

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 the solid knowledge about electrical automation technology, capabilities of operation, installation, commissioning, maintenance, management and sales of automation equipment and small automation systems, competence in related positions such as automation equipment commissioning 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
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1	Electrotechnics	The main contents of the course include analysis and calculation of DC circuits and single-phase AC circuits, characteristics and applications of three-phase AC circuits, basic knowledge of magnetic circuits and iron core coils, principles and applications of DC motors, induction motors, and control motors, as well as knowledge and usage about electrical measuring instruments.	64 credit hours 4 credits	1
2	Mechanical Drawing Reading A	The course mainly teaches the basic knowledge and skills of engineering drawing, the basic theory of projection as well as its basic body and combination body, the drawing method and reading of the drawing, the expression method of the machine part, the prescribed drawing method and labeling of the common parts and standard parts, reading of part drawing, introduction of assembly drawing.	64 credit hours 4 credits	2
3	Sensors and Detection Technology	The course mainly teaches the principle and composition of the detection system, and enables students to master the working principle, structure, performance and main applications of commonly used sensors, as well as the application technology of machine vision, so as to lay a solid foundation for subsequent control courses.	48 credit hours 3 credits	3
4	PLC Application Technology	The course mainly introduces the composition of the hardware components of a PLC and the design method of the ladder diagram program, and enable students to get the ability for designing, debugging and engineering application of software and hardware of the control system, and capabilities for integrated application of the configuration software, touch screen, PLC in the control system.	64 credit hours 4 credits	3

5	Control and Automation	The course mainly teaches control theory, industrial communication and distributed control technology, automation hierarchy, PLC programming, industrial robots, programmable logic controllers, electrical drives, electropneumatics and troubleshooting.	64 credit hours 4 credits	4
6	Manufacturing Systems and Organizational Management	The course mainly teaches production system, economic analysis of different production batches, material management and supply chain, inventory control, production cost and break-even analysis, and capacity management.	64 credit hours 4 credits	4
7	Industrial Network Technology	The task of the course is to enable students to build an enterprise local area network according to the networking requirements, complete the configuration and debugging of network equipment, analyze and troubleshoot faults according to network fault phenomena, and conduct network maintenance. Through the study of the course, students can master the basic concepts, principles, technologies and related information about equipment of computer networks as well as the knowledge of networking methods, network security, new network technologies, and understand network architecture, OSI/RM model and local area network IEEE 802 standard.	32 credit hours 2 credits	5