

**Zhejiang Sci-Tech University**  
**Research Master ' s Degree Program Outline**  
**Applied Economics**

**020200**

Applied Economics is a first-class discipline in Zhejiang Province. It has formed distinct features and outstanding advantages in research fields of ecological economy and environmental governance, urban-rural integration and regional high-quality development, industrial structure optimization and green development, global value chain and trade transformation, rural finance and monetary policy, etc. The discipline has a team of teachers with reasonable age structure, solid theoretical foundation, rigorous academic research, and noble ethics. It has provincial-level young and middle-aged experts with outstanding contributions in Zhejiang Province, the researchers who have first level and key funding of the Provincial New Century "151 Talent Cultivation Project", provincial top-notch talents of 10,000 young people, winners of the Provincial Outstanding Youth Fund, provincial young teaching talents. There are 12 professors and researchers, 24 associate professors, and more than 90% of them have doctoral degrees. This discipline has research centers such as the Zhejiang Provincial Key Research Base of Philosophy and Social Sciences-Zhejiang Ecological Civilization Research Institute, universities think tanks in Zhejiang Province - Green Development Research Center. The discipline consists of six research directions: Industrial Economics, Regional Economics, Ecological Economics, International Trade, Finance and Quantitative Economics.

In recent years, the discipline has achieved remarkable results, and the academic reputation has been steadily improved. It has completed and undertaken a large number of national and provincial (ministerial) level scientific research projects, including more than 150 vertical projects, including more than 30 projects from the National Social Science Foundation and the National Natural Science Foundation (including 2 major projects and 3 key projects) , 2 national soft scientific research projects, and more than 100 provincial and ministerial-level projects; more than 200 horizontal scientific research projects, with scientific research funding of more than 40 million yuan. Under this discipline, more than 300 academic papers in domestic and foreign academic journals have been published, including more than 30 academic papers in internationally renowned academic journals and domestic authoritative journals such as "China & World Economy", "Economic Research", "Management World". The faculty of this discipline had published more than 30 monographs, edited or participated in the editing of more than 20 textbooks, their research results won the second and third prizes of the Humanities and Social

Sciences Award of the Ministry of Education, and more than 20 other provincial and ministerial awards.

## **I. Objectives**

Cultivate high-level professional talents who love the motherland, love the Communist Party of China, develop ethics, intelligence, sports, art and labor in an all-round way, and possess lofty ideals, professionalism, innovation and cooperation. The students are required to master the solid economic basic theories of this discipline and the frontier expertise, research methods and tools adapted to the economic development of the new era. The students are also required to understand the latest development direction of this discipline and the frontiers of international and domestic academic research. Proficiency in the use of modern economic theories, methods and tools in microeconomics, macroeconomics, econometrics, development economics, industrial economics, regional economics, ecological economics, international trade, finance and other related fields is required. Students should be able to observe, ask, analyze, and solve problems in depth in society and economic field. The students should be able to engage in higher-level economic management work in party and government agencies, enterprises and institutions, and be able to master and use a foreign language and be proficient in reading professional foreign literature.

## **II. Research Areas**

### **1. Quantitative Economics**

Main research: (1) Mathematical economic models and methods. Based on mathematical economics and econometrics theories and methods, this discipline mainly studies economic growth and economic development forecasts, economic dynamics analysis, financial econometric analysis and capital operations, ecological econometric methods, high-quality development of the Chinese economy, economic spatial organization and effects, etc. (2) Spatial econometric analysis. Based on spatial statistics and spatial econometrics, it studies the spatial correlation model of regional economy and the adjustment of regional spatial structure, spatial econometric analysis of economic growth, and spatial panel model estimation methods. (3) Macroeconomic analysis. It includes research on economic growth and economic simulation, inflation and economic cycle, macroeconomic policy evaluation, etc.

### **2. Industrial economics**

which includes: 1. theory of industry cluster and industrial organization. Mainly using modern industrial cluster theory and organizational theory to study the development of industry cluster and industrial organization in our country especially Yangtze delta and Zhejiang province

as, and enrich the content of industrial cluster theory and industrial organization theory as well. 2. Textile economy. Mainly researching textile industrial planning, industrial structure, and innovation of industrial technology, and specially focus on Zhejiang textile industry development. 3. Rural economy. New Rural Construction is considered as the main content, and research agriculture, rural areas and farmers' problems in China, which involve agricultural and rural development and environmental governance. 4. Environmental governance and resource management. Mainly researching the environmental governance mechanism in the economic development and policies, and energy efficiency and energy policy. 5. Relationship between financial development and industrial development.

### 3. Regional economics

which includes: 1. Regional economic development and planning. Research on regional economic developing strategy and planning, regional territorial planning, regional industrial planning, regional planning, urban planning, urban system planning and infrastructure planning, and use the quantitative research and long-term prediction mathematical model to puts forward countermeasures and Suggestions. 2. Regional economic policy and industrial development. Research policies for regional development theory and target, regional development and policy innovation, regional industrial cluster development and layout, optimization of regional industrial structure, industrial organization and policy, regional development and public investment policies, regional compensative policy, policy effect evaluation and analysis. 3. Integration of urban and rural economy. Research the formation and development of urban-rural integration theory, the present situation, the gap between the urban and rural areas, reasons and developing trend, the basic principles of urban and rural integration and the target system, the government function and the system in the development of urban and rural integration. 4. Relationship between regional economy and regional trade and finance. Include regional economic division of labor, cooperation and interregional trade, the relationship between the regional development in the process of financial support and the financial resource allocation and so on.

### 4. Ecological economics

which includes: 1. Theory and policy of ecological economy and circular economy. The methods of ecological economic theory and new classic cost-benefit analysis are used to study ecological compensation, ecological economic construction, construction of ecological provinces, and other issues, and using the method of ecological chain to build the recycling model between production and consumption in the levels of enterprises, industries, and parks, and put forward Suggestions about policies. 2. Theory and policy of Resource economy and environmental economy. On the base of externality theory--the core category of resources and environment economics, research the natural resource and environmental resources optimization in term of

property right system and value evaluation, and enrich the theory of resource and environmental economics and propose recommendations of environmental economic policies. 3. Theory and policy of energy economy and low carbon development. By using the methods of systemic analysis and metrological analysis, analyze how to optimize the development and conservation of traditional energy, best mechanism of new energy ' s development and utilization, and the best path and strategy selection of low carbon ' s development.

#### 5. International trade

which includes: 1. the theory and practice of international trade. Research the theory of international trade, the theory and practice for Zhejiang foreign trade and economic development. 2. International business management. Cross-cultural and international business, practices and rules for international business, survey for international business, international business strategic planning and international business operations are included. 3. International marketing. Analysis for international market situation, the concept development, strategy innovation and international expending for international marketing, the practice of Zhejiang enterprises and researching in the internationalization of Zhejiang province are included. 4. International investment and multinational management. Including international investment management, utilization of foreign capital and foreign investment in China, international investment and multinational management with Zhejiang ' s characteristics, the combination of " abstract in " and " going out " for Zhejiang enterprises.

#### 6. Finance

which includes: 1. Theory and empirical of financial development. Research China's financial market structure and efficiency, evolution of international financial investment and financing mode and evolution of the rural financial problems during the transition period, by means of econometrics and based on the finance development theory, monetary economics, development economics. 2. Theory and empirical of company finance. Researching company capital structure, corporate governance structure and company of financing technical problems in China during the transition period, mainly based on the modern theory of corporate finance, such as financial metrology tools for technology, spread to the transition. 3. Asset pricing and risk management. Research the asset pricing in financial market in China during the transition period based on portfolio theory, and how to optimize the financial risk under the condition of uncertainty management issues through the mechanism design of cost-benefit and inter-temporal allocation.

#### 7. Labour economics

which includes: 1. Students should master solid economic and management knowledge, have good Morality and can fit society better. 2. Students can use a foreign language and read professional foreign language literature, and use the method of modern economics to solve

problem independently. 3. Students can analyze the social problems and policies by labour economics and have strong ability to organize and strong spirit of cooperation and innovation. 4. Students should have enough ability working in researching organizations, government departments, enterprises, and institutions.

#### 8.legal economics

which includes: 1. Basic theory of legal economics. Including researching methodology, basic analytical tools and theoretical research, and front edge researching. 2. General theory of sector legal economic. Mainly research the theory, structure, prerequisite and model of sector legal economic, including the property law, tort law, contract law, anti-monopoly law, financial law, administrative law, corporate organization and corporate law, intellectual property law, labor law, law of public execution, environmental law, international economic law and so on. 3. Chinese law and economic analysis of laws. Using theories and tools of legal economics, analyze the legal transformation and legal reform in China, which include economic analysis of main sector laws, legislation and the legal reform, the judicial reform and special laws and legal phenomenon in the transformation of China.

### III. Length of Study

The normal study length for full-time research postgraduates is 3 years. Students who finish their courses ahead of schedule and attain the standards of degree conferment can, after approval, apply for the degree at an earlier time (not earlier than 3 years), while the maximum length of schooling is 4 years.

### IV. Credit Requirements

The course-learning phase of the master ' s degree program adopts credit system. Students majored in arts, economics, management, law and education are required to take at least 35 credits, with 22 credits of degree courses.

### V. Curriculum

Course Classification		Course Code	Course Name	Hour/ Credit	Semester			Notes
					I	II		
Degree courses	General degree courses	FL10015	The Outline of China*	36/2				(Entirely in English)
		CC10009	Basic Chinese (I)	54/3				(For beginners of Chinese language among foreign graduate students)
		CC10010	Basic Chinese (II)	36/2				(For beginners of Chinese language among foreign graduate students)

		FL10026	English Writing of Academic Paper	16/1					
		IF10001	Education on China's National Conditions for International Students A	16/1					
	Major-related degree courses	EM11116	Intermediate Microeconomics*	48/3					
		EM11117	Intermediate Macroeconomics*	48/3					
		EM11118	Intermediate Econometrics*	48/3					
		EM11120	Theories and Planning of Regional Economics	48/3					
		EM11121	Industrial Economics*	48/3					
		EM11122	Resource and Environment Economics*	48/3					
		EM11123	Intermediate International Trade Theories*	48/3					
		EM11124	Financial Economics*	48/3					
		EM11125	Labour Economics*	48/3					
		EM11130	Research Methods and Literature Reading of Applied Economics*	32/2					
Non-degree courses			All optional courses in the university curriculum are open to students of this program.						
Additional courses									For students without an equivalent bachelor's degree
Others		Academic Seminar		/1	separated				
		Academic Report		/1	separated				
		Practical Training			Students are required to take at least 2 weeks practical training, participate in at least one social investigation, and write relevant report. Normally the training should be completed in the first academic year.				
		Thesis Proposal			The 3rd semester				
		Thesis Writing			The 3rd-6th semester				

C=Compulsory, O=Optional

\* Students can decide whether to take this optional course or not according to their different research area.

## VI. Dissertation Requirement

Dissertation is an important part of training program. Graduate students should be actively involved in the scientific research projects which have important academic application value

undertook by supervisors.

### 1. Dissertation Proposal

Under the guidance of supervisors, students should determine the research direction and research topic through information retrieval, data collecting and investigation and study. Literature review (at least 50 literatures, including 20 literatures in foreign languages) and dissertation proposal are required to complete before the third mid-term (normally in 9th ~10th week). All students are required to give a dissertation proposal report that illustrates the research background, topic selection intention, significance of the research, research status at home and abroad, literature review, research objects, research methods, research route, basic framework and research progress. Many related disciplines experts are invited to attend the report and will give some suggestions. Students can carry out dissertation work after approved by the experts. And the dissertation proposal report is organized by the steering committee of academic disciplines.

### 2. Mid-term Inspection

According to the unified schedule of the graduate school, students must participate in the mid-term inspection of the dissertation organized by the college (the time is generally the fourth semester). The mid-term inspection focuses on the progress of the thesis, the publication of the thesis, and the staged results. Assessment conclusions (assessment results) are divided into two types: pass and fail. For those who pass, comments on the revision of the thesis should be given; for those who fail, the main problems of the thesis should be pointed out. The instructor will help them analyze the reasons and propose corresponding improvement measures. After the students have completed the revision, the mid-term assessment will be conducted again. Only after passing the mid-term assessment the students can apply for a pre-defense.

### 3. Pre-defense

Before the blind review of the dissertation, students must participate in the pre-defense of the dissertation organized by the Discipline Training Steering Committee. The pre-defense team is composed of 3-5 master's tutors and corporate tutors will conduct a centralized defense of the students' papers. The dissertation participating in the pre-defense must complete all the work content of the dissertation. Students must obtain the consent of their supervisor before participating in the pre-defense. The supervisor should strictly control the quality, and strictly control the dissertation quality that does not meet the standard. The pre-defense conclusion is divided into pass and fail. For passed dissertations, the defense team shall give specific revision opinions; for dissertations that have not passed, the main problems of the dissertation shall be pointed out, and the tutor shall help them analyze the reasons and put forward corresponding suggestions for improvement. After the revision, the pre-defense is completed by the students.

### 4. Blind review

The dissertations of all students must participate in the blind review of dissertations organized by schools and colleges. Blind review should be reviewed by 3 experts with senior professional and technical titles in management disciplines (among which, no less than 1 external expert), and the instructor cannot be the reviewer. Blind review scores must meet the school's blind review scores for dissertations before entering the defense session.

#### 5. Defense of the dissertation

Prior to the defense of the dissertation, the dissertation shall meet the publication requirements and the specific requirements shall be implemented in accordance with the "Regulations on the Requirements for Publishing Academic Thesis During the Study Period of Zhejiang Sci-Tech University Graduate Students".

Students who pass the blind review of the dissertation must participate in the defense of the dissertation. The defense committee should be composed of 5 experts with senior professional technical positions or senior professional technical positions in management or economics disciplines, and the defense team leader must be an outside expert.

### **VII. Teaching Format**

1. Students and supervisors will take a two-way selection.
2. By the direction of college leaders and master degree program, the supervisors take the all-round responsibilities for students training.
3. The programme implements the principles that curriculum study and dissertation pays equal importance to students. So the programme integrates systematic theory study and in-depth scientific research for the students.
4. In the first term after registration, students should determine the research direction and make the training plan under the guidance of the supervisor. An intermediate inspection will be taken after all courses finished. Students who pass the intermediate inspection will get into dissertation stage as planned.

### **VIII. Graduation & Degree Conferment**

Students who attain the standards of graduation, having completed the required courses, passed the examinations within the study duration, passed the Chinese Proficiency Test (HSK) and obtained the Level 3 Certificate and successfully defended their thesis will be awarded the graduation certificate; those who attain the standards of academic degree conferment and are approved by the university academic degree evaluation committee, will be conferred the corresponding degree.



## IX. References

The dissertation must be edited and output by computer. For the specific format, please refer to the "Standards for Dissertation of Zhejiang Sci-Tech University Master's Degree".

Postgraduates should abide by academic ethics in their thesis publication and dissertation work.

This plan will be implemented from the date of issuance, and the specific explanation will be the responsibility of the School of Economics and Management.

Signature of Program Director:

Signature of Director of School Academic Degree Committee:

Date:

