

**Information for Chinese Government Scholarship- High-level
Graduate Students Program of Nanjing Agricultural University**

南京农业大学中国政府奖学金高水平研究生项目

招生专业信息简介

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College: Agriculture

Discipline: Crop science

Educational Objective:

To master the solid theoretical basis of crop science, systematic and in-depth professional knowledge and well-trained practical skills. To be familiar with the history, current situation and development trend of this discipline. To obtain the ability to independently engage in crop science related work and scientific research, teaching and promotion work, and can explore in the forefront of discipline development.

1. Crop Cultivation and Farming

Code: 090101

Teaching Language: Chinese and English

Study Level: Master

Term of Study: 3 years

Research Fields:

- 01 Crop Physiological and Biochemical
- 02 Crop Ecology
- 03 Theory and Technology of Crop Cultivation
- 04 Crop Growth Monitoring and Diagnosis
- 05 Crop Chemical Control
- 06 Farmland Ecology and Farming System
- 07 Crop System Simulation
- 08 Precision agriculture and digital agriculture
- 09 Ecological Agriculture and Sustainable Agriculture
- 10 Farmland Meteorology and Environmental Engineering
- 11 Agricultural Information Engineering

Core Subjects:

Special Topic of Crop Cultivation and Farming, Crop Physiology, Crop Ecology etc.

2. Crop Genetics and Breeding

Code: 090102

Teaching Language: Chinese and English

Study Level: Master

Term of Study: 3 years

Research Fields:

- 01 Principles and methods of plant breeding
- 02 Research and Utilization of Plant Genetic Resources
- 03 Cell Genetics and Breeding of Plants
- 04 Quantitative Genetics and Breeding of Plants
- 05 Molecular Genetics and Breeding of Plants
- 06 Plant Genomics and Molecular Breeding
- 07 Plant cells and Genetic engineering
- 08 Seed science and technology
- 09 Analysis and Utilization of Biological Information
- 10 Germplasm Genomics

Core Subjects:

Advances in Crop Genetics and Breeding Research, Crop Physiology, Crop Ecology etc.

3. Smart Agriculture	
Code: 0828J2/0901J2	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Agricultural Information Perception 02 Agricultural Data Intelligence 03 Agricultural Simulation Decision 04 Agricultural Intelligent Equipment 05 Smart Agricultural Engineering	
Core Subjects:	
Special Topic on Agricultural Informatics, Crop Physiology, Crop Ecology etc.	
4. Crop Cultivation and Farming	
Code: 090101	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Crop Physiological Ecology 02 Crop Precision Cultivation 03 Crop System Simulation 04 Crop Growth Monitoring 05 Precision Agriculture and Smart Agriculture 06 Farming System and Farmland Ecology 07 Agricultural Smart Device 08 Regional Agricultural Development 09 Crop Phenotypic Study	
Core Subjects:	
Research Advances in Crop Science, Special Topic on Crop Cultivation and Farming etc.	
5. Crop Genetics and Breeding	
Code: 090102	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Soybean Genetic Breeding 02 Germplasm Genomics 03 Wheat Molecular Cytogenetics 04 Rice Molecular Breeding 05 Molecular Plant Breeding 06 Genomics 07 Rice Molecular Genetics and Breeding 08 Research and Utilization of Plant Genetic Resources 09 Theory and Method of Crop Molecular Breeding 10 Plant Genetic Engineering 12 Soybean Molecular Breeding 13 Quality Improvement and Utilization 15 Genetic Breeding of Brassica Napus L. 16 Functional Genomics	

17 Cotton Genetic Breeding	
18 Molecular Design Breeding	
19 Wheat Chromosome Engineering	
21 Function and Regulation of Plant Genes	
22 Genetic Breeding of Maize Disease Resistance	
23 Molecular Breeding of Plant Disease Resistance	
Core Subjects:	
Research Advances in Crop Science, Special Topic on Crop Genetics and Breeding etc.	
6. Smart Agriculture	
Code: 0901J2	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Agricultural Information Perception	
02 Agricultural Data Intelligence	
03 Agricultural Simulation Decision	
04 Agricultural Intelligent Equipment	
05 Smart Agricultural Engineering	
Core Subjects:	
Research Advances in Crop Science, Special Topic on Agricultural Informatics etc.	
7. Seed Science and Technology	
Code: 0901Z2	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Seed Development and Genetic Control	
02 Seed Quality Control Technology	
04 Seed Industrialization	
05 Seed Health Detection	
Core Subjects:	
Research Advances in Crop Science, Special Topic on Seed Science and Technology etc.	
College: Plant Protection	
Discipline: Plant Protection	
Educational Objective:	
With systematic and in-depth theory of plant protection and the ability to engage in independent scientific research. To be competent for the teaching, scientific research and technical management of plant pathology, agricultural entomology and pesticide science.	
1. Plant Pathology	
Code: 090401	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years

Research Fields:	
01 Pathogenic mechanism of plant pathogens	
02 Plant disease resistance and application	
03 Principle and application of plant disease control	
Core Subjects:	
Plant Molecular Immunology, Methods of Plant Protection Research etc.	
2. Agricultural Entomology and Pest Control	
Code: 090402	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Insect Physiology, Biochemistry and Molecular Biology	
02 Insect Toxicology and Pesticide Resistance	
03 Insect Ecology and Forecasting	
04 Molecular Ecology and Evolution of Insects	
05 Chemical Ecology of Insects	
06 Insect Behaviour and Biological Control	
07 Insect Taxonomy and Phylogeny	
08 Plant Quarantine and Invasive Organisms	
09 Insect Genomics	
Core Subjects:	
Evolutionary Biology, Methods of Plant Protection Research etc.	
3. Pesticide Science	
Code: 090403	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Novel Pesticide Creation	
02 Fungicides Toxicology and Resistance	
03 Insecticides Toxicology and Resistance	
04 Herbicide Toxicology and Resistance	
05 Pesticide Residues and Environmental Toxicology	
06 Pesticide application	
Core Subjects:	
Advances in Pesticide Research, Methods of Plant Protection Research etc.	
4. Plant Pathology	
Code: 090401	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Plant Fungal Disease	
02 Plant Bacterial Disease	
03 Plant Virus Disease	
04 Plant Nematode Disease	
05 Plant Oomycetes Disease	

06 Plant Disease Resistance	
07 Biological Control of Plant Diseases	
08 Plant Quarantine and Invasive Biology	
09 The Molecular Mechanism of Interactions Between Plants and Pathogens	
Core Subjects:	
Plant Molecular Immunology, Methods of Plant Protection Research etc.	
5. Agricultural Entomology and Pest Control	
Code: 090402	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Insect physiology, biochemistry and molecular biology	
02 Insect Molecular toxicology	
03 Insect Ecology	
04 Molecular Ecology and Evolution of Insects	
05 Biological Control of Pests and Weeds	
06 Insect Behaviour and Chemical Ecology	
07 Classification and Phyletic Evolution of Insects (Mites)	
08 Invasive Organisms and Biosecurity	
10 Ecology Catastrophe Forewarning	
Core Subjects:	
Evolutionary Biology, Methods of Plant Protection Research etc.	
6. Pesticide Science	
Code: 090403	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Insecticides Toxicology and Resistance	
02 Fungicides Toxicology and Resistance	
03 Herbicide Toxicology and Resistance	
04 Novel Pesticide Creation	
05 Pesticide Residues and Environmental Toxicology	
06 Fungicides Pharmacology	
08 Targeted Pesticide Biology	
Core Subjects:	
Advances in Pesticide Research, Methods of Plant Protection Research etc.	
College: Resources and Environmental Sciences	
Discipline: Agricultural Resources and Environment	
Educational Objective:	
Master the solid fundamental theories and systematic specialized knowledge of the discipline area; Have to have the ability to engage in scientific and technological research, and to understand the frontier of the subject; Have a wide range of knowledge and strong adaptability.	

1. Plant Nutrition	
Code: 090302	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Plant Nutritional Physiology and Nutrient Management	
02 Plant Nutritional Genetics and Stress Tolerance	
03 Science of New Type of Fertilizer and Rhizosphere Processes	
Core Subjects:	
Advanced Plant Nutrition, Resource and Environmental Microbiology etc.	
2. Soil Science	
Code: 090301	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Soil C/N Cycling and Environmental Effects	
02 Soil Bio-function and Utilization of Agricultural Wastes	
03 Control and Remediation of Soil Pollution	
04 Remote Sensing and Information Technology of Soil Resources and Environment	
Core Subjects:	
Advanced Soil Science (Environmental Issues included), Advanced Plant Nutrition etc.	
3. Environmental Science	
Code: 083001	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Environmental Processes and Global Change	
02 Control and Remediation of Pollution in Agricultural Environment	
03 Environmental Quality and Food Safety	
04 Environmental Monitoring and Environmental Impact Assessment	
05 Biology and Ecological Engineering	
Core Subjects:	
Environmental Chemistry, Environmental Microbiology and Experimental Techniques etc.	
4. Environmental Engineering	
Code: 083002	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Solid Waste Treatment and Recycling	
02 Waste Water Treatment Engineering	
03 Remediation of Contaminated Soil and Sediment	
04 Environmental Pollution Chemistry and Pollution Control	
05 Environmental Engineering Microbiology	
Core Subjects:	
Environmental Chemistry, Environmental Engineering Technology etc.	

5. Ecology	
Code: 071300	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Soil ecology and microbial ecology 02 Ecosystem Ecology 03 Restoration Ecology 04 Coastal Ecology	
Core Subjects:	
Frontiers of Ecological Research, Global Change Ecology etc.	
6. Agricultural Resources and Environment	
Code: 090300	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Soil Science and Soil Sustainability Management 02 Plant Nutrition Biology and Stress Regulation 03 Control and Remediation of Agricultural Environmental Pollution 04 Biological Process of Agricultural Waste Recycling 05 Terrestrial Surface Processes and Global Change	
Core Subjects:	
Advanced Plant Nutrition, Resource and Environmental Microbiology etc.	
7. Ecology	
Code: 071300	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Soil Ecology and Microbial Ecology 02 Restoration Ecology 03 Ecosystem Ecology 04 Coastal Ecology	
Core Subjects:	
Advanced Ecology, Advances in Ecological Research, Methods of Ecological Research etc.	
8. Environmental Pollution Control Engineering	
Code: 0828Z1	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Solid Waste Disposal 02 Water and Wastewater Treatment 03 Environmental Engineering Microbiology 04 Control and Remediation of Environmental Pollution	

05 Greenhouse Gas Emission Reduction and Control	
Core Subjects:	
Environmental Pollution Chemistry and Control, Topic on Environmental Engineering etc.	
College: Food Science and Technology	
Discipline: Food Science and Technology	
Educational Objective:	
Have a strong ability to acquire knowledge, scientific research and academic communication; Master-level student can identify and analyse the science and technology and engineering problem in this field in practice and solve them through scientific research, have the ability to engage in scientific research, engineering technology development, and to conduct the public dissemination and consultation of food safety, food nutrition, food technology and other related professional knowledge, and has certain quality of entrepreneurship; Doctoral students can put forward innovative ideas to promote the theoretical development or technological progress of the discipline, and have the ability to engage in innovative basic theory and applied basic scientific research independently and to teach professional knowledge.	
1. Food Science and Engineering	
Code: 083200	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Meat Processing and Quality Safety 02 Livestock Products Processing Science 03 Food Microbiology 04 Food Biotechnology 05 Food nutrition chemistry 06 Agricultural Products Quality Inspection and Control 07 Postharvest Biology and Storage and Transportation Technology 08 Processing and Comprehensive Utilization of Agricultural Products 09 Food Safety Inspection Technology 10 Storage and Processing of Aquatic Products 11 Food Packaging and Preservation Technology	
Core Subjects:	
Advances in Food Nutrition and Chemistry, New Technologies of Food Processing and Analysis etc.	
2. Food Science and Engineering	
Code: 083200	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Meat Processing and Quality Safety Control 02 Livestock Products Processing Science 03 Food Preservation Packaging Technology 04 Nutrigenomics of Meat	

05 Food Enzyme Engineering	
06 Food Microbiology and Biotechnology	
07 Food Safety and Immunization	
08 Safety Control of Food Pathogenic Microbe	
09 Non-destructive Inspection of Agricultural Products	
10 Post-Harvest Treatment, Processing, Storage and Transportation of Agricultural Products	
11 Postharvest Biology and Storage and Transportation Technology of Fruits and Vegetables	
12 Research and Utilization of Active Ingredients in Fruits and Vegetables	
13 Agricultural Products Processing Principle and Technology	
14 Cold Chain Logistics and Quality Control of Agricultural Products	
15 Technology of Food Functional Components Enrichment	
16 Biotechnology and Deep Processing of Agricultural Products	
17 Food Nutrition and Chemistry	
18 Natural Product Chemistry	
19 Biological Resources Chemistry and Functional Foods	
20 Sugar Bioengineering	
21 Sugar Biochemistry	
22 Protein Engineering	
23 Glycomics in Food	
24 Food Nutrition and Processing Safety	
27 Flavour Chemistry	
28 Food Quality Inspection and Control	
29 Food Colloid Science and Technology	
30 Food Nutrition and Immunization	
31 Study and Utilization of Functional Components in Food	
32 Technology and Mechanism of Agricultural Product Quality Promotion	
33 Formation of Meat Physical Properties and its Perception	
Core Subjects	
Advances in Food Nutrition and Chemistry, New Technologies of Food Processing and Analysis etc.	
College: Horticulture	
Discipline: Horticulture	
Educational Objective:	
Master solid fundamental theories and professional knowledge in horticulture discipline, and have strong ability in problem analysis and social practice; Doctoral students have the ability to engage in teaching, scientific research and other practical work independently.	
1. Pomology	
Code: 090201	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Germplasm Resources and Genetic Breeding of Fruit Trees	
02 Cultivation Physiology and Ecology of Fruit Trees	

03 Molecular Biology of Fruit Trees	
04 Cell Biology of Fruit Trees	
05 Fruit Tree Genomics	
06 Application of Plant Growth Substances in Fruit Trees	
Core Subjects:	
Advances in Horticulture, Research Technology of Modern Horticultural Science, Advanced Fruit Tree Cultivation and Breeding etc.	
2. Olericulture	
Code: 090202	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Genetic Breeding of Vegetable Crops	
02 Physiology and Ecology of Vegetable Crops	
03 Biotechnology of Vegetable Crops	
04 Germplasm Creation and Excellent Gene Discovery of Vegetable Crops	
05 High Quality and High Efficiency Cultivation Technology of Vegetable Crops	
06 Vegetable Bioinformatics and Systematic Biology	
Core Subjects:	
Advances in Horticulture, Research Technology of Modern Horticultural Science, Advanced Vegetable Cultivation and Breeding etc.	
3. Tea Science	
Code: 090203	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Breeding and Cultivation of Tea Tree	
02 Tea Chemistry and Tea Making Engineering	
03 Development and Utilization of Beverage Plant Resources	
04 Tea Economy and Tea Culture	
Core Subjects:	
Research Technology of Modern Horticultural Science, Germplasm Resources and Utilization of Tea Trees etc.	
4. Ornamental Horticulture	
Code: 0902Z1	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Research and Innovation of Ornamental Plant Germplasm Resources	
02 Ornamental Plant Genetics and Breeding and Molecular Biology	
03 Ornamental Plant Biotechnology	
04 Ornamental Plant Physiology Ecology	
05 Cultivation Principles and Techniques of Ornamental Plants	
06 Postharvest Physiology and Molecular Biology of Ornamental Plants	
07 Biology of Reproductive Development in Ornamental Plants	

08 Regulation of Secondary Metabolism in Ornamental Plants	
Core Subjects:	
Research Technology of Modern Horticultural Science, Ornamental Plant Resources and Utilization etc.	
5. Protected Horticulture	
Code: 0902Z3	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 The Physiology and Ecology of Protected Crops 02 Stress Biology of Vegetables 03 Greenhouse Design and Construction 04 Protected Environmental Engineering 05 Soilless Cultivation	
Core Subjects:	
Advances in Horticulture, Protected Crops Cultivation etc.	
6. Pomology	
Code: 090201	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Cultivation Physiology and Developmental Biology of Fruit Trees 02 Fruit Tree Genomics 03 Fruit Tree Genetics and Breeding 04 Molecular Biology of Fruit Trees 05 Cultivation Physiology and Ecology of Fruit Trees 06 Genetics and Breeding and Molecular Biology of Fruit Trees 07 Reproductive Physiology and Molecular Biology of Fruit Trees 08 Cell Biology of Fruit Trees 09 Germplasm Resources of Fruit Trees 10 Molecular Physiology of Fruit Trees	
Core Subjects:	
Advanced Fruit Tree Cultivation and Breeding, Frontiers of Modern Horticultural Science etc.	
7. Olericulture	
Code: 090202	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Genetic Breeding of Vegetable Crops 02 Biotechnology of Vegetable Crops 03 Physiology and Ecology of Vegetable Crops 04 Vegetable Crop Systems Biology 05 Vegetable Physiology and Molecular Biology 06 Vegetable Crop Genetics and Breeding and Biotechnology	

07 Vegetable Physiology and Biotechnology	
08 Molecular Cytogenetics of Vegetable Crops	
09 Differential Equation Model and Structure-preserving Numerical Simulation of Vegetable Cells	
Core Subjects:	
Advanced Vegetable Cultivation and Breeding, Frontiers of Modern Horticultural Science etc.	
8. Tea Science	
Code: 090203	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Breeding and Cultivation of Tea Trees	
02 Genetics and Breeding of Tea Trees	
03 Physiology and Molecular Biology of Tea Trees	
Core Subjects:	
Research Technology of Modern Horticultural Science, Frontiers of Modern Horticultural Science etc.	
9. Ornamental Horticulture	
Code: 0902Z1	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Flower Genetics and Breeding	
02 Research and Innovation of Flower Germplasm Resources	
03 Stress Physiology and Molecular Biology of Flowers	
04 Floral Developmental Biology	
05 Floral Reproductive Biology	
07 Physiology and Ecology of Ornamental Plant Cultivation	
Core Subjects:	
Research Technology of Modern Horticultural Science, Frontiers of Modern Horticultural Science etc.	
10. Protected Horticulture	
Code: 0902Z3	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
02 High Quality and Efficient Production of Protected Crops	
03 Environmental Engineering and Control of Protected Horticulture	
Core Subjects:	
Research Technology of Modern Horticultural Science, Frontiers of Modern Horticultural Science etc.	
College: Economics and Management	

Discipline: Agricultural and Forestry Economics and Management	
Educational Objective:	
Master solid and broad basic theories and in-depth systematic specialized knowledge in the field of agricultural and forestry economics and management; Have the ability to engage in economic analysis and social practice independently; Be familiar with the development frontier of the subject and make creative achievements in the research topic.	
1. Agricultural Economics and Management	
Code: 120301	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Agricultural Economic Theory and Policy 02 Agricultural Operation and Management 03 Natural Resource and Environmental Economics 04 Regional Economy and Rural Sustainable Development 05 Agrotechnical Economy	
Core Subjects:	
Microeconomic Theory and Analysis, Macroeconomic Theory and Analysis, Econometric Theory and Application etc.	
2. Agricultural Economics and Management	
Code: 120301	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Agricultural Products Trade 02 Agricultural Economics and Management 03 Agrotechnical Economy 04 Modern Agri-related Enterprise Management 05 Agricultural Economic Theory and Policy 06 Agri-Related Industry Economy 07 Agricultural Resources and Environmental Economics 08 Management of Food Safety	
Core Subjects:	
Advanced Microeconomics, Advanced Econometrics, Quantitative Economic Analysis etc.	
3. International Business (Professional Master's Degree) ¹	
Code: 025400	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 International Business	
Core Subjects:	
International Business, International Trade Policies and Practices, International Finance:	

¹ This major mainly recruits students of the Chinese Government Scholarship——Silk Road Program

Theory and Practice etc.	
College: Public Administration	
Discipline: Public Administration	
Educational Objective:	
Master solid and broad basic theories and in-depth systematic expertise in the field of Public Administration; Have the ability to independently engage in theoretical analysis and social practice within the research field; Be familiar with the discipline frontiers and achieve creative results in the research topic; Integrate theory with practice, be good at interdisciplinary cooperation, and meet the needs of the social development for interdisciplinary and applied talents.	
1. Educational Economics and Management	
Code: 120403	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Educational Economics 02 Educational Administration and Management 03 Educational Decision-Making and Strategy	
Core Subjects:	
Methodology of Social Science Research, Public Management Science, Educational Administration etc.	
2. Educational Economics and Management	
Code: 120403	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
02 Higher Education Administration 04 Educational Decision-Making and Developmental Strategy	
Core Subjects:	
Analysis of Advanced Public Policy, Advances in Educational Economics and Management etc.	
3. Land Resource Management	
Code: 120405	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Land Economy and Management 02 Real Estate Appraisal and Management 03 Land Planning and Urban and Rural Planning 04 Cadastre and Land Information Management 05 Sustainable Use of Land Resources	

06 Land Administration and Land Law	
07 Real Estate Development, Operation and Management	
Core Subjects:	
Advances in Land Resource Management, Land Economic Theory, Econometric Theory and Analysis etc.	
4. Land Resource Management	
Code: 120405	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Land Economy and Management	
02 Resource and Environmental Economics and Management	
03 Real Estate Appraisal and Management	
04 Land Economic Theory and Policy	
05 Land Use Planning and Management	
06 Land Administration	
07 Cadastre and Land Information Management	
08 Sustainable Use of Land Resources	
09 Science of Land Law	
10 Resource Management and Public Policy	
11 Resource (Environment) Economic Theory and Policy	
13 Land System and Law	
14 Resource and Environment Evaluation and Planning Management	
Core Subjects:	
Analysis of Advanced Public Policy, Frontiers of Resource Economy and Land Management Research	
College: Animal Science and Technology	
Discipline: Animal Husbandry	
Educational Objective:	
Systematically master the basic theory of animal husbandry and necessary scientific research skills, understand the domestic and international development trends and the latest scientific and technological achievements in this discipline, and have a broad knowledge of related basic disciplines; Have the courage to innovate, rigorous academic attitude, the scientific spirit of cooperation, and have the ability to independently engage in the teaching, scientific research, production and management work.	
1. Animal Genetics, Breeding and Reproduction	
Code: 090501	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Animal Molecular Quantitative Genetics	
02 Protection and Utilization of Animal Genetic Resources	
03 Animal Breeding	
04 Animal Reproductive Physiology	

05 Animal Genetic Engineering	
Core Subjects:	
Animal Molecular Genetics, Principles of Animal Reproduction and Breeding etc.	
2. Animal Nutrition and Feed Science	
Code: 090502	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Animal Molecular Quantitative Genetics 02 Protection and Utilization of Animal Genetic Resources 03 Animal Breeding 04 Animal Reproductive Physiology 05 Animal Genetic Engineering	
Core Subjects:	
Modern Animal Biochemistry, Advanced Animal Nutrition, Research Methods and Techniques of Feed Nutrition etc.	
3. Animal Genetics, Breeding and Reproduction	
Code: 090501	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Animal Functional Genomics and Molecular Breeding 02 Reproductive Toxicology 06 Sheep Breeding and Nutritional Regulation 07 Animal Reproductive Physiology and Regulation 08 Insemination Biology 09 Germplasm Characteristics Mining and Innovative Application of Swine Genetic Resources 10 Animal Reproductive Pathology 13 Breeding and Molecular Mechanisms of Animal Growth and Behaviour, Animal Behaviour and Welfare 14 Physiological Regulation of Ruminants, Cattle Science 16 Animal Genetics and Functional Genomics, Poultry Genetics and Breeding 18 Mutton Sheep Breeding, Animal Gamete Biology and Embryo Engineering 19 Nutritional Regulation of Animal Reproduction, Ecological Nutritional Regulation in Animal Intestines	
Core Subjects:	
Advances in Animal Breeding and Reproduction, Animal Reproduction Theory and Biotechnology (with Cases) etc.	
4. Animal Nutrition and Feed Science	
Code: 090502	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Animal Digestive Tract Microflora	

03 Meat Quality and Nutritional Regulation	
04 Intestinal Function, Health and Nutrition in Monogastric Animals	
05 Aquatic Animal Physiology and Nutrition	
06 Feed Safety and Healthy Breeding	
08 Animal Environmental Physiology and Nutrition	
09 Animal Nutrition and Metabolomics	
10 Ruminant Nutrition	
11 Swine Intestinal Microbiology and Nutritional Regulation	
12 Animal Tissue Growth and Nutrient Metabolism	
13 Digestive Tract Microflora	
Core Subjects:	
Advances in Animal Nutrition Research, Intelligent Animal Husbandry etc.	
College: Veterinary Medicine	
Discipline: Veterinary Medicine	
Educational Objective:	
Master solid and broad basic theory and in-depth systematic specialized knowledge in veterinary medicine; Master certain knowledge of related disciplines; Have the ability to independently engage in teaching, scientific research and other aspects of work in veterinary disciplines and related sciences, and make creative achievements in science or specialized technology.	
1. Basic Veterinary Medicine	
Code: 090601	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Animal Physiology and Stress Biology	
02 Animal Functional Biochemistry	
03 Animal Functional Histology and Embryology	
04 Animal Pathology	
05 Neuroendocrinology and Immune	
06 Veterinary Pharmacology Toxicology and Veterinary Preparations	
Core Subjects:	
Modern Animal Biochemistry, Modern Animal Immunology, Advanced Animal Pathology etc.	
2. Preventive Veterinary Medicine	
Code: 090602	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Animal Virology and Immunology	
02 Veterinary Microbiology and Immunology	
03 Biotechnology in Veterinary Medicine	
04 Diagnosis and Immunization of Animal Infectious Diseases	
05 Veterinary Parasitic Diseases and Immunization	

06 Veterinary Public Health	
07 Pathogenic microbiology of aquatic animals	
Core Subjects:	
Modern Animal Biochemistry, Gene Engineering, Animal Pathogenic Infection Genomics etc.	
3. Clinical Veterinary Medicine	
Code: 090603	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Small Animal Surgery	
02 Small Animal Internal Medicine	
03 Veterinary Nutritional Metabolic Disease and Toxicosis	
04 Veterinary Imaging Diagnosis and Clinical Testing	
05 Animal Obstetric Diseases and Reproductive Regulation	
06 Chinese Veterinary Medicine and Chinese Veterinary Pharmacy	
Core Subjects:	
Veterinary Clinical Practice, Veterinary Nursing, Advances in Clinical Veterinary Medicine etc.	
4. Basic Veterinary Medicine	
Code: 090601	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Animal Nutrition Physiology and Growth Regulation	
02 Stress Biology and Animal Welfare	
03 Animal Biochemical and Metabolic Regulation	
04 Animal Histology and Developmental Biology	
05 Veterinary Molecular and Immunopathology	
06 Veterinary Pharmacology and Toxicology	
07 Immune Barrier and Mechanism of Livestock and Poultry	
08 Single Molecule Study and Detection Technology of Hazard Factors in Animal-derived Food	
Core Subjects:	
Modern Animal Biochemistry, Modern Animal Immunology, Frontier of Biomedicine etc.	
5. Preventive Veterinary Medicine	
Code: 090602	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Interactions between Pathogen and Host	
02 Molecular Virology and Immunology	
03 Pathogenesis and Immunity of Animal Infectious Diseases	
04 Veterinary Microorganism Pathogenic Mechanism and Immunity	
05 Veterinary Parasite Molecular Immunology	
06 Veterinary Public Health	

Core Subjects:	
Modern Animal Biochemistry, Gene Engineering, Animal Pathogenic Infection Genomics etc.	
6. Clinical Veterinary Medicine	
Code: 090603	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Animal Nutritional Immunology and Nutritional Metabolic diseases 02 Animal Toxicosis and Animal Product Safety 03 Veterinary Surgical Pathology and Experimental Surgery 05 Combination of Chinese Veterinary and Western Veterinary Medicine	
Core Subjects:	
Modern Animal Biochemistry, Modern Animal Immunology, Advances in Clinical Veterinary Medicine etc.	
College: Engineering	
Discipline: Agricultural Engineering	
Educational Objective:	
Master the basic theory and systematic specialized knowledge of a certain field of agricultural engineering, understand the research status and the development trend of the research direction; Have strong ability to analyse problems and solve practical problems, and have new insights in theoretical research or technical research.	
1. Agricultural Mechanization Engineering	
Code: 082801	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Agricultural Machine System Optimization Technology 02 Agricultural Products Inspection and Processing Technology 03 Bio-electromechanical system 04 Agricultural Machinery Modern Design Theory and Method 05 Mechanical and Electrical Integration	
Core Subjects:	
Topic on Agricultural Engineering Research, Modern Mathematics, Advanced Engineering Mechanics (Mechanical Vibration) etc.	
2. Agricultural Biological Environment and Energy Engineering	
Code: 082803	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Agricultural Biological Environment Control and Equipment 02 Coordinated Development of Energy, Economy and Environment and Regional Energy Planning	

03 Development, Utilization and Evaluation of Renewable Energy	
04 Biological Environmental Engineering and Technology	
05 Development and Utilization of Biomass Energy	
Core Subjects:	
Topic on Agricultural Engineering Research, Modern Mathematics, Principles of Transfer Process (Heat and Mass Transfer) etc.	
3. Agricultural Electrification and Automation	
Code: 082804	Teaching Language: Chinese and English
Study Level: Master	Term of Study: 3 years
Research Fields:	
01 Agricultural Electronics and Information Technology	
02 Agricultural Robot	
03 Mechanical and Electrical Integration	
04 Machine Vision and Image Processing	
05 Intelligent Control Technology of Agricultural Equipment	
Core Subjects:	
Engineering Mathematics (Matrix Theory, Mathematical Statistics), Linear System Theory etc.	
4. Agricultural Mechanization Engineering	
Code: 082801	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Drying Method and Technical Equipment of Agricultural Products	
02 Agricultural Vehicle System Dynamics and its Intelligent Control Technology	
03 Precision Planting and Harvesting Technology and Intelligent Equipment	
04 Mechanical and Electrical Integration Technology	
05 Modern Design Theory and Method of Agricultural Machinery	
06 Intelligent Connected Vehicle	
08 Agricultural Robot	
09 Special Processing Technology	
10 Modern Agricultural Equipment and Computer Control	
11 Modern Agricultural Equipment and its Automation Technology	
13 Vehicle Electro-hydraulic Control Technology	
14 Biomass Conversion Technology and Equipment	
Core Subjects:	
Topic on Agricultural Engineering Research, Modern Mathematics, Advanced Engineering Mechanics (Mechanical Vibration) etc.	
5. Agricultural Biological Environment and Energy Engineering	
Code: 082803	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Design and Preparation of Nano Materials and Functional Catalytic Materials	

02 Thermochemical and Biochemical Conversion of Biomass	
03 Biomass Functional Materials Design and equipment	
04 Biomass Environmental Materials and Regulation	
Core Subjects:	
Topic on Agricultural Engineering Research, Modern Mathematics, Principles of Transfer Process (Heat and Mass Transfer) etc.	
6. Agricultural Electrification and Automation	
Code: 082804	Teaching Language: Chinese and English
Study Level: PhD	Term of Study: 4 years
Research Fields:	
01 Processing, Detection and Intelligent Equipment of Agricultural Products	
02 Intelligent Detection and Control Technology	
03 Intelligent Agriculture Technologies and Equipment	
04 Agricultural Condition Information Theory and Equipment	
05 Agricultural Internet of Things and Big Data	
06 Agricultural Automation and Fault Diagnosis	
07 Theory and Application of Switching Systems	
08 Agricultural Robots and Intelligent Control	
09 Machine Vision and Image Processing Technology	
10 Animal Phenotype Detection and Intelligent Farming Technology	
11 Data Science and Agricultural Big Data Processing	
12 Agricultural Internet of Things Technology and Application	
13 Big Data Analysis and Modeling Technology	
14 Research on Artificial Intelligence Theory and its Application	
Core Subjects:	
Topic on Agricultural Engineering Research, Modern Mathematics, Linear System Theory etc.	

南京农业大学中国政府奖学金高校研究生项目 招生专业信息简介

学院：农学院
一级学科：作物学
培养目标：
掌握作物学坚实宽广的理论基础、系统深入的专业知识和训练有素的实践技

能；熟悉本学科的历史、现状和发展动态；具有独立从事作物学相关工作及科研、教学和推广工作的能力，能在学科发展的前沿上探索。

1. 作物栽培学与耕作学

专业代码：090101	授课语言：中、英文
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层次：硕士	学制：3年
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研究方向：

- 01 作物生理生化
- 02 作物生态
- 03 作物栽培理论与技术
- 04 作物生长监测与诊断
- 05 作物化学控制
- 06 农田生态与耕作制度
- 07 作物系统模拟
- 08 精确农业与数字农业
- 09 生态农业与持续农业
- 10 农田气象与环境工程
- 11 农业信息工程

核心课程：

作物栽培学与耕作学专题、作物生理学、作物生态学等

2. 作物遗传育种

专业代码：090102	授课语言：中、英文
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层次：硕士	学制：3年
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研究方向：

- 01 植物育种的原理和方法
- 02 植物遗传资源的研究和利用
- 03 植物细胞遗传与育种
- 04 植物数量遗传与育种
- 05 植物分子遗传与育种
- 06 植物基因组学研究与分子育种
- 07 植物细胞与基因工程
- 08 种子科学与技术
- 09 生物信息分析与利用
- 10 种质基因组学

核心课程：

作物遗传育种研究进展、作物生理学、作物生态学等

3. 智慧农业

专业代码：0828J2/ 0901J2	授课语言：中、英文
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层次：硕士	学制：3年
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研究方向：

- 01 农业信息感知
- 02 农业数据智能

03 农业模拟决策	
04 农业智能装备	
05 智慧农业工程	
核心课程：	
农业信息学专题、作物生理学、作物生态学等	
4. 作物栽培学与耕作学	
专业代码：090101	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 作物生理生态	
02 作物精确栽培	
03 作物系统模拟	
04 作物生长监测	
05 精确农业与智慧农业	
06 耕作制度与农田生态	
07 农业智能装备	
08 区域农业发展	
09 作物表型研究	
核心课程：	
作物科学研究前沿、作物栽培学与耕作学专题等	
5. 作物遗传育种	
专业代码：090102	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 大豆遗传育种	
02 种质基因组学	
03 小麦分子细胞遗传学	
04 水稻分子育种	
05 分子植物育种	
06 基因组学	
07 水稻分子遗传与育种	
08 植物遗传资源的研究与利用	
09 作物分子育种的理论与方法	
10 植物基因工程	
12 大豆分子育种	
13 品质改良与利用	
15 油菜遗传育种	
16 功能基因组学	
17 棉花遗传育种	
18 分子设计育种	
19 小麦染色体工程	
21 植物基因的功能与调控	

22 玉米抗病遗传育种	
23 植物抗病分子育种	
核心课程：	
作物科学研究前沿、作物遗传育种研究进展等	
6. 智慧农业	
专业代码：0901J2	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 农业信息感知 02 农业数据智能 03 农业模拟决策 04 农业智能装备 05 智慧农业工程	
核心课程：	
作物科学研究前沿、农业信息学专题等	
7. 种子科学与技术	
专业代码：0901Z2	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 种子发育与遗传控制 02 种子质量控制技术 04 种子产业化 05 种子健康与检测	
核心课程：	
作物科学研究前沿、种子科学与技术专题等	
学院：植物保护学院	
一级学科：植物保护	
培养目标：	
具有系统深入的植物保护学理论和独立从事科学研究的能力，能胜任植物病理学、农业昆虫学、农药学相关的教学、科研和技术管理工作。	
1. 植物病理学	
专业代码：090401	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 植物病原物致病机理 02 植物抗病性与应用 03 植物病害防控原理与应用	
核心课程：	

植物分子免疫学、植保研究方法等	
2. 农业昆虫与害虫防治	
专业代码：090402	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 昆虫生理生化与分子生物学 02 昆虫毒理与抗药性 03 昆虫生态与预测预报 04 昆虫分子生态与进化 05 昆虫化学生态 06 昆虫行为与生物防治 07 昆虫分类与系统发育 08 植物检疫与入侵生物 09 昆虫基因组	
核心课程：	
进化生物学、植保研究方法等	
3. 农药学	
专业代码：090403	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 新农药创制 02 杀菌剂毒理与抗药性 03 杀虫剂毒理与抗药性 04 除草剂毒理与抗药性 05 农药残留与环境毒理 06 农药应用学	
核心课程：	
农药研究新进展、植保研究方法等	
4. 植物病理学	
专业代码：090401	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 植物真菌病害 02 植物细菌病害 03 植物病毒病害 04 植物线虫病害 05 植物卵菌病害 06 植物抗病性 07 植物病害生物防治 08 植物检疫与入侵生物学 09 植物与病原菌互作分子机制	

核心课程：	
植物分子免疫学、植保研究方法等	
5. 农业昆虫与害虫防治	
专业代码：090402	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 昆虫生理生化与分子生物学 02 昆虫分子毒理学 03 昆虫生态学 04 昆虫分子生态与进化 05 害虫与杂草生物防治 06 昆虫行为与化学生态 07 昆虫（螨）分类与系统进化 08 入侵生物与生物安全 10 生物灾变预警	
核心课程：	
进化生物学、植保研究方法等	
6. 农药学	
专业代码：090403	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 杀虫剂毒理及抗药性 02 杀菌剂毒理及抗药性 03 除草剂毒理及抗药性 04 新农药创制 05 农药残留与环境毒理 06 杀菌剂药理学 08 农药靶标生物学	
核心课程：	
农药研究新进展、植保研究方法等	
学院：资源与环境科学学院	
一级学科：农业资源与环境	
培养目标：	
掌握本学科领域内坚实的理论基础和系统的专门知识，具有从事科学和技术研究的能力，了解本学科前沿；具有较宽的知识面和较强的适应性。	
1. 植物营养学	
专业代码：090302	授课语言：中、英文
层次：硕士	学制：3年

研究方向：	
01 植物营养生理学与养分管理 02 植物营养遗传与抗逆 03 新型肥料学与根际过程	
核心课程：	
高级植物营养学、资源与环境微生物学等	
2. 土壤学	
专业代码：090301	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 土壤碳氮循环与环境效应 02 土壤生物功能及与农业废弃物资源化利用 03 土壤污染控制与修复 04 土壤资源环境遥感及信息技术	
核心课程：	
高级土壤学（含相关环境问题）、高级植物营养学等	
3. 环境科学	
专业代码：083001	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 环境过程与全球变化 02 环境污染控制与生物修复 03 环境质量与食品安全 04 环境监测与环境影响评价 05 环境生物与生态工程	
核心课程：	
环境化学、环境微生物及实验技术等	
4. 环境工程	
专业代码：083002	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 固体废物处理与资源化 02 废水处理工程 03 污染土壤与底泥的修复 04 环境污染化学与污染控制 05 环境工程微生物	
核心课程：	
环境化学、环境工程技术等	
5. 生态学	

专业代码：071300	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 土壤生态与微生物生态学 02 生态系统生态学 03 修复生态学 04 海岸带生态学	
核心课程：	
生态学研究前沿、全球变化生态学等	
6. 农业资源与环境	
专业代码：090300	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 土壤学与土壤可持续性管理 02 植物营养生物学与逆境调控 03 农业环境污染防控与修复 04 农业废弃物资源化的生物学过程 05 陆地表层过程与全球变化	
核心课程：	
高级植物营养学、资源与环境微生物学等	
7. 生态学	
专业代码：071300	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 土壤生态与微生物生态学 02 修复生态学 03 生态系统生态学 04 海岸带生态学	
核心课程：	
高级生态学、生态学研究进展、生态学研究方法等	
8. 环境污染控制工程	
专业代码：0828Z1	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 固体废物处理 02 水与废水处理 03 环境工程微生物 04 环境污染控制与修复 05 温室气体减排与控制	
核心课程：	

环境污染化学与控制、环境工程专题等

学院：食品科技学院

一级学科：食品科学与工程

培养目标：

硕士和博士研究生具有较强的获取知识、科学研究和学术交流的能力；硕士研究生能在实践中对本科学领域涉及的科学技术和工程问题进行鉴别、分析，并通过科学实验加以解决，具备从事科学研究、工程技术开发工作以及食品安全、食品营养、食品工艺等相关专业知识的公众传播和咨询的能力，并具有一定的自主创业能力；博士研究生能提出促进本学科理论发展或技术进步的创新思路，具备独立从事有创新性的基础理论和应用基础科学研究工作并传授专业知识的能力。

1. 食品科学与工程

专业代码：083200

授课语言：中、英文

层次：硕士

学制：3年

研究方向：

- 01 肉品加工与质量安全
- 02 畜产品加工学
- 03 食品微生物学
- 04 食品生物技术
- 05 食品营养化学
- 06 农产品质量检测与控制
- 07 采后生物学与贮运技术
- 08 农产品加工与综合利用
- 09 食品安全检测技术
- 10 水产品贮藏与加工
- 11 食品包装保鲜技术

核心课程：

食品营养与化学进展、食品加工与检测新技术等

2. 食品科学与工程

专业代码：083200

授课语言：中、英文

层次：博士

学制：4年

研究方向：

- 01 肉品加工与质量安全控制
- 02 畜产品加工学
- 03 食品保鲜包装技术
- 04 肉品营养基因组学
- 05 食品酶工程
- 06 食品微生物与生物技术
- 07 食品安全与免疫
- 08 食品致病菌安全控制

09 农产品无损检测	
10 农产品采后处理与加工贮运	
11 果蔬采后生物学与贮运技术	
12 果蔬活性成分研究与利用	
13 农产品加工原理与技术	
14 农产品物流保鲜与品质控制	
15 食品功能成分富集技术	
16 生物技术与农产品精深加工	
17 食品营养与化学	
18 天然产物化学	
19 生物资源化学与功能食品	
20 糖生物工程	
21 糖生物化学	
22 蛋白质工程	
23 食品糖组学	
24 食品营养与加工安全	
27 风味化学	
28 食品质量检测与控制	
29 食品胶体科学与技术	
30 食品营养与免疫	
31 食品中功能组分研究与利用	
32 农产品品质提升技术与机理	
33 肉品物性形成与感知	
核心课程:	
食品营养与化学进展、食品加工与检测新技术等	
学院：园艺学院	
一级学科：园艺学	
培养目标:	
园艺学科理论基础和专业知识扎实，具有较强的问题分析能力和社会实践能力，博士生为具有独立从事教学、科研和其他实际工作能力的高级复合型、应用型人才。	
1. 果树学	
专业代码：090201	授课语言：中、英文
层次：硕士	学制：3年
研究方向:	
01 果树种质资源与遗传育种	
02 果树栽培生理生态	
03 果树分子生物学	
04 果树细胞生物学	
05 果树组学和系统生物学	
06 植物生长物质在果树上应用	

核心课程：	
园艺学进展、现代园艺科学研究技术、高级果树栽培育种学等	
2. 蔬菜学	
专业代码：090202	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 蔬菜作物遗传育种 02 蔬菜作物生理生态 03 蔬菜作物生物技术 04 蔬菜作物种质创制与优异基因发掘 05 蔬菜作物优质高效栽培技术 06 蔬菜生物信息学与系统生物学	
核心课程：	
园艺学进展、现代园艺科学研究技术、高级蔬菜栽培育种学等	
3. 茶学	
专业代码：090203	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 茶树育种及栽培 02 茶叶化学与制茶工程 03 饮料植物资源的开发与利用 04 茶叶经济与茶文化	
核心课程：	
现代园艺科学研究技术、茶树种质资源与利用等	
4. 观赏园艺学	
专业代码：0902Z1	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 观赏植物种质资源研究与创新 02 观赏植物遗传育种与分子生物学 03 观赏植物生物技术 04 观赏植物生理生态 05 观赏植物栽培原理与技术 06 观赏植物采后生理与分子生物学 07 观赏植物生殖发育生物学 08 观赏植物次生代谢调控	
核心课程：	
现代园艺科学研究技术、观赏植物资源与利用等	
5. 设施园艺学	

专业代码：0902Z3	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 设施作物生理生态 02 蔬菜逆境生物学 03 温室设计与建造 04 设施环境工程 05 无土栽培	
核心课程：	
园艺学进展、设施作物栽培学等	
6. 果树学	
专业代码：090201	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 果树栽培生理与发育生物学 02 果树基因组学 03 果树遗传育种 04 果树分子生物学 05 果树栽培生理生态 06 果树遗传育种与分子生物学 07 果树生殖生理与分子生物学 08 果树细胞生物学 09 果树种质资源 10 果树分子生理学	
核心课程：	
高级果树栽培育种学、现代园艺科学前沿等	
7. 蔬菜学	
专业代码：090202	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 蔬菜作物遗传育种 02 蔬菜作物生物技术 03 蔬菜作物生理生态 04 蔬菜作物系统生物学 05 蔬菜生理与分子生物学 06 蔬菜作物遗传育种与生物技术 07 蔬菜生理与生物技术 08 蔬菜作物分子细胞遗传学 09 蔬菜细胞微分方程模型与保结构模拟	
核心课程：	
高级蔬菜栽培育种学、现代园艺科学前沿等	

8. 茶学	
专业代码：090203	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 茶树育种及栽培 02 茶树遗传育种 03 茶树生理与分子生物学	
核心课程：	
现代园艺科学研究技术、现代园艺科学前沿等	
9. 观赏园艺学	
专业代码：0902Z1	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 花卉遗传育种 02 花卉种质资源研究与创新 03 花卉逆境生理与分子生物学 04 花卉发育生物学 05 花卉生殖生物学 07 观赏植物栽培生理生态	
核心课程：	
现代园艺科学研究技术、现代园艺科学前沿等	
10. 设施园艺学	
专业代码：0902Z3	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
02 设施作物优质高效生产 03 设施园艺环境工程与调控	
核心课程：	
现代园艺科学研究技术、现代园艺科学前沿等	
学院：经济管理学院	
一级学科：农林经济管理	
培养目标：	
在农林经济管理学科领域内掌握坚实宽广的基础理论和深入系统的专门知识；具有独立从事经济分析和社会实践能力；熟悉本学科发展前沿并在所研究的课题中取得创造性成果。	
1. 农业经济管理	
专业代码：120301	授课语言：中、英文
层次：硕士	学制：3年

研究方向：	
01 农业经济理论与政策 02 农业经营管理 03 资源环境经济 04 区域经济与农村可持续发展 05 农业技术经济	
核心课程：	
微观经济理论与分析、宏观经济理论与分析、计量经济理论与应用等	
2. 农业经济管理	
专业代码： 120301	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 农产品贸易 02 农业经济管理 03 农业技术经济 04 现代涉农企业管理 05 农业经济理论与政策 06 农业关联产业经济 07 农业资源与环境经济 08 食品安全管理	
核心课程：	
高级微观经济学、高级计量经济学、数量经济分析等	
3.国际商务(专业学位)²	
专业代码：025400	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 国际商务	
核心课程：	
国际商务、国际贸易政策与实务、国际金融理论与实务等	
学院：公共管理学院	
一级学科：公共管理	
培养目标：	
在公共管理学科领域内掌握坚实宽广的基础理论和深入系统的专门知识；具有独立从事相关分析和社会实践能力；熟悉本学科发展的前沿并在所研究的课题中取得创造性的成果；理论联系实际，善于进行跨学科的合作，适应社会发展对复合型、应用型人才的需要。	
1. 教育经济与管理	

² 该专业主要招收中国政府奖学金丝绸之路项目学生

专业代码：120403	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 教育经济 02 教育行政与管理 03 教育决策与战略	
核心课程：	
社会科学研究方法论、公共管理学、教育行政学等	
2. 教育经济与管理	
专业代码：120403	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
02 高等教育管理 04 教育决策与发展战略	
核心课程：	
高级公共政策分析、教育经济与管理研究进展等	
3. 土地资源管理	
专业代码：120405	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 土地经济与管理 02 不动产评估与管理 03 土地规划与城乡规划 04 地籍与土地信息管理 05 土地资源可持续利用 06 土地行政与土地法 07 房地产开发经营与管理	
核心课程：	
土地资源管理研究进展、土地经济理论、计量经济理论与分析等	
4. 土地资源管理	
专业代码：120405	授课语言：中、英文
层次：博士	学制：4年
研究方向：	

01 土地经济与管理	
02 资源环境经济与管理	
03 不动产评估与管理	
04 土地经济理论与政策	
05 土地利用规划与管理	
06 土地行政管理	
07 地籍与土地信息管理	
08 土地资源可持续利用	
09 土地法学	
10 资源管理与公共政策	
11 资源（环境）经济理论与政策	
13 土地制度与法学	
14 资源环境评价与规划管理	
核心课程：	
高级公共政策分析、资源经济与土地管理研究前沿等	
学院：动物科技学院	
一级学科：畜牧学	
培养目标：	
系统地掌握畜牧学的基础理论和必需的科学研究技能，了解本学科的国内外发展动态与最新科技成就，相关基础学科知识宽厚。具有勇于创新，治学态度严谨，团结合作的科学精神和独立从事本专业教学、科研、生产和经营管理的工作能力。	
1. 动物遗传育种与繁殖	
专业代码：090501	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 动物分子数量遗传	
02 动物遗传资源保护与利用	
03 动物育种	
04 动物生殖生理	
05 动物基因工程	
核心课程：	
动物分子遗传学、动物繁殖与育种原理等	
2. 动物营养与饲料科学	
专业代码：090502	授课语言：中、英文
层次：硕士	学制：3年
研究方向：	
01 动物分子数量遗传	
02 动物遗传资源保护与利用	
03 动物育种	

04 动物生殖生理	
05 动物基因工程	
核心课程：	
现代动物生物化学、高级动物营养学、饲料营养研究方法与技术等	
3. 动物遗传育种与繁殖	
专业代码：090501	授课语言：中、英文
层次：博士	学制：4 年
研究方向：	
01 动物功能基因组学与分子育种	
02 生殖毒理学	
06 羊的繁育与营养调控	
07 动物生殖生理与调控	
08 受精生物学	
09 猪遗传资源种质特性挖掘与创新应用	
10 动物生殖病理学	
13 动物生长与行为的育种与分子机制、行为与福利	
14 反刍动物生理调控，养牛学	
16 动物遗传学与功能基因组学、家禽遗传育种	
18 肉羊繁育、动物配子生物学与胚胎工程	
19 动物繁殖的营养调控，动物肠道为生态的营养调控	
核心课程：	
动物育种与繁殖学研究进展，动物繁殖理论与生物技术（附案例）等	
4. 动物营养与饲料科学	
专业代码：090502	授课语言：中、英文
层次：博士	学制：4 年
研究方向：	
01 动物消化道微生物	
03 肉品质量与营养调控	
04 单胃动物肠道功能、健康与营养	
05 水产动物生理与营养	
06 饲料安全与健康养殖	
08 动物环境生理与营养	
09 动物营养与代谢组学	
10 反刍动物营养	
11 猪肠道微生物与营养调控	
12 动物的组织生长及营养代谢	
13 消化道微生物	
核心课程：	
动物营养研究进展，智慧畜牧生产等	
学院：动物医学院	

一级学科：兽医学	
培养目标： 掌握坚实宽广的兽医学基础理论和系统深入的专门知识，同时要掌握一定的相关学科知识，具有独立从事兽医学科及其相关科学的教学、科学研究以及其他方面工作的能力，在科学或专门技术上做出创造性的成果。	
1. 基础兽医学	
专业代码：090601	授课语言：中、英文
层次：硕士	学制：3年
研究方向： 01 动物生理学与应激生物学 02 动物机能生物化学 03 动物功能组织学与胚胎学 04 动物病理学 05 神经内分泌与免疫 06 兽医药理毒理学与兽医制剂	
核心课程： 现代动物生物化学、现代动物免疫学、高级动物病理学等	
2. 预防兽医学	
专业代码：090602	授课语言：中、英文
层次：硕士	学制：3年
研究方向： 01 动物病毒学与免疫学 02 兽医微生物学与免疫学 03 兽医生物技术 04 动物传染病诊断与免疫 05 兽医寄生虫病与免疫 06 兽医公共卫生 07 水生动物病原微生物学	
核心课程： 现代动物生物化学、基因工程、动物病原感染组学等	
3. 临床兽医学	
专业代码：090603	授课语言：中、英文
层次：硕士	学制：3年
研究方向： 01 小动物外科学 02 小动物内科学 03 兽医营养代谢病与中毒病 04 兽医影像诊断与临床检验 05 动物产科疾病与生殖调控 06 中兽医学与中兽药学	

核心课程：	
兽医临床实践、兽医护理学、临床兽医学进展等	
4. 基础兽医学	
专业代码：090601	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 动物营养生理与生长调控 02 应激生物学与动物福利 03 动物生化与代谢调控 04 动物组织学与发育生物学 05 兽医分子与免疫病理学 06 兽医药理学与毒理学 07 畜禽机体免疫屏障及机制 08 动物源食品危害因子的单分子研究及检测技术	
核心课程：	
现代动物生物化学、现代动物免疫学、生物医学前沿等	
5. 预防兽医学	
专业代码：090602	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 病原与宿主相互作用 02 分子病毒与免疫学 03 动物传染病发病机制和免疫 04 兽医微生物致病机理及免疫 05 兽医寄生虫分子免疫学 06 兽医公共卫生学	
核心课程：	
现代动物生物化学、基因工程、动物病原感染组学等	
6. 临床兽医学	
专业代码：090603	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 动物营养免疫学与营养代谢病 02 动物中毒病与畜产品安全 03 兽医外科病理学与实验外科学 05 中兽医学与中西兽医结合	
核心课程：	
现代动物生物化学、现代动物免疫学、临床兽医学进展等	

学院：工学院

一级学科：农业工程

培养目标：

要求掌握农业工程学科某一领域的基础理论和系统的专门知识，了解所从事研究方向的研究现状和发展趋势；具有较强的分析问题和解决实际问题的能力，在理论研究或技术研究中有新见解。

1. 农业机械化工程

专业代码：082801

授课语言：中、英文

层次：硕士

学制：3年

研究方向：

- 01 农业机器系统优化技术
- 02 农产品检测与加工技术
- 03 生物机电系统
- 04 农机现代设计理论与方法
- 05 机电一体化

核心课程：

农业工程研究专题、现代数学、高等工程力学（机械振动学）等

2. 农业生物环境与能源工程

专业代码：082803

授课语言：中、英文

层次：硕士

学制：3年

研究方向：

- 01 农业生物环境控制与装备
- 02 能源与经济、环境协调发展与区域能源规划
- 03 可再生能源开发利用与评价
- 04 生物环境工程与技术
- 05 生物质能开发与利用

核心课程：

农业工程研究专题、现代数学、传递过程原理（传热传质学）等

3. 农业电气化与自动化

专业代码：082804

授课语言：中、英文

层次：硕士

学制：3年

研究方向：

- 01 农业电子与信息技术
- 02 农业机器人
- 03 机电一体化
- 04 机器视觉与图像处理
- 05 农业装备智能控制技术

核心课程：

工程数学上（矩阵论，数理统计）、工程数学下（矩阵论，数理统计）、线

性系统理论等	
4. 农业机械化工程	
专业代码：082801	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 农产品干燥方法与技术装备 02 农业车辆系统动力学及其智能控制技术 03 精准种植与收获技术及智能装备 04 机电一体化技术 05 农机现代设计理论与方法 06 智能网联车辆 08 农业机器人 09 特种加工技术 10 现代农业装备与计算机测控 11 现代农业装备及其自动化技术 13 车辆电液控制技术 14 生物质转化技术与装备	
核心课程：	
农业工程研究专题、现代数学、高等工程力学（机械振动学）等	
5. 农业生物环境与能源工程	
专业代码：082803	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 纳米与功能催化材料设计和制备 02 生物质热化学与生物化学转化 03 生物质功能材料设计与装备 04 生物质环境材料与调控	
核心课程：	
农业工程研究专题、现代数学、传递过程原理（传热传质学）等	
6. 农业电气化与自动化	
专业代码：082804	授课语言：中、英文
层次：博士	学制：4年
研究方向：	
01 农产品加工、检测及智能化装备 02 智能化检测与控制技术 03 农业智能化技术装备 04 农情信息理论与装备 05 农业物联网和大数据 06 农业自动化与故障诊断 07 切换系统理论及应用 08 农业机器人与智能控制	

- | |
|-------------------|
| 09 机器视觉与图像处理技术 |
| 10 动物表型检测与智能化养殖技术 |
| 11 数据科学及农业大数据处理 |
| 12 农业物联网技术及应用 |
| 13 大数据分析建模技术 |
| 14 人工智能理论及其应用研究 |

核心课程：

农业工程研究专题、现代数学、线性系统理论等