

Discussion on the Training Mode of Apprenticeship Talents in Communication Engineering based on Employment Oriented and Post Group

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Abstract

Relying on the communication engineering specialty of the school of information and control of Shenyang Institute of technology, focusing on the Liaoning Branch of Nanjing ninghan Airui Information Technology Co., Ltd. and the two school enterprise cooperative enterprises of Shenyang Neusoft, establish a high-level apprenticeship communication engineering specialty, cultivate the all-round development of morality, intelligence, sports, beauty and labor, and adapt to the communication industry, network operation and maintenance and Internet of things communication in Liaoning, Communication R & D job requirements: intelligent communication system designers, communication R & D and system testers engaged in communication equipment manufacturing and communication product testing, network operation and maintenance personnel with general technology of small and medium-sized networks, ability to assist in the design of small and medium-sized networks and the implementation of design using Huawei routing and switching equipment, working in production, construction, management Service front-line high-level technical and skilled talents with a certain sense of innovation.

Keywords

High level apprenticeship; Communication industry; Network operation and maintenance.

1. Research Background

According to the analysis and prediction of the data of the Ministry of human resources and social security, in the next year, the demand for communication engineering talents will be 5.5 million and the talent gap will be 2 million. By 2025, the demand for talents will reach 7 million, and the talent gap is expected to be 3.5 million. Modern communication technicians will become the "pillar" talents of modern communication industry. Nowadays, although the modern communication technology industry is developing rapidly, the supply of professionals is obviously insufficient and the gap is huge. This is also an important bottleneck restricting the development of communication industry in various countries. In the new round of scientific and technological revolution and industrial transformation, modern communication technology has become the commanding height and main direction for countries all over the world to seize development opportunities.

Under China's current education system, undergraduate education focuses on the study of theoretical knowledge and vocational education focuses on the cultivation of technical skills, resulting in a gap in the cultivation of medium and high-end modern communication technology talents who not only have solid theoretical knowledge and comprehensive quality, but also have excellent professional and technical skills. Therefore, setting up undergraduate apprenticeship communication engineering technology specialty and cultivating high-level technical and

skilled communication technology talents for the society is a powerful measure to fill the "short board" of the supply of technical talents in China's communication industry and an inevitable requirement for the development of China's information and communication industry.

Therefore, the employment oriented and post group based apprenticeship talent training mode of communication engineering is a bright line of talent training, which can enable students to apply what they have learned and achieve the purpose of employment upon graduation.

2. Implementation Plan

Reform content: the University selects modern communication engineering major to carry out high-level apprenticeship pilot work and complete relevant pilot tasks, so as to explore the establishment of a long-term mechanism for joint enrollment, joint training and integrated education between schools and enterprises, and form and promote the characteristic high-level apprenticeship system of government guidance, industry participation and social support, and dual main sports people of enterprises and schools.

Implementation process: on the basis of preliminary market research, the university took the lead in signing the overall framework agreement on the strategic development of school enterprise cooperation with Neusoft group and Huawei Information Technology Co., Ltd., and established a high-level apprenticeship pilot work leading group with senior leaders of both schools and enterprises as the main members to be fully responsible for the overall planning and design of the pilot work.

Set up a special high-level apprenticeship pilot office in the school; Joint teaching and research offices of schools and enterprises are set up in schools and enterprises, with school teaching and scientific research managers and enterprise production managers as the main members to be responsible for the operation, supervision and feedback of the pilot work; A project working group is established in the school, with professional teachers of the school and skilled craftsmen of the enterprise as the main members to be responsible for the professional pilot tasks.

Clarify the main responsibilities of both parties; Both schools and enterprises jointly formulate the enrollment articles of association. Design talent training program. Build professional curriculum resources. Implement professional teaching and quality evaluation. Participate in the whole process of talent training.

Establish a collaborative education mechanism of joint enrollment and joint training. Schools and enterprises jointly formulate enrollment regulations, publicly publish enrollment information, and clarify the enrollment principles of high-level apprenticeship pilot units of "enrollment is recruitment, enrollment is factory entry, and joint training between schools and enterprises".

We will improve the enrollment system integrating school enrollment and enterprise employment, so that students can determine their employment destination and even jobs with enterprises after enrollment.

Using the policies of independent enrollment and independent enrollment owned by the University, according to the characteristics of different students such as fresh high school graduates, secondary vocational graduates and employees of enterprises with the same educational background, expand the scope of enrollment, reform the assessment methods, contents and admission methods, and incorporate the relevant enrollment plan into the annual enrollment plan of the University for unified management.

To explore the training law of high-level apprenticeship talents and gradually expand after accumulating experience, we can start with non academic education and jointly carry out pre job training and job transfer training of enterprise employees in the form of high-level apprenticeship with cooperative enterprises.

Standardize the school enrollment and enterprise employment procedures, clarify the dual identity of apprentice enterprise employees and vocational college students, and sign a tripartite agreement between apprentices, schools and enterprises according to the principle of two-way selection. For apprentices over the age of 16 but under the age of 18, an agreement must be signed by apprentices, Guardians, schools and enterprises, Clarify the rights and interests of all parties and the specific positions, teaching contents, rights and interests protection of apprentice training.

Reform objectives:

The college and enterprises jointly formulate the training plan. The major attaches great importance to school enterprise cooperation and jointly participates in the discussion and demonstration of talent training plan. The formulation of talent training plan for high-level apprenticeship modern communication engineering is mainly completed by Shenyang Institute of technology, Neusoft group and Liaoning Branch of ninghan Airui Co., Ltd, Relying on Shenyang Neusoft group and Nanjing ninghan Airui Liaoning Branch, relying on three job groups, set up training programs and establish training objectives, so as to enable students to achieve the ultimate goal of employment upon graduation.

Establish training objectives: Based on the theoretical knowledge and basic skills and methods of modern communication engineering, have strong communication engineering and network practice ability and good professional quality, adapt to the professional development needs of modern communication engineering, be able to engage in communication equipment manufacturing, communication product testing and general technology with small and medium-sized networks in enterprises, Have the ability to assist in the design of small and medium-sized networks and the implementation of design using Huawei routing and switching equipment, and have high-quality, compound and innovative technical skilled talents who are competent for network construction and network operation and maintenance in Huawei ICT ecosystem.

3. Project Features

Schools and enterprises jointly recruit and recruit students, highlight the cultivation of practical ability, and build a "one foundation, three abilities and multi integration apprenticeship post docking talent training mode"

The University and the enterprise jointly conduct interview and screening, and the enterprise is the leading factor. The students admitted in the interview are arranged to the enterprise for grass-roots post understanding. After screening again, the enterprise, the students and the college jointly sign the employment, training and cooperation agreement. Ensure that students' rights and interests are not damaged, protect the common interests of enterprises, schools and students, and clarify their respective responsibilities. On this basis, it will transition to the integration of enrollment and enterprise employment.

Build a collaborative education and teaching system for high-level technical and skilled talents in modern communication engineering to improve students' innovation ability and employment competitiveness.

Implement the training process of modern communication engineering technical skilled talents integrating "theory and practice, in class and out of class, in school and enterprise, skills and innovation, scientific research and teaching"; The curriculum system of "platform + module + Curriculum Group" has been built to meet the training of knowledge, ability and quality, and the curriculum is more targeted to the post. A three-stage progressive project-based teaching content based on work process is constructed with ability training as the core and practical engineering projects as the carrier; A multi-dimensional assessment and evaluation system is

adopted, which combines the evaluation of teachers and students, the evaluation of process and results, the evaluation of knowledge and skills, and the evaluation of in school and out of school.

4. Summary

Explore and form a long-term mechanism for enterprises and schools to jointly carry out talent training; Introducing comprehensive projects, enterprises participate in all links of education and teaching, and gradually increase the complexity and diversity of projects.

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