MUST Curriculum Planning for Graduate Students for Academic Year 2021-2022, Institute of Electrical Engineering

1st year(110)						2nd year(111)					
	Course	1st semester		2nd semester			Course	1st semester		2nd semester	
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.
MUST Core Required Courses						MUST Core Required Courses					
	Subtotal	0	0	0	0		Subtotal	0	0	0	0
Department compulsory courses	Special Research and Discussion	1	2			Department compulsory courses	Thesis	3	3	3	3
	Research Methodology and Thesis Writing			2	2						
	Subtotal	1	2	2	2		Subtotal	3	3	3	3
Department Elective Courses	Advanced Engineering Mathematics	3	3			Department Elective Courses	Thesis Research and Discussion (I)	1	1		
	Advanced Algorithms	3	3				Deep Learning	3	3		
	Wireless Systems	3	3				Wave Guided Theory	3	3		
	Advanced Electromagnetic Theory	3	3				Intelligent Antenna Theory	3	3		
	Advanced power electronics	3	3				Computer Graphics	3	3		
	Coding Theory	3	3				Artificial Intelligent	3	3		
	Motor Servo Control	3	3				Wireless Network	3	3		
	Microwave Engineering	3	3				Embedded System Programming	3	3		
	Control & Operation of Power Systems	3	3				Linux Servers and Web Application	3	3		
	Advanced Digital Signal Processing	3	3				High Frequency Circuit Design	3	3		
	Linear System Theory	3	3				Network Security	3	3		
	Big Data and Statistic Analysis Practice	3	3				Data Mining	3	3		
	Analysis and Design of PWM Control IC	3	3				Integrated Circuits	3	3		
	Control System Design, Simulation, and Practices	3	3				Lab of Property Practice (I)	9	9		
	Theory and Application of Bluetooth Technology	3	3				Thesis Research and Discussion (II)			1	1
	Topics on Vector Control of Alternating Current Motor (I)	3	3				Variable-Structure Control			3	3
	Embedded Systems and Applications			3	3		Design and Measurement of Electromagnetic Compatibility			3	3
	Elcetric product design practice			3	3		Saving and Management of Power Energy			3	3
	Nonlinear Control			3	3		Nature Inspired Algorithms			3	3
	Mobile Communication			3	3		Applications of Power Electronics			3	3
	Cellular Telecommunication Network Principle and Practice			3	3		Optimization Algorithms			3	3
	Neural Network			3	3		Advanced Computer Architecture			3	3
	Applications for Internet of Things System			3	3		DirectX Programming			3	3
	Advanced PWM Control IC Applications and Practices			3	3		Embedded System Device Driver Programming			3	3
	Mobile Devices Programming and Practices			3	3		Network Planning and Management			3	3
	Image Processing			3	3		Product Research and Management			3	3
	Control System Design and Practices			3	3		Power Electronic Control by FPGA			3	3
	iOS App Development			3	3		Lab of Property Practice (II)			9	9
	Topics on Vector Control of Alternating Current Motor (II)			3	3						
	Robust Control System Design			3	3						
	Fast Fourier Transform with Applications			3	3						

Cr. /hr. =Credit/hour

Remarks:

1. Minimum credits required for graduation are 30 credits (9 required credits and at least 21 elective credits)
2. No fewer than 15 professional elective credits are required with the exclusion of credits for innter-disciplinary programs, expect Lab of Property Practice (I)(II).
3. All 6 thesis credits will be granted only after passing the oral exam.
4. The elective courses are subject to change if necessary.