通信工程专业本科培养计划

Bachelor degree of Engineering (BEng) in Telecommunications Engineering

一、培养目标

I. Program Objectives

本专业将培养德、智、体全面发展,具有通信工程领域系统、扎实的理论基础,具有工程实践和创新能力的高素质科技人才。

本专业的毕业生将掌握信息科学领域内基础理论知识,获得从信息获取、传递、处理到应用等各方面的基本专业知识,掌握现代通信系统、通信网络的基本原理和技术,具有较强的参与设计、开发通信系统的工程实践能力。毕业生将具有较强的专业英语能力、良好的人文素质和创新精神,成为能在信息和通信技术产业的科研部门、高等院校从事通信系统与工程的设计、集成及开发等工作的研究型或应用型人才。

This program is designed to produce fully-developed engineers in morality, intelligence and heath that are trained to develop the fundamental theories and skills, a consolidated knowledge structure, and to be enhanced with hands-on engineering experiences and innovative initiatives in telecommunications engineering.

The graduates in this program are required to develop the systems and technologies which drive the information age, from acquiring information, transmission, processing to application. They are required to master the basic theories and skills in modern communication systems and communication networks. They are able to participate in the design and development of various communication and information systems. The graduates are equipped with strong profession English in communication engineering, good personality and innovative initiatives. They are qualified to design, integrate and develop communication systems and technologies in information and communications industries, research institutes, universities and other related communities.

二、基本规格要求

II. Highlights

毕业生应获得以下几个方面的知识和能力:

- 1. 具有较扎实的数理基础,具有较强的英语语言能力;
- 2. 掌握文献检索和撰写科技论文的方法,了解信息学科的发展动态和理论前沿;
- 3. 理解信息科学的基本理论和方法,具有研究实际问题的能力
- 4. 掌握通信系统、通信网络的原理与技术,具有参与设计和开发的实践能力;
- 5. 具有较好的人文社科知识和人文素质;
- 6. 具有较强的团队合作和科技创新精神。

Students are expected to acquire the following knowledge or skills:

- 1. Consolidated background in both mathematics and physics and strong English capabilities;
- 2. Skills in searching literatures and writing technical report, and familiar with the development trends in the information discipline and research frontiers;
- 3. Understanding of basic theories and methods in information science, and research capabilities of real engineering problems;
- 4. Mastering principles and technologies in communication systems and networks, and participate in the design and development of information systems;
 - 5. Sound knowledge in humanities-and-art and good personality;
 - 6. Cooperative attitude as a team player and strong innovative initiatives.

三、培养特色

III. Program Features

本专业将以通信系统、通信网络、多媒体通信等信息系统的设计与应用为方向,着重培养学生在电子技术、通信系统等方面的理论基础,培养学生参与多种通信系统的设计与开发的工程实践和创新能力。修完本专业课程后,学生也可选择攻读电子科学、通信工程、计算机科学、自动化、光电信息等领域的研究生。

This program focuses on the design and applications of information systems in communication systems, communication networks and multimedia communications. Students are required to construct solid and broad theoretical background in electronics and communications, and they are enhanced with the hands—on engineering experiences and innovative initiatives in the design and development of multiple information systems. Upon graduation, graduates may choose to continue their study at the postgraduate level in electronic science, communication engineering, computer science, automation, optical—electronic and related areas.

四、主干学科

IV. Major Discipline

信息与通信工程

Information and Communication Engineering

五、学制与学位

V. Program Length and Degree

学制: 四年制

Program Length: Four years

授予学位:工学学士

Degrees Conferred: Bachelor of Engineering

六、学时与学分

VI. Hours/Credits

完成学业最低课内学分(含课程体系与集中性实践教学环节)要求: 159.5

Minimum Credits of Curriculum (including courses and intensive practical training/internship): 159.5

完成学业最低课外学分要求: 5

Minimum Extracurricular Credits: 5

1. 课程体系学时与学分

Hours/Credits of the Curriculum

	课程类别	课程性质	学时/学分	占课程体系学分比例(%)
48	通识教育基础课程	必修	1080/61.5	43.1
	也以我自圣仙床住	选修	160/10	6.4
学科基础	学科大类基础课程	必修	552/31.5	22.0
课程	学科专业基础课程	必修	520/31.5	20.8
专业	公共专业选修课程	选修	64/4	2.6
课程	专业方向课程	选修	128/8	5.2
	合计		2504/146.5	100

	Course Classified	Course Nature	Hrs/Crs	Percentage (%)
D	sic Courses in General Education	Required	1080/61.5	43.1
Da	sic Courses in General Education	Elective	160/10	6.4
Basic Courses	Basic Courses in General Discipline	Required	552/31.5	22.0
in Discipline	Common Major Courses	Required	520/31.5	20.8

Courses in	Common Elective Courses	Elective	64/4	2.6
Major	Elective Major Courses	Elective	128/8	5.2
	Total		2504/146.5	100

2. 集中性实践教学环节周数与学分

Weeks/Credits of Intensive Practical Training and Internship

实践教学环节名称	课程性质	周数/学分	占实践教学环节学分比例(%)
军事训练	必修	2/1	7.7
电工实习	必修	2/1	7.7
生产实习(社会实践)	必修	2/1	7.7
软件课程设计	必修	2/1	7.7
硬件课程设计	必修	2/1	7.7
毕业设计	必修	16/8	61.5
合计		26/13	100

Internship & Practical Training	Course Nature	Weeks/Credits	Percentage (%)
Military Training	Required	2/1	7.7
Electrical Engineering Practice	Required	2/1	7.7
Engineering Internship (Social Practice)	Required	2/1	7.7
Course Project of Software	Required	2/1	7.7
Course Project of Hardware	Required	2/1	7.7
Undergraduate Thesis	Required	16/13	61.5
Total		26/13	100

3. 课外学分

Extracurricular Credits

序号	课外活动名称	课外活动和社会实践		课外学分
		提交社会调查报告,通过答辩者		1
1	社会实践活动	个人被校团委或团省委评为社会实践活	动积极分子者,集体被校团	2
		委或团省委评为优秀社会实践队者		2
		全国大学英语六级考试	考试成绩达到学校要求者	2
		全国计算机等级考试	获二级以上证书者	2
2	英语及计算机考试		获程序员证书者	2
		全国计算机软件资格、水平考试	获高级程序员证书者	3
			获系统分析员证书者	4
			获一等奖者	3
		校级	获二等奖者	2
			获三等奖者	1
			获一等奖者	4
3	竞赛	省级	获二等奖者	3
			获三等奖者	2
			获一等奖者	6
		全国	获二等奖者	4
			获三等奖者	3
4	论文	在全国性刊物发表论文	每篇论文	2~3
5	科研	视参与科研项目时间与科研能力	每项	1~3
6	实验	视创新情况	每项	1~3

注:参加校体育运动会获第一名、第二名者与校级一等奖等同,获第三名至第五名者与校级二等奖等同,获第六至第八名者与 校级三等奖等同。

No.	Extracurricular Activities and	Requirements	Extracurricular Credits	

华中科技大学本科专业人才培养计划

	Social Practice								
		Submit social practice report a	nd pass oral defense	1					
1	Activities of Social Practice	Entitled as the Activist by the Communithe Hubei Province; Membership of the group which is entitled Group by the Communist Youth Leagurous Province	d as Excellent Social Practice	2					
		CET-6	Students whose Band-6 exam scores passed university requirements	2					
	Examinations in	National Computer Rank Examination	Holder of the Certificate of Band-2 or higher	2					
2	English and Computer		Holder of the Certificate of programmer	2					
		National Computer Software Qualification							
			Holder of the Certificate of System Analyst	4					
			First prize winner	3					
		University Level	Second prize winner	2					
			Third prize winner	1					
			First prize winner	4					
3	Competitions	Provincial Level	Second prize winner	3					
			Third prize winner	2					
			First prize winner	6					
		National Level	Second prize winner	4					
			Third prize winner	3					
4	Research papers	Published in national journals	Per paper	2~3					
5	Scientific Research	Determined based on both the time and research capability demonstrated in research project	Each item	1~3					
6	Experiments	Determined based on innovation output	Each item	1~3					

Note: In HUST Sports Meets, number 1^{\sim} 2 is equivalent to the first prize winner of the university-level games; number $3^{\sim}5$ is equivalent to the second prize winner of the university-level games; and number $6^{\sim}8$ is equivalent to the third prize winner of the university-level games when the extracurricular credits are calculated.

七、主要课程

VII. Main Courses in Major

电路理论 Circuit Theory、模拟电子技术 Analog Electronics、数字电路与逻辑设计(一)Digital Circuit and Logic Design (I)、信号与线性系统 Signal and Linear System、数字信号处理 Digital Signal Processing、通信原理 Principles of Communications、通信电子线路 Electronic Circuits of Communications、基础信息论 Fundamentals of Information Theory、随机过程 Stochastic Process、电磁场与电磁波 Electromagnetic Field and Wave、数据结构 Data Structure、微机原理 Principles of Microcomputer

八、主要实践教学环节(含专业实验)

WII. Main Internship and Practical Training (Including major-oriented experiments)

电子线路设计•测试•实验 Electronic Circuit Design, Test and Experiments、微机原理实验 Experiment of Microcomputer Principles、软件课程设计 Course Project of Software、硬件课程设计 Course Project of Hardware

九、教学进程计划表

IX. Program Schedule

院(系): 电子与信息工程系

专业:通信工程

School (Department): Department of Electronics and Information Engineering

Major: Telecommunications Engineering

3011001	(Departm	najor:	or: Telecommunications Engineering														
课程 类别 Course	课程 性质	课程 代码	课程名称	学时/ 学分	Ir	其中 ncludir		各学期学时 Hours Distribution in a Semester									
Classificat	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	— 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th		八 8th		
	必 修 Required	0301901	思想道德修养与法律基础 Morals & Ethics & Fundamentals of Laws	40/2.5	8			32									
	必 修 Required	0100721	中国近现代史纲要 An Outline of Modern Chinese History	32/2	8				24								
	必 修 Required	0100881	马克思主义基本原理 Basic Theory of Marxism	40/2.5	8					32							
诵	必修 Required	0100931	思政课社会实践 Social Practice of Ideological and Political Theories	24/1.5	20				4								
通识教育基础课程	必 修 Required	0100321	毛泽东思想和中国特色社会主义理论体 系概论 General Introduction to Mao Zedong's Thoughts and Socialist Theory with Chinese Characteristics	56/3.5							56						
程 Gene	必 修 Required	0100741	形势与政策 Contemporary Affairs and Policies	32/2	14			3	3	3	3	3	3				
eral Edu	必 修 Required	0510071	中国语文 Chinese	32/2	10			22									
General Education Courses	必 修 Required	0500015	综合英语(一) College English (I)	56/3.5				56									
Courses	必 修 Required	0500017	综合英语(二) College English (Ⅱ)	56/3.5					56								
	选 修 Elective	0500019	基础英语(三) College English (Ⅲ)	32/2						32							
	选 修 Elective	0503019	基础英语(四) College English (IV)	32/2							32						
	必 修 Required	0400111	大学体育(一) Physical Education(I)	32/1				32									
	必 修 Required	0400121	大学体育(二) Physical Education (II)	32/1					32								
General Fducation	必 修 Required	0400131	大学体育(三) Physical Education (III)	32/1						32							
General Gartion	必 修 Required	0400141	大学体育(四) Physical Education (IV)	32/1							32						

课程类别	课程性质	课程 代码	课程名称	学时/ 学分		其中 cludin	g			Hou	学其 s Di a Se	strib	ution		
Course Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	— 1st	二 2nd	三 3rd		五 5th	六 6th	七 7th	
	必 修 Required	1200011	军事理论 Military Theory	16/1				16							
	必 修 Required	0700011	微积分(一)上 Calculus(I)	80/5				80							
	必 修 Required	0700012	微积分(一)下 Calculus(II)	80/5					80						
	必 修 Required	10700031	大学物理(一) Physics(I)	64/4					64						
	必 修 Required	0700032	大学物理(二) Physics (II)	64/4						64					
	必 修 Required	0700041	物理实验(一) Physical Experiments(Ⅰ)	32/1		32			32						
	必 修 Required		物理实验(二) Physical Experiments (Ⅱ)	32/1		32				32					
	必 修 Required	10700051	线性代数 (一) Linear Algebra (I)	40/2.5					40						
	必 修 Required		复变函数与积分变换 Complex Functions and Integral	40/2.5						40					
	必 修 Required	0700063	Transforms 概率论与数理统计 (三) Probability and Mathematics Statistics(Ⅲ)	40/2.5						40					
	必 修 Required		数理方程与特殊函数 (一) Mathematics Physics Equations and Functions	40/2.5							40				
	选 修 Required	0800171	大学计算机基础 Fundamentals of Computer Technology	32/2			12	32							
	必 修 Required	0810011	C 语言程序设计 Advanced Programming Language (C++)	56/3.5			20		56						
			人文社科类选修课程 Elective Courses in Humanities and Social Science	160/10											
Con	必 修 Required	0801663	工程制图(一) Engineering Graphics(Ⅰ)	40/2.5				40							
学科大 amon M	必 修 Required	0800441	信息技术导论 Introduction to Information Technologies	24/1.5				16		4		4			
Common Major Courses	必 修 Required	0800113	电路理论(三) Circuit Theory (III)	88/5.5					88						
urses 程	必 修 Required	0511901	文献情报检索 Information Retrieval in Literature	24/1.5						24					
Con 课	必 修 Required	0803051	电路测试实验 Circuit Measurement Experiments	32/1		32				32					
Common	必 修 Required	0800124	模拟电子技术(二) Analog Electronics(II)	56/3.5						56					

课程 类别 Course	课程 性质	课程 代码	课程名称	学时/ 学分		其中 ncludir	ıg			Hou	rs Di	月学 strib mes	ution		
Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	— 1st	二 2nd	三 3rd	四 4th		六 6th	七 7th	
	必修 Required	0800155	信号与线性系统 Signal and Linear System	64/4		8					64				
	必 修 Required	0800773	数字电路与逻辑设计(一) Digital Circuit and Logic Design(I)	56/3.5							56				
	必 修 Required	0815811	电子线路设计•测试•实验(一) Electronic Circuitry Design, Test and Experiments(I)	32/1		32				32					
	必 修 Required	0815821	电子线路设计•测试•实验(二) Electronic Circuitry Design, Test and Experiments(II)	32/1		32					32				
	必 修 Required	0800301	微机原理 Principles of Microcomputer	56/3.5								56			
	必 修 Required	0811161	计算机网络技术及应用 Computer Networks and Applications	48/3		16						48			
	选 修 Electiv e	0810651	微电子器件与 IC 设计 Electronic Device Basics and IC Design	56/3.5									56		
	必修 Required	0800412	数据结构 Data Structure	56/3.5			12			56					
	必 修 Required	0803071	通信电子线路 Electronic Circuits in Communications	64/4		8						64			
学科基础课程	必 修 Required	0700034	随机信号分析 Stochastic Process	48/3		8					48				
	必 修 Required	0808041	操作系统 Operation Systems	48/3			8						48		
学 科 专	必 修 Required	0800791	微机原理实验 Experiment of Microcomputer Principles	32/1		32						32			
业基础	必 修 Required	0800252	电磁场与电磁波 Electromagnetic Field and Wave	40/2.5								40			
	必 修 Required	0800161	数字信号处理 Digital Signal Processing	48/3		8						48			
Core Major Courses	必修 Required	0800511	基础信息论 Fundamentals of Information Theory	32/2								32			
Courses	必修 Required	0821341	嵌入式系统原理与设计 Principle and Design of Embedded Systems	32/2									32		
	必修 Required	0800431	通信原理 Principles of Communications	64/4		8							64		
	必 修 Required	0803081	微波技术基础 Fundamentals of Microwave Engineering	56/3.5		8							56		
程 专	-		专业方向选修公共课程组 Elective Major Courses	64/4											
程 专业方向 Elective Major	限选 Electiv e		专业方向及其选课(讲座) Lectures on Majors and Courses	8/0								8			

课程类别	课程 性质	课程	课程名称	学时/ 学分		其中 icludin	ıg			Hou	·学其 s Di: a Se	strib	ution		
Course Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	— 1st	二 2nd	三 3rd		五 5th	六 6th	七 7th	
	选 修 Elective	0800502	高级程序设计 Advanced Programming	32/2									32		
	选 修 Elective	0800234	数据库 Database Systems	32/2									32		
	选 修 Elective	0803172	软件工程 Software Engineering	32/2									32		
	选 修 Elective	0809961	虚拟仪器技术及应用 Virtual Instrumentation and Applications	32/2									32		
	选 修 Elective	0803231	传感器技术及应用 Sensing Technologies and Applications	32/2									32		
	选 修 Elective	0809891	Java 语言程序设计 JAVA Language Programming	32/2			16						32		
	选 修 Elective	0810261	可靠性技术基础 Fundamentals of Reliability	32/2									32		
	选 修 Elective	0821351	ARM 处理器及应用 ARM Processors and Applications	32/2		32							32		
	选 修 Elective	0821361	Altera 可编程片上系统及应用 Altera SOPC and Applications	32/2		32							32		
	选 修 Elective	0821371	Xilinx FPGA 及应用 Xilinx FPGA and Applications	32/2		32							32		
	选 修 Elective	0821381	MSP430 单片机及应用 MSP430 Microcontroller and Applications	32/2		32							32		
	选 修 Elective		Freescale 单片机及应用 Freescale Microcontroller and Applications	32/2		32							32		
	选修 Elective	10821401	8051 系列单片机原理及应用 8051 Microcontroller Principle and Applications	32/2		32							32		
	选修 Elective	0803151	DSP 处理器及应用 Digital Signal Processors and Applications	32/2		32							32		
	选修 Elective	0821411	嵌入式 Linux 软件设计 Embedded Linux Software Design	32/2		32							32		
	选 修 Elective	0821421	WinCE 软件设计 WinCE Software Design	32/2		32							32		
	选 修 Elective	0833041	信号检测与估计 Signal Detection and Estimation	40/2.5										40	
	选 修 Elective	0833051	现代信号处理 Advanced Signal Processing	40/2.5										40	
方向 Elective Maior Courses	选 修 Elective	0830041	光纤通信基础 Fundamentals of Fiber-optic Communications	32/2										32	
ective			专业方向选修课程组(2 组选 1 组) Elective Major Courses	128/8											

课程 类别	课程 性质	课程	课程名称	学时/		其中 ncludir	ıg			Hou	·学期 rs Di a Se	strib	ution		
Course Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	— 1st	二 2nd	三 3rd	四 4th		六 6th		
			课程组 A(通信网络与交换方向) Elective Courses in Stream A	128/8											
	限 修 Elective	0840261	互联网技术及新应用 Selected Topics on Internet Technologies and Emerging Applications	16/1									16	16	
	选 修 Elective	0803183	现代通信网 Modern Communication Networks	40/2.5									40	40	
	选 修 Elective	0810591	现代通信网实验 Modern Communication Network Experiments	16/1		16							16	16	
	选 修 Elective	0809841	TCP/IP 网络原理与应用 Principles and Applications of TCP/IP Network	40/2.5									40	40	
	选 修 Elective	0809921	计算机网络安全 Security of Computer Networks	40/2.5									40	40	
	选 修 Elective	0833151	无线传感网络 Wireless Sensor Networks	32/2									32	32	
	选 修 Elective	0810291	电子商务概论 Introduction to Electronic Commerce	32/2									32	32	
			课程组 B(无线通信方向) Elective Courses in Stream B	128/8											
	限 修 Elective	0840311	通信前沿讲座 Selected Topics on the Communication Frontiers	16/1									16	16	
	选 修 Elective	0803221	电波与天线 Antenna and Radio Wave Propagation	32/2									32	32	
	选 修 Elective	0840271	空间通信 Space Communications	32/2									32	32	
	选 修 Elective	0809831	射频电路设计与仿真 Design and Simulation of Radio-frequency Circuits	32/2									32	32	
	选 修 Elective	0840281	移动通信原理与技术 Theories and Technologies on Mobile Communication	32/2									32	32	
	选 修 Elective	0803111	锁相技术 Phase-Locked Technologies	32/2									32	32	
方向 Elective	选 修 Elective	0840291	移动通信系统仿真与实验 Simulations and Experiments of Mobile Systems	32/2									32	32	
ctive	选 修 Elective	0840301	移动通信协议与仿真 Protocol Simulations of Mobile Systems	32/2									32	32	

课程 类别	课程性质	课程 代码 Course	课程名称	学时/ 学分		其中 icludin	ıg			Hou	·学其 rs Di a Se	strib	ution		
Course Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实验 Exp.	上机 Oper- ation	_	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th
	选 修 Elective	0833131	纠错编码 Error-Correction Coding	32/2									32	32	
I	必 修 Required	1300012	军事训练 Military Training	2w/1				2w							
nternshi	必 修 Required	1300032	电工实习 Electrical Engineering Practice	2w/1							2w				
实践环节 实践环节	必 修 Required	1300083	生产实习 Engineering Internship	2w/1									2w		
环节ractical	必 修 Required	11300402	软件课程设计 Course Project of Software	2w/1								2w			
Training	必 修 Required	1300292	硬件课程设计 Course Project of Hardware	2w/1									2w		
OQ.	必 修 Required	1300066	毕业设计(论文) Undergraduate Thesis	16w/8											16 w

通信工程第二主修专业培养计划

Bachelor degree of Engineering (BEng) for the Second Major in Telecommunications Engineering

一、培养目标

I. Program Objectives

本专业将培养德、智、体全面发展,具有通信领域系统、扎实的理论基础,具有工程实践和创新能力的高素质科技人才。

This program is designed to produce fully-developed engineers in morality, intelligence and heath that are trained to develop the fundamental theories and skills, a consolidated knowledge structure, and to be enhanced with hands-on engineering experiences and innovative initiatives in telecommunications engineering.

二、学位

II . Degree Conferred

工学学士

Bachelor of Engineering

三、学分

III. Credits

完成学业最低学分要求: 50 Minimum Course Credits: 50 其中:

Including:

学科大类基础课程: 12 学分

Basic Courses in General Discipline: 12

学科专业基础课程: 5.5 学分 Common Major Courses: 7.5 专业核心课程: 10.5 学分 Core Major Courses: 10.5 专业方向课程: 12.5 学分 Elective Major Courses: 12.5

毕业设计: 10 学分

Undergraduate Thesis: 10

四、教学进程计划表

IV. Table of Teaching Schedule

课程 类别	课程 性质	课程 代码	课程名称	学时/ 学分		其中 ncludir	ng			Houi	s Di	期学 strib emes	ution	l	
Course Classificat ion	Course Nature	Course Code	Course Name	Hrs/ Crs	I ⊢∨tra₋	实验	上机 Oper- ation	_	二 2nd	<u>=</u> 3rd	四 4th	五 5th	六 6th	七 7th	八 8th
基 类	必修 Required	0800441	信息技术导论 Introduction to Information Technologies	24/1.5				16		4		4			

ĺ	必修	0800124	模拟电子技术 (二)	56/3.5				56		
	Required		Analog Electronics (II)	00, 0.0				00		

续表

课程 类别 Course Classificat	课程 性质 Course Nature	课程 代码 Course Code	课程名称 Course Name	学时/ 学分 Hrs/ Crs	lr 课外 Extra-	其中 icludir 实验	ng 上机 Oper-	_	=	Hou	rs Di	明学 strib mes 五	utior ter	1	八
ion	ivature	Code		CIS	Cur.	Exp.	ation	1st	2nd	3rd	4th	5th	6th	7th	8th
Basic C in Ge Disci	必 修 Required	0800152	信号与线性系统 Signal and Linear System	64/4		8					64				
Basic Courses in General Discipline	必 修 Required	0800141	计算机网络 Computer Networks and Applications	48/3									48		
程 学科(专	必修 Required	0800773	数字电路与逻辑设计(一) Digital Circuit and Logic Design(I)	56/3.5							56				ĺ
程 Courses Courses	必 修 Required	0827002	电子线路设计·测试·实验 Electronic Circuitry Design, Test and Experiments	64/2		64						64			
专业核心课程 Core Major Courses	必 修 Required	0800252	电磁场与电磁波 Electromagnetic Field and Wave	48/3								48			
Major C	必 修 Required	0803071	通信电子线路 Electronic Circuits of Communications	56/3.5								56			
ourses	必 修 Required	0800431	通信原理 Principles of Communications	64/4										64	
			专业方向选修课程 Elective Major Courses	200/ 12.5											
	选 修 Elective	0800161	数字信号处理 Digital Signal Processing	48/3								48			
<i>±</i>	选 修 Elective	0800511	信息论基础 Fundamentals of Information Theory	40/2.5									40		
专业方向	选 修 Elective	0830051	现代交换原理 Modern Switching Principles	40/2.5									40		
方向课程 I	选 修 Elective	0803221	电波与天线 Antenna and Radio Wave Propagation	32/2									32		
Elective Ma	选 修 Elective		软件无线电技术基础 Fundamentals of Software and Radio Techniques	32/2									32		
ajor Courses	选 修 Elective	0830041	光纤通信基础 Fundamentals of Fiber-optic Communications	32/2										32	
S	选 修 Elective	0803111	锁相技术 Phase Lock Technologies	32/2										32	
	选 修 Elective	0803263	现代通信系统 Modern Communication Systems	40/2.5										40	
	选 修 Elective	0810581	通信软件基础 Fundamentals of Communication Software	32/2										32	

修 修 Required Internship and Practical Training	1300057	毕业设计(论文) Undergraduate Thesis	10w/ 10											10 w
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通信工程辅修专业培养计划

Bachelor degree of Engineering (BEng) for the Minor in Telecommunications Engineering

一、培养目标

I. Program Objectives

本专业将培养德、智、体全面发展,具有通信领域系统、扎实的理论基础,具有工程实践和创新能力的高素质科技人才。

This program is designed to produce fully-developed engineers in morality, intelligence and heath that are trained to develop the fundamental theories and skills, a consolidated knowledge structure, and to be enhanced with hands-on engineering experiences and innovative initiatives in telecommunications engineering.

二、学分

II. Credits

完成学业最低学分要求: 27.5 Minimum Course Credits: 27.5 其中:

Including:

学科基础课程: 15 学分 Common Major Courses: 15 学科专业课程: 12.5 学分 Core Major Courses: 12.5

三、教学进程计划表

III. Prgoram Schedule

课程 类别 Course	课程 性质	课程 代码	课程名称	学时/ 学分		其中 cludir	ıg		各等 ours in a	Dis		ution	
Classificat on	Course Nature	Course Code	Course Name	Hrs/ Crs	课外 Extra- cur.	实 验 Exp.	上机 Oper- ation	 2nd			五 5th		
学	必 修 Required	0800152	信号与线性系统 Signal and Linear System	64/4		8				64			
学科基础课程	必 修 Required	0800124	模拟电子技术(二) Analog Electronics (II)	56/3. 5						56			
□ □	必修 Required	0800773	数字电路与逻辑设计(一) Digital Circuit and Logic Design(I)	56/3. 5						56			
Common rses	必 修 Required	0827002	电子线路设计·测试·实验 Electronic Circuitry Design, Test and Experiments	64/4		64					64		
Co ₂	必修 Required	10803071	通信电子线路 Electronic Circuits in Communications	56/3. 5							56		
Core Major Courses	必修	0800161	数字信号处理 Digital Signal Processing	48/3							48		
or A	必修 Required	0800511	基础信息论 Fundamentals of Information Theory	40/2. 5								40	

ĺ	必修	0800431	通信原理	64/4					64	
	Required		Principles of Communications	64/4					64	