I. Years of Study

Three-Year

II. Medium of Instruction

Chinese

III. Cultivation Goals

Oriented towards career competence and demand for jobs, the college is aimed at cultivating students' Chinese language skills, job skills and professional competence, nurturing unique characteristics such as internationalization, skill upgrading and professionalism in a science-based approach. It works to cultivate high-quality technical and skilled personnel who have following qualifications, including mastering the knowledge about computer network expertise and computer network capabilities such as planning and design, deployment and implementation, analysis and testing, security assessment and protection, automatic operation and maintenance management, being able to meet the needs of economic and social development and production services, having abilities of adapting to the needs of industrial transformation and upgrading and enterprise technology innovation as well as competence in positions such as enterprise and industrial network construction, management and maintenance. At the same time, students shall have a certain understanding about Chinese traditional culture and history of humanity.

IV. Major Courses

No.	Title of the Course	Main Content of the Course	Credit Hours and Credits	Semester

1	Network Fundamentals A	The course introduces network-related knowledge, including network protocols and communication, functions of each layer of OSI and TCP/IP models, Ethernet technology and its working principle, IP subnetting, as well as the knowledge about routing, VLAN, ACL, NAT to connect and configure a small- and medium-sized network.	64 credit hours 4 credits	1
2	Programming Fundamentals B	The course introduces the basic syntax and statements of the Python language, the basic ideas and methods of structured programming, and the basic algorithms and data structures, so as to cultivate a good programming style.	64 credit hours 4 credits	2
3	Network Exchange and Routing	The course introduces network switching technology and routing technology, the basic configuration, VLAN configuration, VTP configuration of Cisco switches, the basic configuration of Cisco routers, as well as static and dynamic routing configuration.	80 credit hours 5 credits	2
4	Database Principle and Application B	The course introduces three parts, namely SQL Server database management system, SQL language and SQL programming, and database application development technology. It first introduces some basic principles of the database, next the use of the SQL Server database management system, then the knowledge about database backup and recovery, security management, query and maintenance, and after that the programming methods through the use of database objects such as SQL create views, stored procedures, functions and triggers.	48 credit hours 3 credits	3
5	Python Application Development	Through the projects, the course introduces the technology and methods of complex data construction, parsing, crawling network data and extracting key information, with the aim of cultivating students' basic abilities in network programming, directional network data crawling, complex data structure processing and data analysis.	64 credit hours 4 credits	3
6	Network Device Configuration and Debugging	The course introduces the configuration and debugging of switches and routers, and the basic configuration and debugging of network security, which are required to design and build small- and medium-sized enterprise networks.	48 credit hours 3 credits	3

7	Linux Operating System and Application	The course introduces the basic knowledge of the Linux operating system, including knowledge and skills such as installation and configuration of the Linux operating system, common Linux commands, file systems, users and groups, disk management, network configuration, shell programming and text editors.	48 credit hours 3 credits	3
8	Web Design	The course introduces three parts, namely HTML syntax, CSS styles and scripting language. It mainly describes the use of HTML language to create web pages, the use of CSS to uniformly customize the style of web pages, and the use of JavaScript to achieve some simple client-side interaction effects.	48 credit hours 3 credits	4
9	Information Security Technology	The course introduces the basic knowledge and basic technology of computer network security, firewall technology, VPN technology, computer virus prevention technology, cyber-attack defense, and e-commerce security issues.	48 credit hours 3 credits	4
10	Network Automatic Operation and Maintenance	The course introduces the concept of network automatic operation and maintenance, common tools for automatic operation and maintenance, programming foundation, API application, data specification, Python modules commonly used in network operation and maintenance and data processing of network equipment, and enable students to realize automatic operation and maintenance of network equipment through programming.	48 credit hours 3 credits	4