MUST Curriculum Planning for Graduate Students for Academic Year 2022-2023, Institute of Electrical Engineering

1st year(111)	Course	1st semester Cr.	1st semester hr.	2nd semester Cr.	2nd semester hr.	2nd year(112)	Course	1st semester Cr.	1st semester hr.	2nd semester Cr.	2nd semester 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 graduation credits: 30 credits; compulsory credits: 9 credits, electives: 21 credits
   (elective credits include inter-departmental elective credits).

2. Study credits per semester: the lower limit is 1 credit,

3. The department allows inter-departmental electives, but the credits of the department's major electives cannot be 15 credits, expect Lab of Property Practice (I)(II).

3. The department allows inter-departmental electives, but the credits of the department's major electives

4. All 6 thesis credits will be granted only after passing the oral exam.

5. The elective courses are subject to change if necessary.