

1.Years of Study

Three years

2.Language of Instruction

Chinese (HSK Level 4)

3.Cultivation Objectives

This program aims to cultivate individuals who are well-rounded in morality, intelligence, physical fitness, aesthetics, and labor. They possess excellent professional ethics and innovative spirit, along with solid expertise in mechatronics technology. The program equips students with practical skills necessary for various occupational roles such as assisting in the design of electromechanical equipment, installation and debugging, operation and maintenance, and marketing of electromechanical devices. Targeting the electromechanical industry, graduates are prepared to adapt to industrial transformation and upgrading. They are capable of engaging in the installation, debugging, operation, and maintenance of electromechanical equipment and intelligent production lines.

4.Employment Positions

Mechanical design, installation, and debugging of electromechanical equipment, maintenance of electromechanical equipment; after-sales technical support for electromechanical equipment, etc.

5. Co-operative enterprises

- (1) Techcon Eco-Ring New Energy Technology Co., Ltd.
- (2) Zhongke Micro-Zhi Intelligent Manufacturing Technology Co., Ltd
- (3) Wuxi Best Precision Machinery Co., Ltd.
- (4) Siemens Industrial Software (Shanghai) Co., Ltd
- (5) FAW Group Corporation Wuxi Diesel Engine Plant.
- (6) Wuxi Outvate Technology Co., Ltd.
- (7) Wuxi Intelligent Automatic Control Engineering Co., Ltd.

6. Main courses

Serial number	Course name and module code	The main content of the course (Limit to 80 characters)	Hours and hours Credits	Nature of the course	Term
1	Engineering drawing A	This course mainly teaches the basic knowledge and skills of engineering drawing, the basic theory of projection, the basic body and combination; the drawing and reading of views, the expression method of machine parts; the prescribed drawing and marking of common parts and standard parts; the reading of part drawings and the introduction of assembly drawings.	64 class hours 4 credits	Compulsory	1

2	Electro-electronic technology	The main contents of this course module include the analysis and calculation of DC circuit and single-phase AC circuit, the characteristics and application of three-phase AC circuit, the basic knowledge of magnetic circuit and core coil, the principle and application of DC motor, induction motor and control motor, the understanding and use of electrical measuring instrument, etc. Through the study of this course, students can acquire the basic theory, basic knowledge and basic skills of analog electronic technology, master the analysis methods of analog electronic circuits, and have a strong ability to consult technical manuals and experimental skills. Combined with the teaching of the course, students' scientific attitude of seeking truth from facts and their ability to analyze and solve problems are cultivated, so as to lay a solid foundation for the follow-up courses and the future work.	64 class hours 4 credits	Compulsory	1
3	Fundamentals of Mechanical Design	It mainly introduces the basic knowledge and methods of the working principle, type, motion characteristics, application and design method of plane connecting rod mechanism, gear mechanism, cam mechanism, screw mechanism and intermittent motion mechanism; calculation of gear system and brief introduction of mechanical innovation design.	48class hours 3 credits	Compulsory	3
4	Digital design of mechanical products	The task of this course is using the SolidWorks software to learn basic body modeling, sketch drawing, drawing modeling, feature modeling, assembly modeling, engineering drawing knowledge. Students can master the basic ability of digital design and complete the mechanical parts 3-d modeling design, assembly and engineering work, establish theoretical basis for the follow-up course learning and drawing, reading skills.	48 class hours 3 credits	Compulsory	3
5	Installation and commissioning of the electrical control system	The task of this course is to teach the selection and working principle of common low-voltage electrical appliances, make students master the principles of control circuit and control mode of three-phase asynchronous motor and the electrical schematic diagram, the drawing diagram, the layout diagram and the drawing method, and improve the ability of reading electrical drawings. To improve the students' professional quality, engaged in professional practice work to lay a good foundation.	48 class hours 3 credits	Compulsory	4

6	PLC technology and application	The task of this course is to describe the basic structure of PLC, working principle, programming method and the typical application of PLC with Siemens series PLC. Through the study of the course, students can be familiar with PLC selection, master the hardware circuit and control program design method of PLC control system, and have the ability to upgrade the old equipment and correctly install, run, debug and maintain the programmable controller system in the production site. To improve the students' professional quality and to continue to study, engaged in professional practice work to lay a good foundation.	48 class hours 3 credits	Compulsory	4
7	Industrial network and configuration technology	Master basic knowledge of industrial network, basic knowledge of field-bus and industrial Ethernet; master basic knowledge of configuration software, installation, use, configuration and case development, etc.	32class hours 2 credits	Compulsory	5