

Undergraduate Talent Development Program for Electrical (Power) Engineering and Its Automation Major

(Version: V2026.01)

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I. Basic Professional Information

School: School of Information and
Intelligent Engineering

Disciplinary Category: Engineering Professional Category: Electrical
Engineering

Program Title: Electrical (Power) Professional Code: 080601
Engineering and Its Automation

Program Duration: 4 years Degree conferred: Bachelor of
Engineering

Total credit hours for China Rules: 165 Total teaching hours: 3,106

ECTS: 207 Workload: 6162

II. Educational Objectives

The Electrical (Power) Engineering and Its Automation program is rooted in Yunnan Province and serves the entire nation. It aims to cultivate high-caliber, application-oriented professionals who achieve well-rounded development in moral, intellectual, physical, aesthetic, and labor education. These graduates will possess a solid foundation in the basic theories of electrical engineering as well as specialized knowledge centered on the production, transmission, and utilization of electrical energy; they will demonstrate the fundamental ability to solve technical analysis and control problems in electrical engineering, along with strong humanistic literacy, robust engineering practical skills, and innovative and entrepreneurial capabilities. They are prepared to undertake diverse roles in the fields of electrical engineering, electrical control, and industrial automation—particularly within the electrical engineering sector—such as in electrical energy production, power grid operation, power plant monitoring, power supply and consumption management, power equipment research and development, as well as the design,

installation, operation, and maintenance of power engineering projects.

Graduates of this program are expected to achieve the following objectives approximately five years after graduation:

Objective 1: Possess excellent moral character, a correct worldview, outlook on life, and set of values; demonstrate strong professional ethics.

Goal 2: Possess a solid foundation in natural sciences (such as mathematics and physics) as well as in economics and management knowledge required for a career in electrical engineering.

Objective 3: Possess a solid foundation in the theoretical knowledge of electrical engineering, a systematic background in engineering practice, and strong communication and problem-solving skills.

Objective 4: Possess solid professional expertise in the field of electrical engineering along with the ability to integrate knowledge from multiple disciplines; be proficient in the latest technologies, current developments, and emerging trends in electrical engineering; be capable of utilizing modern tools to solve complex engineering problems related to electrical engineering; and demonstrate the ability to assess, make decisions, and resolve problems.

Goal 5: Possess the ability for lifelong learning and self-development; be able to expand knowledge and enhance skills through various channels.

III. Graduation Standards and Requirements

(1) Graduation Requirements

Students who demonstrate well-rounded development in moral, intellectual, physical, aesthetic, and labor education; have completed all instructional components specified in this training program; have earned a minimum of 165 credits; have successfully defended their graduation project (thesis); have met the passing requirements of the National Student Physical Health Standards; and comply with the relevant provisions of the Yunnan University of Economics and Managements Measures for the Administration of Awarding Bachelors Degrees shall be granted graduation and awarded a bachelors degree.

1. Complete a total of 64 credits in the general education curriculum, including at least 10 credits from general education elective courses;

2. Complete a total of 93 credits from the professional education curriculum, including at least 16 credits from professional education elective courses;

3 .Complete 8 credits of extracurricular activities.

4. Professional Qualification Certificate Requirement: Special Operation Certificate (High-Voltage Electrician, Low-Voltage Electrician, and High-Altitude Work).

(2) Graduation Requirements

Graduation Requirements 1. Engineering Knowledge

The ability to apply mathematics, natural sciences, computing, fundamental engineering principles, and specialized knowledge to solve complex engineering problems in electrical engineering.

Graduation Requirement 2: Problem Analysis

Be able to apply the fundamental principles of mathematics, natural sciences, and engineering sciences to identify, articulate, and analyze complex engineering problems through literature review; while taking into account the requirements of sustainable development to draw valid conclusions.

Graduation Requirement 3: Design/Develop Solutions

The ability to design and develop solutions for complex engineering problems, as well as to design systems, components, or process flows that meet specific requirements – demonstrating innovation – while assessing feasibility from perspectives including health, safety and the environment; full life cycle cost and net-zero carbon requirements; legal and ethical considerations; and social and cultural factors.

Graduation Requirement 4: Research

The ability to investigate complex engineering problems based on scientific principles and using scientific methods—including designing experiments, analyzing and interpreting data, and drawing reasonable and valid conclusions through information synthesis.

Graduation Requirement 5: Use of Modern Tools

Be able to develop, select, and apply appropriate technologies, resources, modern engineering tools, and information technology tools to address complex engineering problems—including the prediction and simulation of such problems—and to understand their limitations.

Graduation Requirement 6: Engineering and Sustainable Development

When addressing complex engineering problems, one should be able to leverage relevant engineering background knowledge to analyze and assess the impact of engineering practices on health, safety, the environment, legal and economic and social sustainable development, and to understand the responsibilities that entail.

Graduation Requirement 7: Engineering ethics and professional codes of conduct.

Possess a commitment to serving the nation through engineering and enhancing the well-being of the public; demonstrate literacy in the humanities and social sciences as well as a strong sense of social responsibility; be capable of understanding and applying engineering ethics; and adhere to engineering professional ethics, standards, and relevant laws in engineering practice while fulfilling ones responsibilities.

Graduation Requirement 8: Individual and Team

Be able to assume individual, team member, or lead role within a diverse, multidisciplinary team.

Graduation Requirement 9: Communication

Be able to engage in effective communication and collaboration with industry professionals as well as the general public when addressing complex engineering challenges—this includes drafting reports and design documents, delivering presentations, clearly articulating ideas, or responding to instructions; and being capable of communicating within cross-cultural contexts while understanding and respecting linguistic and cultural differences.

Graduation Requirement 10: Project Management

Understand and master management principles and economic decision-making methods relevant to engineering projects, and be able to apply them in a multidisciplinary environment.

Graduation Requirement 11: Lifelong Learning

Possess the awareness and capability for self-directed learning, lifelong learning, and critical thinking; be able to understand the impact of broad technological transformations on engineering and society; and adapt to emerging technological changes.

IV. Core Disciplines, Course Modules, and Core Courses

(1) Core Disciplines

Electrical Engineering, Control Science and Engineering, Computer Science and Technology.

(2) Professional Competence Module and Core Courses

1. Module Names: Engineering Foundation Module, Professional Foundation Module, Professional Core Competence Module, and Engineering Practice and Design Module.

2 .Core Professional Courses: Electric Machines, Sensors and Detection Technology, Power

Electronics Technology, Power System Analysis, Electrical Control and PLC Technology, Electrical Systems for Power Plants/Substations, Principles of Power System Relay Protection

3.Course Modules and Supporting Courses

Module Name	Supporting Course	Prerequisite Courses	Total learning volume			
			Teaching hours	Total learning time	China Credit Hours	ECTS
Engineering Foundation Module	Advanced Mathematics, College Physics , Linear Algebra, Probability Theory and Mathematical Statistics, Complex Analysis and Integral Transforms	/	336	630	21	21
Professional Foundation Module	Circuit Theory, Analog Electronics, Digital Electronics, Engineering Electromagnetic Fields, Automatic Control Theory, Electrical Engineering Drawing and CAD, C Language Programming, Automatic Equipment for Power Systems, Python Programming and Data Analysis	Advanced Mathematics, College Physics , Linear Algebra, Probability Theory and Mathematical Statistics, Complex Analysis and Integral Transforms	480	990	30	33
Professional Core Competence Module	Electrical Machinery, Sensors and Detection Technology, Power Electronics Technology, Power System Analysis, Electrical Control and PLC Technology, Electrical Systems for Power Plants/Substations, Principles of Power System Relay Protection, Power Communication Technology, High-Voltage Technology, Power Plant Power Systems, Electrical Engineering Materials, Electrical Measurement Technology, Secondary Circuits for Power Plants and Substations, New Energy Generation Technologies, Intelligent Monitoring and Fault Diagnosis for Electrical Equipment, Principles and Interface Technology of Single-Chip Microcomputers, Factory Data Acquisition and Monitoring and Control Systems, Embedded Systems and Applications, Microcomputer-Based Protection for Power Systems, Principles and Applications of DSP,	Circuit Theory, Analog Electronics, Digital Electronics, Engineering Electromagnetic Fields, Automatic Control Theory, Electrical Engineering Drawing and CAD, C Language Programming, Automatic Equipment for Power Systems, Python Programming and Data Analysis	880	2490	5 5	83

Module Name	Supporting Course	Prerequisite Courses	Total learning volume			
			Teaching hours	Total learning time	China Credit Hours	ECTS
	Principles and Applications of Variable Frequency Drives, Automation Engineering Design and Applications					
Engineering Practice and Design Module	Engineering Practice, Electronic craft production, Cognitive Internship, Electrical training, Electrical Control and PLC Technology Course Design, Power System Analysis Course Design, Power System Relay Protection Course Design, Comprehensive Electrical training	Electrical Machinery, Sensors and Detection Technology, Power Electronics Technology, Power System Analysis, Electrical Control and PLC Technology, Electrical Systems for Power Plants/Substations, Principles of Power System Relay Protection, Power Communication Technology, High-Voltage Technology, Power Plant Power Systems, Electrical Engineering Materials, Electrical Measurement Technology, Secondary Circuits for Power Plants and Substations, New Energy Generation Technologies, Intelligent Monitoring and Fault Diagnosis for Electrical Equipment, Principles and Interface Technology of Single-Chip Microcomputers, Factory Data Acquisition and Monitoring and Control Systems, Embedded Systems and Applications, Microcomputer-Based Protection for Power Systems, Principles and Applications of DSP, Principles and Applications of Variable Frequency Drives, Automation Engineering Design and Applications	104	270	4.3	9

V. Major Professional Practical Components

order number	curriculum	Is it a compulsory course?	Primary Practical Projects	Total study time	Semester/Weeks	Location (including off-campus)
1	college physics	yes	Measuring gravitational acceleration using a physical pendulum, determining the speed of wave propagation, magnetic field measurement, and the Hertz experiment	30	1/8	College Physics Laboratory
2	Circuit Theory (1)	yes	Kirchhoffs laws, Thevenins theorem	30	1/8	Electrical and

order number	curriculum	Is it a compulsory course?	Primary Practical Projects	Total study time	Semester/Weeks	Location (including off-campus)
			Verification			Electronics Laboratory
3	Circuit Theory (2)	yes	Three-Table Method for Measuring Circuit Equivalent Parameters; Three-Phase AC Circuit Experiment	34	2/9	Electrical and Electronics Laboratory
4	Analog Electronics	yes	Common-emitter amplifier circuit experiment; Operational amplifier experiment	34	3/9	Electrical and Electronics Laboratory
5	Digital Electronics Technology	yes	Combinational Logic Circuit Experiment; Flip-Flop and Counter Experiment	34	4/9	Electrical and Electronics Laboratory
6	automatic control theory	yes	Control System Time-Domain Analysis	30	5/9	Power System Simulation Laboratory
7	Electrical Engineering Drawing and CAD	yes	Typical Electrical Engineering Drawing Preparation	68	5/18	Power System Simulation Laboratory
8	Electrical machinery	yes	Three-phase transformer experiment; Parallel operation experiment for three-phase synchronous generator	56	4/10	Motor Laboratory
9	Sensors and Detection Technology	yes	Verification of typical sensor operating principles, characteristic testing, and parameter tuning of signal conditioning circuits	34	4/6	Power System Simulation Laboratory
10	power electronic technology	yes	Three-phase bridge rectifier circuit experiment; SPWM control experiment	56	5/10	Power Electronics Laboratory
11	power system analysis	yes	Power System Power Flow Calculation and Operational Dispatch Simulation	11	5/2	Power System Laboratory
12	Electrical Control and PLC Technology	yes	Logical control design, Sequential control design	56	5/8	Programmable Logic Controller Laboratory
13	Power Plant/Substation Electrical Section	yes	Electrical main switchgear switching operation simulation	50	6/8	Smart Power Supply and Distribution Laboratory
14	Power System Relay Protection Principles	yes	Current protection setting and operation characteristic testing; power transformer differential protection and excitation surge current experiment	56	6/10	Relay Protection Laboratory

order number	curriculum	Is it a compulsory course?	Primary Practical Projects	Total study time	Semester/Weeks	Location (including off-campus)
15	Engineering Training	yes	Fitter Practical Training, Welder Practical Training, Machining Practical Training	60	2/2	Engineering Training Center
16	Cognitive Internship	yes	Power Plant Internship	30	1–2 days / 1 day	Off-campus internship base
17	Electronic craft production	yes	Multimeter Construction	30	3/ 1	Electronic Manufacturing Laboratory
18	Electrical training	yes	Electrical Control Technology Practice	30	4/ 1	Electrical Engineering Operation Laboratory
19	Electrical Control and PLC Technology Course Design	yes	Control system design and debugging; Comprehensive PLC system design	30	5/ 1	Programmable Logic Controller Laboratory
20	Power System Analysis Course Project	yes	Power flow calculation for complex power grids; asymmetric short-circuit current calculation; three-phase short-circuit current calculation	30	5/ 1	Power System Laboratory
21	Power System Relay Protection Course Design	yes	1 Relaying Protection Design for 10 kV Transmission Lines	30	6/ 1	Power System Simulation Laboratory
22	Electrical Engineering Comprehensive Practical Training	yes	Electrical Engineering Comprehensive Project	30	6/2	Power System Simulation Laboratory
23	Graduation internship	yes	----	360	7/ 1 2	practice base
24	Graduation Thesis (Design Project)	yes	----	240	8/14	On-campus / Off-campus
amount to		——	——		——	——

Note: Practical teaching components include laboratory sessions (training), internships, social practice, graduation projects (theses), course designs, etc.; the location should clearly indicate the name of the laboratory session (training) room or the internship base.

VI. Teaching Plan and Implementation

1. Semester Allocation Table (Unit: Weeks)

project	First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year		amount to
	1	2	3	4	5	6	7	8	
Military Theory and Training	3	——	——	——	——	——	——	——	3
Course Teaching	16	16	16	16	16	16	7	——	103
Practice Week	——	2	2	2	2	2	——	——	10

Graduation internship	—	—	—	—	—	—	12	—	12
Graduation Thesis (Design Project)	—	—	—	—	—	—	—	14	14
Examination / Credit Recognition / Graduation Eligibility Review	1	2	2	2	2	2	1	4	16
Total number of education weeks	20	20	20	20	20	20	20	18	158
winter vacation and summer vacation	5	7	5	7	5	7	5	—	41

2. Semester-specific Teaching Plan Schedule (see Appendix 1)

VII. Explanation

1. Innovative aspects and distinctive features, including training models, curriculum systems, and practical teaching approaches

This program is closely aligned with the national energy strategy and leverages Yunnan Provinces strengths in developing its "Green Energy Brand," establishing a distinctive educational approach characterized by "deep integration of industry and education, emphasis on engineering practice, and enhancement of applied competencies." The program adheres to the fundamental mission of fostering virtue through education, striving to cultivate high-caliber, application-oriented professionals who excel in moral, intellectual, physical, aesthetic, and labor development.

Training Model Innovation: The "3+1" training model is adopted, with the first three years dedicated to theoretical instruction and on-campus practical training, while the fourth year focuses on enterprise internships and graduation projects, achieving a deep integration of theory and practice. The university has established deep collaborative partnerships with leading enterprises in Yunnans power industry to jointly build internship bases and laboratories, facilitating collaborative talent development between academia and industry.

Course System Features: The curriculum features a four-module structure— "Engineering Fundamentals – Professional Fundamentals – Professional Core – Engineering Practice" —which emphasizes the core knowledge framework of electrical engineering. Two specialized track modules—Intelligent Electrical Engineering and Intelligent Control—have been established to cater to students personalized development needs. The curriculum places strong emphasis on integrating cutting-edge technologies, covering emerging fields such as new energy power generation, smart grids, and power big data, reflecting the educational philosophy of "solid foundation, broad scope, and strong practical focus."

Practical teaching innovation: A five-tiered practical teaching system—comprising "classroom experiments – course design – comprehensive practical training – corporate internship – graduation project" —has been established. The proportion of practical teaching amounts to 32.73%, which is higher than the average level among similar majors. Special emphasis is placed on developing engineering practical skills through specialized course designs for core professional courses such as Power System Analysis and Relay

Protection, thereby fostering students ability to solve complex engineering problems.

2. Educational Objectives and Significance of Cross-Disciplinary Elective Courses

This program offers interdisciplinary elective courses designed to broaden students knowledge base and cultivate versatile engineering and technology professionals. By taking courses in Computer Science and Technology, Automation, and related fields, students will acquire a comprehensive interdisciplinary knowledge framework and enhance their competitiveness in cross-disciplinary domains such as smart grids and industrial automation. Interdisciplinary learning helps foster students systems thinking and innovative capabilities, enabling them to meet the evolving talent demands arising from the digital transformation of the power industry.

3. Other

This talent development program strictly adheres to national education standards and complies with the requirements of the "National Standard for Teaching Quality of Undergraduate Programs in Regular Higher Education Institutions," thereby ensuring the quality of talent cultivation. The program is designed with full consideration of the development needs of Yunnan Provinces power industry; graduates will be qualified to work in fields such as electrical engineering, electrical control, and industrial automation—particularly within the electrical engineering sector—engaging in tasks including power generation, power grid operation, power plant monitoring, power supply and consumption management, research and development of power equipment, as well as engineering design and installation, thereby becoming key contributors to serving the power industry and supporting local economic development.

Annex 1: Semester-specific Teaching Plan Schedule

class	Cheng class	Bie	class	Cheng	course title	curriculum code	ECTS	Total study time	China Credit Hours	Total teaching hours	ETCS Credit Allocation							
											First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year	
											semester one	second term	Third Semester	Fourth Semester	Fifth Semester	Sixth Semester	Seventh Semester	8th Semester
											18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks
General Education Platform	General Education	obligatory	Curriculum	y	Ideology, Ethics and Rule of Law		3	90	3	48	42	6	3					
					Socialism with Chinese Characteristics for a New Era		3	90	3	48	42	6	3					
					Basic Principles of Marxism		3	90	3	48	42	6		3				
					Outline of Modern and Contemporary History of China		3	90	3	48	42	6		3				
					Theoretical System of Socialism with Chinese Characteristics		3	90	3	48	42	6			3			

class	Cheng class Bie	signature nature	course title	curriculum code	ECT S	Total study time	China Credit Hours	Total teaching hours	Total teaching hours allocation	ETCS Credit Allocation								
										First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year		
										semester one	second term	Third Semester	Fourth Semester	Fifth Semester	Sixth Semester	Seventh Semester	8th Semester	
										theory	practice	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	
			An Introduction to the Chinese National Community		2	60	2	32	30	2				2				
			Situation and policy		2	60	2	48	48	0	0.3	0.3	0.3	0.3	0.4	0.4		
			Military Theory and Training		5	148	4	148	36	112	5							
			College Sport (Club)		5	144	4	144	24	120	1.25	1.25	1.25	1.25				
			College Foreign Languages		10	300	6	192	192	0	3	3	2	2				
			Health education for College students		2	60	2	32	32	0	1	1						
			College Students National Security Education		1	30	1	16	16	0		1						
			Career Planning and Career Guidance		2	60	2	38	18	20	0.8			0.6		0.6		
			Entrepreneurship education		2	60	2	36	16	20		0.1		1.9				
			Beauty and Life-The Ladies' School/The School of the Gentlemen		1	30	1	16	6	10			1					
			Labour education		2	60	2	32	8	24	0.4	1.6						
			Advanced Mathematics		8	240	8	128	128	0	4	4						
			Artificial Intelligence and Computational Thinking		3	90	3	48	24	24		3						
			subtotal		60	1792	54	1150	788	362	21.8	21.3	7.6	8.1	0.4	1.0	0.0	0.0
		take as an elective course	General Education Elective Courses (including selective compulsory courses such as the Four Histories, China outstanding traditional culture, and aesthetic education)		6	180	6	96	96	0	√	√	√	√	√	√	√	
			Career Awareness and Development		4	120	4	64	64	0						2	2	
accumulative total					70	2092	64	1310	948	362	21.8	21.3	7.6	8.1	0.4	3.0	2.0	0.0
Specialized learning of specific	branch	certificate	College Physics		4	120	4	64	48	16		2	2					
			Linear algebra		3	90	3	48	48	0			3					
			Probability Theory and Mathematical Statistics		3	90	3	48	48	0			3					
			Complex Functions and Integral Transforms		3	90	3	48	48	0				3				
			Circuit Theory (1)		3	90	3	48	32	16	3							

class Cheng class Bie	class Ch en g nat ure nat ure	course title	curriculum code	ECT S	Total study time	Chin a Cred it Hour s	Total teach ing hour s	Total teaching hours allocation		ETCS Credit Allocation							
										First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year	
										semest er one	second term	Third Semes ter	Fourth Seme ster	Fifth Semes ter	Sixth Semes ter	Sevent h Semester	8th Seme ster
								theo ry	pract ice	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks
business Technology Application Planning Taiwan	class	Circuit Theory (2)		4	120	4	64	46	18		4						
		Analog Electronics		4	120	4	64	46	18			4					
		Digital Electronics Technology		4	120	4	64	46	18				4				
		Introduction to Electrical Engineering		1	30	1	16	16	0	1							
		Engineering electromagnetic field		2	60	2	32	32	0			2					
		Automatic control theory		4	120	4	64	48	16					4			
		Electrical Engineering Drawing and CAD		3	90	3	48	12	36					3			
	subtotal			38	1140	38	608	470	138	4	6	14	7	7	0	0	0
	specialty Core Course	Electrical machinery		6	180	4	64	44	20				6				
		Sensors and Detection Technology		3	90	2	32	20	12				3				
		Power electronic technology		6	180	4	64	44	20					6			
		Power system analysis		6	180	4	64	60	4					6			
		Electrical Control and PLC Technology		6	180	4	64	44	20					6			
		Power plant/substation electrical part		5	150	3	48	32	16						5		
		Principle of relay protection in power system		6	180	4	64	44	20						6		
	subtotal			38	1140	25	400	288	112	0	0	0	9	18	11	0	0
Professional Integrative Practical Training	obligatory	Engineering Training		2	60	1	24	0	24	2							
		Cognitive Internship		1	30	0.3	8	0	8		1						
		Electronic craft production		1	30	0.5	12	0	12			1					
		Electrical training		1	30	0.5	12	0	12				1				
		Electrical Control and PLC Technology Course Design		1	30	0.5	12	0	12					1			
		Power System Analysis Course Design		1	30	0.5	12	0	12					1			
		Power System Relay Protection Course Design		1	30	0.5	12	0	12						1		
		Electrical Engineering Comprehensive Practical Training		1	30	0.5	12	0	12						1		
		Graduation internship		12	360	6	160	0	160							12	

class	Cheng class Bie	cla ss Ch en g na t u r e n a t u r e	course title	curriculum code	ECT S	Total study time	Chin a Cred it Hour s	Total teaching hours	Total teaching hours allocation	ETCS Credit Allocation										
										First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year				
										semest er one	second term	Third Semest er	Fourth Semest er	Fifth Semest er	Sixth Semest er	Sevent h Semest er	8th Seme ster			
										theo ry	pract ice	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks			
Pr of e ssi o n al Ele ct ri c al Eng ine er ing Trac k Ele ct ri c al Eng ine er ing Trac k Ele ct ri c al Eng ine er ing Trac k			Graduation thesis (design)		8	240	4	140	0	140							4	4		
			subtotal				29	870	14	404	0	404	2	1	1	1	2	2	16	4
	lim ite d opt ion al cou rse s			EDA technology		3	90	2	36	26	10	3								
				Python Programming and Data Analysis		3	90	2	32	22	10						3			
				Intelligent Monitoring and Fault Diagnosis for Electrical Equipment		3	90	2	32	22	10							3		
		Sma rt Elec trica l Engi neer ing Trac k			Power System Automatic Devices		3	90	2	32	20	12			3					
					Electrical Engineering Materials		3	90	2	32	32	0			3					
					Power Communication Technology		3	90	2	32	20	12				3				
					high voltage technique		3	90	2	32	22	10				3				
					Power Plant Power Section		3	90	2	32	32	2					3			
					Electrical Measurement Technology		3	90	2	32	20	12					3			
					Power plant substation secondary circuit		3	90	2	32	16	16						3		
					New Energy Power Generation Technology		3	90	2	32	32	0						3		
		Intel lige nt Con trol Dire ction			C Language Programming		3	90	2	32	16	16			3					
					Power System Microprocessor-Based Protection		3	90	2	32	16	16			3					
					Single-Chip Microcomputer Principles and Interface Technology		3	90	2	32	16	16				3				
					Factory Data Acquisition and Monitoring and Control System		3	90	2	32	16	16				3				
					Embedded Systems and Applications		3	90	2	32	16	16					3			
					DSP Principles and		3	90	2	32	20	12					3			

class Cheng class Bie		class Ch en g nat ure nat ure	course title		curriculum code	ECT S	Total study time	Chin a Cred it Hour s	Total teach ing hour s	Total teaching hours allocation		ETCS Credit Allocation							
												First Academic Year		Second Academic Year		Third Academic Year		Fourth Academic Year	
												semester one	second term	Third Semester	Fourth Semester	Fifth Semester	Sixth Semester	Seventh Semester	8th Semester
												18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks	18 weeks
			Applications																
			Inverter Principle and Application		3	90	2	32	32	0						3			
			Automated Engineering Design and Application		3	90	2	32	16	16						3			
		subtotal				24	720	16	256	128	128	3	0	3	3	3	9	3	0
		accumulative total				129	3870	93	1668	886	782	9	7	18	20	30	22	19	4
Second Classroom Platform		obligatory	Social practice, volunteer service, innovation and entrepreneurship training, humanities and arts activities, sports competitions, mental health education practices, and various student club activities, etc.			8	200	8	128	0	128		√	√	√	√	√	√	
amount to						207	6162	165	3106	1834	1272	31	28	26	28	30	25	21	4

revise	Head of the Teaching and Research Section Sign	Zheng Yuli		
	Program Lead Sign	Qiao Lin	Academic Leaders Signature	Xiang Fenghong
examine and verify	Deputy Dean of Academic Affairs Sign	Teng Renchao		
	Dean Signature and Date	Li Hongyu		