一、修业年限

三年制

二、授课语言

中文（HSK 四级水平）

三、培养目标

本专业以职业能力和岗位需求为导向，以培养学生“汉语水平+岗位能力+职业素养”为目标，科学定位，打造“国际化、技能化、职业化”的专业特色，掌握电子信息技术的基础知识，具备嵌入式产品生产制造、软硬件辅助设计能力，从事智能嵌入式产品的生产制造、产品调测、技术支持、软硬件辅助设计等一线工作的高素质技术技能人才，同时了解中国传统文化和人文历史。

四、就业岗位

主要岗位：

电子设备装配调试、电子设备检验、电子产品设计开发

次要岗位：

电子产品维修、电子设备生产管理、电子信息系统集成

五、合作企业

SK 海力士半导体（无锡）有限公司

无锡信捷电气股份有限公司

华润微电子有限公司

航天新气象科技有限公司

无锡同舟电子实业有限公司

无锡科尔华电子有限公司

无锡电子仪表工业有限公司

无锡同步电子科技股份有限公司

无锡晶哲科技有限公司

六、主要课程

序号	课程名称	课程主要内容 （限 80 字以内）	学时与学分	课程性质	开课学期
1	电路基础	本课程主要讲授直流电阻电路和单相交流电路、三相交流电路的与分析、常用电路定理的应用、一阶电路的过渡过程、非正弦周期电路分析以及磁路和铁心线圈电路的基本知识等。	64 学时 4 学分	必修	2
2	C 语言程序设计	本课程主要讲授 C 语言的数据结构、程序结构、数组、函数、指针、结构体与共用体、文件操作等的基本概念与方法。	80 学时 5 学分	必修	2
3	模拟电子技术	本课程主要讲授各种半导体器件的性能与识别、基本单元电路和典型电路的特性分析以及集成电路的应用等。目的是使学生初步具备查阅电子元器件手册以及阅读和分析简单电子电路的能力。	64 学时 4 学分	必修	3
4	自动检测与传感技术	本课程主要讲授工业控制中常用的温度、压力、流量、位移、速度等物理量的自动检测、转换及处理技术及传感器类比、选型及实际应用。介绍集成化、数字化和测试智能化的传感器。	48 学时 3 学分	必修	3
5	数字电子技术	本课程主要讲授数字电路基础知识，集成逻辑门电路、组合逻辑电路、集成触发器、时序逻辑电路、脉冲电路、A/D 与 D/A 电路的原理与应用、小规模、中规模常用集成电路的使用以及简单数字逻辑电路的设计方法等。	64 学时 4 学分	必修	4
6	单片机与接口技术	本课程主要讲授单片机的原理、系统组成、系统扩展以及在工业控制中的应用技术等内容。通过基础理论教学与大量的实践练习环节，使学生具有初步设计单片机的硬件和用 C 语言进行编程、调试的能力。	64 学时 4 学分	必修	4
7	STM32 单片机应用	本课程主要讲授 STM32 系列嵌入式单片机，系统地介绍 SRAM、FLASH 和 E^2PROM 存储器、中断系统、GPIO、定时器/计数器、A/D 和 D/A、USART、SPI 和 TWI 等片内功能模块的结构、原理和使用方法，最后还结合实例对其应用系统的设计、开发和调试等进行了专门介绍。	64 学时 4 学分	必修	5
8	RFID 技术及应用	本课程主要讲授 RFID（无线射频识别）技术和应用，课程主要内容有：无线射频识别技术的工作原理、频率标准与技术规范、读写器与电子标签、无线射频识别应用系统、无线射频识别安全隐私保护等。	48 学时 3 学分	必修	5

I. Duration of Study

3 Years

II. Medium of Instruction

Chinese (HSK Level 4)

III. Cultivation Objective

This major is oriented to vocational ability and job requirements, aims to cultivate students' “Chinese language proficiency+job competence+vocational literacy”, scientifically positioned to create the professional characteristics of “internationalisation, skillfulness and vocationalisation”, and masters the basic knowledge of electronic information technology, with the ability of manufacturing embedded products, software and hardware auxiliary design, and the ability to engage in the production of intelligent embedded products, product adjustment and design. With the ability of embedded product manufacturing, software and hardware auxiliary design, high-quality technical and skilled personnel engaged in the production of intelligent embedded products, product testing, technical support, software and hardware auxiliary design and other front-line work, and at the same time, understand the traditional Chinese culture and humanities and history.

IV. Employment

Main positions:

Electronic Equipment Assembly and Debugging

Electronic Equipment Inspection

Electronic Product Design and Development

Secondary positions:

Electronic Product Maintenance

Electronic Equipment Production Management

Electronic Information System Integration

V. Co-operative Enterprise

SK Hynix Semiconductor (Wuxi) Co.,Ltd

Wuxi Xinje Electric Co.,Ltd.

China Resources Microelectronics Ltd

Aerospace New Sky Technology Co.,Ltd

Wuxi Tongzhou Electronic Industry Co., Ltd

Wuxi KEH Electronics Co.,Ltd

Wuxi Electronic Instrument Industry Co.,Ltd

Wuxi Tongbu Electronics Co., Ltd

Wuxi Jingzhe Technology Co., Ltd

VI. Main courses

Serial number	Course Name	Main Content (Limit to 80 characters)	Hours and Credits	Course Type	Term
1	Circuit Fundamentals	This course mainly teaches DC resistance circuits and single-phase AC circuits, three-phase AC circuits and analysis, application of common circuit theorems, transition processes in first-order circuits, analysis of non-sinusoidal periodic circuits, and the basics of magnetic circuits and core coil circuits.	64 class hours 4 credits	Compu lsory	2
2	C Programming	This course mainly teaches the basic concepts and methods of data structures, program structures, arrays, functions, pointers, structures and shared bodies, and file operations of the C language.	64 class hours 4 credits	Compu lsory	2
3	Analogue Electronics	This course mainly teaches the performance and identification of various semiconductor devices, characterisation of basic unit circuits and typical circuits, and applications of integrated circuits. The aim is to provide students with the initial ability to consult electronic component manuals and to read and analyse simple electronic circuits.	80 class hours 5 credits	Compu lsory	3

4	Automatic Detection and Sensing Technology	This course mainly teaches the automatic detection, conversion and processing technology of physical quantities such as temperature, pressure, flow, displacement, speed and other physical quantities commonly used in industrial control, as well as sensor analogy, selection and practical application. Introduction to integrated, digital and test intelligent sensors.	48 class hours 3 credits	Compu lsory	3
5	Digital Electronics	This course mainly teaches the basics of digital circuits, integrated logic gate circuits, combinational logic circuits, integrated flip-flops, timing logic circuits, pulse circuits, the principles and applications of A/D and D/A circuits, the use of small-scale and medium-scale commonly used integrated circuits as well as the design methods of simple digital logic circuits.	64 class hours 4 credits	Compu lsory	4
6	Microcontroll er and interface technology	This course mainly teaches the principle of microcontroller-based, system composition, system expansion and application technology in industrial control. Through the basic theory teaching and a lot of practical exercises, the students have the ability to design the hardware of microcontroller and use C language for programming and debugging.	64 class hours 4 credits	Compu lsory	4

7	STM32 Microcontroller Applications	This course mainly teaches STM32 series embedded microcontroller, systematically introduces SRAM, FLASH and E2PROM memory, interrupt system, GPIO, timer/counter, A/D and D/A, USART, SPI and TWI and other on-chip functional modules of the structure, principles and methods of use, and finally combined with the example of its application system design, development and debugging. Finally, the design, development and debugging of the application system are also introduced with examples.	64 class hours 4 credits	Compulsory	5
8	RFID Technology and Applications	This course mainly teaches RFID (radio frequency identification) technology and applications, the main contents of the course are: the working principle of radio frequency identification technology, frequency standards and technical specifications, read-write and electronic tags, radio frequency identification application system, radio frequency identification security and privacy protection.	48 class hours 3 credits	Compulsory	5