

2020 Master program, Department of Electrical Engineering														
Course category			First grade						Second grade					
			1st semester			2nd semester			1st semester			2nd semester		
			Course Title	Credits	Hours	Course Title	Credits	Hours	Course Title	Credits	Hours	Course Title	Credits	Hours
College Common Course	Elective	Basic Design and Analysis of Switching Converters Microcredits/1/1 Robotic competition and challenge microcredits/1/1 Low-carbon energy industry and technology microcredits/1/1 Network and Queuing Theory/1/1 Microwave Engineering and Application/1/1												
College Interdisciplinary Courses	Elective	Blockchain Technology and Application/3/3 Blockchain smart contract agreement/3/3												
Professional Courses	Required	Required credits 10(credits)	Special topics(1)	1	2	Special topics(2)	1	2	Special topics(3)	1	2	Special topics(4)	1	2
			Thesis	6	6									
	Elective	Required credits 24(credits)	Reconstruction of Power System Operation	3	3	Teaching practice microcredits	1	1	Off-campus summer internship	2	2			
Adaptive Control			3	3	Quality of Service in	3	3							

			System			Wireless Networks								
			Network Database Design	3	3	Technology management practice	3	3						
			Special Topics on Patents	3	3	Power Information Integrated Design	3	3						
			Artificial Neural Networks with Applications	3	3	Smart Grid Special Topic	3	3						
			Optimization Approaches	3	3	Optical Design	3	3						
			Genetic algorithm and application	3	3	Optical technology and practice	3	3						
			Special topics on power electronics	3	3	Data Mining	3	3						
			Linear system analysis and design	3	3	Robot Control	3	3						
			English scientific reports and writing	3	3	Internet of Things Topics	3	3						
			Special Topics on Power SCADA	3	3	Artificial Intelligence Application	3	3						
			The Application Data Warehouse	3	3	Digital Control System Design	3	3						
			Cloud and cluster computing	3	3	Electrical Energy Control and Management	3	3						
			Topics of Optoelectronic System Design	3	3	Special Topics on Power Electronics Application	3	3						
			Distribution	3	3	Fuzzy theory and	3	3						

			automation			application								
			Computer Vision	3	3	Nonlinear control	3	3						
			Renewable Energy	3	3	Optimal Estimation	3	3						
			Power system operation	3	3	Social Networks	3	3						
			Power System Economic Dispatch	3	3	Data mining	3	3						
			Reliability of power system	3	3	Wireless Communications and Networks	3	3						
			The quality analysis of power system	3	3	Advanced Computer Network	3	3						
			Modern power system analysis	3	3	Advanced Computer Simulation	3	3						
			Power system protection	3	3	Advance Digital Signal Process	3	3						
			Wind Energy Project Analysis	3	3	Multimedia Communication Systems	3	3						
			Introduction to Intellectual Property Rights	3	3	Distributed Systems	3	3						
			Computer Simulation	3	3	Neural Networks	3	3						
			Topics of Photonic Engineering	3	3	Multicore Computing	3	3						
			Solid-state power converter	3	3	Special Topics For Power Quality Improvement	3	3						

			power converter interface for renewable energy	3	3	Special topics on motor driver	3	3						
			Pattern Recognition	3	3	Robust Control	3	3						
			Topics of Automatic Control	3	3	Text Mining and Nature Language Processing	3	3						
			Advanced Social Computing	3	3	Advanced Access Network Technology	3	3						
			High-Speed Networks	3	3	Digital power Analysis and practice	3	3						
			Advanced Information System Design	3	3	Topics of Green energy and Energy storage Application	3	3						
			Topics of Green energy Technology	3	3	Data Science and Big data Application	3	3						

Remarks:

1. The total credits for graduation are 34 credits.
2. 10 Compulsory credits and 24 elective credits.
3. College common courses are recognized as credits for the professional courses of the department; College interdisciplinary courses or courses offered by other colleges are recognized as credits for external departments.
4. The conditions set by the department (the course of study, certification, license, recognition of credits from other departments, and others):
  - (1) Professional elective courses not offered by this department can be admitted only 3 credits.
  - (2) The course of study, verification, licenses, etc. shall be handled in accordance with the school regulations.