Course Description

1. Spoken English

In this course, teachers make communication with students face to face, mixing new words, phrases and grammar in the conversation, to provide students a chance to practice and improve their spoken English.

2. Computer Technology I Hardware

This course comprehensively introduces and explains the composition of computer system and the work principles of each part. Starting with the need of computer applications, with the Intel series of computer which is dominated in modern computer world as main platform, this course systematically introduces computer's hardware technology and application foundations.

3. Fundamentals of Information Technology

This course systematically explains basis of software and hardware of computer and the foundation of the programming design. The main content includes: overview of computer system, basic conception of operating system, how the operating system manages the process, storage, device, files and other hardware and software resources; basic conception, structure, formation and operating environment of compilation; programming approach; basic conception, features and applications of XML language.

4. Cultivation of Ideology and Morality & Fundamentals of Law

It talked about the relationship between college life and life development, between maintaining mental health and establishing harmonious interpersonal relationships. By the way of slide, teacher tells us to strengthen self-morality and law awareness, and obey the law and regulation.

5. Comprehensive English

The course linked to social life and work, and it is useful to English communication activity in different situation. It includes many units such as characters instruction, acquaintance and asking, talking about work, family and occupation, music scene, sports, dressing, past and future, new work, wedding ceremony, in clinic, celebration and so on.

6. Higher Mathematics

Higher Mathematics is an important basic course of all majors in science and engineering. It includes: function and limit, univariate differential calculus and integral calculus, ordinary differential equation, vector algebra and space analytic

geometry, multivariate differential calculus, double integral and curvilinear integral and progression.

7. Physical Education

This course aims to help students master basic knowledge of sports activities and health care, improve sport technological level and build a strong body.

8. Mechanical Innovation Design

The teaching content includes: expressing methods and subject of mechanical innovation design; innovation design in function principles, mechanism and structure, common methods in innovation design, creativity development and innovation miscue analysis. It aims to improve students' interest and self-confidence in mechanical innovation design by introducing innovation design methods and successful cases in mechanical innovation design.

9. ITEC140VB Programming

This course uses Visual Basic 6.0 simplified Chinese version as language background, and introduces Visual Basic 6.0 programming technique, generally covering the common content of Visual Basic 6.0 programming. The main contents include: development environment, language foundation and array and process, common controls, menu design, file processing, ActiveX, database programming, graphics programming, multimedia programming, network programming, API-Function and Registry, installation programming and comprehensive actual cases.

10. Practice of Microcomputer System Maintenance

This course contains 7 modules: 1. the assembling of computer hardware system; 2. the assembling of computer operating system; 3. the assembling of common tools hardware; 4. the assembling of common peripheral equipment; 5. the system's optimization, backup and restore; 6. Internet configuration; 7. the maintenance of computer's hardware system.

11. ITEC170 Principles of Network

This course is a core course of the major computer science and technology. By learning the theory and doing experiments, this course aims to make students deeply understand the basic conception of computer network system and working mechanism, master the basic content and working principles of TCP/IP architecture which is used in the Internet.

12. Introduction to Mao Zedong Thought, Deng Xiaoping Theory and "Three Represents"

The basic content of this course includes is historical process of the combination of basic principle of Marxism and Chinese actual situation, which reflects three main

theoretical achievements of Chinese Marxism. It aims to help students systematically master fundamental principles of Mao Zedong Thought, Deng Xiaoping Theory and "Three Represents".

13. Appreciation of Northern Europe Classical Myth

Northern Europe is an exclusive mythology in Scandinavia. The word of mouth history of northern Europe could go back to A.D. 1st or 2nd Century. This course aims to let students know more about northern Europe culture by instructing them to read and appreciate the classical works of myths.

14. NETW595 Principle of Multimedia

This course contains three parts: the first two parts are basic knowledge, mainly includes principles of multimedia technology and system application. The third part is mainly experiments, aiming to instructing students in details, helping them to master the operation and usage of common multimedia software.

15. ITEC510 Data Structure

Data structure is the way for computers to store and organize date, and it means the collection of data elements which have one or multiple types of certain relationship. This course mainly studies basic principles of data structure, how the different data structures affect operational and storage efficiency.

16. TCPIP Network Protocol

This course consists of a series of well-designed experiments which covers various aspects referring to TCP/IP network protocol, such as network bridge, router, local area network, static and dynamic routing, multicast and real-time service, network administration and security and so on.

17. NETW202 Wire and Wireless Network System

This course explains the advantage and disadvantage of wire and wireless network and related operation and problems when the wire network upgrades to wireless network. In fact, wire network could not be replaced completely in actual work environment, and this course also introduces some classic applications in aspects of exchange, sharing, route, debugging after the wire and wireless are integrated.

18. NETW535 Network Operating System

Operating system is the interfaces among the computer hardware system, and the main purpose of operating system is to manage the resources in the system so that it is convenient for users to operate. NOS (Network Operating System) could not only realize all the functions of stand-alone operating system, but also have sharing resources in management network. This course studies how to supervise software and

hardware resources of one or more host computers in computer network, how to support network communication and provide network service.

19. Practice of Usage of Network Equipment

This course systematically introduces the usage of network equipment, fault detection theory and practical operation methods and skills. The main content includes: how to configure and use common equipment such as switchboard, router and firewall and so on; the methods, tools and basic command of network fault diagnosis; the detection and maintenance of hardware equipment in local area network and wide area network; basic detection and maintenance of network security. With a large number of cases, this course helps students learn how to solve all kinds of problems in management and operation of network equipment fast and accurately.

20. Bee Products and Human Health

This course is a course of popularization of science to introduce bees and bee products. In this course, the teacher not only uses witty and colloquial language to tell us those interesting stories and secrets, but also introduce various of bee products such as honey, bee pollen, royal jelly and so on, and applications of these products on human health care.

21. Practice of Website Development

The course content includes: web producer, web design, website features, Html and Javascript, web optimization technique, web editor, domain name registration enquiry, website construction, promotion, evaluation, operation and revision. In this course, the students need to apply the above theoretical knowledge into practice.

22. ITEC255 Technology Support II

With the improvement of technology, the technical supporting work becomes different. For example, in the field of software, there are before-sale and after-sale technical supports. Different clients may bring different problems, which makes us upgrade faster than the client. This course mainly explains basic maintenance technique of computers.

23. Professional Skills Training

This course uses a large number of icons and cases to introduce elementary knowledge of computer, which has high practicality. The main contents include: Chinese input technique, the usage of Windows 2000 and Windows XP, Word 2000 and Word 2002, simplified Chinese Excel 2000 and Excel 2002, Chinese PowerPoint 2000 and PowerPoint 2002, Internet operation basis and common tools and softwares.

24. ITEC520 Principles of Microcomputer and Assembly Language

This course uses the type of 8086 as background, introduces the basic composition, working principles and practical applications of microcomputer system. Besides, the characteristics of other microcomputers like 80286, 80386 and 80486 are also introduced in this course. The main content of this course includes: microcomputer overview, the architecture of the series of 80X86 microcomputer, instruction system and addressing mode, assembler language programming, storage, input/output system, interrupt and common programmable peripheral interface

25. NETW575 Computer and Network Safety

This course mainly introduces basic knowledge of computer network safety, network safety system, remote attack and defense, cryptology, information authentication technology, access control technology, network virus and defense, firewall, network security scanning technique, network intrusion detection system, security isolation technique, virtual private network technique. Besides, it also briefly analyses the concept, characteristics, tasks and development trend of network warfare.

26. NETW755 Website Design and Management

This course starts with website life cycle, researches all kinds of affairs during the whole process of website construction, such as e-business strategy, Unified Modeling Language, website demand analysis, website design, site implementation, web marketing, detailed steps and contents of web daily operation maintenance, and gives the students an concrete application example "My Farm" and forms a knowledge body which covers the whole website life cycle.

27. Network Program Development

This course is a comprehensive and practical network programming course. With 12 selected typical cases of network programming, this course covers the hot issues in current networking programming field, including network program development foundation, FTP server and client, Web server, email system. Network firewall, network traffic monitoring system, web download applications, voice chatting system, remote control system, office automation system, and instant messaging system and so on.

28. ITEC56JAVA Programming

Java is an interpreted network programming language which is object-oriented and multithreads-supporting. It is one of the most popular programming languages on the Internet, and it has high-level safety, portability, and code reusability. It consists of 13 projects, and this course divides each project into several small tasks according to the whole work process required to complete the project. This course breaks down the knowledge of JAVA language and distributes them in every project task. By carrying out project and task, let students learn knowledge and master skills.

29. Curriculum Design of Network Programming

This course concludes and refines 14 curriculum design topics based on the study requirements of computer network and basic concept, basic work principles and implementation technique of Internet. Then these topics are assigned to students, and the students need to finish the task of network programming independently step by step so that they deeply understand basic work principles and implementation methods of network. The design content includes the purpose, requirements, related knowledge, analysis of curriculum design and expending knowledge.

30. Network Management Software

Network management software is a network management system that can realize the function of network management. With the help of this system, network administrator could not only exchange network information with managed system agent, but also develop network administration implementation program. This course mainly introduces and explains the applications of network management software.

31. Three Layers Device Application

This course content includes: computer network overview, network transmission medium, network interface card and hub, switchboard, router, server, gateway, network bridge and repeater, network firewall, technique and equipment of broadband network, actual examples of Huawei network equipment. This course pays attention to explaining basic concept and principles of computer network technique and equipment and introducing the applications of network equipment while it also introduces some other new network technology like Gigabit Ethernet Passive Optical Network.

32. NETW780 Linux Operation System

Linux is a set of operation system similar to Unix which is for free use and free communication, and is a multi-user, multitask, multithread-supporting and multi-CPU operation system based on POSIX and UNIX. This system could run main tools software of UNIX, application program and network protocol, and its design idea focuses on network and it's a multi-user network operating system with stable performance. This course mainly studied working principles and applications of Linux operation system.

33. Network Practice

This course is has three parts and is divided into seven projects according to working process of actual position based on a situation of enterprise network of long-distance division. Seven projects include enterprise network planning and design, office network construction and management, enterprise network construction and management, enterprise network service and management, enterprise wireless local area network, enterprise network security and comprehensive practice part.

34. Graduation Thesis

In this course, the students work independently on graduation design, and improve it by the discussion and research of teams. This course aims to strengthen the cooperation ability among the students, develop the creativity and imagination of students and enrich the student's practical experience and knowledge.

35. Comprehensive Practice of Network Engineering

Network engineering mainly means computer network system focusing on block-switch technology. It has developed rapidly since 1970s, and the Internet with TCP/IP architecture is widely used. In order to make the network meet the demands of constant incensement in bandwidth, scalability and reliability and so on in various web-based service, network engineering must face these challenges by designing excellent network and solving technical problems in implementation and maintenance. Therefore, this course encourages students to practice with the instruction in design and practice of network cabling of teachers. The students practice in teams, but need to finish designing cabling steps and wiring installation. It aims to add more network cabling experience to students, improve and strengthen their practical skills.