Teacher Enterprise Practice and Implementation

Partnership Enterprises

co-operative enterprise	Cooperation Areas
Yunnan Yunnei Power	Electrical Equipment R&D
China Energy Yangzonghai Power Plant	Power generation technology, power quality
Zhejiang Yunda Wind Power	New Energy Power Generation Technology
Yunnan Sanke Intelligent Technology	Intelligent Control Technology
UBTECH Shenzhen	Intelligent Robotics Education
Qingdao Oriental Excellence Electric	Microgrid Harmonic Mitigation
Kunming Kunke Measurement and Control Technology	Industrial Measurement and Control System
Xi'an RuiNu Aviation Equipment	Power Supply Equipment Thermal Management
Yunnan Liangong Technology	Natural Rubber Processing Technology
Kunshan Intelligent Technology Co., Ltd.	Non-standard automated logistics equipment
Yunnan Electric Power Testing Research Institute	Power Distribution Technology and Technology Transfer

The following compilation summarizes the practical experiences of five faculty members across various enterprises, covering multiple fields such as intelligent robotics, electrical engineering, thermal management technology, automated logistics equipment, and power testing and research. These case studies vividly illustrate the cultivation of practical skills within the college's diversified faculty-led education system.

surname and personal name	co-operative enterprise	Cooperation Period	Corporate Positions	Core R&D Content
Yang Zuyuan	Shenzhen Ubtech Robotics Co., Ltd.	2018.6~2019.12	Intelligent Robotics Education Laboratory	Over 300 participants have received intelligent robotics training at primary and secondary schools.
Liu Qingxue	Qingdao Dongfang Zhuoyue	2024.5~2027.5	Led the R&D of the project	Microgrid Harmonic Mitigation Strategies and Control Systems

	Electric Technology Co., Ltd.			
	Kunming Kunke Measurement and Control Technology Co., Ltd.	2024.4~2025.4	Control System Development	Development and Design of Compressor Warm-up Test System
Bieyu	Xi'an Ruinuo Aviation Equipment Co., Ltd.	2024.7~2025.6	Thermal Management System Design	Design and Optimization of Thermal Management Systems for Power Supply Equipment
	Yunnan Liangong Technology Co., Ltd.	2024.3~2024.12	Experimental Researcher	Experimental Study of Natural Rubber Drying Characteristics
Jia Youdong	Kunshan Intelligent Technology Co., Ltd.	2015.7~2020.7	Mechanical Designer (Level 1)	R&D of Non-standard Automated Logistics Equipment
Liang Shibin	Yunnan Electric Power Testing Research Institute	1997.7~2025.12	Manager/Technical Expert	Power Distribution Technology and Technology Transfer

	(Group)			

1 Yang Zuyuan – Practical Implementation of Intelligent Robotics Education Promotion

(1) Company Background

Shenzhen Ubtech Robotics Co., Ltd. is a leading AI and humanoid robot company in China, with extensive influence in the field of intelligent robotics education.

(2) Practical Tasks

Professor Yang Zuyuan works at Ubtech Robotics' Intelligent Robotics Education Laboratory, where he provides intelligent robotics training for primary and secondary school teachers across China. Between June 2018 and December 2019, he completed training sessions for more than 300 participants.

(3) Educational translation value

- Integrate enterprise training systems and methodologies into teacher education curricula to cultivate students' ability to deliver robotics-based instruction for primary and secondary schools;
- Integrating real-world corporate cases into the classroom enhances the cutting-edge nature and practical relevance of the teaching content;
- Accumulating extensive experience in teacher training will serve as a reference for subsequent initiatives aimed at enhancing teachers' information technology skills.

2 Jia Youdong – Design and R&D of Non-standard Automated Logistics Equipment

(1) Company Background

Kunshan Intelligent Technology Co., Ltd. is a leading enterprise in the field of automated logistics equipment, specializing in the research, development, and manufacturing of intelligent logistics system integration and non-standard automated equipment.

(2) Practical Tasks

Professor Jia Youdong served at Kunshan Ship Intelligence for five years (July 2015 – July 2020), where he held the position of Mechanical Designer (First-Class Designer), specializing in the

design and R&D of non-standard automated logistics equipment — including the full-process development of conveying systems, sorting systems, and warehousing equipment.

(3) Educational translation value

- Five years of hands-on enterprise experience have enabled the accumulation of a vast number of non-standard design cases, which can be utilized for teaching courses on mechanical design and mechanics principles;
- The innovative requirements of non-standard automation design can provide authentic research topics for course projects and graduation projects;
- The comprehensive experience gained throughout the process from concept development to prototype creation can help establish a project-driven teaching model.

3 Liang Shibin – Power Distribution Technology and Technology Transfer

(1) Company Background

Yunnan Electric Power Test Research Institute (Group) Co., Ltd. is a research institution under Yunnan Power Grid Company, primarily engaged in power technology testing and research, technical services, and the commercialization of scientific and technological achievements.

(2) Practical Tasks

Professor Liang Shibin has worked at the Yunnan Electric Power Testing Research Institute for 28 years, serving successively as a Manager and Technical Expert at the Yunnan Power Grid Company. His primary research and professional focus areas include distribution and power supply technology research, scientific and technological innovation management, and the commercialization of scientific and technological achievements. As the Chief Expert of the Scientific and Technological Innovation Achievement Commercialization and Incubation Base of the Yunnan Power Grid Company, he holds a Technical Broker Certification and leads a team dedicated to the incubation of power-related scientific and technological achievements and their industrialization. He has undertaken 87 scientific and technological achievement commercialization projects for the Yunnan Power Grid Company, including his own independently developed achievements: "Active Signal Detection Device for Single-Phase Ground Faults in Distribution Networks" and "Lightning Protection Leakage Circuit Breaker." From 2022 to 2024, the sales revenue generated from the commercialization of these independently developed achievements exceeded RMB 190 million, with additional profits exceeding RMB 35 million; specifically, the sales revenue from his independently developed commercialized

products exceeded RMB 13.5 million, generating additional profits of over RMB 26 million. The Commercialization and Incubation Base has attracted 15 innovative enterprises and 16 scientific and technological innovation teams to establish operations there, and in 2024, it was officially recognized as a "Mass Innovation Space" by Yunnan Province.

(3) Educational translation value

- Nearly three decades of hands-on experience in the power industry provide a robust engineering background for the teaching of electrical engineering;
- Experiences in technology transfer can be integrated into innovation and entrepreneurship education curricula;
- Case studies on power distribution technologies can be utilized in courses such as Power System Analysis and Power Supply and Distribution Technology.