

通信工程

一、培养目标

依据“工程教育认证标准”制定培养方案,培养具有良好的人文、科学及工程素养,具有较扎实的数理基础,系统掌握通信工程的基础知识、具备较坚实的理论基础,获得通信工程专业良好的科学思维和系统的工程训练;熟练掌握信息电子学的基础理论与方法和集成电路设计、计算机硬件、软件开发的基本技术;熟练掌握通信系统设计技术及信号与信息处理技术;能在信息技术产业、科研部门、高等院校及其相关领域从事通信工程的研究、设计、开发及管理等工作的人才。

二、基本规格要求

通信工程专业本科毕业生应具有如下基本素质:

1. 工程知识:能够将数学、自然科学、工程基础和通信工程专业专业知识用于解决复杂工程问题。
2. 问题分析:能够应用数学、自然科学与工程科学的基本原理,定义与分析复杂通信领域的复杂工程问题,搜索相关文献,以获得有意义的结论。
3. 设计/开发解决方案:能够设计通信领域中复杂工程问题的解决方案,设计满足特定需求的系统、部件或过程,并能够适当考虑公共健康、安全、文化、社会以及环境等因素。
4. 研究:能够设计针对通信系统复杂工程问题的解决方案,设计满足特定需求的计算机系统、单元(部件)或工艺流程,并能够在设计环节中体现创新意识,考虑社会、健康、安全、法律、文化以及环境等因素。
5. 使用现代工具:能够基于科学原理并采用科学方法对通信系统复杂工程问题进行研究,包括设计实验、分析与解释数据,并通过信息综合得到合理有效的结论。
6. 工程与社会:能够基于工程相关背景知识进行合理分析,评价通信专业工程实践和通信系统复杂工程问题解决方案对社会、健康、安全、法律以及文化的影响,并理解应承担的责任。
7. 环境与可持续发展:能够理解和评价针对通信系统复杂工程问题的工程实践对环境、社会可持续发展的影响。
8. 职业规范:具有人文社会科学素养、社会责任感,能够在通信系统工程实践中理解并遵守工程职业道德和规范,履行责任。
9. 个人和团队:能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色。
10. 沟通:能够就通信系统复杂工程问题与业界同行及社会公众进行有效沟通和交流,包括撰写报告和 design 文稿、陈述发言、清晰表达或回应指令。并具备一定的国际视野,能够在跨文化背景下进行沟通和交流。
11. 项目管理:理解并掌握工程管理原理与经济决策方法,并能在多学科环境中应用。
12. 终身学习:具有自主学习和终身学习的意识,有不断学习和适应发展的能力。

三、培养特色

本专业在教育部本科专业目录中属于电子信息类专业,培养方案以电子信息类专业工程教育认证要求为准则,结合本校实际制定;注重学科专业基础知识与专业技能,突出电波传输、集成电路设计、信号处理、通信系统与通信网络等相关特色方向。

四、学制、毕业基本要求及学位授予

1. 本科基本学制 4 年，弹性学习年限 3—6 年，按照学分制度管理。
2. 通信工程专业学生毕业最低学分数为 165 学分，其中各类别课程及环节要求学分数如下表：

课程类别	通识必修	学门核心	学类核心	专业核心	专业选修	通识选修	集中实践	合计
学分数	24	24	23	28	27	8	31	165

3. 学生修满培养方案规定的必修课、选修课及有关环节，达到规定的最低毕业学分数，并修完规定必修但不记学分的所有课程和环节，德、智、体合格，即可毕业。满足学位授予相关文件要求的，授予工学学士学位。

五、课程设置及学分布

(一) 通识教育课程〔必修 24+ (6) 学分+选修 8 学分〕

通识教育课程包括必修和选修两部分。通识选修课程按《湖南大学通识选修（文化素质教育）课程方案》实施，通识必修课程如下：

编码	课程名称	学分	备注
GE01101	毛泽东思想和中国特色社会主义理论体系概论	3+ (3)	
GE01039	思想道德修养与法律基础	1.5+ (1.5)	
GE01100	形势与政策	0.5+ (1.5)	
GE01102	中国近现代史纲要	2	
GE01103	马克思主义基本原理 (上)	2	
GE01104	马克思主义基本原理 (下)	2	
GE01012 (-15)	大学英语	8	
GE01107 (-13)	心理素质与生涯发展	1	
GE01089 (-92)	体育	4	

(二) 学门核心课程 (24 学分)

编码	课程名称	学分	备注
GE03025	高等数学 A (1)	5	
GE03026	高等数学 A (2)	5	
GE03003	线性代数 A	3	
GE03004	概率论与数理统计 A	3	
GE03005	普通物理 A (1)	3	
GE03006	普通物理 A (2)	3	
GE03007	普通物理实验 A (1)	1	
GE03008	普通物理实验 A (2)	1	

(三) 学类核心课程 (23 学分)

编码	课程名称	学分	备注
CS04022	高等程序设计	4	
CS04027	应用统计与随机过程	4	
EI04017	数字逻辑	4	
CS04002	数据结构	4	
CS04028	计算机组成与设计	4	
CS04021	程序设计实验	2	
CS04024	数字系统实验	1	

(四) 专业核心课程 (28 学分)

编码	课程名称	学分	备注
EI04022	信号与系统 (含信号处理实验)	4	
EI05025	电路分析	4	
EI05005	通信原理 (含通信原理实验)	4	
EI05026	计算机通信与网络	4	
EI05027	信息与通信中的数学基础	4	
EI05028	电磁场与电磁波 (含电磁场与电磁波实验)	4	
EI05029	电子线路 (含电子线路实验)	4	

(五) 专业选修课程 (27 学分)**(1) 专业限选课 (12 学分)**

本专业学生必须从下列课程中选修 4 门, 以强化专业基础, 总计 12 学分。

编码	课程名称	学分	备注
EI06100	数字信号处理 (含信号处理实验)	3	
EI06101	信息论与编码	3	
EI06102	网络交换与路由	3	
EI05017	通信电路 (含通信电路实验)	3	
EI05016	无线通信原理 (含无线通信原理实验)	3	
EI06103	移动通信 (含移动通信实验)	3	

(2) 专业选修课程任选修 5 门课程, 总计 15 学分, 课程及分组如下:

编码	课程名称	学分	备注
EI06104	现代通信光电子学	3	通信电波组
EI06105	电磁兼容原理与应用	3	
EI06106	微波与天线原理	3	
EI06107	微波通信技术	3	
EI06108	集成电路设计	3	通信电路与电子组
EI06109	模拟集成电路分析与设计	3	
EI06110	射频集成电路设计	3	
EI06111	时频信号分析	3	信号处理组
EI06112	基于 DSP 的实时信号处理	3	
EI06113	检测估计与系统仿真	3	
EI06114	随机过程与排队论	3	
EI06045	数字图像处理	3	通信系统组
EI06115	现代通信新技术	3	
EI06037	光纤通信原理	3	
CS06027	多媒体通信	3	通信网络组
EI06116	计算机通信网	3	
EI06117	现代数字通信系统	3	
EI06118	计算机通信网络	3	
EI06119	光网络与光交换技术	3	

注: 1) 鼓励学生自主选修本专业或跨专业选修类课程, 学分不少于应选学分的 50%。

2) 在读期间参加学科竞赛或公开发表学术论文等经学院认定 (详见《湖南大学信息科学与工程学院学术研究成果分类指导意见和技术创新成果指导意见》) 可以申请替代选修 2 学分。

(六) 集中实践环节 (31 学分)

课程编码	课程名称	学分	备注
GE01040	军训、军事与国防 (含军事理论)	0	
CS10018	入学教育与专业入门	0	
GE09030	中文写作实训	1	一年级夏季学期
GE09028	程序设计训练	1	
CS10019	电子系统设计 (含数字系统设计)	2	二年级夏季学期
CS10020	软件设计	2	
CS10021 (22)	专业综合设计	4	三年级夏季学期
CS10023	毕业实习	2	第 8 学期
CS10024	交换机与路由器实验	2	
CS10025	电路实验	2	特色实践课程
CS10026	毕业设计 (含导师课程)	14	包含 2 个学分的导师课程。导师课程是“导师制”的具体任务,本课程须是以项目驱动、“CDIO”模式、讨论方式教学,每岗每届指导学生共 3—6 人。课程内容包含:本科生学业指导、一年级与二年级学生夏季学期设计课程监管、三年级学生夏季学期设计课程指导、四年级本科生毕业实习与毕业设计指导。

六、课程责任教师一览表

序号	姓名	职称	学历学位	专业特长	课程 (专业核心、专业选修、通识选修)
1	王春华	教授	博士	集成电路设计	电子线路
2	康志伟	教授	博士	信号处理	信号与系统、时频信号分析
3	何松华	教授	博士	信号与信息处理	应用统计与随机过程
4	陈林	教授	博士	光纤通信与无线通信	通信原理
5	傅喜泉	教授	博士	光通信技术	通信工程中的数学基础
6	杨高波	教授	博士	视频信号处理、多媒体通信	信息论与编码、数字图像处理
7	何海珍	副教授	硕士	通信电路与系统	数字电路与逻辑设计、数字系统设计
8	何选森	副教授	硕士	信号与信息处理	应用统计与随机过程
9	余小游	副教授	博士	深空通信网	通信原理
10	杜四春	副教授	博士	通信电子	电子线路、模拟集成电路分析与设计
11	张汗灵	副教授	博士	图像处理	数字信号处理
12	李涛	副教授	博士	通信电子	数字电路与逻辑设计、数字系统设计
13	曾凡仔	副教授	博士	认知无线网络	数字信号处理、DSP 应用编程
14	伍仁勇	副教授	博士	传感器网络、车载网络	计算机网络
15	杨华	副教授	博士	中红外激光技术	电路分析
16	舒维星	副教授	博士	光器件	通信中的数学基础、电磁计算软件应用
17	唐志祥	副教授	博士	光器件	电磁场与电磁波、天线理论与设计
18	罗志年	副教授	博士	移动通信关键技术	移动通信、现代数字通信
19	白艳峰	副教授	博士	光通信	电磁场与电磁波
20	何晶	副教授	博士	光通信、计算机网络	无线通信原理、光纤通信原理
21	吴建辉	讲师	博士	通信电子	电路分析
22	陈华	讲师	硕士	多媒体通信	数字电路与逻辑设计
23	孙晶茹	讲师	硕士	通信电子	通信电路

续表

序号	姓名	职称	学历学位	专业特长	课程 (专业核心、专业选修、通识选修)
24	胡红平	讲师	硕士	多媒体通信	信号与系统、基于 DSP 的实时信号处理
25	肖 竹	讲师	博士	通信网络	信息论与编码、现代通信新技术
26	杜青松	讲师	博士	通信网络	无线通信原理、无线通信系统设计
27	陈巍巍	讲师	博士	计算机网络	计算机网络、无线通信网络
28	李谢华	讲师	博士	无线通信、网络安全	网络交换与路由、计算机通信网络
29	曹子峥	讲师	博士	光通信	网络交换与路由、光网络与光交换技术

七、专业责任教授

序号	姓名	职称	学历学位	专业特长	承担授课课程
1	王春华	教授	博士	集成电路设计	集成电路设计, 电子线路

Communication Engineering

I . Objects

On the basis of “Engineering Education Certification Standards”, our target is to culture undergraduate students with the good qualities on humanity, science and engineering, as well as solid mathematical foundation on the areas of computer, information, and communication sciences to support their researches. We demand the students should have solid theoretical knowledge on their majors, scientific ways of thinking, and technologies of engineering practice, that prompt them to make engineering innovations on their areas. Moreover, the students should have the abilities to solve complex engineering problems by using their professional knowledge and engineering technology. Also, they need to understand the process of project implementation and the cooperation ways among partners from multiple disciplines so that they can in charge of projects by themselves. Finally, we need the students to master at least one foreign language, have an international vision, and know the international forefront on the field of the Communication Engineering, that will help them to make a cooperation with international partners.

II . Basic Requirements

The undergraduate students of Communication Engineering should have the following qualities and abilities:

1. **Engineering Knowledge:** The students need to have the knowledge from mathematics, natural science and engineering, and Communication Engineering to solve complex engineering problems in communication systems.

2. **Problem Analysis:** The students need to have the abilities to make use of basic principles from mathematics, natural and engineering science to recognize, define and analyze complex engineering problems in communication systems with searching relevant literature, and finally make a reasonable conclusion.

3. **Design and Development:** The students need to have the abilities to give solutions for complex engineering problems from communication systems, and design a system, component or process to meet the specific requirements, and be able to reflect the innovation consciousness in the design process, considering the social, health, safety, law, culture, environment and other factors.

4. **Research:** The students should have such abilities to research complex engineering problems in communication systems based on science principles and scientific methods, as experiment designs, analysis and data interpretation and observation of reasonable conclusions.

5. **Utilize Modern Appliances:** The students should fully utilize appropriate techniques and tools to study and simulate the complex engineering issues under communication systems. During complex activities in communication systems, the students can develop the proper technology, or make use of the existing resources and methods to solve problems, and also understand the limitations of these approaches.

6. **Engineering and Sociality:** The students have reasonable thinking of engineering-related envi-

ronmental information, and can make a fair evaluation about engineering practice on its responsibility and many other factors involved in the areas of sociality, health, safety, law, and culture etc.

7. **Social and Environmental Integration:** The students have relevant knowledge to understand professional engineering solutions and their influences on society and environment, as well as the necessity on sustainable development.

8. **Professional Norm:** The students are encouraged to enrich the quality of humanity and social sciences, to enhance the social responsibility. In addition, the students should understand and obey the professional ethic and standard.

9. **Personal and Teamwork:** The students should have the ability to cooperate with team members from different education background and act as different roles.

10. **Communication:** The students need to have the abilities to effectively communicate and exchange with industry peers and the public about complex engineering in communication systems, including report writing and design document, statement, clear expression or to respond to commands. And have a certain international perspective, can communicate and exchange in the cross-cultural context.

11. **Project Management:** The students are encouraged to understand and master the engineering management principle and economic decision-making method, and can be applied in many subjects environment.

12. **Life-long Learning:** The students should have the ability of self-learning and accept the idea of life-long learning.

III. Program Traits

This major belongs to the communication Engineering major in the undergraduate major directory from the Ministry of Education. The cultivation program is formulated according to the criterion of professional communication and engineering requirements as well as considering the actual environments of our school. We demand our students have a core foundation on the knowledge from communication, network and computer majors, emphasize their engineering practices on the communication engineering, and train their abilities on scientific researches and technological innovations. We also strengthen the interdisciplinary and international exchange, and highlight some research directions such as circuit analysis, information processing, communication network and system, electric field and wave and so on.

IV. Length of Schooling, Basic Requirements for Graduation, and Degree Conferment

1. The length of schooling for undergraduate studies is four years, with a flexible length lasting from 3 to 6 years, based on the regulation of credit system.

2. Students of Communication Engineering majors are expected to complete a minimum of 165 credits upon graduation, and the required credits for different courses are illustrated in the following table.

Course Category	Required General Education Courses	Introductory Major Courses	Major Survey Courses	Required Core Courses	Restricted Electives	General Education Electives	Intensive Practice	Total
Credits	24	24	23	28	27	8	31	165

3. A student can graduate if he/she fulfills the course study of core courses, electives, and other courses as specified in the program, and satisfies the basic requirements on morality, intelligence, and health. We will confer the Bachelor Degree of Engineering on students if they satisfy the requirements of degree according to the related policies.

V. Curriculum and Credits

1. General Education Courses [required 24+(6) + elective 8 credits]

The general education courses consist of required courses and elective courses. General education electives are designed according to the *Curriculum Design of General Education Electives of Hunan University*. Required general education courses are illustrated in the following table.

Code	Course Title	Credit(s)	Remarks
GE01101	Introduction to Maoism and Theoretical System of Socialism with Chinese Characteristics	3+(3)	
GE01039	Moral Cultivation and Law Basics	1.5+ (1.5)	
GE01100	Current Situation and Policies	0.5+ (1.5)	
GE01102	Outline of Modern Chinese History	2	
GE01103	Fundamentals of Marxism I	2	
GE01104	Fundamentals of Marxism II	2	
GE01012(-15)	College English	8	
GE01107(-13)	Psychological Health & Career Planning	1	
GE01089(-92)	Physical Education	4	

2. Introductory Major Courses(24credits, 8 courses)

Code	Course Title	Credit(s)	Remarks
GE03025	Advanced Mathematics A(I)	5	
GE03026	Advanced Mathematics A (II)	5	
GE03003	Linear Algebra A	3	
GE03004	Probability Theory and Mathematical Statistics A	3	
GE03005	College Physics A(I)	3	
GE03006	College Physics A(II)	3	
GE03007	College Physics Experiments A(I)	1	
GE03008	College Physics Experiments A(II)	1	

3. Core courses; domain (23 credits, 7 courses)

Code	Course Title	Credit(s)	Remarks
CS04022	Advance Programming	4	
CS04027	Computer Components and Structure	4	
EI04017	Applied Statistics and Stochastic Process	4	
CS04002	Digital Logic	4	
CS04028	Data Structure	4	
CS04021	Programming Experiments	2	
CS04024	Digital System Design Experiments	1	

4. Core courses; discipline (28 credits, 7courses)

Code	Course Title	Credit(s)	Remarks
EI04022	Signal and System (Signal Processing Experiments included)	4	
EI05025	Circuit Analysis	4	
EI05005	Communication Principles(Experiments Included)	4	
EI05026	Computer Communication and Networks	4	
EI05027	Mathematics in Communication and Information	4	
EI05028	Electromagnetic Field and Wave(Experiments Included)	4	
EI05029	Electronic Circuit(Experiments Included)	4	

5. Electives: major (27 credits)

(1) Major restricted electives (12 credits)

In order to strengthen the knowledge base, students in the intelligence science and technology major are required to take these electives, for a total of 12 credits.

Code	Course Name	Credit(s)	Remarks
EI06100	Digital Signal Processing(Experiments Included)	3	
EI06101	Information Theory and Coding	3	
EI06102	Networks Exchange and Routing	3	
EI05017	Communication Circuits(Experiments Included)	3	
EI05016	Wireless Communication Principles(Experiments Included)	3	
EI06103	Mobile Communication (Experiments Included)	3	

(2) Major non-restricted electives (15 credits)

Major non-restricted electives are implemented as groups. Students of communication engineering major should take all the courses in one group and The rest from other groups or even from other majors, with a total of five (5) non-restricted electives and 15 credits at least. These selection strategies will help students cultivate their abilities in professional systems and expand their professional knowledge and skills. The non-restricted electives and their groups are listed in the following table:

Code	Course Name	Credit(s)	Remarks
EI06104	Optical Electronics in Modern Communications	3	Electricwave transmission group
EI06105	Electromagnetic Compatibility Principles and Application	3	
EI06106	Microwave and Antenna	3	
EI06107	Microwave Communication Technology	3	
EI06108	Design of Integerated Circuit	3	Communication circuit and electronics group
EI06109	Design of Analog Integerated Circuit	3	
EI06110	Design of Radio-frequency Integerated Circuit	3	
EI06111	Time-frequency Analysis	3	Information processing group
EI06112	Real-time Signal Processing Using DSP	3	
EI06113	Signal Detection and System Simulation	3	
EI06114	Stochastic Process and Queuing Theory	3	
EI06045	Digital Image Processing	3	communication system group
EI06115	Modern Communication Technology	3	
EI06037	Optical Communication Principles	3	
CS06027	Multimedia Communication	3	Communication networks group
EI06116	Computer Communication Network	3	
EI06117	Modern Digital Communication	3	
EI06118	Computer Communications and Networking	3	
EI06119	Optical Network and Exchange	3	

Note: 1) Students are encouraged to sign up for elective within and across their majors, with the credit hours no less than 50% of the total required credit hours.

2) Students who take part in computer competitions or publish technical papers can apply to substitute two selective credit hours (see instructions of academic research and techniques invocation of the college of computer science and electronic engineering, hunan university).

6. Collective training (31 credits)

Code	Course Name	Credit(s)	Remarks
GE01040	Military training, Military Affairs and National Defense (including Military Theory)	0	
CS10018	University and Major Introduction	0	
GE09030	Practices for Chinese Writing	1	Summer semester of the first year of study
GE09001	Practices for Programming	2	
CS10019	Practices for Digital Systems Design	2	Summer semester of the second year of study
CS10020	Practices for Software Design	2	
CS10021(22)	Major Specific Integrated Design	4	Summer semester of the third year of study
CS10023	Internship for Graduation Project	2	Spring semester of the fourth year of study
CS10024	Networks Exchanges and Routing	2	
CS10025	Circuit Analysis Experiments	2	
CS10026	Graduation Project(including Mentor Courses)	14	Mentor courses (2 credits) are included. Mentor courses are the tasks of the mentor system. These courses are project-driven with "CDIO" model, and are taught by discussions. Every mentor takes charge of 3—6 students of each class year. The course contents include: academic guidance for undergraduate students, monitoring on summer semester design courses for first and second year undergraduate students, mentoring on summer semester design courses for third year undergraduate students, mentoring on graduation project and internship for fourth (final) year undergraduate students.

VI. Course Instructor List

No.	Name	Academic Title	Educational Background	Research Areas	Courses(Disciplinary Core Courses;Disciplinary Electives; General Electives)
1	Wang Chuanhua	Professor	Ph. D	Integrated Circuit Design	Digital Circuit
2	Kang Zhiwei	Professor	Ph. D	Signal Processing	Signal and System; Time and Frequency analysis
3	He Songhua	Professor	Ph. D	Signal and Information Processing	Applied Statistics and Stochastic Process

Cont

No.	Name	Academic Title	Educational Background	Research Areas	Courses(Disciplinary Core Courses;Disciplinary Electives; General Electives)
4	Chen Lin	Professor	Ph. D	Optical Communication and-Wireless Communication	Communication Principles
5	Fu Xiquan	Professor	Ph. D	Fiber-optic Communication Technology;	Mathematics in Communication and Information
6	Yang Gaobo	Professor	Ph. D	Video Signal Processing; Multi-media Communication	Information Theory and Coding Foundations; Digital Image Processing
7	He Haizhen	Associate Professor	M. S.	Communication Circuit and System	Digital Logic; Digital System Design
8	He Xuansen	Associate Professor	M. S.	Signal and Information Processing	Applied Statistics and Stochastic Process
9	Yu Xiaoyou	Associate Professor	Ph. D	Deep Space Communication Network	Communication Principles
10	Du Sichun	Associate Professor	Ph. D	Communication Electronic	Digital Circuit
11	Zhang Hanling	Associate Professor	Ph. D	Information processing	Digital Signal Processing
12	Li Tao	Associate Professor	Ph. D	Communication Electron	Digital Logic; Digital System Design
13	Zeng Fanzai	Associate Professor	Ph. D	Wireless Network,	Digital Signal Processing; DSP programming
14	Wu Renyong	Associate Professor	Ph. D	Sensor Network; In-vehicle Network	Computer Network
15	Yang Hua	Associate Professor	Ph. D	Mid-infrared Laser Technology	Basics of Circuit Analysis
16	Shu Weixing	Associate Professor	Ph. D	Micro-nano Electronic Devices	Mathematics in Communication and Information; Application of Electromagnetic Computation
17	Tang Zhixiang	Associate Professor	Ph. D	Micro-nano Photonic Devices	Electromagnetic Field and Wave; Antenna Design and Theory
18	Luo Zhinian	Associate Professor	Ph. D	Mobile Communication Key Technology	Mobile communication; Modern Digital Communication
19	Bai Yanfeng	Associate Professor	Ph. D	Fiber-optic Technology	Electromagnetic Field and Wave
20	He Jing	Associate Professor	Ph. D	Optical Communication; Computer Network	Wireless Communication Theory; Principle of Optical Communication
21	Wu Jianhui	Lecturer	Ph. D	Communication Electronic	Basics of Circuit;
22	Chen Hua	Lecturer	Ph. D	Multi-media Communication	Digital logic
23	Sun Jingru	Lecturer	Ph. D	Communication Electronic	Communication Circuit
24	Hu Hongping	Lecturer	M. S.	Multi-media Communication	Signal and System; DSP Technology and Application

Cont

No.	Name	Academic Title	Educational Background	Research Areas	Courses(Disciplinary Core Courses;Disciplinary Electives; General Electives)
25	Xiao Zhu	Lecturer	Ph. D	Communication Network	Information Theory and Coding Foundations; Modern Communication Technology
26	Du Qionsong	Lecturer	M. S.	Communication Network	Wireless Communication Theory; Wireless communication system Design
27	Chen Weiwei	Lecturer	Ph. D	Computer Networks	Computer networks; Wireless communication Networks
28	Li Xiehua	Lecturer	Ph. D	Wireless Communication; Network Security	Network exchange and routing; Computer networks
29	Cao Zizheng	Lecturer	Ph. D	Optical Communication	Network exchange and routing; Optical network and routing

VII. Course Scheduler

No.	Name	Academic Title	Educational Background	Research Areas	Courses
1	Wang Chunhua	Professor	Ph. D	Integrated Circuit Design	Digital Circuit; Integrated Circuit Design

(翻译人:曾凡仔)