and initiate the research, and at the end of the semester, students need to pass an oral defense for their research proposal. In the beginning of the third semester, students will further carry out their research and thesis writing. In the fourth semester, students should finish their thesis writing and pass the final defense.

Thesis shall be written in English, but should be with a Chinese abstract.

## 6) Degrees

A professional master degree of fishery science will be conferred upon a candidate in this master program after his/her successful completion of required credits and thesis.

## **III Profiles of Instructors (Partial)**

WXFC boasts of first-class faculty composed of distinguished scholars and accomplished practitioners, who have been actively engaged in the study and research of fishery and aquaculture science, accumulated rich experiences in international exchanges and communications in fishery, and widely acknowledged as experts in their own field. Core faculty of WXFC is listed below.

#### XU Pao

Professor, Doctor, Supervisor for PhD and MSc students of WXFC

Main research fields: fish genetics and breeding, tilapia selective breeding, high-value

species culture, purification fishery in open waters

Email: xup@ffrc.cn

#### **GE Xianping**

Professor, Doctor, Supervisor of PhD and MSc students of WXFC

Main research fields: fish feed and nutrition, healthy aquaculture and management

Email: gexp@ffrc.cn

#### YANG Jian

Professor, Doctor of the University of Tokyo, Supervisor for PhD and MSc students of WXFC

Main research fields: fishery environment assessment and protection, biological monitoring of water environment pollution, bio-indicators and environment rehabilitation, biodiversity protection, climate change and fishery

Email: jiany@ffrc.cn

#### **FU Hongtuo**

Professor, Doctor, Supervisor for PhD and MSc students of WXFC

Main research fields: fish genetics and breeding, shrimp breeding and culture

Email: fuht@ffrc.cn

## **DONG** Zaijie

Professor, Doctor, Supervisor for PhD and MSc students of WXFC Main research fields: fish genetics and breeding, molecular biology

Email: dongzj@ffrc.cn

#### YIN Guojun

Professor, Doctor, Supervisor for PhD and MSc students of WXFC

Main research fields: fish disease, diagnosis, and treatment, fish nutrition

Email: yingj@ffrc.cn

#### **YANG Hong**

Professor, Doctor, Supervisor for MSc students of WXFC

Main research fields: freshwater fish genetics, biotechnology and biological engineering

in fishery, healthy aquaculture, tilapia breeding

Email: yangh@ffrc.cn

#### **CHEN Jiazhang**

Professor, Supervisor for MSc students of WXFC

Main research fields: fishery environment monitoring and protection, quality and safety control of aquatic products, aquaculture environment restoration, ecological assessment Email: chenjz@ffrc.cn

#### **YUAN Xinhua**

Professor, Doctor, Supervisor for MSc students of WXFC

Main research fields: aquaculture technology, fishery economy and management, good aquaculture practices

Email: yuanxh@ffrc.cn

#### XIE Jun

Professor, Supervisor for MSc students of WXFC

Main research fields: micro-ecology of pond, anti-stress mechanism of aquatic animals, bacterial diseases and control

Email: xiej@ffrc.cn

#### **YUAN Yongming**

Professor, Doctor, Supervisor for MSc students of WXFC

Main research fields: fishery industry economy, fishery information technology

Email: yuan@ffrc.cn

#### WU Wei

Professor, Supervisor for MSc students of WXFC

Main research fields: pollution ecology and environment ecology, microbial ecology, quality safety and risk assessment of fish products

Email: www@ffrc.cn

#### **YOU Yang**

Professor, Supervisor for MSc students of WXFC

Main research fields: inland fishery resources, high-value species protection and utilization, aquaculture and enhancement in inland waters, open water aquaculture

Email: youy@ffrc.cn

#### **ZHU** Jian

Professor, Supervisor for MSc students of WXFC

Main research fields: fishery science and technology, healthy aquaculture, fishbreeding

Email: zhuj@ffrc.cn

#### **MIN Kuanhong**

Professor, Supervisor for MSc students of WXFC

Main research fields: biology of major culture species, agricultural technical extension Email: minkh@ffrc.cn

#### JIANG Gaozhong

Professor, Doctor, Supervisor for MSc students of WXFC

Main research fields: fishery history and development, fishery laws and regulations

Email: jianggz@ffrc.cn

#### IV Financial Aid

The Chinese Ministry of Commerce will provide "Chinese Government Scholarships" to admitted students from the developing countries. These scholarships cover both tuition and living expenses. They also include a round-trip international airfare for all the students for coming and returning, and another round-trip international airfares for home visit (between the academic years). In terms of living expenses, it is 36000 RMB/year for the master program, and will be given on a monthly base. There is also a settlement allowance of 3000RMB/person.

If a student expects to have his/her spouse, children, relatives or friends to visit him/her during the stay in Wuxi, the visitor will have to bear all the expenses by him/herself.

## V Application

## 1. Requirement

All applicants must meet the following admission requirements:

- 1) Applicants must be non-Chinese citizens from developing countries, with a valid passport, or any other identification certificate sufficient to verify his/her nationality;
- 2) Applicants must have attained a Bachelor degree or above;
- 3) Applicants must be proficient in English. Non-native English speakers or candidates whose undergraduate education was not conducted in English are required to submit a test score of TOEFL or IELTS as proof of English proficiency. Applicants with the following scores would be considered competitive:
  - TOEFL 100 or above in iBT (Internet-Based TOEFL);
  - TOEFL 600 or above in PBT (Paper-Based TOEFL), or
  - IELTS 7.0 or above in overall band score.
- 4) All applicants shall be in good physical conditions and carry no infectious diseases which may have a serious impact on public health or fall into any of the

- health situations prohibited by China's Entry-Exit Inspection and Quarantine Laws and Regulations.
- 5) Only applicants recommended by the Economic and Commercial Counsellor's Office of Chinese Embassy in the country that accords with the candidate's nationality will be considered.
- 6) Applicants should not be older than 40 years old.

#### 2. Procedures

## 1) Application to Nanjing Agricultural University

Please download the attached application form of NAU (or visit NAU website for overseas admission *http://coie.njau.edu.cn/en/bigclass.asp?id=6* and download the application form), fill it online and please pay attention to the information below while filling:

- (1) In the scholarship source column fill with "Chinese Government Scholarship (Master's Degree Program)";
- (2) After filling in all the required information, print the form, put on a hand-written name and date, and then post a photo on it.

## 2) Application to Chinese Government Scholarship

Please visit the online application system of Chinese Scholarship Council at *http://laihua.csc.edu.cn*, and register for an account. Select the program "Chinese Government Scholarship", fill in all the required information, and an application form will come into being. Print out the form, put on a hand-written name and date, and then post a photo on it. To complete the form successfully, please note the following information:

- (1) The agency No. of Nanjing Agricultural University is 10307; Major is "Fishery";
- (2) The CSC code number gained from filling online will be used when filling visa application form (JW201 form).

#### 3) Materials

Documents		Requirements	Original copy	Photocopy
1	ANU Application Form	Please download the attached form or download from NAU website, fill it in, print it out, sign, date, and post a photo on it.	1	1
2	Chinese Government Scholarship Application Form	Please visit http://laihua.csc.edu.cn/, fill in the application form, print it out, sign, date, and post a photo on it.	1	1
3	Degrees	An original copy and a photocopy need to be prepared for each degree.	1	1
4	Official Transcripts	Transcripts must list all courses taken and all scores	1	1

		obtained.		
5	Personal Statement	Personal statement must be written in English and be some 1000 words in length. It shall cover such essential elements as applicant's academic background, work experience, achievements, and future career plans, including a research proposal at NAU.	1	1
6	CV	In English.	1	1
7	Recommendation Letters	Two recommendation letters are required: one by a superior in the institution where the applicant works; the other by a professor who knows the applicant well.	1	1
8	English Language Proficiency Test Results	Applicants who are not native English speakers or whose undergraduate education was not conducted in English shall provide TOEFL or IELTS test scores.	1	1
9	Physical Examination Form	The health form shall be issued within one month before the submission of application, showing that the applicant carries no infectious diseases which may have a serious impact on public health or fall into any of the health situations prohibited by China's Entry-Exit Inspection and Quarantine Laws and Regulations.	1	1
10	Photocopy of a Valid Passport	The passport must be a personal regular passport.  All successful candidates must enter China and register with Peking University using the same passport as used for applying for the program.	0	2

## 4) Submission

- 1) Submit all the application materials listed in the above table in both hard copy and scanned copy to the Economic and Commercial Counsellor's Office of Chinese Embassy. Hard copy must include both the original copy and the photocopy, as indicated in the table. For emails and addresses of the Economic and Commercial Counsellor's Offices, please visit <a href="http://www.china-aibo.cn">http://www.china-aibo.cn</a>.
- 2) Submit a written request to the Economic and Commercial Counsellor's Office of Chinese Embassy for an official recommendation letter and clearly state:
  - a) Whether the applicant is willing to be considered for a similar program at other universities if the programs at WXFC are already full.
  - b) Other special requests if any.
- 3) After being verified by the ECC Office, above materials should be scanned, and sent to Ms. Li Feifan in NAU via email: liff@ffrc.cn, ice@ffrc.cn for further contact and assurance.

#### **Reminders:**

- a) All the documents to be submitted should be in Chinese or English. Otherwise, a notarized copy in Chinese or English is required.
- b) An original copy of degrees, transcripts and language certificates must be presented for on-site verification.
- c) Applicants will get back all the hard-copy materials, both original copies and photocopies from the Economic and Commercial Counsellor's Office. If

Degree Education Programs Sponsored by Ministry of Commerce PRC admitted, they must take the documents to China and submit them to the Wuxi Fisheries College during registration in September.

d) None of the materials submitted to the Wuxi Fisheries College will be returned. For important documents such as degrees and transcripts, a stamped copy issued by the institution where the applicant received his/her degrees will be accepted as a replacement of the original copy. In this case, the original copy must be presented for on-site verification.

#### 3. Deadlines

The application deadline for this program is June 30, 2019.

## VI Admission

The Admissions Committee of Wuxi Fisheries College of NAU makes final admission decisions. No explanation will be made regarding admission results.

Admission letters will be sent by the end of June, 2019. They will include other necessary documents for visa processing.

## VII Registration

Registration will take place in early September, 2019. The exact date will be specified in the admission letter.

#### VIII Contacts

Contact person: Ms. Li Feifan Mr. MING Junchao,

E-mail: liff@ffrc.cn, ice@ffrc.cn, Telephone: (86-510) 85555796

Fax: (86-510) 85555796

Website: http://coie.njau.edu.cn/en/index.asp

# Degree Education Programs Sponsored by Ministry of Commerce PRC Previous Activities in the 2015/2016 Master Programs in Fishery Science

#### **ACADEMIC STUDIES**





Fig.1.Opening ceremony of 2016 Professional Master Program on Fishery Science



Fig.2. Prof. XU Pao, Dean of WXFC giving lecture for the oversea students



Fig.3. Prof. ZHU Jian, giving lecture for the oversea students



Fig.4. Study tour in Suzhou Weilai Fish Seed Hatchery



Fig.5. Investigation and interview on site with the fish

Degree	Education	Programs S	ponsored by	v Ministry	y of Commerc	ce PRC

farm manger



Fig.6.Visit to Chinese Academy of Fishery
Sciences in Beijing



Fig.7. Visit to Tianjin Agricultural University

## Leisure and cultural activities





Fug.8.Chinese traditional culture experience-paper cutting





Fig.9.Playing pool





Fig.10. Christmas and birthday party





Fig.11.Footbal match





Fig, 12. Celebrating the International Women's Day