Education Plan for Academic Graduate in Information and Communication Engineering

（Discipline Code:081000,Award Master Degree of Engineering）

I Objectives

The discipline（specialty）aims to train all-round development of senior personnel from morally, intellectually and physically who could comply with Chinese Constitution and laws and Postgraduate Code of Conduct.

1.Those who law-abiding, good character, honest and trustworthy, rigorous style of study, unity and cooperation, with good research ethics and professionalism.

2. Those who have solid foundation theory and have systematic professional knowledge in the field of information and communications engineering could undertake high level teaching ,scientific research, engineering technical work and scientific and technical management.

3. To master a foreign language with capacity to read and write skillfully on their profession.

4. To have a healthy body and good psychological diathesis.

II Disciplinary Research Areas

1.Optical Information Processing, Optical Fiber Sensing Theory and Technology.

2.Information Processing, Intelligent Monitoring and Control Theory and Technology.

3. Communication System Theory and Communication Network Technology.

4. Sensor Network， Theory and Technology of and Information Security.

III Educational System and Years of Study

The education system for full-time academic graduate lasts for 3 years. Learning period is generally 3 years, the longest no more than 5 years. Total credits of graduation are not less than 27 credits, in which the total credits of courses are not less than 22 credits, the degree courses not less than 17 credits, compulsory activities courses not less than 5 credits.

IV Curriculum System and Credit Requirements

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	003281001	First Foreign Language(Chinese)	108	6	1、2	School of Internation Education	Compulsory
	003281002	Introduction to China	54	3	1	School of Internation Education	Compulsory
	01421062	Theory of Matrices	36	2	1	School of Science	

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	01421064	Stochastic Process	36	2	2	School of Science	Compulsory
Professional Degree Courses	00921001	Modern Digital Signal Processing(A)	36	2	1	Schoolof Information Engineering	At least 6 credits
	00921002	Digital Communication (A)	36	2	2	Schoolof Information Engineering	
	00921003	Pattern Recognition	36	2	1	Schoolof Information Engineering	
	00921004	Computer Networks and Communication	36	2	1	Schoolof Information Engineering	
Interdisciplı		Specific courses in the principles	18	1	1-2	Graduate School	At least choose one course
Professional Elective(1)	00922001	The Application of Modern Digital Signal Processing in the Advanced Subject(A)	18	1	1	Schoolof Information Engineering	Mandatory
	00922002	Professional English	18	1	2	Schoolof Information Engineering	
Professional Elective 2	00922003	Statistical Signal Analysis	36	2	2	Schoolof Information Engineering	
	00922004	Modern Detection Technology and Systems	36	2	2	Schoolof Information Engineering	

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	00922005	Networks Analysis and Design	36	2	2	Schoolof Information Engineering	Elective courses not less than5 credits, Optionally 1-2 professional elective course 1-2 credits within the school.
	00922006	New Communication Electronic Circuit Design	36	2	2	Schoolof Information Engineering	
	00922007	Multimedia Communication Networks	36	2	2	Schoolof Information Engineering	
	00922008	Embedded System and Application	36	2	2	Schoolof Information Engineering	
	00922009	Digital Image Processing and Analysis A	36	2	2	Schoolof Information Engineering	
	00922010	All Optical Networks A	36	2	1	Schoolof Information Engineering	
	00922011	Modern Software Engineering	36	2	2	Schoolof Information Engineering	
	00922012	Multi-wavelength Optical Networks	36	2	2	Schoolof Information Engineering	
	00922013	Network Control Technology A	36	2	2	Schoolof Information Engineering	
	00922014		36	2	2		

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
		Information Security Technology A				Schoolof Information Engineering	
	00922015	Fieldbus Technology A	36	2	2	Schoolof Information Engineering	
	00922016	Modern Communications Technology	36	2	2	Schoolof Information Engineering	
	00922017	Broadband Networks Technology	36	2	2	Schoolof Information Engineering	
	00922018	DSP Design and Implementation	36	2	1	Schoolof Information Engineering	
	00922019	voice Signal Processing	36	2	2	Schoolof Information Engineering	
	00922020	Virtual Instruments	36	2	2	Schoolof Information Engineering	
	00922021	Theory and Application of Neural Networks	36	2	2	Schoolof Information Engineering	
	00922022	Data Compression Principle and Application	36	2	2	Schoolof Information Engineering	
	00922023	Optoelectronic Image Processing (A)	36	2	2	School of Information Engineering	

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	00922024	The Technique of Software Testing	36	2	2	School of Information Engineering	
	00922025	Cryptography	36	2	2	School of Information Engineering	
	00922026	Computer Vision	36	2	1	School of Information Engineering	
	00922027	Parallel Computing	36	2	1	School of Information Engineering	
	00922028	Ultra-Wideband Radio Foundation	36	2	2	School of Information Engineering	
	00922029	Cognitive Wireless Network Theory	36	2	2	School of Information Engineering	
	00922030	Plan and Realization of Radio Communication System in Embedded System	36	2	2	School of Information Engineering	
	00922031	SOPC Design of SOPC System	36	2	2	School of Information Engineering	
	00922032	Digital Video Processing	36	2	2	School of Information Engineering	

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	00922033	The Design and Application of Database	36	2	2	School of Information Engineering	
	00922034	Design and Stimulation of High Speed Circuits	36	2	2	School of Information Engineering	
	00922035	Linux Linux Kernel Analysis and Driver Programming	36	2	2	School of Information Engineering	
	00922036	RF Circuit Design	36	2	2	School of Information Engineering	
	00922037	(A) The Design and Analysis of Algorithm	36	2	2	School of Information Engineering	
	00922038	Principles and Application of Laser	36	2	2	School of Information Engineering	
	00922039	Software Radio Technology	36	2	2	School of Information Engineering	
	00922040	Things and Future Networks Technologies	36	2	2	School of Information Engineering	
	00922041	Multi-source Information Processing	36	2	2	School of Information Engineering	
	00922048	The Electronic Circuit Used for Photoelectric Conversion	36	2	2	Fiber center	

Course Category	Course No.	Course Name	Hour	Credit	Semester	School	Remark
	00922050	Laser Advanced Manufacturing Technology	36	2	2	Fiber center	
	00922051	Electronic and Information Devices and Technologies	36	2	2	Fiber center	
	00922052	Fiber Optics	36	2	2	Fiber center	
	00922053	Optic Fiber Sense Technology	36	2	2	Fiber center	
	00922049	Fiber Optic Communications	36	2	2	Fiber center	
Interdisciplinary	02223001	Taijiquan and its	18	1	1	Department of Physical Education	
Compulsory Activities	00924004	Field Practice		3	1-6	School of Information Engineering	At least 5 credits
	00924002	Thesis Proposal		1	3-4		
	00924003	Academic Activities	5	1	1-6		