目 录

Master Program (for International Students) in Foreign Languages and Literatures

The discipline foreign languages and literatures belongs to humanities and social sciences. Its research objects are mainly language, literature and culture, covering five main research fields: foreign literature, foreign linguistics and applied linguistics, translation studies, comparative literature and cross-cultural communication studies, and country and area studies.

1.Objectives

Candidates with a master's degree in this discipline should have good interpersonal communication skills, teamwork spirit and social responsibility. They should be able to systematically master the basic theories and research methods of this discipline and engage in academic research in one of the following branches: linguistics, translation studies, foreign literature and comparative literature, or country and area studies.

"A Survey of China" and "Comprehensive Chinese" are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Foreign Linguistics and Applied Linguistics

2)Foreign Literature and Comparative Literature

3)Translation Studies

4)Country and Area Studies

3.Duration

The program is carried out in a combination of coursework and thesis research work, with individual guidance of supervisors or group guidance of mentors.

The duration set for master candidates is 2 years (full-time). An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 30. Master candidates should complete the course work of no less than a total of 28 credits (out of which at least 17 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, and complete the thesis independently, and pass the thesis defense.

During the course work, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance but these cannot replace the major's complusory courses. International students of Chinese language abilities can apply to take courses given in

Chinese to local full-time graduate students and acquire corresponding credits if passed.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

The supervisor is responsible for helping the students with personal study plan, choice of courses, and completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1705026014	Foreign Linguistic Theories★	64	4	1	At least 1 from 4
		1705026015	Theories of Foreign Literature and Comparative Literature★	64	4	1	
		1705026016	Translation Theories★	64	4	1	
		1705026017	Introduction to Country and Area Studies★	64	4	1	
		1705026018	Research Methodologies and Thesis Writing	48	3	2	Compulsory
Non-degree Optional Courses	Elective Major Course	1705027006	Cognitive Neuroscience of language	48	3	1	
		1705027027	International Organizations and Global Governance	48	3	1	
		1705027028	Translation History In and Outside China	48	3	2	
		1705027029	Reading and Criticism of Foreign Literary Classics	48	3	1	
		1705027032	Applied Linguistics: Theory and Practice	48	3	2	
		1705027033	Case Studies in Linguistic Intelligence	32	2	2	
		1705027035	Case Studies in Foreign Literature and Comparative Literature	48	3	2	
		1705027040	Social and Cultural Studies of Target-language Countries	48	3	2	
Non-degree Optional Courses	Elective Major Course	1705517012	Intelligent Translation Technology: Theory and Practice	32	2	1	

	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc., such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he / she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates to reach level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's / doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to "UESTC Regulations for Postgraduate Degree Conferring"

Master Program (for International Students) in Physics

Physics is the natural science that involves the study of matter and its motion through space and time, along with related concepts such as energy and force. It is conducted to disclose the structure of matter, interaction between matters, and the motion laws of matters in order to understand the universe. It results in many significant technologies and products.

The School of Physics at University of Electronic Science and Technology of China has the primary objective of advancing knowledge of physics and training of qualified manpower to acquire and develop an economy based on high technology. It is also involved in inter-disciplinary research with other branches of science as well as engaging in collaborative work with industry. Six fields, Theoretical Physics, Condensed Matter Physics, Radio physics, Optics, Plasma Physics, and Quantum Physics and Quantum Information, have established their reputation for research excellence. Collaborations in research across national borders and disciplines have been built. The school intends to play a key role in the advancement of China into a high-tech era.

This programme offers excellent opportunities for students to further develop their potential as intellectual leaders for a wide range of career paths. They will not only acquire fundamental and emerging knowledge in physics, but also solve practical problems of relevance to industrial development.

1.Objectives

Candidates of Master of Science in Physics are expected to have a profound knowledge in fundamental physics and experimental skills. They are also required to have a clear vision of cutting-edge research and emerging trends in physics.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Theoretical Physics　　2)Condensed Matter Physics

3)Radio Physics　　4)Optics

5)Plasma Physics　　6)Quantum Physics and Quantum Information

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete

the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance， but cannot replace compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 3
		1100016011	Stochastic Processes and Applications	48	3	1	
		1100016012	Optimization Methods and Applications	48	3	1	
		0208096064	Advanced Electromagnetic Theory	48	3	1	
		1207026039	Advanced Quantum Mechanics	56	3.5	2	
		1207026043	General relativity	32	2	2	
		1207026045	Quantum Field Theory I	48	3	1	
Non-degree Optional Courses	Elective Major Course	0108107076	Radar Theory	24	1.5	2	
		1207027055	Quantum Field Theory（二）	48	3	2	
		1207027060	Solid-State Battery and Energy-Storage Device	16	1	1	
		1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	

Compulsory Section	6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
	6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Mechanical Engineering

Mechanical Engineering is the first level discipline based on natural science and engineering technology, which aims to study the related theory on mechanical design, manufacturing, control, operation and maintenance during the usage of the mechanical equipment, and further resolve practical engineering problems. This discipline covers several directions, such as mechanical design and theory, mechanical manufacturing and automation, and mechatronics engineering, which leads to the discipline advantage with the multi-disciplinary synthesis of machine, electronic information, and measurement & control technology.

1.Objectives

Masters of the discipline are expected to have a rather profound knowledge of the cutting-edge research and trend of the field and relatively sound grasp of the theoretical and systematic expertise in mechanical engineering fields, as are able to master corresponding experimental skills, to be proficient in the use of computers, at least familiar with one software closely related to the discipline, so as to independently conduct the high-level research by integrating the machine science and information science.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Equipment reliability and equipment monitoring management

2)Intelligent manufacturing equipment,

3)Intelligent perception and control technology

4)Equipment intelligence design and simulation

5)MEMS

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master

candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but these cannot replace the major's complusory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 2
		1100016011	Stochastic Processes and Applications	48	3	1	
		0408026030	Advanced Manufacturing Technology	32	2	1	
		0408026031	Microelectromechanical Systems (MEMS)	32	2	1	
		0808126041	Embedded Operating System and Application	32	2	2	
		1100016012	Optimization Methods and Applications	48	3	1	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0408027049	Machinery Dynamics	32	2	2	
		0408027050	Reliability Design	32	2	2	
	Other Elective Course	0411117006	English Academic Writing for Graduate Students	16	1	2	
		6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5

Compulsory Section	6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Optical Engineering

Optical Engineering, which mainly focuses on Light Information Acquisition, Optical Transmission, Optical Switching, Optical Information Processing and Photoelectric Image Display, has wide applications in the industry, and becomes an important discipline in the current information technology field.

The teaching and research area of Optical Engineering in UESTC covers the theory and application of the whole optical engineering discipline, especially strong in optical communication, photonic integration, infrared and sensing technology, panel display and imaging technology. The discipline has undertaken a number of national key research projects, receiving sufficient funds, and wining several state or provincial awards. The main research direction of this discipline has stepped into the leading position in China, also having a certain international influence.

1.Objectives

Masters of the discipline are expected to have a rather profound knowledge of the cutting-edge research and trend of the field and a relatively sound grasp of the theoretical and systematic expertise, as are able to master corresponding experimental skills, to be proficient in the use of computers, familiar at least with one simulation software closely related to this discipline, able to contribute academic papers and exchange views in conferences, and to demonstrate rigorous spirits in scientific approaches and working style and professional ethics, so as to be competent in research, development, teaching or management jobs at research institutes and universities.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Optic communication and optic integration

2)Photoelectric Detection and System Integration

3)Sensitive electronics and sensor network

4)Display and Imaging

5)Microwave photonics

6)Photoelectric measurement and control technology

3.Duration

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student’s making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis independently, and pass the degree thesis defense.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. However, it is not a substitute for compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		0108106051	Digital Communications	32	2	2	
		0108106052	Digital Signal Processing	32	2	1	
		0108106053	Fiber Optical Communication	24	1.5	2	
		0508036033	Fiber Optics	32	2	1	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0108107074	Optical Fiber Technology	32	2	1	
		0508037036	Nonlinear Optics	32	2	2	
		0508037051	Organic Electronics	16	1	2	
		0808127067	Mathematical Fundamental of Information Security	40	2.5	1	

Non-degree Optional Courses	Elective Major Course	1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires international graduates' Chinese language ability of to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Instrument Science and Technology

Instrument Science and Technology is a vital component of the information field, with its primary research areas encompassing methods for acquiring, converting, amplifying, and processing signals or information, metrology, measurement methodology, as well as instrumentation engineering and measurement and control systems engineering. This discipline boasts sustainable development advantages, notable interdisciplinary characteristics, and a cutting-edge position in science and technology, playing a pivotal role in guiding and promoting the development of high-tech industries, industrial progress, and societal advancement.

1.Objectives

Abide by the law and discipline, and possess good moral character; Have certain Chinese communication ability upon graduation; Have a solid theoretical foundation and systematic specialized knowledge in the field of the subject; Understand the development direction and academic research frontier of the subject; Have the preliminary ability to conduct independent theoretical and experimental research, and the ability to engage in technological development; Have a rigorous and realistic scientific attitude; Be able to engage in scientific research, teaching, engineering technology, and management in the subject or related disciplines.

2.Orientations

1)Broadband Time-Domain Testing Technology and Instrumentation

2)Comprehensive Testing, Diagnosis, and Prediction of Electronic Systems

3)Microwave and Millimeter-Wave Testing Technology and Remote Sensing

4)Integrated Circuit Testing and Design-for-Test Theory and Technology

5)Novel Sensor Technology and Precision Measurement

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master

candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses (but not substitute for the compulsory courses) as their degree courses under supervisors' guidance. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		0108106052	Digital Signal Processing	32	2	1	
		0608116020	Computer Vision★	32	2	1	
		0608116021	Linear System Theory★	40	2.5	1	
		0608116022	Numerical optimization and applications	40	2.5	2	
Non-degree Optional Courses	Elective Major Course	0208096131	Advanced Electromagnetic Field Theory	48	3	1	
		0208097121	RF Integrated Circuit Design	32	2	2	
		0608047027	Signal Detection and Estimation	32	2	1	
		0808126041	Embedded Operating System and Application	32	2	2	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	
Non-degree Optional Courses	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	

Non-degree Optional Courses	Other Elective Course	XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400007006	Mid term evaluation	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 4,000 words as well as the corresponding Research Proposal Report.

5)Mid-term Report on Thesis Work: All candidates are obliged to provide written progress reports on their dissertations six months after they begin. These reports will be evaluated and approved by experts before the candidates can move further with their dissertations.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Materials Science and Engineering

The Discipline of Materials Science and Engineering studies the composition, structure, preparation process, properties and applications of materials. The research objects include the theory, design, preparation, testing and application of electrical, magnetic, acoustic, optical, thermal, mechanical and biological functional materials. The research process involves the acquisition, transformation, storage, processing and control of materials information. UESTC is the first batch selected into the national project of First-class Universities and Disciplines of the World. Research and development of electronic information materials and application are characteristics and advantages of UESTC. The discipline of Materials Science and Engineering has strong academic faculties, which include doctoral supervisor, professors, associate professors, and a number of Ph.D talents, advanced experimental facilities and plenty of research funds.

With the development of science and technology, the discipline of Materials Science and Engineering has become more and more closely interdisciplinary with other disciplines. At the same time, as an important pillar of modern civilization, the discipline has become the forerunner and foundation of the development of modern science and technology, and has a very close relationship with the development of contemporary society.

1.Objectives

Masters of the discipline are expected to have a rather profound knowledge of the cutting-edge research and trend of the field and a relatively sound grasp of the theoretical and systematic expertise, as are able to master corresponding experimental skills, to be proficient in the use of computers, familiar at least with one simulation software closely related to this discipline, able to contribute academic papers and exchange views in conferences, and to demonstrate rigorous spirits in scientific approaches and working style and professional ethics, so as to be competent in research, development, teaching or management jobs at research institutes and universities.

2.Orientations

1)Electronic Information Materials and Devices

2)Materials Gene Project

3)Electronic Film and Integrated Devices

4)New Energy Materials and Devices

5)Printed Circuits and Printed Electronic Technology

6)Organic Functional Materials and Engineering

3.Duration

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but they cannot replace the required courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense. A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 3
		1100016011	Stochastic Processes and Applications	48	3	1	
		1100016012	Optimization Methods and Applications	48	3	1	
		0208096065	Advanced Electromagnetic Field Theory	48	3	1	
		0208096121	IC Design	32	2	2	
		0208096122	Microwave Engineering	32	2	2	

Degree Courses	Major Core Course	1207026039	Advanced Quantum Mechanics	56	3.5	2	
		1207026043	General relativity	32	2	2	
		1207026045	Quantum Field Theory I	48	3	1	
Non-degree Optional Courses	Elective Major Course	0308057036	Optoelectronic Conversion from Fundamental to Devices	16	1	2	
		0308057040	Frontier in Fabrication and Application of Nanomaterials	16	1	1	
		0408087028	Renewable Energy Generation and Integration	32	2	2	
		0411117006	English Academic Writing for Graduate Students	16	1	2	
		0508037051	Organic Electronics	16	1	2	
		1207027060	Solid-State Battery and Energy-Storage Device	16	1	1	
		1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of

international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring. For Int'l students, the language used in the defense should be English.

Master Program (for International Students) in Electrical Engineering

Electrical Engineering is an engineering discipline related to the research and application of electricity, electronics, and electromagnetics. It includes electricity, electronics, circuits, control and communications. It is an indispensable key discipline in today's high tech fields. For nearly forty years, under the integrated and cross functional roles of information and communication engineering, control science and engineering, it has become one of the core disciplines in modern science and technology. UESTC conforms to the national energy development strategy and relies on the comprehensive advantages of electronic information, including the wide area measurement and control of power systems, smart grids, power electronics and power transmission, and new types of power generation and energy storage. As a special feature, it has achieved a large number of high level scientific research achievements and laid a good foundation for cultivating high caliber, multi functional, and international high end electrical engineering talents.

1.Objectives

The discipline is positioned to cultivate in the field of electrical engineering, especially in power and control, circuits and systems, power information and communications, with solid basic theory and system expertise, master of electrical engineering and computer applications high-tech talent. Master degree holders should understand the academic status and direction of development in the relevant research areas in China and abroad, have the ability to independently analyze and solve specific technical problems in the subject, have a good international perspective and international communication skills. Students would also be proficient in Chinese. With rigorous and realistic scientific attitude and style of work, courage to innovate and pioneering consciousness and good professional qualities, the students can be competent in related research, teaching, engineering technology development and management in the field of electrical engineering.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Power System Analysis and Control

2)Power Transformation and Active Distribution Network

3)Advanced Transmission and Conversion Technology

4)Intelligent Monitoring and Diagnosis of Electrical Equipment

5)Motor System and Control

6)Power and Energy Economy

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory; at least one in core courses should be taken. Master candidates are allowed to choose 1~2 Inter-disciplinary core courses as their degree courses under supervisors' guidance, but these cannot replace the major's complusory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 2
		1100016011	Stochastic Processes and Applications	48	3	1	
		0408086015	Power System Operation and Control	32	2	2	
		0408086016	Power Electronics	32	2	1	
		0808126041	Embedded Operating System and Application	32	2	2	
		1100016012	Optimization Methods and Applications	48	3	1	

Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0408027050	Reliability Design	32	2	2	
		0408087028	Renewable Energy Generation and Integration	32	2	2	
		0408087029	Electricity Market	32	2	1	
	Other Elective Course	0411117006	English Academic Writing for Graduate Students	16	1	2	
		6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Electronic Science and Technology

The Discipline of Electronic Science and Technology, which has been selected into the national project of First-class Universities and Disciplines of the World, is one of the national key disciplines of China. It consists of 5 second disciplines including electromagnetic field and microwave technology, microelectronics and solid state electronics, circuits and systems, Electronic Information Materials and Devices and Electronic information materials and components.In pursuing the advanced level of scientific research, those disciplines all have very strong research capabilities and extensive academic impact.

1.Objectives

Master of the discipline are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid grasp of the basic theories and systematic specialized knowledge in Electronic Science and Technology, as are able to complete experiments and studies of the filed independently, to be proficient in the use of computers, able to contribute high-level academic papers and exchange views in international conferences, and to be capable of conducting scientific research independently, undertaking related research and development projects, and possessing qualities to become academic leaders or project managers.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Electromagnetic Field and Microwave Technology

2)Integrated Circuits and Systems

3)Electronic Information Materials and Devices

4)Microelectronics and Solid Electronics

5)Physical electronics

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory; at least one in core courses should be taken. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but these cannot replace compulsory courses. International students with Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016011	Stochastic Processes and Applications	48	3	1	At least 1 from 2
		1107016019	Convex Analysis	32	2	2	
		0208096065	Advanced Electromagnetic Field Theory	48	3	1	
		0208096121	IC Design	32	2	2	
		0208096122	Microwave Engineering	32	2	2	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0108107076	Radar Theory	24	1.5	2	
		0208096123	Principles of semiconductor devices	40	2.5	2	
		0208097094	Modern Microwave Measurement	32	2	1	
		0208097121	RF Integrated Circuit Design	32	2	2	
		3108097001	Co-Design of Hardware and Software	32	2	2	
		3114017036	Syllabus of Surface and Bulk Acoustic Wave Devices for Telecommunications	32	2	2	

Non-degree Optional Courses	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Information and Communication Engineering

Information and Communication Engineering of UESTC is the national key discipline, which constituted by 2 sub-disciplines, Communication and Information System, Signal and Information Processing. The disciplines related to Information and Communication Engineering of UESTC are the first batch of disciplines which were authorized to confer doctoral degree and to establish postdoctoral position, and also the first batch of Project 211, Project 985, Double First-Class key disciplines. The discipline was ranked as 2nd in National Discipline Evaluation from Ministry of Education in 2012 and was accredited as A+ in the fourth round of National Discipline Evaluation from Ministry of Education in 2017. The school has 2 academicians of Chinese Academy of Engineering, 8 awardees of National Thousand Talents Program, 2 National Renowned Professors, 5 awardees of Cheung Kong Scholars Program, 2 awardees of National Natural Science Foundation for Distinguished Young Scholars, 9 awardees of Thousand Talent Program for Young Outstanding Scientists and 1 awardees of National Youth Top-notch Talent Support Program. The research team of this discipline enjoys a good reputation both at home and abroad. The discipline has many international first-class academic research and talents cultivation platforms such as National key laboratories, Ministry key laboratories and Overseas Expertise Introduction Project for Discipline Innovation.

The research fields of this discipline are closely related with those of Electronics Science and Technology, Computer Science and Technology, Control Science and Engineering, Instruments Science and Technology.

1.Objectives

Masters of the discipline are expected to have a rather profound knowledge of the cutting-edge research and trend of the field and a relatively sound grasp of the theoretical and systematic expertise, as are able to master corresponding experimental skills, to be proficient in the use of computers, familiar with at least one simulation software closely related to this discipline, to know the new technology and development trend in a certain field of information and communication engineering at home and abroad and to solve the academic or technical issues innovatively, able to contribute academic papers and exchange views in conferences, and to demonstrate rigorous spirits in scientific approaches and working style and professional ethics, so as to be competent in research, development, teaching or management jobs at research institutes and universities.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Wireless and Mobile Communication System

2)Anti-jamming and Secure Communication System

3)Radar Detection and Imaging Recognition

4)Intelligent Communication Network and Information Processing

5)Optical Fiber Sensing and Communication

6)Image and Video Processing

7)Communication Integrated Circuit and System

8)Intelligent Perception and Information System

9)Machine Learning and Artificial Intelligence

10)Signal and Information Intelligent Processing

3.Duration

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis independently, and pass the degree thesis defense. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance; however, these cannot substitute for compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory

Degree Courses	Common Core Course	6900005004	A Survey of China	36	2	1,2	Compulsory
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		0108106051	Digital Communications	32	2	2	
		0108106052	Digital Signal Processing	32	2	1	
		0108106053	Fiber Optical Communication	24	1.5	2	
		0108106054	Artificial Intelligence	32	2	1	
		0208096121	IC Design	32	2	2	
Non-degree Optional Courses	Elective Major Course	0108107049	Convex Optimization for Signal Processing	40	2.5	1	
		0108107055	Fuzzy logic	32	2	2	
		0108107073	Signal Detection and Estimation	32	2	1	
		0108107074	Optical Fiber Technology	32	2	1	
		0108107075	Computational Intelligence Methods and Application	24	1.5	2	
		0108107076	Radar Theory	24	1.5	2	
		0108107077	Applied Matrix Methods for Signal Processing & Data Analysis	48	3	2	
		0808127067	Mathematical Fundamental of Information Security	40	2.5	1	
		0808127082	Advanced Computer Network and Its Programming	16	1	1	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts. A candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture and arts, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

As for problems regarding the degree thesis defense, from its application, evaluation and holding to the final award of the degree, all shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Control Science and Engineering

Control Science and Engineering a discipline related to research of control theory, method, technology and engineering application. Based on control theory, system theory and information theory, control science deals with mutual problems in various application areas, which are building system model, analyzing its inner and outer information, adopting control methods. The program has an obvious characteristics in combination of theory research and engineering application, disciplinary crossing and integration, civil-military integration technology, and plays an indispensable role in national economy development and national security.

This program is a key discipline in Sichuan Province with abundant teaching resources. After many years' development, the program has been expanded into several research areas including complex system control and optimization, new energy system control technology, computer vision and pattern recognition, robot technology and system, etc.. The development of this program brings great benefits to the society and country, and makes outstanding contribution to national defense, social service, talent training and so on.

1.Objectives

Abide by the laws and have good moral character. Master solid basic theories and knowledge. Able to communicate in Chinese. Able to engage in research or academic research, teaching, and independent technical job.

2.Orientations

1)Complex System and Intelligent Information Processing

2)New Energy System Control Technology

3)Pattern Recognition and Intelligent System

4)Measurement and Control Communication and Navigation Control

5)Detection Technology and Automation Device

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		0108106052	Digital Signal Processing	32	2	1	
		0608116020	Computer Vision★	32	2	1	
		0608116021	Linear System Theory★	40	2.5	1	
		0608116022	Numerical optimization and applications	40	2.5	2	
Non-degree Optional Courses	Elective Major Course	0108106033	Signal Detection and Estimation	32	2	1	
		0208096131	Advanced Electromagnetic Field Theory	48	3	1	
		0208097121	RF Integrated Circuit Design	32	2	2	
		0808126041	Embedded Operating System and Application	32	2	2	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	

Non-degree Optional Courses	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400007006	Mid term evaluation	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 4,000 words as well as the corresponding Research Proposal Report.

5)Mid-term Report on Thesis Work: All candidates are obliged to provide written progress reports on their dissertations six months after they begin. These reports will be evaluated and approved by experts before the candidates can move further with their dissertations.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Computer Science and Technology

With its postdoctoral research station set up as early as in 1999, the discipline enjoys a rather strong comprehensive advantages and has demonstrated great competence in fundamental and applied researches. With its substantially enhanced research abilities, the discipline is drawing close to the national first level as a whole with part of its achievements coming up as the most advanced in the country. Altogether, cheerful results have been achieved in aspects of discipline orientations, academic teams, discipline platform constructions, scientific researches, cultivation of talents and academic exchanges.

1.Objectives

Masters of the discipline are expected to have a sound grasp of the fundamental theories and systematic expertise, and a thorough knowledge of the trend of the field. As masters of modern experimental approaches and skills of the field, they are enabled to carry out academic researches in their orientations. On graduation, they are competent in academic researches related to the computer field, in software developments and analysis of computer application system, and in computer teaching work.

Masters of the discipline are also expected to have a basic knowledge of Chinese history and culture, be capable of reading Chinese scientific literatures in simple Chinese, and communicating with basic skills in the Chinese language. A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Information Security

2)Embedded System

3)Computer Networks

4)Artificial Intelligence

5)Cloud Computing

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory; at least one in core courses should be taken. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. However, it is not a substitute for compulsory courses. Degree courses can be taken to substitute non-degree courses, but not vice versa. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		0808126040	Mobile Computing	32	2	2	
		0808126041	Embedded Operating System and Application	32	2	2	
		0808126042	The Design of Cryptographic Algorithm	32	2	2	
		0808126043	Software Development Technology	32	2	1	
		0808126051	Big Data Analysis and Mining	32	2	2	
Non-degree Optional Courses	Elective Major Course	0808127039	Frontiers in Algorithms	16	1	1	
		0808127052	Cloud Computing	16	1	1	
		0808127063	Foundation of Cryptography	32	2	2	
		0808127064	Database Technique	32	2	2	
		0808127065	Computer Graphics	32	2	2	
		0808127066	Operating System: Structure and Applications	32	2	2	

Non-degree Optional Courses	Elective Major Course	0808127067	Mathematical Fundamental of Information Security	40	2.5	1	
		0808127068	Object Oriented Technology	24	1.5	1	
		0808127082	Advanced Computer Network and Its Programming	16	1	1	
		0808127084	Advanced Network Computing	16	1	1	
		0808127104	Neural Networks and Machine Learning	32	2	2	
		0808397014	Data Recovery and Digital Forensics	16	1	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

Degree thesis is a comprehensive reflection of a master candidate's scientific research ability, basic theoretical level and mastery of professional knowledge, and is an important basis for degree conferring. Master candidates should complete their thesis independently under the guidance of their supervisors. The writing of thesis should be carried out in accordance with UESTC Graduate Dissertation(Thesis) Writing Standards; The application, review, defense and degree conferment of thesis shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Biomedical Engineering

Biomedical Engineering (BME) is an inter-disciplinary field involving the subject of Life Science, Cognitive Science and Information Science. BME in UESTC started from the year of 1986. During the discipline evaluation organized by Ministry of Education in the year of 2017, BME in UESTC ranks B+ among the BME disciplines of all the main universities in China. There are 40+ full and associate professors in BME of UESTC, including academician of Chinese academy of sciences, AIMBE Fellow, IET Fellow, etc. and 6 full-time foreign professors. The current experimental conditions include the Key Laboratory of Neuroinformation of Ministry of Education, and other Sichuan Province supported Key Laboratories, which are equipped with 3.0T MR, EGI and NeuroScan EEG workstations, etc. Altogether, rich outcomes have been achieved in the areas of brain imaging techniques and applications, visual electrophysiology and computational modeling, biomedical signal processing, medical imaging and processing, system biology, plant molecular genetics, nanomedicine, etc.

1.Objectives

Masters of the discipline are expected to have a rather profound knowledge of the cutting-edge research and trend of the field and a relatively sound grasp of the theoretical and systematic expertise in computer, human anatomy and physiology, and biomedical signal processing. Masters of the discipline are able to contribute academic papers and exchange views in conferences, and to demonstrate rigorous spirits in scientific approaches and working style and professional ethics, so as to be competent in research, development, teaching or management jobs at research institutes and universities in the areas of biomedical signal collection and processing, biomedical instruments.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Brain Functions and Neural Information Engineering (EEG and fMRI Data Processing, Neural Electrophysiology, Brain-Computer Interface, Brain-inspired Intelligence, etc)

2)Medical Instruments, Medical Image and Signal Processing

3)Bioinformatics

4)Neurobiology

5)Cell Biology

6)Biochemistry and Molecular Neurobiology

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those

who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory; at least one in core courses should be taken. Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but they cannot replace compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016009	Matrix Theory	48	3	1	At least 1 from 3
		1100016010	Numerical Analysis	48	3	1/2	
		1100016011	Stochastic Processes and Applications	48	3	1	
		1404026013	Cognitive neuroscience	32	2	1	
		1407106020	Advanced Molecular Biology	32	2	1	
		1407106021	Bioinformatics	32	2	1	
		1408316018	Fundamentals of Brain Science	32	2	2	
		1408316019	Biomedical Statistics	48	3	2	
Non-degree Optional Courses	Elective Major Course	0108106051	Digital Communications	32	2	2	

Non-degree Optional Courses	Elective Major Course	0108106052	Digital Signal Processing	32	2	1	
		0208096101	IC Design	40	2	2	
		0808126043	Software Development Technology	32	2	1	
		1408317023	Advances in Brain Imaging	32	2	2	
		1408546003	Psychophysical Experiments	40	2.5	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Software Engineering

As the software industry becomes a pillar industry in national economy, the discipline of Software Engineering becomes one of the fast developing disciplines in Information Technology. The development in this field has a wind-range, multidimensional, multilayer and interdisciplinary architecture. The knowledge in this field includes software requirement, software design, software test, software maintenance, software configuration management, software project management, software quality, software security and software ethics and laws. It is also connected with various disciplines such as system engineering, domain engineering, digital technology, system management and support, network and information security, embedded system and marketing.

1.Objectives

The cultivation objectives focus on fundamental software theory. Complying with development of software technology and demand of software industry and following international software development mode, master degree graduates of the discipline are research-oriented talents with solid knowledge of software engineering theory, software development technology and software development process.

Masters of the discipline are expected to be familiar with advanced programming technologies, mainstream operating system and software development platforms. On graduation, they should be qualified for system analysis, design and programming by following international software development mode and standards. They should also have basic knowledge of project management and be capable of using modern software technology and tools. They should also be competent in scientific researches related to the fields of software engineering, system and software design, development and management.

Masters of the discipline are also expected to have a basic knowledge of Chinese history and culture, and be capable of reading Chinese scientific literature in simple Chinese and communicating with basic skills in Chinese language.

2.Orientations

1)Embedded software and industrial software

2)Secure computing environment

3)Artificial Intelligence and Its Applications

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 26. Master candidates should complete the course work of no less than a total of 24 credits (out of which at least 15 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Under the guidance of the supervisor, Master candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses, but they cannot replace compulsory courses. A Survey of China and Comprehensive Chinese are compulsory for international postgraduates , who are required to pass the HSK 3 or equivalent Chinese Language Test by graduation. Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 3
		1100016011	Stochastic Processes and Applications	48	3	1	
		1100016012	Optimization Methods and Applications	48	3	1	
		0908356022	Software Architecture Model and Design★	32	2	2	
		0908356025	Embedded Systems Design	32	2	2	
		0908356026	Fundamentals of Network Computing	32	2	1	
		0908356027	Network Security: Theory and Practice	32	2	1	
		0908357051	New Theory and Practice of Database	32	2	1	
		0908357052	Data Science and Application	32	2	2	
		0908357053	AI Programming Practical	32	2	1	

Non-degree Optional Courses	Elective Major Course	0908357054	Postgraduate Thesis Writing Guidance Course	16	1	2	
		0908357055	Fundamental of Mathematic for Information Security	32	2	1	
		6900005005	Chinese Reading and Writing	32	2	1/2	
Non-degree Optional Courses	Elective Major Course	XX0004XXXX	High-Level International Courses	/	/	1/2	
		Academic Activities	0	1	1,2	Compulsory	
		Research Proposal and Literature Review of the Dissertation	0	0	1,2		
	Other Elective Course	Chinese Proficiency Assessment	60	0	1,2		
Compulsory Section		6400006003	Elective Competence Development Courses	0	1	1,2	
		6400006004					
		6900006001					
		XX00025XXX					

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sports, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Master Program (for International Students) in Public Management

School of Public Administration (SPA) is top ranked for our full line of degrees from undergraduate to Ph.D degree including 4 bachelor degrees of Public Management, Information Management, Law and Urban Studies and 2 master degrees of Public Management and Journalism and Communication, 2 professional programs of MPA and MJC respectively, English-instructed International Program in Public Management and Ph.D degree in Urban Studies and Management in highly rated education with featured key disciplines, as well as featured Think Tank, Centers and Institutes for Social Science Research.

SPA offer many unusual advantages compared to other schools of Public Administration and Political School for UESTC is “a cradle for Chinese Electronic Information Industry”. Our school’s research and teaching is information knowledge based one. With joint efforts and contributions from SPA faculty, we have witnessed proud legacy of teaching and researching nationwide with Top National Courses based Teaching Achievements, Nationally Recognized Research Projects Granted and enjoy popularity of academic influence worldwide via the platform of International Conference on Public Administration (ICPA).

1.Objectives

Comprised of a core curriculum, distribution requirements, areas of focus and electives, the two-year MPM is a science degree program designed for students with current and future managerial and development skills for the public service, at local, provincial and national levels of government. Many students focus their electives into an optional concentration of study comprised of topical courses at School of Public Administration (SPA) as well as in departments and schools across campus. The concentration areas offered by SPA mainly reflect the areas in which faculty do research and are a way to choose a set of courses that provide depth in a substantive public management area. Students who do not select a concentration area are expected to select courses that make academic sense.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Public Administrative Management

2)Public Policy

3)Digital Public Governance

4)Urban-rural Public Governance

3.Duration

The duration set for master candidates is 2 years full-time. An extension can be applied for by those

who cannot finish their courses in time owing to objective causes, yet altogether 4 years is the last due.

4.Progression and Requirements

The minimum sum total credits for international students of master candidates are 30. Master candidates should complete the course work of no less than a total of 28 credits (out of which at least 17 credits should be acquired from degree courses), compulsory sections of no less than 2 credits, complete the thesis (or a research report) independently, and pass the degree thesis defense.

The supervisor responsibility mechanism is adopted in the education for international master candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis. The personal study plan cannot be changed without permission of the supervisor.

During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses and disciplinary core courses are compulsory; Master candidates are allowed to choose 1-2 inter-disciplinary degree courses as their degree courses under supervisors' guidance (these cannot substitute for compulsory courses). International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the requirements as described above can fill up the gap by repetition or make-up in the limit of one year. Those who fail to meet the credit requirements even till the end of the due time are to be terminated.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005004	A Survey of China	36	2	1,2	Compulsory
		6900005001	Comprehensive Chinese	60	2	1	
	Major Core Course	1612046011	Public Management	48	3	1	
		1612046012	Classic Readings of Public Administration	48	3	1	
		1612046015	Public Economics	32	2	1	
		1612046016	E-government	32	2	2	
		1612046020	Public Policy	40	2.5	2	
		1612046036	Digital Globalization of World Politics	32	2	2	
		1612046037	Social Science Research Methodologies	48	3	1	
Degree Courses	Major Core	1612046038	Public Human Resource Management	48	3	2	

	Course						
Non-degree Optional Courses	Elective Major Course	1612047034	Digital Government and Media	32	2	2	
		1612047035	Academic Writing for Social Science	24	1.5	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 5
		6900006001	Chinese Proficiency Assessment	60	0	1,2	Compulsory
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of master candidates include three parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture and arts, etc, such courses are given to improve the master candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden master candidates' scope of knowledge, one should attend at least five academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Foreign Languages and Literatures

The discipline foreign languages and literatures belongs to humanities and social sciences. Its research objects are mainly language, literature and culture, covering five main research fields: foreign literature, foreign linguistics and applied linguistics, translation studies, comparative literature and cross-cultural communication studies, and country and area studies.

1.Objectives

Candidates with a doctor's degree in this discipline should have good interpersonal communication skills, teamwork spirit and social responsibility. They should be able to systematically master the theoretical frontiers and research methods of this discipline and engage in academic research in one of the following branches: linguistics, translation studies, foreign literature and comparative literature, or country and area studies.

2.Orientations

1)Foreign Linguistics and Applied Linguistics

2)Foreign Literature and Comparative Literature

3)Translation Studies

4)Country and Area Studies

3.Duration

The supervisor responsibility mechanism is adopted in the education for international Ph.D. candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the degree thesis.

The duration set for Ph.D. candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits for international Ph.D. students are 16, including no less than 14 course credits (with at least 10 from degree courses) and no less than 2 credits from compulsory sections. During the course work, students should pass the required exams for degree courses and assessments for non-degree elective courses as per the discipline's requirements. In degree courses, general foundational courses are compulsory. Under supervisors' guidance, students can take 1-2 inter-disciplinary degree courses as part of their degree courses for this program, but these cannot replace the major's complusory courses.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1705026019	Theoretical Frontiers of Foreign Linguistics and Research Methods★	32	2	1	
		1705026020	Theoretical Frontiers of Foreign Literature and Comparative Literature and Research Methods★	32	2	1	
		1705026021	Theoretical Frontiers of Translation Studies and Research Methods★	32	2	1	
		1705026022	Country and Area Studies: Theory and Practice★	32	2	1	
Non-degree Optional Courses	Elective Major Course	1705027006	Cognitive Neuroscience of language	48	3	1	
		1705027033	Case Studies in Linguistic Intelligence	32	2	2	
		1705027035	Case Studies in Foreign Literature and Comparative Literature	48	3	2	
		1705027036	Case Studies in Foreign Linguistics	48	3	2	
		1705027037	Case Studies in Translation Theory and Practice	48	3	1	
		1705027038	Case Studies in Intelligent International Communication	32	2	2	
		1705027039	Case Research in Country and Area Studies	48	3	2	
		1705517012	Intelligent Translation Technology: Theory and Practice	32	2	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are given in

English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D. candidates include five parts, and a candidate is required to complete the following aspects:

（1）Elective Competence Development Courses: through introducing the academic cutting-edge knowledge, culture, arts and sports, etc., such courses are given to improve the Ph. D. candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

（2）Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D. candidates' scope of knowledge, one should attend at least 10 academic lectures within and out of UESTC (including 2 international conferences) and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he / she succeeds in completing the above procedures.

（3）Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): this is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions and the frontier development in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then he / she cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

（4）The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 100 papers in the leading edge of their discipline from the latest literature, including no fewer than 30 foreign-language ones, and at least 40 classic pieces of literature should be read intensively. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

（5） Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language

ability of international graduates to pass the HSK 3 by graduation. Doctoral students are required to undergo a HSK 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

The topic of a Ph. D. thesis should be at the cutting edge of the discipline and hold important theoretical and practical significance. The thesis is expected to demonstrate that the author has acquired a solid and broad foundation in the field as well as systematic and in-depth specialized knowledge. It should also reflect the author's ability to conduct independent research and produce creative results.

Writing of the Ph. D. thesis should be in line with national requirements and the "UESTC Regulations for Postgraduate Degree Conferring". Under the guidance of their Ph. D. supervisor and the discipline-based team, Ph. D. candidates should independently complete their theses, which can be in a foreign language specific to their field or in Chinese, with no less than 100,000 words of a foreign language or no less than 150,000 Chinese characters.

Ph.D Program (for International Students) in Physics

Physics is the natural science that involves the study of matter and its motion through space and time, along with related concepts such as energy and force. It is conducted to disclose the structure of matter, interaction between matters, and the motion laws of matters in order to understand the universe. It results in many significant technologies and products.

The School of Physics at University of Electronic Science and Technology of China has the primary objective of advancing knowledge of physics and training of qualified manpower to acquire and develop an economy based on high technology. It is also involved in inter-disciplinary research with other branches of science as well as engaging in collaborative work with industry. Six fields, Theoretical Physics, Condensed Matter Physics, Radio physics, Optics, Plasma Physics, and Quantum Physics and Quantum Information, have established their reputation for research excellence. Collaborations in research across national borders and disciplines have been built. The school intends to play a key role in the advancement of China into a high-tech era.

This programme offers excellent opportunities for students to further develop their potential as intellectual leaders for a wide range of career paths. They will not only acquire fundamental and emerging knowledge in physics, but also solve practical problems of relevance to industrial development.

1.Objectives

Candidates of Doctor of Philosophy in Physics are expected to have a profound knowledge in fundamental physics and experimental skills. They are also required to have a clear vision of cutting-edge research and emerging trends in physics. The candidates should be able to develop research projects and conduct research independently.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Theoretical Physics

2)Condensed Matter Physics

3)Radio Physics

4)Optics

5)Plasma Physics

6)Quantum Physics and Quantum Information

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance， but cannot replace compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016018	Theory and Algorithms of Numerical Algebra	32	2	2	
		0208096064	Advanced Electromagnetic Theory	48	3	1	
		1207026039	Advanced Quantum Mechanics	56	3.5	2	
		1207026043	General relativity	32	2	2	
		1207026045	Quantum Field Theory I	48	3	1	
Non-degree Optional Courses	Elective Major Course	1207027047	String theory	32	2	2	
		1207027055	Quantum Field Theory（二）	48	3	2	
		1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	

Compulsory Section	6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
	6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires international graduates' Chinese language ability of to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Mechanical Engineering

Mechanical Engineering is the first level discipline based on natural science and engineering technology, which aims to study the related theory on mechanical design, manufacturing, control, operation and maintenance during the usage of the mechanical equipment, and further resolve practical engineering problems. This discipline covers several directions, such as mechanical design and theory, mechanical manufacturing and automation, and mechatronics engineering, which leads to the discipline advantage with the multi-disciplinary synthesis of machine, electronic information, and measurement & control technology.

1.Objectives

Ph.D candidates of the discipline are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid and extensive grasp of the theoretical and systematic expertise in a certain direction among mechatronic systems design, manufacturing and measurement and control, as are able to complete experiments and studies of the field independently, able to contribute high-level academic papers and exchange views in international conferences, and to demonstrate rigorous spirits in scientific approaches and independence in scientific pursuits with in-depth studies and innovative achievements, so as to have the competency of undertaking researches and developing projects independently and qualities of being academic leaders or projects leaders.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Equipment reliability and equipment monitoring management

2)Intelligent manufacturing equipment

3)Intelligent perception and control technology

4)Equipment intelligence design and simulation

5)MEMS

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the

dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but these cannot replace the major's complusory courses. Degree courses can be taken to substitute non-degree courses, but not vice versa. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	0408026030	Advanced Manufacturing Technology	32	2	1	
		0408026031	Microelectromechanical Systems (MEMS)	32	2	1	
		0808126041	Embedded Operating System and Application	32	2	2	
		1100016010	Numerical Analysis	48	3	1/2	
		1100016012	Optimization Methods and Applications	48	3	1	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0408027049	Machinery Dynamics	32	2	2	
		0408027050	Reliability Design	32	2	2	
	Other Elective Course	0411117006	English Academic Writing for Graduate Students	16	1	2	Compulsory
		6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10

Compulsory Section	6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
	6400007006	Mid term evaluation	0	0	1,2	
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Optical Engineering

Optical Engineering, which mainly focuses on Light Information Acquisition, Optical Transmission, Optical Switching, Optical Information Processing and Photoelectric Image Display, has wide applications in the industry, and becomes an important discipline in the current information technology field.

The teaching and research area of Optical Engineering in UESTC covers the theory and application of the whole optical engineering discipline, especially strong in optical communication, photonic integration, infrared and sensing technology, panel display and imaging technology. The discipline has undertaken a number of national key research projects, receiving sufficient funds, and wining several state or provincial awards. The main research direction of this discipline has stepped into the leading position in China, also having a certain international influence.

1.Objectives

Ph.Ds of the discipline are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid and comprehensive grasp of the theoretical and systematic expertise, as are able to complete experiments and studies of the filed independently, to be proficient in the use of computers, able to contribute high-level academic papers and exchange views in international conferences, and to demonstrate rigorous spirits in scientific approaches and independence in academic research with in-depth studies and innovative achievements, so as to have the competency of undertaking researches and developing projects independently and qualities of being academic leaders or project leaders.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2. Orientations

1)Optic communication and optic integration

2)Photoelectric Detection and System Integration

3)Sensitive electronics and sensor network

4)Display and Imaging

5)Microwave photonics

6)Photoelectric measurement and control technology

3.Duration

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates.

The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance.However, it is not a substitute for compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 2
		1100016012	Optimization Methods and Applications	48	3	1	
		0108106053	Fiber Optical Communication	24	1.5	2	
		0208096065	Advanced Electromagnetic Field Theory	48	3	1	
		0508036033	Fiber Optics	32	2	1	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0108107074	Optical Fiber Technology	32	2	1	
		0508037036	Nonlinear Optics	32	2	2	
		0508037051	Organic Electronics	16	1	2	
		1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory

Compulsory Section	6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Instrument Science and Technology

Instrument Science and Technology is a vital component of the information field, with its primary research areas encompassing methods for acquiring, converting, amplifying, and processing signals or information, metrology, measurement methodology, as well as instrumentation engineering and measurement and control systems engineering. This discipline boasts sustainable development advantages, notable interdisciplinary characteristics, and a cutting-edge position in science and technology, playing a pivotal role in guiding and promoting the development of high-tech industries, industrial progress, and societal advancement.

1.Objectives

Comply with laws and disciplines, possess excellent moral character; demonstrate a certain level of proficiency in Chinese communication upon graduation; possess a solid and extensive theoretical foundation as well as systematic and profound specialized knowledge within one's academic discipline; have a profound understanding of the developmental trends and international research frontiers within one's field; be capable of conducting high-level theoretical and experimental research, and achieving innovative research outcomes in a specific area; possess the ability to independently engage in scientific research and technological development; adhere to a rigorous and pragmatic scientific approach; and be competent in scientific research, teaching, engineering development, or technical management roles within one's discipline or related disciplines.

2.Orientations

1)Broadband Time-Domain Testing Technology and Instrumentation

2)Comprehensive Testing, Diagnosis, and Prediction of Electronic Systems

3)Microwave and Millimeter-Wave Testing Technology and Remote Sensing

4)Integrated Circuit Testing and Design-for-Test Theory and Technology

5)Novel Sensor Technology and Precision Measurement

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work

around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses (but not substitute for the compulsory courses)as their degree courses under supervisors' guidance. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016018	Theory and Algorithms of Numerical Algebra	32	2	2	
		0108106052	Digital Signal Processing	32	2	1	
		0608116020	Computer Vision	32	2	1	
		0608116021	Linear System Theory	40	2.5	1	
		0608116022	Numerical optimization and applications	40	2.5	2	
Non-degree Optional Courses	Elective Major Course	0808126041	Embedded Operating System and Application	32	2	2	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10

Compulsory Section	6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
	6400007006	Mid term evaluation	0	0	1,2	
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	Compulsory

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include six parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and

preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

6)Mid-term Report on Thesis Work: All Ph.D. candidates are obliged to provide written progress reports on their dissertations 12 months after they begin. These reports will be evaluated and approved by experts before the candidates can move further with their dissertations.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Materials Science and Engineering

The Discipline of Materials Science and Engineering studies the composition, structure, preparation process, properties and applications of materials. The research objects include the theory, design, preparation, testing and application of electrical, magnetic, acoustic, optical, thermal, mechanical and biological functional materials. The research process involves the acquisition, transformation, storage, processing and control of materials information. UESTC is the first batch selected into the national project of First-class Universities and Disciplines of the World. Research and development of electronic information materials and application are characteristics and advantages of UESTC. The discipline of Materials Science and Engineering has strong academic faculties, which include doctoral supervisor, professors, associate professors, and a number of Ph.D talents, advanced experimental facilities and plenty of research funds.

With the development of science and technology, the discipline of Materials Science and Engineering has become more and more closely interdisciplinary with other disciplines. At the same time, as an important pillar of modern civilization, the discipline has become the forerunner and foundation of the development of modern science and technology, and has a very close relationship with the development of contemporary society.

1.Objectives

Ph.Ds of the discipline of Materials Science and Engineering are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid and extensive grasp of the theoretical and systematic expertise, as are able to complete experiments and studies of the filed independently, to be proficient in the use of computers, able to contribute high-level academic papers and exchange views in international conferences, and to demonstrate rigorous spirits in scientific approaches and independence in scientific pursuits with in-depth studies and innovative achievements, so as to have the competency of undertaking researches and developing projects independently and qualities of being academic leaders or project leaders.

2.Orientations

1)Electronic Information Materials and Devices

2)Materials Gene Project

3)Electronic Film and Integrated Devices

4)New Energy Materials and Devices

5)Printed Circuits and Printed Electronic Technology

6)Organic Functional Materials and Engineering

3.Duration

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the degree thesis.

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance， but they cannot replace the required courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 2
		1100016012	Optimization Methods and Applications	48	3	1	
		0208096065	Advanced Electromagnetic Field Theory	48	3	1	
		0208096122	Microwave Engineering	32	2	2	
Non-degree Optional Courses	Elective Major Course	0208096123	Principles of semiconductor devices	40	2.5	2	

Non-degree Optional Courses	Elective Major Course	0308057036	Optoelectronic Conversion from Fundamental to Devices	16	1	2	
		0308057051	Frontiers in the Preparation and Application of Nanomaterials	16	1	2	
		0408087028	Renewable Energy Generation and Integration	32	2	2	
		0411117006	English Academic Writing for Graduate Students	16	1	2	
		1207027060	Solid-State Battery and Energy-Storage Device	16	1	1	
		1207027064	Nano-Optics	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include four parts; a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC)：which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he

cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by theAcademicDegreeEvaluationCommittee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize CEPC each year in October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature, no less than 1/3 published in the past 5 years. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring. For Int'l students, the language used in the defense should be English.

Ph.D Program (for International Students) in Electronic Science and Technology

The Discipline of Electronic Science and Technology, which has been selected into the national project of First-class Universities and Disciplines of the World, is one of the national key disciplines of China. It consists of 5 second disciplines including electromagnetic field and microwave technology, microelectronics and solid state electronics, circuits and systems, Electronic Information Materials and Devices and Electronic information materials and components.In pursuing the advanced level of scientific research, those disciplines all have very strong research capabilities and extensive academic impact.

1.Objectives

Ph.Ds of the discipline are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid and extensive grasp of the theoretical and systematic expertise, as are able to complete experiments and studies of the filed independently, to be proficient in the use of computers, able to contribute high-level academic papers and exchange views in international conferences, and to demonstrate rigorous spirits in scientific approaches and independence in scientific pursuits with in-depth studies and innovative achievements, so as to have the competency of undertaking researches and developing projects independently and qualities of being academic leaders or project leaders.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Electromagnetic Field and Microwave Technology

2)Integrated Circuits and Systems

3)Electronic Information Materials and Devices

4)Microelectronics and Solid Electronics

5)Physical electronics

3.Duration

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student’s making of personal study plan, the choice of courses, and the completion of the degree thesis.

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those

who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. International students with Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass. Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016019	Convex Analysis	32	2	2	
		0208096065	Advanced Electromagnetic Field Theory	48	3	1	
		0208096122	Microwave Engineering	32	2	2	
Non-degree Optional Courses	Elective Major Course	0108107073	Signal Detection and Estimation	32	2	1	
		0208096123	Principles of semiconductor devices	40	2.5	2	
		0208097094	Modern Microwave Measurement	32	2	1	
		0208097121	RF Integrated Circuit Design	32	2	2	
		3108097001	Co-Design of Hardware and Software	32	2	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory

Compulsory Section	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	Compulsory
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEP Cat the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the AcademicDegreeEvaluationCommittee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish

a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Midterm report of dissertation: all Ph.D. candidates should complete the corresponding midterm report based on the research work which already carried out, approximately one year after completing the research proposal report.

6)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Information and Communication Engineering

Information and Communication Engineering of UESTC is the national key discipline, which constituted by 2 sub-disciplines, Communication and Information System, Signal and Information Processing. The disciplines related to Information and Communication Engineering of UESTC are the first batch of disciplines which were authorized to confer doctoral degree and to establish postdoctoral position, and also the first batch of Project 211, Project 985, Double First-Class key disciplines. The discipline was ranked as 2nd in National Discipline Evaluation from Ministry of Education in 2012 and was accredited as A+ in the fourth round of National Discipline Evaluation from Ministry of Education in 2017. The school has 2 academicians of Chinese Academy of Engineering, 8 awardees of National Thousand Talents Program, 2 National Renowned Professors, 5 awardees of Cheung Kong Scholars Program, 2 awardees of National Natural Science Foundation for Distinguished Young Scholars, 9 awardees of Thousand Talent Program for Young Outstanding Scientists and 1 awardees of National Youth Top-notch Talent Support Program. The research team of this discipline enjoys a good reputation both at home and abroad. The discipline has many international first-class academic research and talents cultivation platforms such as National key laboratories, Ministry key laboratories and Overseas Expertise Introduction Project for Discipline Innovation.

The research fields of this discipline are closely related with those of Electronics Science and Technology, Computer Science and Technology, Control Science and Engineering, Instruments Science and Technology.

1.Objectives

Ph.Ds of the discipline are expected to have a profound knowledge of the cutting-edge research and trend of the field and a solid and extensive grasp of the theoretical and systematic expertise, as are able to complete experiments and studies of the filed independently, to know the new technology and development trend in a certain field of information and communication engineering at home and abroad and to solve the academic or technical issues innovatively, to be proficient in the use of computers, able to contribute high-level academic papers and exchange views in international conferences, and to demonstrate rigorous spirits in scientific approaches and independence in scientific pursuits with in-depth studies and innovative achievements, so as to have the competency of undertaking researches and developing projects independently and qualities of being academic leaders or project leaders.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Wireless and Mobile Communication System

2)Anti-jamming and Secure Communication System

3)Radar Detection and Imaging Recognition

4)Intelligent Communication Network and Information Processing

5)Optical Fiber Sensing and Communication

6)Image and Video Processing

7)Communication Integrated Circuit and System

8)Intelligent Perception and Information System

9)Machine Learning and Artificial Intelligence

10)Signal and Information Intelligent Processing

3.Duration

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance; however, these cannot substitute for compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	

Degree Courses	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 2
		1100016012	Optimization Methods and Applications	48	3	1	
		0108106051	Digital Communications	32	2	2	
		0108106052	Digital Signal Processing	32	2	1	
		0108106053	Fiber Optical Communication	24	1.5	2	
		0108106054	Artificial Intelligence	32	2	1	
		0808126043	Software Development Technology	32	2	1	
Non-degree Optional Courses	Elective Major Course	0108107055	Fuzzy logic	32	2	2	
		0108107073	Signal Detection and Estimation	32	2	1	
		0108107074	Optical Fiber Technology	32	2	1	
		0108107075	Computational Intelligence Methods and Application	24	1.5	2	
		0108107077	Applied Matrix Methods for Signal Processing & Data Analysis	48	3	2	
		0208096121	IC Design	32	2	2	
		0808126051	Big Data Analysis and Mining	32	2	2	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	Compulsory
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts. A candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture and arts, etc, such courses are given to improve the Ph.D candidates' comprehensive

competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of the Dissertation (hereinafter as RPRLRD): before making the Research Proposal for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

As for problems regarding the dissertation defense, from its application, evaluation and holding to the final award of the degree, all shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Control Science and Engineering

Control Science and Engineering a discipline related to research of control theory, method, technology and engineering application. Based on control theory, system theory and information theory, control science deals with mutual problems in various application areas, which are building system model, analyzing its inner and outer information, adopting control methods. The program has an obvious characteristic in combination of theory research and engineering application, disciplinary crossing and integration, civil-military integration technology, and plays an indispensable role in national economy development and national security.

This program is a key discipline in Sichuan Province with abundant teaching resources. After many years' development, the program has been expanded into several research areas including complex system control and optimization, new energy system control technology, computer vision and pattern recognition, robot technology and system, etc. The development of this program brings great benefits to the society and country, and makes outstanding contribution to national defense, social service, talent training and so on.

1.Objectives

Abide by the laws and have good moral character. Master solid and comprehensive basic theories and knowledge. Able to communicate in Chinese. Able to make scientific research independently and creatively. Good and rigorous research spirit. Able to make creative achievement in scientific research or academic research.

2.Orientations

1)Complex System and Intelligent Information Processing

2)New Energy System Control Technology

3)Pattern Recognition and Intelligent System

4)Measurement and Control Communication and Navigation Control

5)Detection Technology and Automation Device

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work

around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1,2	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016018	Theory and Algorithms of Numerical Algebra	32	2	2	
		0108106052	Digital Signal Processing	32	2	1	
		0608116020	Computer Vision	32	2	1	
		0608116021	Linear System Theory	40	2.5	1	
		0608116022	Numerical optimization and applications	40	2.5	2	
Non-degree Optional Courses	Elective Major Course	0808126041	Embedded Operating System and Application	32	2	2	
		1008256023	Theories and Methods of Systems Engineering	32	2	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	

Compulsory Section	6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
	6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
	6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
	6400007006	Mid term evaluation	0	0	1,2	
	6900006001	Chinese Proficiency Assessment	60	0	1,2	
	XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include six parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials

with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

6)Mid-term Report on Thesis Work: All Ph.D. candidates are obliged to provide written progress reports on their dissertations 12 months after they begin. These reports will be evaluated and approved by experts before the candidates can move further with their dissertations.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Computer Science and Technology

With its postdoctoral research station set up as early as in 1999, the discipline enjoys a rather strong comprehensive advantages and has demonstrated great competence in fundamental and applied researches. With its substantially enhanced research abilities, the discipline is drawing close to the national first level as a whole with part of its achievements coming up as the most advanced in the country. Altogether, cheerful results have been achieved in aspects of discipline orientations, academic teams, discipline platform constructions, scientific researches, cultivation of talents and academic exchanges.

1.Objectives

Ph.Ds of the discipline are expected to have a solid and comprehensive knowledge of fundamental mathematics, a systematic knowledge of the discipline's covered areas, and a profound knowledge of their orientations. With their vigorous consciousness of academic pursuits, acute awareness of innovation and an in-depth understanding of the present situations, the developing trends and the cutting-edge of the discipline, they are enabled to contribute high-level academic papers and exchange research concerns in international conferences, to carry out independent researches on fundamental theories and front issues of computer science with internationally acknowledged innovative achievements, and to undertake designing and developing large scale software or significant computer applied projects, and they are thus furnished with the qualities of being an academic leader or a project director and the qualifications for teaching in institutes of higher education.

International doctoral candidates are also expected to have a basic knowledge of Chinese history and culture, be capable of reading Chinese scientific literatures in simple Chinese, and communicating with basic skills in the Chinese language. A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Information Security

2)Embedded System

3)Computer Networks

4)Artificial Intelligence

5)Cloud Computing

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the degree thesis.

4.Progression and Requirements

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance. However, it is not a substitute for compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016019	Convex Analysis	32	2	2	
		0808126040	Mobile Computing	32	2	2	
		0808126041	Embedded Operating System and Application	32	2	2	
		0808126042	The Design of Cryptographic Algorithm	32	2	2	
		0808126043	Software Development Technology	32	2	1	
		0808126051	Big Data Analysis and Mining	32	2	2	
		0808126064	Mathematical Foundations of Computer Science★	32	2	1	

Non-degree Optional Courses	Elective Major Course	0808127039	Frontiers in Algorithms	16	1	1	
		0808127052	Cloud Computing	16	1	1	
		0808127053	Advanced computer networks	16	1	2	
		0808127063	Foundation of Cryptography	32	2	2	
		0808127065	Computer Graphics	32	2	2	
		0808127066	Operating System: Structure and Applications	32	2	2	
		0808127104	Neural Networks and Machine Learning	32	2	2	
		0808397014	Data Recovery and Digital Forensics	16	1	1	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional

knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

Dissertation is a comprehensive reflection of a Ph.D candidate's scientific research ability, basic theoretical level and mastery of professional knowledge, and is an important basis for degree conferring. Ph.D candidates should complete their dissertation independently under the guidance of their supervisors. The writing of dissertation should be carried out in accordance with UESTC Graduate Dissertation(Thesis) Writing Standards; The application, review, defense and degree conferment of dissertation shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Biomedical Engineering

Biomedical Engineering (BME) is an inter-disciplinary field involving the subject of Life Science, Cognitive Science and Information Science. BME in UESTC started from the year of 1986. During the discipline evaluation organized by Ministry of Education in the year of 2017, BME in UESTC ranks B+ among the BME disciplines of all the main universities in China. There are 40+ full and associate professors in BME of UESTC, including academician of Chinese academy of sciences, AIMBE Fellow, IET Fellow, etc. and 6 full-time foreign professors. The current experimental conditions include the Key Laboratory of Neuroinformation of Ministry of Education, and other Sichuan Province supported Key Laboratories, which are equipped with 3.0T MR, EGI and NeuroScan EEG workstations, etc. Altogether, cheerful outcomes have been achieved in the areas of brain imaging techniques and applications, visual electrophysiology and computational modeling, biomedical signal processing, medical imaging and processing, system biology, plant molecular genetics, nanomedicine, etc.

1.Objectives

Ph.Ds of the BME discipline are expected to have a profound knowledge of the cutting-edge research and trend of the fields of biomedicine and information techniques and a solid and extensive grasp of the theoretical and systematic expertise, as are able to complete experiments and studies of the field independently.

A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 3 or equivalent Chinese language test by graduation.

2.Orientations

1)Brain Functions and Neural Information Engineering (EEG and fMRI Data Processing, Neural Electrophysiology, Brain-Computer Interface, Brain-inspired Intelligence, etc)

2)Medical Instruments, Medical Image and Signal Processing

3)Bioinformatics

4)Neurobiology

5)Cell Biology

6)Biochemistry and Molecular Neurobiology

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to certain objective causes, yet altogether 6 years are the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses under supervisors' guidance, but they cannot replace compulsory courses. International students of Chinese language abilities can apply to take courses given in Chinese to local full-time graduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied to enter into the phase of thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016011	Stochastic Processes and Applications	48	3	1	At least 1 from 3
		1107016018	Theory and Algorithms of Numerical Algebra	32	2	2	
		1107016034	Optimization Methods and Applications	48	3	1	
		1404026013	Cognitive neuroscience	32	2	1	
		1407106020	Advanced Molecular Biology	32	2	1	
		1407106021	Bioinformatics	32	2	1	
		1408316018	Fundamentals of Brain Science	32	2	2	
Non-degree Optional Courses	Elective Major Course	1408316019	Biomedical Statistics	48	3	2	
		1408317023	Advances in Brain Imaging	32	2	2	
		1408546003	Psychophysical Experiments	40	2.5	2	

Non-degree Optional Courses	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
		XX0004XXXX	High-Level International Courses	/	/	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC can integrate written and oral patterns with one-hundred-mark system. The written examination should account for at least 50%.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

5)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

7.Degree Thesis

All degree thesis related issues shall refer to UESTC Regulations for Postgraduate Degree Conferring.

The requirements for publishing academic papers before the phase of thesis defense shall refer to UESTC Regulations for Requirements for Publishing Academic Papers for International Students.

Ph.D Program (for International Students) in Software Engineering

As software industry becomes a pillar industry in national economy, discipline of Software Engineering becomes one of the fast developing disciplines in Information Technology. The development in this field has a wind-range, multidimensional, multilayer and interdisciplinary architecture. The knowledge in this field includes software requirement, software design, software test, software maintenance, software configuration management, software project management, software ethics and laws, software security and software quality. It is also connected with various disciplines such as system engineering, domain engineering, digital technology, embedded system, network and information security, system management and support and marketing.

1.Objectives

The PhD candidates of this discipline are selected from high-level talents in the field of software engineering, according to development of software technology and demand of software industry.

PhD Graduates of the discipline are expected to have a solid and comprehensive knowledge of the fundamentals in the field of software engineering. They are with comprehensive quality and able to carry out researches independently in the field. They are expected to achieve internationally acknowledged research results. They have broad academic visions, innovation consciousness, and in-depth understanding of present situations, developing trends and cutting-edge of the discipline. They are able to write academic papers in English and give lectures at international academic conferences. They can undertake the task of designing and developing large scale software projects. They are qualified as a teacher at institutes of higher education.

2.Orientations

1)Embedded software and industrial software

2)Secure computing environment

3)Artificial Intelligence and Its Applications

3.Duration

The duration set for Ph.D candidates is 4 years full-time. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

International students of Ph.D candidates can take 1) full-time training, i.e. the whole progression is done at UESTC, or 2) on-the-job training, i.e. finishing the course work at UESTC and completing the dissertation in their home country, with no less than 1 year to be spent at UESTC for the research work

around the dissertation. Either way chosen, the dissertation defense should be done at UESTC.

The supervisor responsibility mechanism is adopted in the education for international Ph.D candidates. The supervisor is responsible for the student's making of personal study plan, the choice of courses, and the completion of the research report or the degree thesis.

The minimum total credits for international students of Ph.D candidates is 14, Ph.D candidates should complete the course work of no less than a total of 12 credits (out of which at least 8 should be of the degree course categories), compulsory sections of no less than 2 credits. During the course work, according to specifications by the discipline, the student is to pass examinations held for the degree courses and examinations or assessments held for the other optional courses. Of all the degree courses, common core courses are compulsory. Under the guidance of the supervisor, Ph.D candidates are allowed to choose 1~2 inter-disciplinary core courses as their degree courses, but they cannot replace compulsory courses. A Survey of China and Comprehensive Chinese are compulsory for international postgraduates, who are required to pass the HSK 5 or equivalent Chinese Language Test by graduation. Those who fail to meet the credit requirements will be denied the thesis defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016010	Numerical Analysis	48	3	1/2	At least 1 from 3
		1100016011	Stochastic Processes and Applications	48	3	1	
		1100016012	Optimization Methods and Applications	48	3	1	
		0908356022	Software Architecture Model and Design	32	2	2	
		0908356026	Fundamentals of Network Computing	32	2	1	
		0908356027	Network Security: Theory and Practice	32	2	1	
		0908357051	New Theory and Practice of Database	32	2	1	
		0908357052	Data Science and Application	32	2	2	
		0908357054	Postgraduate Thesis Writing Guidance Course	16	1	2	
Non-degree Optional Courses	Elective Major Course	0908357055	Fundamental of Mathematic for Information Security	32	2	1	
		6900005005	Chinese Reading and Writing	32	2	1/2	

		Academic Activities	0	1	1,2	Compulsory	
		Research Proposal and Literature Review of the Dissertation	0	0	1,2		
	Other Elective Course	Comprehensive Examination for Ph.D Candidates	0	0	1,2		
Compulsory Section		6400006003	Chinese Proficiency Assessment	60	0	1,2	
		6400006004	Elective Competence Development Courses	0	1	1,2	
		6400006005					
		6900006001					
		XX00025XXX					

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international students of Ph.D candidates include five parts, a candidate is required to complete the following aspects:

1)Elective Competence Development Courses: through introducing the academic cutting edge knowledge, culture, arts and sport, etc, such courses are given to improve the Ph.D candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

2)Academic Activities: to enliven academic atmosphere and to further and broaden Ph.D candidates' scope of knowledge, one should attend at least ten academic lectures within and out of UESTC, and fill in the Academic Activities Registration Form and get the official stamp upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures.

3)Chinese Proficiency Assessment: The Ministry of Education requires the Chinese language ability of international graduates' to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. Master's/doctoral students are required to undergo a Chinese assessment level 3 during their stay at the university, and those who meet the requirements are eligible to apply for their graduation defense. Chinese Proficiency Assessment is accredited by School of International Education.

4)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon their completion of all required courses. It mainly tests their understanding of basic theories and professional knowledge, and also checks their mastery of the research directions, of the leading edge, and of the dynamics in relevant fields.

A.Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those

who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

B.The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three experts designated by the Academic Degree Evaluation Committee of the School. The chairman of EC must be a professor, while the other members being professors or associate professors.

C.The CEPC is written examination with one-hundred-mark system.

D.According to the actual situation, each discipline should organize two times of CEPC each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the Teaching Affairs Secretary of each school should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

5)The Research Proposal Report and Literature Review of Dissertation (hereinafter as RPRLRD): before making the Research Proposal Report for the dissertation, all Ph.D. candidates should read more than 30 papers in the leading edge of their discipline from the latest literature. Then everyone should finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

7.Degree Thesis

All degree thesis problems shall refer to UESTC Regulations for Postgraduate Degree Conferring.

Ph.D Program (for International Students) in Management Science and Engineering

The Ph.D. program for international candidates in the discipline of Management Science and Engineering of UESTC is focused on the integration of management knowledge and skills and modern information technologies, and devoted to taking advantage of the University's superiority in scientific researches and resources in the field of information science and technology to better the program, as can be best reflected by the candidates' accomplishment and competency. Taking the cultivation of multidisciplinary and innovative management elites with an international perspective and a command of modern management thoughts and methods as its mission, the program, after more than a decade's continuous efforts, has distinguished itself by clarified training targets, distinct training conceptions and characteristic training modes.

1.Objectives

The training modes combine systematic theoretical learning with academic research, aiming to cultivate academic elites who identify with China, possess a global perspective, are familiar with theoretical frontiers, and master scientific research methods, as well as to develop leading talents capable of engaging in management roles in government and corporate sectors.

International Ph.D. graduates of the discipline are expected to have solid and thorough foundation in mathematics and statistics as well as in-depth theoretical background in and systematic knowledge of management science, economics, finance, etc. They are to master tools and methods of system theories and engineering as well as the current application of digital intelligent technology. Empowered with capabilities in conducting academic researches on fundamental theories and cutting-edge issues in the discipline independently, they are to achieve innovative results, and to be qualified for positions such as teaching, researching, managing and industry planning at institutes of higher education, enterprises and government departments.

2.Orientations

1)Operations and Supply Chain Management

2)Management Decision Making and Optimization

3)Data Science and Intelligent Management

4)Financial Technology and Financial Engineering

3.Duration

There are two training modes to cultivate international Ph.D. candidates.

1)full-time training, i.e. the whole progression is done at UESTC.

2)on-the-job training, i.e. finishing the coursework at UESTC and completing the dissertation in their

home countries, with no less than 1 year to be spent at UESTC for the research work around the dissertation.

The supervisor responsibility mechanism is adopted in the cultivation of international Ph.D. candidates. The supervisor is responsible for the candidate's making of personal study plan, the choice of courses, the conduct of research, the completion of the degree dissertation, etc.

The duration set for international Ph.D. candidates is 4 years. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits are 16. International Ph.D. candidates should complete the coursework of no less than a total of 14 credits (out of which at least 10 should be of the degree course categories), and compulsory sections of no less than 2 credits. During the coursework, according to specifications by the discipline, international Ph.D. candidates are to pass examinations held for the degree courses and examinations or assessments held for the non-degree optional courses. Of all the degree courses, common core courses are compulsory; at least one in major core courses should be taken. International Ph.D. candidates are allowed to choose 1-2 inter-disciplinary core courses as their degree courses under their supervisors' guidance, but inter-disciplinary core courses cannot be taken to substitute compulsory courses. Degree courses can be taken to substitute non-degree courses, but not vice versa. International Ph.D. candidates of Chinese language abilities can apply to take courses given in Chinese to local full-time postgraduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the dissertation defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1100016012	Optimization Methods and Applications	48	3	1	At least 1 from 2
		1107016019	Convex Analysis	32	2	2	
		1502026011	Business Statistics	40	2.5	1	
		1512017012	Service Management	24	1.5	2	
Non-degree Optional Courses	Elective Major Course	1502517005	Finance	40	2.5	2	
		1512017011	Data Mining and Information Management	40	2.5	1	
		1512017016	Management Scinece Research Methods	24	1.5	2	
		1512017023	Supply Chain Management	32	2	1	

Non-degree Optional Courses	Elective Major Course	1512028006	Research Topics on Innovation and Entrepreneurship Management	40	2.5	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international Ph.D. candidates include five parts, a candidate is required to complete the following aspects:

1)Academic Activities: to further enliven academic atmosphere and to broaden international Ph.D. candidates' scope of knowledge, one should attend at least ten academic activities within or out of UESTC, fill in the Academic Activities Registration Form of UESTC and get the official stamps upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures, and submits the form to the Postgraduate Office of the School.

2)Research Proposal and Literature Review of the Dissertation I (hereinafter as RPRLRD): before applying for the Research Proposal Defense for the dissertation, an international Ph.D. candidate should read more than 30 papers in the leading-edge of his/her discipline from the latest literature, finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon international Ph.D. candidates' completion of all required courses. It mainly tests their understanding of fundamental theories and professional knowledge, and also checks their mastery of the research orientations, of the leading edge, and of the dynamics in relevant disciplines.

(1) International Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the

resit, then she/he cannot participate in the dissertation defense and will terminate the study.

(2) The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three panelists designated by the Postgraduate Office of the School. The chair of EC must be a professor, while the other members being professors or associate professors.

(3) The CEPC can be conducted in either a written or oral pattern with one-hundred-mark system.

(4) According to the actual situation, two times of CEPC will be organized each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the teaching coordinator for international Ph.D. candidates of the School should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)Chinese Proficiency Assessment: The Ministry of Education requires international postgraduates' Chinese language ability to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. International Ph.D. candidates are required to undergo a Chinese assessment level 3 during their study at UESTC, and those who meet the requirements are eligible to apply for their dissertation defense. Chinese Proficiency Assessment is accredited by School of International Education of UESTC.

5)Elective Competence Development Courses: through introducing the academic cutting-edge knowledge, culture, arts, sports, etc., such courses are given to improve international Ph.D. candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

7.Degree Thesis

1)General Requirements

The topic of degree dissertation for international Ph.D. candidates should be cutting-edge subjects of the discipline, or of significant theoretical or practical value to the development of science and technology and the society. International Ph.D. candidates are to be in capable of solid and thorough theoretical understanding and in-depth systematic knowledge of the discipline, to be empowered to be engaged in independent academic researches, and to be expected to make innovative achievements in academic researches.

2)International Ph.D. candidates should determine the topic of the degree dissertation under the guidance of their supervisors and complete their dissertations. The writing of the dissertation shall refer to Graduate Dissertation (Thesis) Writing Standards for International Graduate Students of UESTC. The application for defense, external review, dissertation defense and degree awarding shall refer to UESTC Regulations for Postgraduate Degree Conferring.

3)The publication requirements for international Ph.D. candidates applying for Ph.D. degree shall refer to UESTC Regulations for Requirements for Publishing Academic Papers for International Students.

Ph.D Program (for International Students) in Business Administration

The Ph.D. program for international candidates in the discipline of Business Administration of UESTC is devoted to develop academic elites who understand China's business culture and environment and master modern management thoughts and methods, as well as to develop leading talents capable of engaging in management roles in government and corporate sectors, by coursework and professional academic training, with the advantages in talent education evolved from UESTC's superiority in scientific researches in the discipline of information technology and business administration, and China's industries.

1.Objectives

The training modes combine systematic theoretical learning with academic research, aiming to cultivate academic elites who identify with China, possess a global perspective, are familiar with theoretical frontiers, and master scientific research methods, as well as to develop leading talents capable of engaging in management roles in government and corporate sectors.

International Ph.D. graduates of the discipline are expected not only to be equipped with management theories and expertise in strategic management, organizational behavior, innovation and entrepreneurship, etc., but also to be familiar with innovative practices in industrial and financial sectors, to understand and apply the fundamental theories and analytical tools in national governance and public policy, to undertake independent basic and cutting-edge research in their own field on the basis of judgement on their home country development stage and industrial base, in order that they can achieve innovative results, and be competent at top management to make strategic decisions, to manage industrial innovation, to develop public policies, etc.

2.Orientations

1)Organizational Behavior and Human Resource Management

2)Strategic Management

3)Innovation & Entrepreneurship Management

4)Service Management and Digital Marketing

5)Industrial Innovation

6)Commercial Mode Innovation

7)Public Policy and Governance

Note: Orientations 5-7 are only apt for the Leading Talent Plan for Industrial and Economic Development On-job Doctoral Program.

3.Duration

There are two training modes to cultivate international Ph.D. candidates.

1)full-time training, i.e. the whole progression is done at UESTC.

2)on-the-job training, i.e. finishing the coursework at UESTC and completing the dissertation in their home countries, with no less than 1 year to be spent at UESTC for the research work around the dissertation.

The supervisor responsibility mechanism is adopted in the cultivation of international Ph.D. candidates. The supervisor is responsible for the candidate's making of personal study plan, the choice of courses, the conduct of research, the completion of the degree dissertation, etc.

The duration set for international Ph.D. candidates is 4 years. An extension can be applied for by those who cannot finish their courses on time owing to objective causes, yet altogether 6 years is the last due.

4.Progression and Requirements

The minimum total credits are 16. International Ph.D. candidates should complete the coursework of no less than a total of 14 credits (out of which at least 10 should be of the degree course categories), and compulsory sections of no less than 2 credits. During the coursework, according to specifications by the discipline, international Ph.D. candidates are to pass examinations held for the degree courses and examinations or assessments held for the non-degree optional courses. Of all the degree courses, common core courses are compulsory; at least one in major core courses should be taken. International Ph.D. candidates are allowed to choose 1-2 inter-disciplinary core courses as their degree courses under their supervisors' guidance, but inter-disciplinary core courses cannot be taken to substitute compulsory courses. Degree courses can be taken to substitute non-degree courses, but not vice versa. International Ph.D. candidates of Chinese language abilities can apply to take courses given in Chinese to local full-time postgraduate students and acquire corresponding credits if pass.

Those who fail to meet the credit requirements will be denied the dissertation defense.

5.Curriculum

Course Categories		Course Number	Course Name	Class Hours	Credits	Semester	Notes
Degree Courses	Common Core Course	6900005001	Comprehensive Chinese	60	2	1	Compulsory
		6900005004	A Survey of China	36	2	1,2	
	Major Core Course	1502026011	Business Statistics	40	2.5	1	Orientations 1-4
		1512026009	Managerial Research Method	32	2	2	
		1512026012	Economic Reforms in China	32	2	1/2	Orientations 5-7
		1512026013	Innovation and Made in China	32	2	1/2	
		1512026014	Digital Economics	32	2	1/2	
		1512026015	Introduction to Research Method	32	2	1/2	
		1512026016	Management Theory	32	2	1	Orientations 1-4

		1612046021	Overview of Chinese Governance System	32	2	1/2	Orientations 5-7
Non-degree Optional Courses	Elective Major Course	1512017011	Data Mining and Information Management	40	2.5	1	
		1512017012	Service Management	24	1.5	2	
		1512028006	Research Topics on Innovation and Entrepreneurship Management	40	2.5	2	
	Other Elective Course	6900005005	Chinese Reading and Writing	32	2	1/2	
Compulsory Section		6400006003	Academic Activities	0	1	1,2	Compulsory at least 10
		6400006004	Research Proposal and Literature Review of the Dissertation	0	0	1,2	Compulsory
		6400006005	Comprehensive Examination for Ph.D Candidates	0	0	1,2	
		6900006001	Chinese Proficiency Assessment	60	0	1,2	
		XX00025XXX	Elective Competence Development Courses	0	1	1,2	

Directions: All courses, except for the Chinese ones specified by the requirements, are totally given in English.

6.Compulsory Sections

The compulsory sections for international Ph.D. candidates include five parts, a candidate is required to complete the following aspects:

1)Academic Activities: to further enliven academic atmosphere and to broaden international Ph.D. candidates' scope of knowledge, one should attend at least ten academic activities within or out of UESTC, fill in the Academic Activities Registration Form of UESTC and get the official stamps upon attendance. One credit can be granted to the candidate when he/she succeeds in completing the above procedures, and submits the form to the Postgraduate Office of the School.

2)Research Proposal and Literature Review of the Dissertation I (hereinafter as RPRLRD): before applying for the Research Proposal Defense for the dissertation, an international Ph.D. candidate should read more than 30 papers in the leading-edge of his/her discipline from the latest literature, finish a literature review report of about 5,000 words as well as the corresponding Research Proposal Report.

3)Comprehensive Examination for Ph.D. Candidates (hereinafter as CEPC): which is taken upon international Ph.D. candidates' completion of all required courses. It mainly tests their understanding of

fundamental theories and professional knowledge, and also checks their mastery of the research orientations, of the leading edge, and of the dynamics in relevant disciplines.

(1) International Ph.D. candidates should generally take the CEPC at the end of the first year after enrollment. Those who fail in CEPC will have the opportunity to resit in the next year. If one still fails the resit, then she/he cannot participate in the dissertation defense and will terminate the study.

(2) The CEPC is implemented by the Examination Committee (hereinafter as EC), which is composed of three panelists designated by the Postgraduate Office of the School. The chair of EC must be a professor, while the other members being professors or associate professors.

(3) The CEPC can be conducted in either a written or oral pattern with one-hundred-mark system.

(4) According to the actual situation, two times of CEPC will be organized each year in April and October respectively. Having collected the test questions, test papers, oral test records and comments of the CEPC, the teaching coordinator for international Ph.D. candidates of the School should submit all these materials with the results of CEPC to the Section of Teaching Management in Graduate School for filing and preservation.

4)Chinese Proficiency Assessment: The Ministry of Education requires international postgraduates' Chinese language ability to reach the level 3 based on the International Chinese Proficiency Standards at the time of graduation. International Ph.D. candidates are required to undergo a Chinese assessment level 3 during their study at UESTC, and those who meet the requirements are eligible to apply for their dissertation defense. Chinese Proficiency Assessment is accredited by School of International Education of UESTC.

5)Elective Competence Development Courses: through introducing the academic cutting-edge knowledge, culture, arts, sports, etc., such courses are given to improve international Ph.D. candidates' comprehensive competence. A candidate should take at least one course and get one credit after assessment.

7.Degree Thesis

1)General Requirements

For international Ph.D. candidates of Orientations 1-4, the topic of degree dissertation should be cutting-edge subjects of the discipline, or of significant theoretical or practical value to the development of science and technology and the society. International Ph.D. candidates are to be in capable of solid and thorough theoretical understanding and in-depth systematic knowledge of the discipline, to be empowered to be engaged in independent academic researches, and to be expected to make innovative achievements in academic researches.

For international Ph.D. candidates of Orientations 5-7, the topic of degree dissertation should be relevant to their home countries' government management, industrial policy, or practical enterprise issues, or of significant theoretical or practical value to the home countries' development of science and technology and the society. International Ph.D. candidates are to be in capable of solid and thorough theoretical understanding and in-depth systematic knowledge of the discipline, and to be empowered to be

engaged in independent academic researches or management work.

2)International Ph.D. candidates should determine the topic of the degree dissertation under the guidance of their supervisors and complete their dissertations. The writing of the dissertation shall refer to Graduate Dissertation (Thesis) Writing Standards for International Graduate Students of UESTC. The application for defense, external review, dissertation defense and degree awarding shall refer to UESTC Regulations for Postgraduate Degree Conferring.

3)The publication requirements for international Ph.D. candidates applying for Ph.D. degree shall refer to UESTC Regulations for Requirements for Publishing Academic Papers for International Students.

外国语言文学 来华留学硕士培养方案

外国语言文学属于人文社会科学学科，是中外文明和文化交流的产物。本学科的研究对象以语言、文学、文化为主体，涵盖外国文学、外国语言学及应用语言学、翻译学、比较文学与跨文化研究、国别与区域研究等 5 大主干学科方向。

1.培养目标

本学科硕士学位获得者应具备良好的人际交流沟通能力、团队协作精神和社会责任感。能系统掌握外国语言文学学科基础理论和研究方法，能在所学学科方向从事创新性学术研究，并具有较强的逻辑抽象思维能力、创新思维能力和交叉学科研究能力。能从事语言研究、翻译研究、外国文学与比较文学研究或国别与区域研究；能在国际组织等从事跨文化交流，能胜任外语教育、翻译与对外文化传播等方面的工作。

留学研究生必修《中国概况》和《综合汉语》等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．外国语言学及应用语言学　　2．外国文学与比较文学

3．翻译学　　4．国别与区域研究

3.培养方式与学习年限

硕士研究生的培养采取课程学习和论文研究工作相结合的方式。通过课程学习和论文研究工作，系统掌握所在学科领域的理论知识，培养分析问题和解决问题的能力。硕士研究生的培养采用导师个人指导或导师组集体指导相结合的方式。

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，最长学习年限不超过四年。

4.学分与课程学习基本要求

留学硕士研究生总学分要求不低于 30 学分，课程学分不低于 28 学分，必修环节不低于 2 学分。公共基础课必修，学位课要求不低于 17 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

研究生应在导师指导下制定个人培养计划和选课。研究生学习与研究课题有关的专业知识，可由导师指定内容，系统地自学某些课程，并列入个人培养计划，但不计学分。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1705026014	外国语言学理论★	64	4	1	必须选 1- 4 门
		1705026015	外国文学与比较文学理论★	64	4	1	
		1705026016	翻译学理论★	64	4	1	
		1705026017	国别与区域研究概论★	64	4	1	
		1705026018	学科方法论与论文写作	48	3	2	必修
非学位课	专业选修课	1705027006	认知神经语言学	48	3	1	硕博共选
		1705027027	国际组织与全球治理研究	48	3	1	
		1705027028	中西翻译史	48	3	2	
		1705027029	外国文学经典阅读与批评	48	3	1	
		1705027032	应用语言学理论与实践	48	3	2	
		1705027033	语言智能专题研究	32	2	2	硕博共选
		1705027035	外国文学与比较文学专题研究	48	3	2	
		1705027040	目标语国社会文化专题研究	48	3	2	
		1705517012	智能翻译技术：理论与实践	32	2	1	硕博共选
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容:

1）素质教育公选课：以介绍学术前沿知识、中外文化和艺术等为主，加强来华留学研究生综合素质教育，研究生可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，有举办学术活动单位的公章为依据，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

物理学 来华留学硕士培养方案

物理学是研究物质及其运动的自然科学，揭示物质的结构、物质之间的相互作用和物质的运动规律，为理解自然界奠定坚实的基础。物理学新方法、新理论是众多新技术、新产品的重要源头。

电子科技大学物理学院拥有物理学一级学科博士学位授予权，设有博士后流动站。本学科依托物理学研究和与其它学科的交叉领域的研究，支撑相关工程技术的研发，提升学生对物理知识的掌握，培养合格的科技人才，促进服务于经济发展的高技术研究。本学科包含理论物理、凝聚态物理、无线电物理、光学、等离子体物理、量子物理与量子信息等六个优势学科方向，具有较强的基础研究能力和理工渗透、协调发展的明显特色，取得良好的学术声誉。物理学院致力于在高科技时代中发挥关键作用。

本学科课程体系立足于物理学学科，培养学生在宽口径职业方向的领导潜能，培养学生获取物理学基础知识和新兴知识的能力，培养学生解决与工业发展有关实际问题的能力。

1.培养目标

本学科硕士学位获得者应对物理学相关研究前沿和发展趋势有较深入的了解，具有物理学科较深厚的基础理论和系统专门的知识，掌握相关的实验技能，熟练运用计算机及相关信息技术，学会撰写学术论文并在国际会议上进行交流，有严谨的科学态度、工作作风和高尚的职业道德，毕业后能胜任科研、生产单位的研究、开发工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．理论物理
2．凝聚态物理
3．无线电物理
4．光学
5．等离子体物理
6．量子物理与量子信息

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文（含研究报告），通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学

分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 3 门
		1100016011	随机过程及应用	48	3	1	
		1100016012	最优化理论与应用	48	3	1	
		0208096064	高等电磁理论	48	3	1	
		1207026039	高等量子力学	56	3.5	2	
		1207026043	广义相对论	32	2	2	
		1207026045	量子场论（一）	48	3	1	
非学位课	专业选修课	0108107076	雷达原理	24	1.5	2	
		1207027055	量子场论（二）	48	3	2	
		1207027060	固态电池与储能器件	16	1	1	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

机械工程 来华留学硕士培养方案

机械工程是以自然科学和工程技术科学为理论基础的一级学科，系统研究和解决现代社会生产和服务过程中的机械设计、制造、控制、使用和维修的相关理论和实际问题。本学科涵盖机械设计及理论、机械制造及其自动化、机械电子工程等研究方向，形成了机械、电子信息和计算机测控技术等多学科交叉综合的学科优势。

1.培养目标

本学科硕士学位获得者应对本学科的国内外技术发展现状和学术研究的前沿趋势有较深入的了解，具备坚实的机械科学与技术基础理论和专业知识，掌握相应的实验技能，熟练运用计算机，至少能熟练使用一个与本学科密切相关的软件，能在机械科学、信息科学的融合及其相关领域独立地开展较高学术意义或实用价值的科学研究工作。

本学科硕士学位获得者应必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．装备可靠性与设备监控管理
2．智能制造与装备
3．智能感知与控制技术
4．装备智能设计与仿真
5．微机电系统（MEMS）

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016011	随机过程及应用	48	3	1	
		0408026030	先进制造技术	32	2	1	
		0408026031	微机电系统	32	2	1	
		0808126041	嵌入式操作系统及应用	32	2	2	
		1100016012	最优化理论与应用	48	3	1	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0408027049	机械动力学	32	2	2	
		0408027050	可靠性设计	32	2	2	
	其他选修课	0411117006	研究生论文写作基础（留学生）	16	1	2	
		6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 个学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

光学工程 来华留学硕士培养方案

光学工程学科主要研究光信息获取、光存储、光传输、光交换、光信息处理以及光电图像显示等方向领域，在军事及民用领域有广泛的应用，是信息产业的重要支柱学科之一。

我校光学工程主要从事光学工程学科的理论及其相关应用方面的教学与科研，特别在光通信、集成光学与光电子器件、红外与传感技术、平板显示与成像技术等方面具有特色和优势，处于国内前列、国际先进。

1.培养目标

本学科硕士学位获得者应具有坚实的基础理论、系统的专业知识，了解本学科领域的前沿和动态，掌握现代实验方法和技能；并能适应科学进步及社会发展的需要，具有从事理论研究或独立担负工程技术实践的能力。同时应具有严谨求实的科学态度和工作作风，良好的合作精神和交流能力。毕业后能胜任相关的学术研究与工程技术开发、教学和技术管理等工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．光通信与集成光学
2．光电探测与系统集成
3．敏感电子学与传感网
4．显示与成像
5．微波光子学
6．光电测控与仪器

3.培养方式与学习年限

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过后获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，

将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	三选一
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		0108106051	数字通信基础	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0108106053	光纤通信	24	1.5	2	
		0508036033	光纤光学	32	2	1	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0108107074	光纤技术	32	2	1	
		0508037036	非线性光学	32	2	2	
		0508037051	有机电子学	16	1	2	
		0808127067	信息安全数学基础	40	2.5	1	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

仪器科学与技术 来华留学硕士培养方案

仪器科学与技术是信息领域的重要组成部分，其主要研究内容包括：信号或信息的获取方法及转换放大与处理技术、测量方法学、计量学以及仪器工程学与测控系统工程学等。仪器科学与技术学科具有自身可持续发展的优势，具有突出的学科交叉性和科技前沿性等显著的特点，对高新科技与工业的发展和社会进步具有重要的引领作用和推动作用。

我校仪器科学与技术学科源于学校 1956 年创办的“电子测量技术及仪器”专业，是国内电子测量技术高层次人才培养基地之一。拥有一级学科博士点、博士后流动站，是四川省一级学科重点学科。学科教学科研实力雄厚，在多年的发展和建设中，形成了宽带时域测试技术及仪器、电子系统综合测试诊断与预测、微波与通信测试技术及仪器、集成电路测试与可测性设计理论及技术等研究方向，具有显著的电子测试优势和鲜明的军事电子特色，工程研究能力突出。

1.培养目标

遵纪守法，具有良好的道德品质；毕业时具有一定的汉语交流能力；在本学科领域具有坚实的专业理论基础和系统的专门知识；了解本学科领域的发展方向和学术研究前沿；具有独立进行理论和实验研究的初步能力和从事技术开发的能力；有严谨求实的科学作风；能从事本学科或相近学科的科研、教学、工程技术和管理工作。

2.研究方向

1．宽带时域测试技术及仪器
2．电子系统综合测试诊断与预测
3．微波毫米波测试技术及遥感
4．集成电路测试与可测性设计理论及技术
5．新型传感技术与精密测量

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文（含研究报告），通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课（但不可替代必修课）作为本学科的学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	必须选 1- 3 门
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		0108106052	数字信号处理	32	2	1	
		0608116020	计算机视觉★	32	2	1	专业核心课
		0608116021	线性系统理论★	40	2.5	1	
		0608116022	最优化理论与应用	40	2.5	2	
非学位课	专业选修课	0208096131	高等电磁场理论	48	3	1	
		0208097121	射频集成电路设计	32	2	2	
		0608047027	信号检测与估计	32	2	1	
		0808126041	嵌入式操作系统及应用	32	2	2	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	
		6400007006	中期考评	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	必修

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

4）论文开题报告及文献阅读综述：指研究生在学位论文开题之前，必须阅读本学科前沿的文献30篇以上，并写出4000字左右的文献综述报告，完成相应的开题报告。

5）论文工作中期报告：开题半年后，需以书面形式报告论文工作进展及完成情况，经专家评审通过，方可继续论文工作。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

材料科学与工程 来华留学硕士培养方案

“材料科学与工程”是研究材料的组成、结构、制备工艺与其性能及应用间相互关系的科学与技术，研究对象包括电、磁、声、光、热、力及生物等功能材料的理论、设计、制备、检测及应用，研究过程涉及到信息的获取、转换、存储、处理与控制。我校是首批“双一流”A 类建设高校，电子信息材料及应用的研究和开发是本学科的特色和优势。本学科现有国家级人才、博士生导师、教授、副教授以及一批青年博士组成的学术队伍，拥有先进的实验设备和充足的科研经费。

随着科学技术的发展，本学科与其它学科的交叉越来越紧密，同时，作为当代文明的重要支柱，本学科已成为现代科学技术发展的先导和基础，与当代社会发展有着极为密切的依存关系。

1.培养目标

本学科硕士学位获得者应具有一定的汉语听、说、读、写能力，对学科研究前沿和发展趋势有较深入的了解，具有较深厚的材料科学与工程学科的基础理论和系统专门的知识，掌握相应的实验技能，熟练运用计算机，至少能熟练使用一个与本学科密切相关的仿真软件，有严谨的科学态度和工作作风与高尚的职业道德，能胜任科研、生产单位和高等院校的研究、开发、教学或技术管理工作。

2.研究方向

1．电子信息材料与器件　　2．材料基因工程

3．电子薄膜与集成器件　　4．新能源材料与器件

5．印制电路与印制电子技术　　6．有机功能材料与工程

3.培养方式与学习年限

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 3 门
		1100016011	随机过程及应用	48	3	1	
		1100016012	最优化理论与应用	48	3	1	
		0208096065	高等电磁场理论	48	3	1	
		0208096121	集成电路与设计	32	2	2	
		0208096122	微波工程	32	2	2	
		1207026039	高等量子力学	56	3.5	2	
		1207026043	广义相对论	32	2	2	
		1207026045	量子场论（一）	48	3	1	
非学位课	专业选修课	0308057036	Optoelectronic Conversion from Fundamental to Devices	16	1	2	
		0308057040	纳米材料制备与应用	16	1	1	
		0408087028	新能源发电与并网	32	2	2	
		0411117006	研究生论文写作基础（留学生）	16	1	2	
		0508037051	有机电子学	16	1	2	
		1207027060	固态电池与储能器件	16	1	1	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 个学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。来华留学生的答辩语言统一为英语。

电气工程 来华留学硕士培养方案

电气工程是一门关于电力、电子和电磁的研究与应用的工程学科，其涵盖的领域包括电力、电子、电路、控制和通信，是当今高新技术领域中不可或缺的关键学科。近四十年来在信息与通信工程、控制科学与工程等学科的综合、交叉作用下，已经成为现代科学技术领域的核心学科之一。我校顺应国家能源发展战略，依托学校在电子信息领域综合优势，以电力系统广域测量与控制、智能电网、电力电子与电力传动、新型发电与储能等领域的研究为特色，取得了一大批高水平的科研成果，为培养宽口径、复合型、国际化的高端电气工程人才奠定了很好的基础。

1.培养目标

本学科定位于培养在电气工程领域，特别是电力与控制、电路与系统、电力信息与通信等方面，具备坚实的基础理论和系统的专业知识，掌握电气工程和计算机应用等专业技术的高端人才。硕士学位获得者应了解本学科有关研究领域国内外的学术现状和发展方向，具备独立分析和解决本学科的专门技术问题的能力，熟练掌握汉语，具备较好的国际化视野和国际交流能力，具有严谨求实的科学态度和工作作风、勇于创新的开拓意识和良好的职业素养，能胜任电气工程领域相关的科研、教学、工程技术开发及管理工作。

本学科硕士学位获得者应必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．电力系统分析与控制
2．电力变换与主动配电网
3．先进输变电技术
4．电气设备智能监测与诊断
5．电机系统与控制
6．电力能源经济

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课，基础课至少选修 1 门。允许在导师指导下跨学科选修 1~2 门学位课作为

本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016011	随机过程及应用	48	3	1	
		0408086015	电力系统运行与控制	32	2	2	
		0408086016	电力电子技术	32	2	1	
		0808126041	嵌入式操作系统及应用	32	2	2	
		1100016012	最优化理论与应用	48	3	1	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0408027050	可靠性设计	32	2	2	
		0408087028	新能源发电与并网	32	2	2	
		0408087029	电力市场	32	2	1	
	其他选修课	0411117006	研究生论文写作基础（留学生）	16	1	2	
		6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 个学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

电子科学与技术 来华留学硕士培养方案

电子科学与技术是进入国家“双一流”建设的重点一级学科，包含电磁场与微波技术、电路与系统、物理电子学、微电子学与固体电子学、电子信息材料与元器件等 5 个二级学科。该学科师资力量雄厚，在各个研究方向上都具有高水平的科研实力和广泛的国际学术影响。

1.培养目标

硕士学位获得者应具有一定的汉语听、说、读、写能力，对本学科研究前沿和发展趋势有系统深入的了解，在电子科学与技术方面有坚实的基础理论和系统的专门知识，应当具有从事学术研究工作的能力，能应用英语撰写高水平学术论文，并能在国际会议上进行交流。能独立从事科学研究，承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质，能胜任在科研单位、产业部门或高等院校有关方面的研究、科研开发，教学和技术管理工作。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．电磁场与微波技术
2．集成电路与系统
3．电子信息材料与元器件
4．微电子与固体电子
5．物理电子学

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文（含研究报告），通过答辩。留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修

学位课	公共基础课	6900005004	中国概况	36	2	1,2	必修
	专业基础课	1100016011	随机过程及应用	48	3	1	必须选 1- 2 门
		1107016019	凸分析	32	2	2	
		0208096065	高等电磁场理论	48	3	1	
		0208096121	集成电路与设计	32	2	2	
		0208096122	微波工程	32	2	2	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0108107076	雷达原理	24	1.5	2	
		0208096123	半导体器件原理	40	2.5	2	
		0208097094	近代微波测量	32	2	1	
		0208097121	射频集成电路设计	32	2	2	
		3108097001	软硬件协同设计	32	2	2	
		3114017036	声表面波和体声波器件在通信中的应用	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。来华留学生的答辩语言统一为英语。

信息与通信工程 来华留学硕士培养方案

电子科技大学“信息与通信工程”一级学科是国家重点学科，包含 2 个二级学科，即属于国家重点学科与长江学者计划特聘教授设岗的两个二级学科“通信与信息系统”和“信号与信息处理”。我校“信息与通信工程”相关学科是国内首批获博士学位授予权、首批设立博士后流动站的学科，也是首批“211 工程”、“985 工程”重点建设学科及“双一流”重点建设学科，2012 年本学科在教育部学科评估中排名第 2，在 2017 年教育部公布的第四轮一级学科评估结果中被评为 A+。拥有中国工程院院士 2 人，千人计划入选者 8 人，全国教学名师 2 人，长江学者 5 人，国家杰出青年科学基金获得者 2 人，青年千人计划入选者 9 人，国家青年拔尖人才支持计划入选者 1 人。本学科研究团队在国内外享有良好声誉。本学科具有国家级重点实验室、教育部重点实验室、“111”学科引智基地等等具有国际一流水平的学术研究与人才培养平台。

本学科与电子科学与技术、计算机科学与技术、控制科学与工程、仪器科学与技术等学科的研究领域密切相关。

1.培养目标

本学科硕士学位获得者应对学科研究前沿和发展趋势有较深入的了解，具有通信学科的较深厚的基础理论和系统专门的知识，掌握相应的实验技能，熟练运用计算机，至少能熟练使用一个与本学科密切相关的仿真软件，了解国内外信息与通信工程学科某一领域的新技术和发展动向，创新性地解决本学科的学术或技术问题，能撰写学术论文并在会议上进行交流，有严谨的科学态度和工作作风与高尚的职业道德，能胜任科研、生产单位和高等院校的研究、开发、教学或技术管理工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．无线与移动通信系统　　2．抗干扰与安全通信系统
3．雷达探测与成像识别　　4．智能通信网络与信息处理
5．光纤传感与通信　　6．图像与视频处理
7．通信集成电路与系统　　8．智能感知与信息系统
9．机器学习与人工智能　　10．信号与信息智能处理

3.培养方式与学习年限

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

攻读硕士学位者，学习年限为 2 年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过 4 年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节

不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过后获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	第 1 组，必须选 1- 3 门
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		0108106051	数字通信基础	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0108106053	光纤通信	24	1.5	2	
		0108106054	人工智能	32	2	1	
		0208096121	集成电路与设计	32	2	2	
非学位课	专业选修课	0108107049	凸优化及其信号处理应用	40	2.5	1	
		0108107055	模糊逻辑	32	2	2	
		0108107073	信号检测与估计	32	2	1	
		0108107074	光纤技术	32	2	1	
		0108107075	计算智能方法及其应用	24	1.5	2	
		0108107076	雷达原理	24	1.5	2	
		0108107077	信号处理和数据分析中的应用矩阵方法	48	3	2	
		0808127067	信息安全数学基础	40	2.5	1	
		0808127082	高级计算机网络及其编程	16	1	1	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化和艺术等为主，加强来华留学研究生综合素质教育，研究生可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，有举办学术活动单位的公章为依据，报所在学院研究生科备案，完成后获得 1 学分。

3) 汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

控制科学与工程 来华留学硕士培养方案

控制科学与工程是研究控制的理论、方法、技术及其工程应用的学科。控制科学以控制论、系统论、信息论为基础，研究各应用领域内的共性问题，即为了实现控制目标，如何建立系统的模型，分析其内部与环境信息，采取何种控制与决策行为；且与各应用领域的密切结合，又形成了控制工程丰富多样的内容。本学科点在理论研究与工程实践相结合、学科交叉和军民结合等方面具有明显的特色与优势，在我国国民经济发展和国家安全方面发挥了重大作用。

我校控制科学与工程学科为四川省重点学科，师资力量雄厚，形成了复杂系统控制与优化、新能源系统控制技术、计算机视觉与模式识别、机器人技术与系统等研究方向，具有电子信息优势明显，学科交叉特色鲜明，工程研究能力突出等特点。本学科的发展受益于社会和国家的发展，同时也在国家的决策咨询、国防建设、行业推动、社会服务、人才培养等方面做出了突出的贡献。

1.培养目标

遵纪守法，具有良好的道德品质；掌握本学科领域坚实的基础理论和系统的专门知识；毕业时具有一定的汉语交流能力；具有从事科学研究、教学工作或独立担负学术研究工作的能力。

2.研究方向

1．复杂系统与智能信息处理
2．新能源系统及控制技术
3．模式识别与智能系统
4．测控通信与导航控制
5．检测技术与自动化装置

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文（含研究报告），通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，

将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	第 1 组，必须选 1- 3 门
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		0108106052	数字信号处理	32	2	1	
		0608116020	计算机视觉★	32	2	1	专业核心课
		0608116021	线性系统理论★	40	2.5	1	
		0608116022	最优化理论与应用	40	2.5	2	
非学位课	专业选修课	0108106033	信号检测与估计	32	2	1	
		0208096131	高等电磁场理论	48	3	1	
		0208097121	射频集成电路设计	32	2	2	
		0808126041	嵌入式操作系统及应用	32	2	2	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修不少于 5 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400007006	中期考评	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》

三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

4）论文开题报告及文献阅读综述：指研究生在学位论文开题之前，必须阅读本学科前沿的文献30篇以上，并写出4000字左右的文献综述报告，完成相应的开题报告。

5）论文工作中期报告：开题半年后，需以书面形式报告论文工作进展及完成情况，经专家评审通过，方可继续论文工作。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

计算机科学与技术 来华留学硕士培养方案

电子科技大学“计算机科学与技术”于 1999 年建成一级学科博士后流动站，本学科已形成强有力的基础研究和应用研究能力，具有较强的学科综合优势。学科研究水平和研究能力大幅度提升，整体接近国内一流水平，部分研究方向达到国内先进水平。在学科方向、学术团队、学科平台、科学研究、人才培养、学术交流等方面取得了突出的成绩。

1.培养目标

硕士学位获得者应具有本学科坚实的基础理论、系统的专业知识，了解本学科主要的技术发展状况，掌握本学科的现代实验方法和技能。在所学专业方向上，具有从事学术研究工作的能力。毕业后能胜任与计算机领域相关的学术研究、计算机应用系统的软件开发与分析，以及计算机领域教学工作。

硕士学位获得者还应对中国的历史与文化有初步的了解，能阅读简单的中文科技文献，并具有简单的汉语对话能力。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．信息安全
2．嵌入式系统
3．计算机网络
4．工智能
5．云计算

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课，基础课至少选修 1 门。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。学位课可替代非学位课，但非学位课不能替代学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过后获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	第 1 组，必须选 1- 3 门
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		0808126040	移动计算技术	32	2	2	
		0808126041	嵌入式操作系统及应用	32	2	2	
		0808126042	密码算法设计	32	2	2	
		0808126043	软件开发技术	32	2	1	
		0808126051	大数据分析与挖掘	32	2	2	全英文，中外共选
非学位课	专业选修课	0808127039	前沿算法	16	1	1	
		0808127052	云计算	16	1	1	
		0808127063	密码学基础	32	2	2	
		0808127064	数据库技术	32	2	2	
		0808127065	计算机图形学	32	2	2	
		0808127066	操作系统结构与应用	32	2	2	
		0808127067	信息安全数学基础	40	2.5	1	
		0808127068	面向对象编程技术	24	1.5	1	
		0808127082	高级计算机网络及其编程	16	1	1	
		0808127084	高级网络计算	16	1	1	
		0808127104	神经网络与机器学习	32	2	2	
		0808397014	数据恢复与数字取证	16	1	1	全英文，中外共选
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文是对研究生科研能力、基础理论水平及专门知识掌握程度的综合反映，是学位授予的重要依据。研究生应在导师指导下独立完成学位论文。学位论文的撰写应按照《电子科技大学研究生学位论文撰写格式规范》执行；学位论文的答辩申请、评阅、答辩与学位授予应按照《电子科技大学研究生学位授予实施细则》的规定执行。

生物医学工程 来华留学硕士培养方案

生物医学工程是现代科学技术与生物医学问题相结合的一个交叉领域，与电子信息科学与技术、计算机科学与技术、生物医学、认知神经科学和分子生物学等学科的研究领域密切相关。我校本学科创办于 1986 年；1993 年获得硕士授位权；2000 年获得“生物医学工程”一级学科博士授位权；2017 年在教育部全国高校第四轮学科评估中获评 B+类学科。现有正副教授 40 余名，汇集了包括中国科学院院士、美国医学与生物工程院 Fellow、英国工程技术学会 Fellow 等高层次人才 17 位（不重复计算）、全时非华裔高层次人才 6 位，构建了高水平的国际化师资队伍。设有国家国际科技合作基地-神经信息国际联合研究中心，以及神经信息教育部重点实验室、高场磁共振脑成像四川省重点实验室等三个部（省）重点实验室，拥有 3T MR 脑成像中心，以及 EGI 及 Neuroscan 脑电工作站等具有国际水平的实验仪器设备。在脑功能成像技术及应用、视觉神经电生理、生物医学信号处理、医学成像与处理、生物信息学等方面成果显著。

1.培养目标

本学科硕士获得者应掌握生物医学信号处理的基本理论及技术、具有较好的计算机软硬件技术知识，以及人体解剖和生理学等生物医学方面的基础知识，掌握一门外国语。具备独立从事生物医学信号采集与处理、生物医学电子仪器的设计开发及相关基础研究的能力，能胜任在科研单位、生产部门及高等院校从事研究、开发、教学工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试

2.研究方向

1．脑功能与神经信息工程（含脑机接口、类脑技术等）
2．医疗设备、医学图像与信号处理
3．生物信息学
4．神经生物学
5．细胞生物学
6．生物化学与分子生物学

3.培养方式与学习年限

来华留学硕士研究生学制为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

来华留学硕士研究生的培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作等。

来华留学硕士研究生的总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。公共基础课和专业基础课为必修课。开展学位论文工作，撰

写一篇学位论文，通过答辩。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016009	矩阵理论	48	3	1	三选一
		1100016010	数值分析	48	3	1/2	
		1100016011	随机过程及应用	48	3	1	
		1404026013	认知神经科学	32	2	1	
		1407106020	高级分子生物学	32	2	1	
		1407106021	生物信息学	32	2	1	
		1408316018	脑科学基础	32	2	2	
		1408316019	生物医学统计	48	3	2	
非学位课	专业选修课	0108106051	数字通信基础	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0208096101	集成电路与设计	40	2	2	
		0808126043	软件开发技术	32	2	1	
		1408317023	脑成像进展	32	2	2	
		1408546003	心理物理实验	40	2.5	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次，中文项目留学生不少于 10 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须

参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》中的要求执行。

软件工程 来华留学硕士培养方案

软件工程学科是信息技术领域中发展最快的学科领域之一，软件产业也成为各国经济发展的支柱产业。软件工程领域总体发展形成了宽范围、多维度、多层次、多交叉的体系结构，知识领域包括软件需求、软件设计、软件构建、软件测试、软件维护、软件配置管理、软件项目管理、软件质量、软件安全、软件道德与法律等；也涉及到系统工程、领域工程、数字化技术、嵌入式系统、网络与信息安全，系统管理与支持、市场营销等多学科交叉领域。

1.培养目标

本学科培养以软件理论为基础，根据软件技术的发展和软件行业的需求，按照国际化软件开发标准与模式，培养掌握软件工程基本理论、熟悉软件技术及软件开发过程的研究型人才。

本学科硕士毕业生除了熟练掌握先进的程序设计技术、主流系统平台与工具，能遵循国际软件开发规范与标准进行系统分析、设计和编程，具有一定的项目管理知识和能力，能熟练应用现代软件技术、方法和工具，从事软件工程领域及其他应用领域的系统与软件设计、开发、管理的研究性工作外，还应对中国的历史与文化有初步的了解，能阅读简单的中文科技文献，并具有简单的汉语对话能力。

2.研究方向

1．嵌入式软件与工业软件

2．安全计算环境

3．人工智能及其应用

3.培养方式与学习年限

攻读硕士学位者，学习年限为两年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过四年。

4.学分与课程学习基本要求

总学分要求不低于 26 学分，课程总学分不低于 24 学分，其中学位课不低于 15 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文，通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016011	随机过程及应用	48	3	1	
		1100016012	最优化理论与应用	48	3	1	
		0908356022	软件架构模型与设计★	32	2	2	
		0908356025	嵌入式系统及应用	32	2	2	
		0908356026	网络计算导论	32	2	1	
		0908356027	网络安全：理论与实践	32	2	1	
		0908357051	新型数据库理论与实践	32	2	1	
		0908357052	数据科学与应用	32	2	2	
		0908357053	人工智能编程实践	32	2	1	
非学位课	专业选修课	0908357054	研究生写作指导课程	16	1	2	
		0908357055	信息安全数学基础	32	2	1	
		6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
		学术活动	0	1	1,2	必修	
	其他选修课	论文开题报告及文献阅读综述 I	0	0	1,2		
		汉语水平测评	60	0	1,2		
必修环节		6400006003	素质教育公选课	0	1	1,2	
		6400006004					
		6900006001					
		XX00025XXX					

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

公共管理学 来华留学硕士培养方案

公共管理是一门综合性强，研究范围广，极具实践价值的学科，本学科以政治学、管理学、社会学等学科为基础，对公共管理进行综合的全面研究，揭示公共组织、公共体制、公共伦理、公共决策、公共管理程式、公共管理方法与技术的一般规律和理论，研究公共管理的历史和现状，探索提高公共管理有效性的方法路径，注重总结世界各国在行政管理领域的经验，构建在信息化的条件下符合时代特征的新型行政管理模式，培养 21 世纪高质量、高水平的公共管理国际化人才。

1.培养目标

本学科硕士学位获得者应具有较强的管理学理论基础和系统的专业知识，能掌握政治学理论、公共管理学、公共经济学、组织行为学、行政学等专业基础知识，具有较强的理论水平，掌握一门外国语和计算机工具，具有较强的分析问题解决问题的能力、组织管理能力和电子政务水平，并且拥有较高政治学和管理学理论素养，能够理论联系实际，同时具有严谨的科学态度和工作作风，能胜任政府部门、公共组织，社团组织、高等院校、国有企业行政管理工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．公共行政管理
2．公共政策研究
3．数字公共治理
4．城乡公共治理

3.培养方式与学习年限

攻读硕士学位者，学习年限为 2-4 年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过 4 年。

4.学分与课程学习基本要求

总学分要求不低于 30 学分，课程总学分不低于 28 学分，其中学位课不低于 17 学分；必修环节不低于 2 学分。开展学位论文工作，撰写一篇学位论文（含研究报告），通过答辩。

留学研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展研究报告或学位论文工作。

课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课、专业基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未达到上述要求者，可以在一年内补修或重修有关课程，在规定期限内仍没有达到学分要求者，将被终止学业。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005004	中国概况	36	2	1,2	必修
		6900005001	综合汉语	60	2	1	
	专业基础课	1612046011	公共管理学	48	3	1	
		1612046012	公共行政学经典文献选读	48	3	1	
		1612046015	公共经济学	32	2	1	
		1612046016	电子政务	32	2	2	
		1612046020	公共政策	40	2.5	2	
		1612046036	数字全球化与世界政治	32	2	2	
		1612046037	社会科学研究方法	48	3	1	
		1612046038	公共人力资源管理	48	3	2	
非学位课	专业选修课	1612047034	数字政府与传媒	32	2	2	
		1612047035	社会科学学术论文写作	24	1.5	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 5 次
		6900006001	汉语水平测评	60	0	1,2	必修
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学硕士研究生必修环节包含三大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化和艺术等为主，加强来华留学研究生综合素质教育，研究生可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，硕士研究生在校期间须参加 5 次以上校内外学术报告会，填写学术活动登记表，有举办学术活动单位的公章为依据，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

外国语言文学 来华留学博士培养方案

外国语言文学属于人文社会科学学科，是中外文明和文化交流的产物。本学科的研究对象以语言、文学、文化为主体，涵盖外国文学、外国语言学及应用语言学、翻译学、比较文学与跨文化研究、国别与区域研究等 5 大主干学科方向。

1.培养目标

本学科博士学位获得者应具备良好的人际交流沟通能力、团队协作精神和社会责任感。能系统掌握外国语言文学学科的理论前沿和研究方法，能在所学学科方向从事创新性学术研究，并具有较强的逻辑抽象思维能力、创新思维能力和交叉学科研究能力。能从事语言研究、翻译研究、外国文学与比较文学研究或国别与区域研究；能在国际组织等从事跨文化交流，能胜任外语教育、翻译与对外文化传播等方面的工作。

2.研究方向

1．外国语言学及应用语言学　　2．外国文学与比较文学

3．翻译学　　4．国别与区域研究

3.培养方式与学习年限

留学博士研究生培养实行导师负责制。导师指导研究生制定个人培养计划、选课、开展学位论文工作。

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

总学分不低于 16 学分，其中课程学分不低于 14 学分，学位课不低于 10 学分，必修环节不低于 2 学分。课程学习期间，应通过本学科规定的学位课程考试，以及非学位选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1-2 门学位课作为本学科的学位课，但不能替代必修课。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1705026019	外国语言学理论前沿与研究方法★	32	2	1	
		1705026020	外国文学与比较文学理论前沿与研究方法★	32	2	1	
		1705026021	翻译学理论前沿与研究方法★	32	2	1	

学位课	专业基础课	1705026022	国别与区域研究——理论与实践★	32	2	1	
非学位课	专业选修课	1705027006	认知神经语言学	48	3	1	硕博共选
		1705027033	语言智能专题研究	32	2	2	
		1705027035	外国文学与比较文学专题研究	48	3	2	
		1705027036	外国语言学专题研究	48	3	2	
		1705027037	翻译理论与实践专题研究	48	3	1	
		1705027038	智能国际传播专题研究	32	2	2	
		1705027039	国别与区域专题研究	48	3	2	
		1705517012	智能翻译技术：理论与实践	32	2	1	硕博共选
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

（1）选修素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

（2）参加学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，其中至少参加 2 次高水平国际学术会议，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

（3）通过博士生综合考试：在修完课程后进行，主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所在研究方向及有关领域前沿动态的掌握程度。

1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得申请学位论文开题和参加论文答辩，作退学处理。

2）博士生综合考试由学院学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

3）综合考试采用笔试或口试的方式，以百分制评定成绩。

4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

（4）论文开题报告及文献阅读综述：博士研究生在学位论文开题之前，必须阅读本学科前沿的

国内外文献不少于 100 篇（部），其中外文文献不少于 30 篇（部），至少精读经典文献 40 篇（部），并写出不少于 5000 词的文献综述，完成相应的开题报告。

（5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

（1）基本要求

博士学位论文的选题应属学科前沿，具有理论意义和现实意义。学术学位申请人应在本学科或专业领域掌握坚实全面的基础理论和系统深入的专门知识，具有独立从事学术研究工作的能力，并在学术研究领域做出创新性成果。

（2）学位论文工作

博士学位论文相关工作按照国家及《电子科技大学研究生学位授予实施细则》的规定执行。博士学位论文在博士生导师及学科方向团队指导下，由博士研究生本人独立完成，可用外语或汉语撰写。论文字数原则上外文不少于 10 万词，中文不少于 15 万字。

物理学 来华留学博士培养方案

物理学是研究物质及其运动的自然科学，揭示物质的结构、物质之间的相互作用和物质的运动规律，为理解自然界奠定坚实的基础。物理学新方法、新理论是众多新技术、新产品的重要源头。

电子科技大学物理学院拥有物理学一级学科博士学位授予权，设有博士后流动站。本学科依托物理学研究和与其它学科的交叉领域的研究，支撑相关工程技术的研发，提升学生对物理知识的掌握，培养合格的科技人才，促进服务于经济发展的高技术研究。本学科包含理论物理、凝聚态物理、无线电物理、光学、等离子体物理、量子物理与量子信息等六个优势学科方向，具有较强的基础研究能力和理工渗透、协调发展的明显特色，取得良好的学术声誉。物理学院致力于在高科技时代中发挥关键作用。

本学科课程体系立足于物理学学科，培养学生在宽口径职业方向的领导潜能，培养学生获取物理学基础知识和新兴知识的能力，培养学生解决与工业发展有关实际问题的能力。

1.培养目标

本学科博士学位获得者应对相关领域研究前沿和发展趋势有较深入的了解，具有相关学科较深厚的基础理论和系统专门的知识，掌握相关的实验技能，熟练运用计算机及相关信息技术，具备独立、创新性地从事相应学科中的相关课题研究的能力，有严谨的科学态度、工作作风和高尚的职业道德，毕业后能胜任科研、技术开发以及高校教学等工作。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．理论物理
2．凝聚态物理
3．无线电物理
4．光学
5．等离子体物理
6．量子物理与量子信息

3.培养方式与学习年限

学习年限：

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；

必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	必须选 1- 2 门
		1107016018	数值代数理论与算法	32	2	2	
		0208096064	高等电磁理论	48	3	1	
		1207026039	高等量子力学	56	3.5	2	
		1207026043	广义相对论	32	2	2	
		1207026045	量子场论（一）	48	3	1	
非学位课	专业选修课	1207027047	弦理论	32	2	2	
		1207027055	量子场论（二）	48	3	2	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修，不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补

考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

机械工程 来华留学博士培养方案

机械工程是以自然科学和工程技术科学为理论基础的一级学科，系统研究和解决现代社会生产和服务过程中的机械设计、制造、控制、使用和维修的相关理论和实际问题。本学科涵盖机械设计及理论、机械制造及其自动化、机械电子工程等研究方向，形成了机械、电子信息和计算机测控技术等多学科交叉综合的学科优势。

1.培养目标

本学科博士学位获得者应对本学科研究前沿和发展趋势有系统深入的了解，在机电系统设计、制造、测控等特定方向具有坚实全面的理论基础，具有独立完成本学科相关实验研究与工程实践能力，能应用英语撰写高水平学术论文，并能在国际会议上进行交流。能独立从事科学研究，承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质。

本学科博士学位获得者应必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．装备可靠性与设备监控管理

2．智能制造与装备

3．智能感知与控制技术

4．装备智能设计与仿真

5．微机电系统（MEMS）

3.培养方式与学习年限

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。学位课可代替非学位课，但非学位课不能替代学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	0408026030	先进制造技术	32	2	1	
		0408026031	微机电系统	32	2	1	
		0808126041	嵌入式操作系统及应用	32	2	2	
		1100016010	数值分析	48	3	1/2	
		1100016012	最优化理论与应用	48	3	1	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0408027049	机械动力学	32	2	2	
		0408027050	可靠性设计	32	2	2	
	其他选修课	0411117006	研究生论文写作基础（留学生）	16	1	2	必修
		6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6400007006	中期考评	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得

低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

光学工程 来华留学博士培养方案

光学工程学科主要研究光信息获取、光存储、光传输、光交换、光信息处理以及光电图像显示等方向领域，在军事及民用领域有广泛的应用，是信息产业的重要支柱学科之一。

我校光学工程主要从事光学工程学科的理论及其相关应用方面的教学与科研，特别在光通信、集成光学与光电子器件、红外与传感技术、平板显示与成像技术等方面具有特色和优势，处于国内前列、国际先进。

1.培养目标

本学科博士学位获得者应对本学科研究前沿和发展趋势有系统深入的了解，在光学工程学科方面有坚实全面的理论基础，具有独立完成本学科相关实验研究的能力，能熟练使用计算机，能撰写高水平学术论文，并能在国际会议上进行交流。有严谨求实的科学态度和工作方法，能独立从事学术研究，对本学科某方面具有深入研究并取得创新性成果，能独立承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．光通信与集成光学　　2．光电探测与系统集成

3．敏感电子学与传感网　　4．显示与成像

5．微波光子学　　6．光电测控与仪器

3.培养方式与学习年限

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	二选一
		1100016012	最优化理论与应用	48	3	1	
		0108106053	光纤通信	24	1.5	2	
		0208096065	高等电磁场理论	48	3	1	
		0508036033	光纤光学	32	2	1	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0108107074	光纤技术	32	2	1	
		0508037036	非线性光学	32	2	2	
		0508037051	有机电子学	16	1	2	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员

会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

仪器科学与技术 来华留学博士培养方案

仪器科学与技术是信息领域的重要组成部分，其主要研究内容包括：信号或信息的获取方法及转换放大与处理技术、测量方法学、计量学以及仪器工程学与测控系统工程学等。仪器科学与技术学科具有自身可持续发展的优势，具有突出的学科交叉性和科技前沿性等显著的特点，对高新科技与工业的发展和社会进步具有重要的引领作用和推动作用。

我校仪器科学与技术学科源于学校 1956 年创办的“电子测量技术及仪器”专业，是国内电子测量技术高层次人才培养基地之一。拥有一级学科博士点、博士后流动站，是四川省一级学科重点学科。学科教学科研实力雄厚，在多年的发展和建设中，形成了宽带时域测试技术及仪器、电子系统综合测试诊断与预测、微波与通信测试技术及仪器、集成电路测试与可测性设计理论及技术等研究方向，具有显著的电子测试优势和鲜明的军事电子特色，工程研究能力突出。

1.培养目标

遵纪守法，具有良好的道德品质；毕业时具有一定的汉语交流能力；在本学科的研究领域中具有坚实宽广的理论基础和系统深入的专门知识；深入了解本学科领域的发展方向及国际学术研究前沿；能够从事高水平的理论和实验研究，并在某一方面取得创新性的研究成果；具有独立从事科学研究和技术开发的能力；有严谨求实的科学作风；能胜任本学科或相近学科的科研、教学、工程开发或技术管理工作。

2.研究方向

1．宽带时域测试技术及仪器
2．电子系统综合测试诊断与预测
3．微波毫米波测试技术及遥感
4．集成电路测试与可测性设计理论及技术
5．新型传感技术与精密测量

3.培养方式与学习年限

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课（但不可替代必

修课）作为本学科的学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	必须选 1- 2 门
		1107016018	数值代数理论与算法	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0608116020	计算机视觉	32	2	1	
		0608116021	线性系统理论	40	2.5	1	
		0608116022	最优化理论与应用	40	2.5	2	
非学位课	专业选修课	0808126041	嵌入式操作系统及应用	32	2	2	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6400007006	中期考评	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含六大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补

考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

6）论文工作中期报告：开题一年后，需以书面形式报告论文工作进展及完成情况，经专家评审通过，方可继续论文工作。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

材料科学与工程 来华留学博士培养方案

“材料科学与工程”是研究材料的组成、结构、制备工艺与其性能及应用间相互关系的科学与技术，研究对象包括电、磁、声、光、热、力及生物等功能材料的理论、设计、制备、检测及应用，研究过程涉及到信息的获取、转换、存储、处理与控制。我校是首批“双一流”A 类建设高校，电子信息材料及应用的研究和开发是本学科的特色和优势。本学科现有国家级人才、博士生导师、教授、副教授以及一批青年博士组成的学术队伍，拥有先进的实验设备和充足的科研经费。

随着科学技术的发展，本学科与其它学科的交叉越来越紧密，同时，作为当代文明的重要支柱，本学科已成为现代科学技术发展的先导和基础，与当代社会发展有着极为密切的依存关系。

1.培养目标

博士学位获得者应具有一定的汉语听、说、读、写能力，对本学科研究前沿和发展趋势有系统深入的了解，在材料科学与工程方面有坚实全面的理论基础，具有独立完成本学科相关实验研究与工程实践能力，能应用英语撰写高水平学术论文，并能在国际会议上进行交流。能独立从事学术研究，承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质，能胜任在科研单位、产业部门或高等院校有关方面的研究、科研开发，教学和技术管理工作。

2.研究方向

1．电子信息材料与器件　　2. 材料基因工程

3．电子薄膜与集成器件　　4. 新能源材料与器件

5．印制电路与印制电子技术　　6. 有机功能材料与工程

3.培养方式与学习年限

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》

三级水平考试或通过同等难度的汉语水平考试。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016012	最优化理论与应用	48	3	1	
		0208096065	高等电磁场理论	48	3	1	
		0208096122	微波工程	32	2	2	
非学位课	专业选修课	0208096123	半导体器件原理	40	2.5	2	
		0308057036	Optoelectronic Conversion from Fundamental to Devices	16	1	2	
		0308057051	纳米材料制备与应用前沿	16	1	2	
		0408087028	新能源发电与并网	32	2	2	
		0411117006	研究生论文写作基础（留学生）	16	1	2	
		1207027060	固态电池与储能器件	16	1	1	
		1207027064	纳米光学	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

6.必修环节

来华留学博士研究生必修环节包含四大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试方式，以百分制评定成绩。

（4）各学科根据实际情况每年集中举行一次综合考试，时间定在每年的十月。综合考试的试题由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，近 5 年文献不低于 1/3，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。来华留学生的答辩语言统一为英语。

电子科学与技术 来华留学博士培养方案

电子科学与技术是进入国家“双一流”建设的重点一级学科，包含电磁场与微波技术、电路与系统、物理电子学、微电子学与固体电子学、电子信息材料与元器件等 5 个二级学科。该学科师资力量雄厚，在各个研究方向上都具有高水平的科研实力和广泛的国际学术影响。

1.培养目标

博士学位获得者应具有一定的汉语听、说、读、写能力，对本学科研究前沿和发展趋势有系统深入的了解，在电子科学与技术方面有坚实全面的基础理论和系统深入的专门知识，具有独立从事学术研究工作的能力，能应用英语撰写高水平学术论文，并能在国际会议上进行交流。能独立从事科学研究，承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质，能胜任在科研单位、产业部门或高等院校有关方面的研究、科研开发，教学和技术管理工作。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．电磁场与微波技术
2．集成电路与系统
3．电子信息材料与元器件
4．微电子与固体电子
5．物理电子学

3.培养方式与学习年限

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	必须选 1- 2 门
		1107016019	凸分析	32	2	2	
		0208096065	高等电磁场理论	48	3	1	
		0208096122	微波工程	32	2	2	
非学位课	专业选修课	0108107073	信号检测与估计	32	2	1	
		0208096123	半导体器件原理	40	2.5	2	
		0208097094	近代微波测量	32	2	1	
		0208097121	射频集成电路设计	32	2	2	
		3108097001	软硬件协同设计	32	2	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理

科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）论文中期报告：指博士研究生在完成论文开题报告一年左右，根据已开展的研究工作内容，完成相应的中期报告。

6）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。来华留学生的答辩语言统一为英语。

信息与通信工程 来华留学博士培养方案

电子科技大学“信息与通信工程”一级学科是国家重点学科，包含 2 个二级学科，即属于国家重点学科与长江学者计划特聘教授设岗的两个二级学科“通信与信息系统”和“信号与信息处理”。我校“信息与通信工程”相关学科是国内首批获博士学位授予权、首批设立博士后流动站的学科，也是首批“211 工程”、“985 工程”重点建设学科及“双一流”重点建设学科，2012 年本学科在教育部学科评估中排名第 2，在 2017 年教育部公布的第四轮一级学科评估结果中被评为 A+。拥有中国工程院院士 2 人，千人计划入选者 8 人，全国教学名师 2 人，长江学者 5 人，国家杰出青年科学基金获得者 2 人，青年千人计划入选者 9 人，国家青年拔尖人才支持计划入选者 1 人。本学科研究团队在国内外享有良好声誉。本学科具有国家级重点实验室、教育部重点实验室、“111”学科引智基地等等具有国际一流水平的学术研究与人才培养平台。

本学科与电子科学与技术、计算机科学与技术、控制科学与工程、仪器科学与技术等学科的研究领域密切相关。

1.培养目标

本学科博士学位获得者应对本学科研究前沿和发展趋势有系统深入的了解，在通信学科方面有坚实全面的理论基础，具有独立完成本学科相关实验研究的能力，了解国内外信息与通信工程学科某一领域的新技术和发展动向，创新性地解决本学科的学术或技术问题，能熟练使用计算机，能撰写高水平学术论文，并能在国际会议上进行交流。有严谨求实的科学态度和工作方法，能独立从事学术研究，对本学科某方面具有深入研究并取得独创性成果，能独立承担相关的研究和开发课题，具备成为学术带头人或项目负责人的素质。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．无线与移动通信系统　　2．抗干扰与安全通信系统
3．雷达探测与成像识别　　4．智能通信网络与信息处理
5．光纤传感与通信　　6．图像与视频处理
7．通信集成电路与系统　　8．智能感知与信息系统
9．机器学习与人工智能　　10．信号与信息智能处理

3.培养方式与学习年限

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学

位论文工作。

攻读博士学位者，学习年限为 4 年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过 6 年。

4.学分与课程学习基本要求

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过后获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016012	最优化理论与应用	48	3	1	
		0108106051	数字通信基础	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0108106053	光纤通信	24	1.5	2	
		0108106054	人工智能	32	2	1	
		0808126043	软件开发技术	32	2	1	
非学位课	专业选修课	0108107055	模糊逻辑	32	2	2	
		0108107073	信号检测与估计	32	2	1	
		0108107074	光纤技术	32	2	1	
		0108107075	计算智能方法及其应用	24	1.5	2	
		0108107077	信号处理和数据分析中的应用矩阵方法	48	3	2	
		0208096121	集成电路与设计	32	2	2	
		0808126051	大数据分析与挖掘	32	2	2	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化和艺术等为主，加强来华留学研究生综合素质教育，研究生可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，有举办学术活动单位的公章为依据，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文的答辩申请、评阅、答辩与学位授予，参照《电子科技大学研究生学位授予实施细则》的规定执行。

控制科学与工程 来华留学博士培养方案

控制科学与工程是研究控制的理论、方法、技术及其工程应用的学科。控制科学以控制论、系统论、信息论为基础，研究各应用领域内的共性问题，即为了实现控制目标，如何建立系统的模型，分析其内部与环境信息，采取何种控制与决策行为；且与各应用领域的密切结合，又形成了控制工程丰富多样的内容。本学科点在理论研究与工程实践相结合、学科交叉和军民结合等方面具有明显的特色与优势，在我国国民经济发展和国家安全方面发挥了重大作用。

我校控制科学与工程学科为四川省重点学科，师资力量雄厚，形成了复杂系统与智能优化、新能源系统控制技术、计算机视觉与模式识别、机器人技术与系统等研究方向，具有电子信息优势明显，学科交叉特色鲜明，工程研究能力突出等特点。本学科的发展受益于社会和国家的发展，同时也在国家的决策咨询、国防建设、行业推动、社会服务、人才培养等方面做出了突出的贡献。

1.培养目标

热爱祖国，遵纪守法，具有良好的道德品质；在本学科领域掌握坚实全面的基础理论和系统深入的专门知识；毕业时具有一定的汉语交流能力；具有独立地、创造性地从事科学研究的能力，并具有严谨求实的科学作风；能够在科学研究或学术研究上做出创造性的成果。

2.研究方向

1．复杂系统与智能信息处理

2．新能源系统及控制技术

3．模式识别与智能系统

4．测控通信与导航控制

5．检测技术与自动化装置

3.培养方式与学习年限

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学

位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1,2	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	必须选 1- 2 门
		1107016018	数值代数理论与算法	32	2	2	
		0108106052	数字信号处理	32	2	1	
		0608116020	计算机视觉	32	2	1	
		0608116021	线性系统理论	40	2.5	1	
		0608116022	最优化理论与应用	40	2.5	2	
非学位课	专业选修课	0808126041	嵌入式操作系统及应用	32	2	2	
		1008256023	系统工程理论与方法	32	2	1	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6400007006	中期考评	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含六大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补

考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

6）论文工作中期报告：开题一年后，需以书面形式报告论文工作进展及完成情况，经专家评审通过，方可继续论文工作。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

计算机科学与技术 来华留学博士培养方案

电子科技大学“计算机科学与技术”于 1999 年建成一级学科博士后流动站，本一级学科已形成强有力的基础研究和应用研究能力，具有较强的学科综合优势。学科研究水平和研究能力大幅度提升，整体接近国内一流水平，部分研究方向达到国内先进水平。在学科方向、学术团队、学科平台、科学研究、人才培养、学术交流等方面取得了突出的成绩。

1.培养目标

本学科博士学位获得者具有坚实全面的数学基础知识、系统的学科领域知识和精深的研究方向知识；学术思想活跃，创新意识强，了解学科现状、发展方向和前沿；能撰写高水平学术论文，能在国际学术会议上交流研究内容；能独立从事计算机领域内的基础理论和学科前沿课题的研究，能做出创新性的被国际认同的研究成果，可承担大型软件或重大计算机应用项目的设计和开发，具备成为学术带头人和项目负责人的素质，能胜任高等院校的教学工作。

博士学位获得者还应对中国的历史与文化有初步的了解，能阅读简单的中文科技文献，并具有简单的汉语对话能力。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．信息安全　　2．嵌入式系统

3．计算机网络　　4．人工智能

5．云计算

3.培养方式与学习年限

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

4.学分与课程学习基本要求

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。学位课中，公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过后获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	必须选 1- 2 门
		1107016019	凸分析	32	2	2	
		0808126040	移动计算技术	32	2	2	
		0808126041	嵌入式操作系统及应用	32	2	2	
		0808126042	密码算法设计	32	2	2	
		0808126043	软件开发技术	32	2	1	
		0808126051	大数据分析与挖掘	32	2	2	中外共选
		0808126064	计算机科学中的数学基础★	32	2	1	
非学位课	专业选修课	0808127039	前沿算法	16	1	1	中外共选
		0808127052	云计算	16	1	1	
		0808127053	高级计算机网络	16	1	2	
		0808127063	密码学基础	32	2	2	
		0808127065	计算机图形学	32	2	2	
		0808127066	操作系统结构与应用	32	2	2	
		0808127104	神经网络与机器学习	32	2	2	
		0808397014	数据恢复与数字取证	16	1	1	中外共选
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，研究生可选修一门，考核通过后获 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综

合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文是对研究生科研能力、基础理论水平及专门知识掌握程度的综合反映，是学位授予的重要依据。研究生应在导师指导下独立完成学位论文。学位论文的撰写应按照《电子科技大学研究生学位论文撰写格式规范》执行；学位论文的答辩申请、评阅、答辩与学位授予应按照《电子科技大学研究生学位授予实施细则》的规定执行。

生物医学工程 来华留学博士培养方案

生物医学工程是现代科学技术与生物医学问题相结合的一个交叉领域，与电子信息科学与技术、计算机科学与技术、生物医学、认知神经科学和分子生物学等学科的研究领域密切相关。我校本学科创办于 1986 年；1993 年获得硕士授位权；2000 年获得一级学科博士授位权；2017 年在教育部全国高校第四轮学科评估中获评 B+类学科。现有正副教授 40 余名。汇集了包括中国科学院院士、美国医学与生物工程院 Fellow、英国工程技术学会 Fellow 等高层次人才 17 位（不重复计算）、全时非华裔高层次人才 6 位，构建了高水平的国际化师资队伍。设有国家国际科技合作基地-神经信息国际联合研究中心，以及神经信息教育部重点实验室、脑机接口与类脑智能四川省重点实验室等三个部（省）重点实验室，拥有 3T MR 脑成像中心，以及 EGI 及 Neuroscan 脑电工作站等具有国际水平的实验仪器设备。在脑功能成像技术及应用、视觉神经电生理、生物医学信号处理、医学成像与处理、生物信息学等方面成果显著。

1.培养目标

具备相应的电子信息科学与生物医学的坚实理论基础和系统深入的专门知识。本学科博士学位获得者应掌握有关领域的国内外前沿现状和发展趋势，具有独立从事学科领域中的基础理论及前沿课题的研究能力，并做出创新的研究成果。至少熟练掌握一门外语，具有“读、写、听、说”能力。

留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》三级水平考试或通过同等难度的汉语水平考试。

2.研究方向

1．脑功能与神经信息工程（含脑机接口、类脑技术等）
2．医疗设备、医学图像与信号处理
3．生物信息学
4．神经生物学
5．细胞生物学
6．生物化学与分子生物学

3.培养方式与学习年限

来华留学博士研究生学制为四年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

来华留学博士研究生的培养，原则上应采取脱产培养的方式，即整个培养过程均在我校完成。如确因需要，经导师同意，所在学院和研究生院批准，可进行在职培养，留学生可以回国撰写论文，但在我校从事论文研究的时间累计不得低于一年，且所有课程学习和论文答辩必须在我校完成。

来华留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作等。

来华留学博士研究生的总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。公共基础课为必修课。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016011	随机过程及应用	48	3	1	必须选 1- 1 门
		1107016018	数值代数理论与算法	32	2	2	
		1107016034	最优化理论与方法	48	3	1	
		1404026013	认知神经科学	32	2	1	
		1407106020	高级分子生物学	32	2	1	
		1407106021	生物信息学	32	2	1	
		1408316018	脑科学基础	32	2	2	
非学位课	专业选修课	1408316019	生物医学统计	48	3	2	
		1408317023	脑成像进展	32	2	2	
		1408546003	心理物理实验	40	2.5	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
		XX0004XXXX	前沿与交叉课程	/	/	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综

合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试和口试相结合的方式，以百分制评定成绩。其中笔试成绩所占比例不得低于 50%。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、口试记录及评语等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

5）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》中的要求执行。

来华留学博士研究生发表学术论文的要求参照《电子科技大学来华留学博士研究生发表论文的要求》执行。

软件工程 来华留学博士培养方案

软件工程学科是信息技术领域中发展最快的学科领域之一，软件产业也成为各国经济发展的支柱产业。软件工程领域总体发展形成了宽范围、多维度、多层次、多交叉的体系结构，知识领域包括软件需求、软件设计、软件构建、软件测试、软件维护、软件配置管理、软件项目管理、软件质量、软件安全、软件道德与法律等；也涉及到系统工程、领域工程、数字化技术、嵌入式系统、网络与信息安全，系统管理与支持、市场营销等多学科交叉领域。

1.培养目标

本学科根据软件技术的发展和软件行业的需求，面向软件工程领域高层次人才招生。本学科博士学位获得者应在软件工程方面具有坚实全面的理论基础；具有独立从事科学研究的能力和良好的综合素质；能独立地、创造性地从事软件领域内的科研工作并取得被国际认同的科研成果；学术视野开阔，创新意识强，了解学科现状、发展和前沿；能用英语撰写学术论文并在国际学术会议上交流；可承担大型软件项目的设计和开发；能胜任高等院校的教学工作。

2.研究方向

1．嵌入式软件与工业软件

2．安全计算环境

3．人工智能及其应用

3.培养方式和学习年限

攻读博士学位者，学习年限为四年。若因客观原因不能按时完成学业者，可申请延长学习年限，但最长学习年限不超过六年。

4.学分与课程学习基本要求

留学博士研究生培养方式：

1．脱产培养。整个培养过程均在我校完成；

2．在职培养。课程学习在我校完成，论文工作可在留学生本国完成，但在我校从事论文研究的时间累计不得少于一年。两种培养方式的论文答辩均须在我校完成。

留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文工作。

总学分要求不低于 14 学分，课程总学分不低于 12 学分，其中学位课不低于 8 学分；必修环节不低于 2 学分。课程学习期间，应通过本专业规定的学位课程考试，以及其他选修课程的考试或考查。公共基础课为必修课。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。留学研究生必修中国概况和综合汉语等课程，毕业时须通过《国际汉语能力标准》五级水平考试或通过同等难度的汉语水平考试。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016010	数值分析	48	3	1/2	必须选 1- 2 门
		1100016011	随机过程及应用	48	3	1	
		1100016012	最优化理论与应用	48	3	1	
		0908356022	软件架构模型与设计	32	2	2	
		0908356026	网络计算导论	32	2	1	
		0908356027	网络安全：理论与实践	32	2	1	
		0908357051	新型数据库理论与实践	32	2	1	
		0908357052	数据科学与应用	32	2	2	
		0908357054	研究生写作指导课程	16	1	2	
非学位课	专业选修课	0908357055	信息安全数学基础	32	2	1	
		6900005005	汉语阅读与写作	32	2	1/2	
		学术活动	0	1	1,2	必修	
		论文开题报告及文献阅读综述 I	0	0	1,2		
	其他选修课	博士综合考试	0	0	1,2		
必修环节		6400006003	汉语水平测评	60	0	1,2	
		6400006004	素质教育公选课	0	1	1,2	
		6400006005					
		6900006001					
		XX00025XXX					

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五大部分，要求留学研究生分别完成以下内容：

1）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学研究生综合素质教育，须至少获得 1 个学分。

2）学术活动：为进一步活跃学术气氛并拓宽来华留学研究生的知识面，博士研究生应广泛参加学术活动，在校期间须参加 10 次以上校内外学术报告会，填写学术活动登记表，加盖举办学术活动单位的公章，报所在学院研究生科备案，全部完成后获得 1 学分。

3）汉语水平测评：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。留学硕士/博士研究生在校期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由国际教育学院进行水平认定。

4）博士生综合考试是博士生修完课程后进行的、主要考查博士生有关基础理论和专业知识的综

合考试，同时适当检查博士生对所研究方向及有关领域前沿动态的掌握程度。

（1）博士生一般应于入学一年后参加综合考试。综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士生综合考试由学位评定分委员会指定三名专家组成的考试委员会负责实施。考试委员会主席必须由教授以上职称的专家担任，考试委员会其他成员必须由副教授以上职称的专家担任。

（3）综合考试采用笔试的方式，以百分制评定成绩。

（4）各学科根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。综合考试的试题、试卷、等由所在学院研究生秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

5）论文开题报告及文献阅读综述：指博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

7.学位论文

学位论文工作按照《电子科技大学研究生学位授予实施细则》的规定执行。

管理科学与工程 来华留学博士培养方案

电子科技大学管理科学与工程学科来华留学博士研究生项目强化管理知识和技能与现代信息技术相结合的培养模式，致力于将学校在信息科学技术领域的学科优势、科研优势和资源优势转化为培养优势，并最终落实为学生的竞争优势。培养具有国际化视野、掌握现代管理思想和方法的复合型、创新型管理人才。历经十余年磨砺和持续努力，管理科学与工程学科来华留学博士研究生项目已形成了清晰的培养目标、明确的培养理念和独特的培养模式。

1.培养目标

采用系统的理论学习和学术研究相结合的培养方式，培养认同中国，具有全球视野、熟悉理论前沿、掌握科学研究方法的学术精英和能够在政府企业部门从事管理工作的领军型人才。

毕业生应具有扎实的数理基础、管理科学、经济金融等学科领域的理论基础和系统的专业知识，并掌握系统理论与系统工程的工具方法，熟悉数字智能技术应用，具有独立从事本学科领域基础前沿研究的能力，形成创新性的研究成果，并能够胜任高等院校教学科研、企业和政府等部门的高级管理和产业规划等工作。

2.研究方向

1．运营与供应链管理

2．管理决策与优化

3．数据科学与智能管理

4．金融科技与金融工程

3.培养方式与学习年限

来华留学博士研究生培养方式有以下两种：

1．脱产培养。整个培养过程均在我校完成。

2．在职培养。来华留学博士研究生可以回国撰写论文，但在我校从事论文研究的时间累计不得低于一年，且所有课程学习和论文答辩须在我校完成。

来华留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文研究工作等。

攻读博士学位者，学制为 4 年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过 6 年。

4.学分与课程学习基本要求

总学分要求不低于 16 学分，课程总学分不低于 14 学分，其中学位课不低于 10 学分，必修环节不低于 2 学分。课程学习期间，应通过本学科规定的学位课程考试，以及非学位选修课程的考试或考查。学位课中，公共基础课为必修课，专业基础课至少选修 1 门。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。学位课可代替非学位课，但非学位课不能替代学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获

得相应学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1100016012	最优化理论与应用	48	3	1	二选一
		1107016019	凸分析	32	2	2	
		1502026011	商务统计	40	2.5	1	
		1512017012	服务管理	24	1.5	2	
非学位课	专业选修课	1502517005	金融学	40	2.5	2	
		1512017011	数据挖掘与信息管理	40	2.5	1	
		1512017016	管理科学研究方法	24	1.5	2	
		1512017023	供应链管理	32	2	1	
		1512028006	创新创业管理研究	40	2.5	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五个部分，要求来华留学博士研究生分别完成以下内容：

1）学术活动：为进一步活跃学术气氛并拓宽来华留学博士研究生的知识面，来华留学博士研究生应广泛参加学术活动，在读期间须参加 10 次及以上校内外学术报告会，填写电子科技大学学术活动登记表，加盖举办学术活动单位的公章，报学院研究生管理办公室备案，全部完成后获得 1 学分。

2）论文开题报告及文献阅读综述 I：指来华留学博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并写出 5000 字左右的文献综述报告，完成相应的开题报告。

3）博士综合考试：修完课程后进行，主要考查来华留学博士研究生有关基础理论和专业知识的综合考试，同时适当检查来华留学博士研究生对所研究方向及有关领域前沿动态的掌握程度。

（1）来华留学博士研究生一般应于入学一年后参加博士综合考试。博士综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士综合考试由学院研究生管理办公室指定三名专家组成的考试委员会负责实施。考试委员会主席必须由正高级职称的专家担任，考试委员会其他成员必须由副高级及以上职称的专家担任。

（3）博士综合考试采用笔试或口试的方式，以百分制评定成绩。

（4）根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。博士综合考试的试题、试卷、口试记录及评语等由学院留学生教务秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）汉语水平测试：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。来华留学博士研究生在读期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由电子科技大学国际教育学院进行水平认定。

5）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学博士研究生综合素质教育，须至少获得 1 个学分。

7.学位论文

1．基本要求

来华留学博士研究生学位论文的选题，应属学科前沿或科技和社会发展具有重要的理论意义或实用价值。学位申请人应在本学科或者专业领域掌握坚实全面的基础理论和系统深入的专门知识，具有独立从事学术研究工作的能力，在学术研究领域做出创新性的成果。

2．来华留学博士研究生应在导师指导下确定选题，并完成学位论文工作。学位论文的撰写按照《电子科技大学研究生学位论文撰写格式规范》执行；学位论文的答辩申请、评阅、答辩与学位授予按照《电子科技大学研究生学位授予实施细则》的规定执行。

3．来华留学博士研究生申请学位创新成果的要求按照《电子科技大学来华留学博士研究生发表论文的要求》执行。

工商管理学 来华留学博士培养方案

电子科技大学工商管理学学科来华留学博士研究生项目致力于将学校在电子信息和工商管理学的学科优势、科研优势以及中国的产业优势转化为高层次人才培养优势，通过课程学习和专业学术训练，把学生培养成了解中国商业文化环境、掌握现代管理思想和方法的学术精英和能够在政府企业部门从事管理工作的领军型人才。

1.培养目标

采用系统的理论学习和学术研究相结合的培养方式，培养认同中国，具有全球视野、熟悉理论前沿、掌握科学研究方法的学术精英和能够在政府企业部门从事管理工作的领军型人才。

毕业生不仅具备战略管理、组织行为、创新创业等领域的管理理论和专业知识，还熟悉产业和经济部门的创新实践，掌握国家治理与公共政策方面的基础理论和分析工具，能够结合本国发展阶段和产业基础，独立从事本学科的基础前沿研究，形成创新性的研究成果，并能够胜任战略决策、产业创新管理、公共政策制定等领域的高级管理工作。

2.研究方向

1．组织行为与人力资源管理
2．战略管理
3．创新创业管理
4．服务管理与数智营销
5．产业创新
6．商业模式创新
7．公共政策与政府治理

说明：研究方向 5、6、7 仅针对产业与经济发展领军人才计划-在职博士项目。

3.培养方式与学习年限

来华留学博士研究生培养方式有以下两种：

1．脱产培养。整个培养过程均在我校完成。

2．在职培养。来华留学博士研究生可以回国撰写论文，但在我校从事论文研究的时间累计不得低于一年，且所有课程学习和论文答辩须在我校完成。

来华留学博士研究生培养实行导师负责制。导师负责指导研究生制定个人培养计划、选课、开展学位论文研究工作等。

攻读博士学位者，学制为 4 年。若因客观原因不能按时完成学业者，可申请适当延长学习年限，但最长学习年限不超过 6 年。

4.学分与课程学习基本要求

总学分不低于 16 学分，课程总学分不低于 14 学分，其中学位课不低于 10 学分，必修环节不低于 2 学分。课程学习期间，应通过本学科规定的学位课程考试，以及非学位选修课程的考试或考查。学位课中，公共基础课为必修课，专业基础课至少选修 1 门。允许在导师指导下跨学科选修 1~2 门学位课作为本学科的学位课，但不可替代必修课。学位课可代替非学位课，但非学位课不能替代学位课。有汉语基础者，可申请选修面向国内全日制研究生用中文讲授的专业课程，通过者获得相应

学分。

未完成课程学习的学分要求者，不能参加论文答辩。

5.课程设置

课程类别		课程编号	课程名称	学时	学分	开课学期	备注
学位课	公共基础课	6900005001	综合汉语	60	2	1	必修
		6900005004	中国概况	36	2	1,2	
	专业基础课	1502026011	商务统计	40	2.5	1	方向 1-4
		1512026009	管理研究方法	32	2	2	方向 1-4
		1512026012	中国经济改革	32	2	1/2	方向 5-7
		1512026013	创新与中国制造	32	2	1/2	
		1512026014	数字经济	32	2	1/2	
		1512026015	研究方法导论	32	2	1/2	
		1512026016	管理理论	32	2	1	方向 1-4
		1612046021	中国国家治理体系概论	32	2	1/2	方向 5-7
非学位课	专业选修课	1512017011	数据挖掘与信息管理	40	2.5	1	
		1512017012	服务管理	24	1.5	2	
		1512028006	创新创业管理研究	40	2.5	2	
	其他选修课	6900005005	汉语阅读与写作	32	2	1/2	
必修环节		6400006003	学术活动	0	1	1,2	必修 不少于 10 次
		6400006004	论文开题报告及文献阅读综述 I	0	0	1,2	必修
		6400006005	博士综合考试	0	0	1,2	
		6900006001	汉语水平测评	60	0	1,2	
		XX00025XXX	素质教育公选课	0	1	1,2	

说明：除规定的汉语课程以外，其他课程均采用英语授课。

6.必修环节

来华留学博士研究生必修环节包含五个部分，要求来华留学博士研究生分别完成以下内容：

1）学术活动：为进一步活跃学术气氛并拓宽来华留学博士研究生的知识面，来华留学博士研究生应广泛参加学术活动，在读期间须参加 10 次及以上校内外学术报告会，填写电子科技大学学术活动登记表，加盖举办学术活动单位的公章，报学院研究生管理办公室备案，全部完成后获得 1 学分。

2）论文开题报告及文献阅读综述 I：指来华留学博士研究生在学位论文开题之前，必须阅读本学科前沿的文献 30 篇以上，并撰写 5000 字左右的文献综述报告，完成相应的开题报告。

3）博士综合考试：修完课程后进行，主要考查来华留学博士研究生有关基础理论和专业知识的综合考试，同时适当检查来华留学博士研究生对所在研究方向及有关领域前沿动态的掌握程度。

（1）来华留学博士研究生一般应于入学一年后参加博士综合考试。博士综合考试未通过者，允许在下一年参加一次补考，补考仍未通过者，不得参加论文答辩，作退学处理。

（2）博士综合考试由学院研究生管理办公室指定三名专家组成的考试委员会负责实施。考试委

员会主席必须由正高级职称的专家担任，考试委员会其他成员必须由副高级及以上职称的专家担任。

（3）博士综合考试采用笔试或口试的方式，以百分制评定成绩。

（4）根据实际情况每年集中举行两次综合考试，时间定在每年的四月和十月。博士综合考试的试题、试卷、口试记录及评语等由学院留学生教务秘书收齐后，与成绩一并报研究生院教学管理科备案保存。

4）汉语水平测试：教育部要求留学研究生在毕业时中文能力应至少达到《国际汉语能力标准》三级水平。来华留学博士研究生在读期间须接受汉语三级水平测评，达到要求者方可申请毕业论文答辩。由电子科技大学国际教育学院进行水平认定。

5）素质教育公选课：以介绍学术前沿知识、中外文化、艺术和体育等为主，加强来华留学博士研究生综合素质教育，须至少获得 1 个学分。

7.学位论文

1．基本要求

方向 1-4 来华留学博士研究生学位论文的选题，应属学科前沿或对科技和社会发展具有重要的理论意义或实用价值。学位申请人应在本学科或者专业领域掌握坚实全面的基础理论和系统深入的专门知识，具有独立从事学术研究工作的能力，在学术研究领域做出创新性的成果。

方向 5-7 来华留学博士研究生学位论文的选题，原则上应与博士生所在国家的政府管理、产业政策或企业管理的实际问题有关，对所在国家的科技和社会发展具有重要的理论意义或实用价值。学位申请人应在本学科或者专业领域掌握坚实全面的基础理论和系统深入的专门知识，具有独立从事学术研究工作或管理工作的能力。

2．来华留学博士研究生应在导师指导下确定选题，并完成学位论文工作。学位论文的撰写按照《电子科技大学研究生学位论文撰写格式规范》执行；学位论文的答辩申请、评阅、答辩与学位授予按照《电子科技大学研究生学位授予实施细则》的规定执行。

3．来华留学博士研究生申请学位创新成果的要求按照《电子科技大学来华留学博士研究生发表论文的要求》执行。