Thinking and Implementation of Construction Plan of Packaging Engineering

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Abstract. Based on the analysis of the development basis and achievement of packaging engineering in Beijing Institute of Graphic Communication (BIGC), the guiding ideology and goals are defined, the construction plan of packaging engineering in BIGC is put forward. Through the construction of packaging engineering, its characteristics and feature of "the combination of packaging technology and intelligent technology" and "the combination of packaging system design and art design" will be outstanding further, become the leader in the whole china and even in the world.

Development Basis and Achievement

Development Basic Situation

Packaging engineering focus on the modern packaging and related industries, adapts to the demands of China national economic construction and social development, and trains the senior application professionals with a comprehensive professional quality of packaging engineering and innovative spirit.

The characteristics and features of packaging engineering is "the combination of packaging technology and intelligent technology" and "the combination of packaging system design and art design". Packaging engineering highlights to train the practical and application ability of students in Beijing institute of graphic communication (BIGC).

After the year training and study, the students can engage in packaging and printing enterprises, research institutions, foreign trade, commodity inspection departments engaged in packaging design, package post-press finishing, quality testing, technology management.

Teaching Staff and Students Source. There are 21 professional teachers in packaging engineering, including 6 teachers over the age of 50 and 15 teachers under the age of 40. There are 3 professors and 12 vice-professors in packaging engineering. 8 teachers are PhD and 2 teachers are post-doctoral research staff, 2 teachers ever studied abroad.

There are more students from other city gradually. The percent for the first batch admission is close to 50%.

Teaching Condition. Practice teaching bases supporting packaging engineering include Beijing foreign talent training base, packaging engineering experiment center and practice base inside and outside the school.

There are plastic packaging test room, paper packaging test room, surface finishing laboratory molding processing, containers and packaging laboratories, packaging technology testing room and packaging design laboratory in Packaging Engineering.

Achievements

Course and Textbooks. Packaging and printing technology is fine course in Beijing. Packaging design and packaging materials are fine course in BIGC. Packaging decoration design is fine
construction course. Transportation packaging, packaging design basis and packaging machinery courses are excellent course in BIGC.

Packaging introduction is to the bilingual course, and: packaging printing technology, packaging technology will be teaching with Chinese and English.

The self-edited textbooks are used by 16.7%. They are packaging printing technology edited by Professor Wencai Xu, packaging standards and regulations by Professor Guorong Cao, introduction to packaging by Professor Huiping Cai, packaging materials forming and processing by Quanxiao Liu and packaging engineering experimental textbook by Teacher Jiandong Lu.

**Practical Teaching and Innovative Entrepreneurship Education.** There are three of practical teaching platform such as Packaging technology and design teaching experimental platform, intelligent packaging teaching experimental platform and printing and packaging composite practice teaching base.

There are package graduation exhibition each year, design competition of the world packaging design star, Jifeng Cup design competition and creative packaging design competition for students to attend. These provide students innovative entrepreneurship education

**Guiding Ideology and Goals**

**Guiding Ideology**

Taking professional construction as the center, innovation and entrepreneurship education as the starting point, cultivating senior applied talents with innovative spirit and entrepreneurial ability as the goal, the first class innovative entrepreneurial talent education system are supposed to build and cultivate first-class packaging talents.

Based on Internet plus and packaging plus, the professional characteristics of packaging engineering is considered and the features and characteristics of packaging engineering is formed, packaging engineering is becoming the first-class in China.

**Overall Goals**

The overall goals are to improve students training quality, to construct distinctive and outstanding packaging engineering with feature and characteristics, to support our school materials science and engineering (the first grade discipline) and materials processing engineering (the second grade discipline).

**Specific Goals**

1. 1 famous teacher in Beijing.
2. 1-3 teaching reform project from, 1-2 teaching achievement award from BIGC.
4. 1-2 excellence courses reaching the school level and above.
5. 1 off-campus packaging engineering training base.
6. 1 school level and above teaching team.

**Implementation Plan and Program**

**Teaching Staff Construction**

The teachers are constructed to strengthen and enhance their professional quality as the main content. The teachers are encouraged to go to overseas universities for study and communication and supported to government departments, industry associations, enterprises and other vocational training, arranged to practice and guide students to practice in enterprises. The young teachers are encouraged and supported to take part in bilingual teaching and training.
Part-time outside experts and professors are encouraged to communicate with professional teachers, to give lessons in class, who play important role in teacher construction.

**Revise and Improve Cultivating Program**

Taking personnel cultivating objectives and professional construction goals as a guide, the system design and art design as an obedience, intelligent packaging and green packaging as the focus, providing packaging engineering system solutions, packaging engineering training schedule is revised and improved.

To further optimize the curriculum, form the characteristics of the curriculum group, strengthen the innovation of practical teaching, highlight the professional characteristics of internet plus and packaging plus, concise professional features, highlight the application of new materials, technologies and equipment in intelligent packaging and packaging technology and design, take efforts to improve the quality and level of teaching.

**Course Construction and Teaching Reform**

Curriculum construction and innovate curriculum content is carry out actively, the quality of courseware and the teaching level is improved. Professional core courses and important compulsory courses are core constructed firstly. The construction of packaging structure design, packaging and printing technology, packaging information detection and processing technology, packaging materials science will be constructed.

To meet the needs of international personnel training, the pace of bilingual teaching construction and curriculum reform is speed up. The development of bilingual or English teaching is carried out steadily. More systematic bilingual teaching or all English teaching characteristics course group occurred.

Taking innovation and entrepreneurship of packaging engineering as the goal, exploring creative innovation entrepreneurial talent training mode as the main content, the teaching reform of packaging engineering is carried out, the combination of engineering competition and design competition with innovative models is created and constructed. The characteristics and features of packaging engineering are formed the combination of skills increase and design innovation and the combination of system design and art design.

**Construction of Textbook and Practice Teaching Platform**

Packaging materials science and packaging decoration design as feature texts will be written. The other textbooks of packaging after processing packaging materials molding processing technology will be written too.

In order to meet the requirements of innovative business education Traditional professional curriculum experiment will be changed, and its experimental content will be adjusted, innovative comprehensive experiment will be set up. In terms of intelligent packaging direction, construction of teaching experimental platform is constructed rapidly to meet the teaching requirements.

**Construction of Innovation Entrepreneurship Education System**

The innovative entrepreneurship education system with engineering competition and design competition will be established. The mode of packaging engineers/designers vocational skills competition and packaging design basic skills competition and creative innovation entrepreneurial design competition will be constructed.

The innovative spirit and entrepreneurial ability is combined throughout the whole process of teaching, so that students stand out in packaging materials, packaging technology and packaging design and other aspects.

**International and Outstanding Talent Cultivating**

Packaging engineering is a multi-disciplinary discipline involving of light industry, food, forestry and other disciplines, which has a wide range of contacts and cross. The international talent training
channels are explored actively. Foreign universities are communicated, and 1 +2 +1 training mode of packaging engineering is constructed. The outstanding talent plan has been proposed.

**Soft Environmental Construction**

The soft environment construction of packaging engineering will be strengthened to promote and improve the improvement of teaching style, teaching quality and talent training.

Strengthen the link between the same kind of colleges and universities in which the packaging engineering specialty is strengthened, and increase the communication characteristics and advantages of the packaging engineering. Discuss and begin the teaching and research activities participate with packaging engineering department (professional) and the student organization, the packaging engineering class committee and the excellent students. Form postgraduate guidance organization for students in which all teachers participate. Make the establishment of innovative cultivating talent model of professional education, research and study abroad, employment and entrepreneurship training linkage mechanism to explore and scientific research institutes, industry, business.

**Development and Outlook**

On the basis of packaging engineering characteristics and feature of "the combination of packaging technology and intelligent technology" and "the combination of packaging system design and art design", considering the background of internet plus and the professional characteristics of packaging plus, the location advantages of the design capital of Beijing and Beijing-Tianjin-wing integration, closely linking to scientific research of packaging materials and technology, intelligent packaging and green packaging, the packaging engineering in Beijing institute of graphic communication will be strengthened, and further its characteristics and feature will become outstanding further and become the leader in the whole China and even in the world.

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