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Research on the Construction of "Course Certificate Integration" Curriculum System for Cloud Computing Technology Application Major in Higher Vocational Colleges

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Abstract: Based on cloud computing technology in a cloud computing platform, cloud services, and cloud terminal professional talent demand has carried on the systematic analysis, from the professional requirements, work flow and the perspective of the actual work process, found that higher vocational cloud computing technology application roughly the training needs and direction of the professional talents, give full consideration to factors such as creative thinking, cultural quality, professional ability, In addition, practical employment and technological innovation are applied to construct a new curriculum system with deep integration of professional technical skills and vocational skills certificates, providing reference for higher vocational colleges to set up cloud computing technology and application major.

Keywords: High occupation; Cloud computing application major; Course card integration; Curriculum system

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Introduction

Cloud computing, with its powerful advantages of intensive management, strong flexibility, virtual computing, strong performance and low energy consumption, has a huge impact on all walks of life in today's world.

It is the source of the economy and strategic deployment of many developed countries. At present, the cloud computing market is facing huge demand, which brings great opportunities for the future development of the cloud computing industry. Cloud meter technology as an important core network information technology in the future, it will be big data, platform, the Internet and traditional service and manufacturing industry to carry on the organic integration, the market also brought new development direction and the energy, effectively changed the traditional layout and the direction of the information industry, formed the industrial chain a mightily relieved and employment opportunities^[1]. At present, the cloud computing industry is extremely short of relevant professional and technical personnel, which also gives new directions and requirements to various vocational colleges in the training of relevant professional personnel.

1. Demand analysis of cloud computing talents

In 2019, the Ministry of Education was approved to set up a new engineering major with Internet and industrial intelligence as the core. Virtualization, decentralized computing and storage technologies of cloud computing can provide huge data storage, processing and processing capabilities for the development of artificial intelligence and big data. In recent years, the shortage of talents in cloud computing industry is becoming a hot spot of its economic development. The average monthly salary of cloud computing talents is more than 10,000 yuan. Companies recruit mainly for technical ability and experience, there is no high requirement for academic qualifications. As an important unit of cloud computing talent training and output, higher vocational colleges should completely break the 1+X certificate system, introduce relevant high-quality certificates of cloud computing industry and enterprises to schools, and do a good job of organic combination of degree certificates and industry certificates. We should improve the quality of personnel training, train professionals suitable for social development, speed up the transfer of relevant personnel, and make contributions to the development and allocation of the country's new economy and new industries.

2. Cloud computing personnel training positioning

2.1 Virtual engineer

Mainly responsible for the introduction and application of enterprise virtualization solutions. Be familiar with virtualization technology, storage technology, and computer network technology, traditional virtualization technology and distributed architecture, and independently operate and maintain servers and storage networks. Capable of independently completing the architecture and construction of Fusion Sphere and other projects, capable of virtualization network planning and implementation, as well as powerful fault detection and error transmission capabilities^[2].

2.2 Cloud computing engineer

Mainly responsible for cloud computing platform deployment, operation and maintenance. His job requirements include: Master current centralized and mainstream cloud computing solutions, familiar with the overall architecture of VMware vSphere and Fusion Sphere, installation and deployment of cloud platform, fault diagnosis and migration, cloud platform maintenance and management,

log analysis, cluster management, disaster recovery, VIRTUAL machine management, monitoring and update, And have the ability to analyze and solve common faults.

3. Construction of professional curriculum system of cloud computing technology and application in higher vocational education

3.1 Principles of constructing professional curriculum system of cloud computing technology and application in vocational colleges

Adhere to the four docking principles, on the basis of comprehensive cloud computing research and talent demand analysis, adhere to the connection between professional approaches and industry needs, course content and professional standards, teaching process and production process. Each vocational college should actively create professional and effective curriculum system for cloud computing application, and effectively help students improve their professional skills through professional curriculum system and curriculum content. Depth of higher vocational colleges should consider the cloud computing industry, the current situation of the talent demand of combined with the specific market demand, will be highly integration, professional education and professional skills ducation to create entrepreneurial employment as the guidance, relevant professional skills as the standard of higher vocational cloud computing technology professional curriculum system, cultivating possesses theoretical basis, and have good professional skills in the field of professional and technical personnel. While coping with the characteristics of innovation and entrepreneurship opportunities required by the rapid development of cloud computing industry, each higher vocational college must also consider the cloud computing industry's demand for innovative thinking, humanistic quality, professional knowledge and professional ability of outstanding professionals^[3].

3.2 Cloud computing curriculum system reform

In the course construction process, the professional basic courses are determined from the requirements of basic vocational ability and technical innovation skills. Core courses include the design and implementation of virtualization technologies and applications such as big data system construction, decentralized storage, data management and monitoring, virtualization, application development, management and maintenance. According to the professional core courses, the professional platform courses supporting the professional core courses are further deducted. Professional platform courses include programming fundamentals, data structures and algorithms, cloud device interconnection technology, actual operating systems, irrelevant database systems, Web applications and development, Java programming and development, etc.

Combined with school management characteristics of higher vocational colleges and the direction of the cloud computing professional certification system, and studies the characteristics of higher vocational students, clear the differences between different education objects, guided by the business project cases, work out project, professional and three levels of education achievement cloud computing course in the system on the basis of professional certification, according to the scheme of professional certification, Integrate professional certification learning courses into the cloud computing curriculum system, build a curriculum system suitable for the development of the industry under the "1+X" system, and organize students to obtain the corresponding professional certification every academic year. The real realization of "class" and "certificate" organic integration^[4].

4. Conclusion

Under the background of "curriculum and certificate integration" curriculum system, the research on the reform of cloud computing technology and application professional curriculum system closely focuses on the scarce talent demand of the company, and grasps the opportunity of "1+X" certification system to deepen the cooperation between schools and enterprises. To achieve the goal of joint specialty construction, resource sharing and literature integration education, and encourage students to obtain relevant professional skills and other technical certificates during school. In the professional resume system, we can integrate the examination requirements of professional skills grade certificates, effectively improve the quality of talent training and education, and improve the competitiveness of students in the industry. Through the reform of cloud computing resume system, it can effectively integrate the deficiency of cloud computing talent training methods in higher vocational colleges. In addition to improving the teaching quality of vocational colleges, more high-quality cloud computing professionals can be trained.

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