MUST Curriculum Guide for Graduate Students for Academic Year 2018-2019, Institute of Electrical Engineering

	Year I (2018)	1st semester		2nd semester	
	Course title	Cr.	hr.	Cr.	hr.
C	※Special Research and Discussion	1	2	1	2
	※Research Methodology and Thesis Writing			1	2
	Summation	1	2	2	4
E	Advanced Engineering Mathematics	3	3		
	Advanced Algorithms	3	3		
	Wireless Systems	3	3		
	Advanced Electromagnetic Theory	3	3		
	Advanced power electronics	3	3		
	Coding Theory	3	3		
	Motor Servo Control	3	3		
	Microwave Engineering	3	3		
	Control & Operation of Power Systems	3	3		
	Advanced Digital Signal Processing	3	3		
	Linear System Theory	3	3		
	Linux Programming	3	3		
	CMOS Analog IC Analysis and Design	3	3		
	Control System Design, Simulation, and Practices	3	3		
	Internet Technology	3	3		
	Integrated Circuit Testing	3	3		
	Embedded Systems and Applications			3	3
	Electric product design practice			3	3
	Nonlinear Control			3	3
	Mobile Communication			3	3
	Stochastic Control			3	3
	Neural Network			3	3
	Computer-Application of Power System			3	3
	Speech Signal Processing			3	3
	The Design of Digital Integrated Circuits			3	3
	Stochastic Process			3	3
	Optimal Control			3	3
	Microprocessor and Embedded System Interface			3	3
	Database System Concepts and Developments			3	3
	Web Programming			3	3
	Electromagnetic Compatibility			3	3

	Year II (2019)	1st semester		2nd semester	
	Course title	Cr.	hr.	Cr.	hr.
C	※Thesis	3	3	3	3
	Summation	3	3	3	3
E	Thesis Research and Discussion (I)	1	1		
	Robust Control	3	3		
	Wave Guided Theory	3	3		
	Wave Propagation and Applications	3	3		
	Intelligent Antenna Theory	3	3		
	Computer Graphics	3	3		
	Artificial Intelligent	3	3		
	Mobile Network	3	3		
	Embedded System Programming	3	3		
	Linux Servers and Web Application	3	3		
	Control Integrated Circuit Design	3	3		
	High Frequency Circuit Design	3	3		
	Network Security	3	3		
	Data Mining	3	3		
	Integrated Circuits	3	3		
	Thesis Research and Discussion (II)			1	1
	Variable-Structure Control			3	3
	Design and Measurement of Electromagnetic Compatibility			3	3
	Deregulation of Power Systems			3	3
	Saving and Management of Power Energy			3	3
	Nature Inspired Algorithms			3	3
	Applications of Power Electronics			3	3
	Optimization Algorithms			3	3
	Advanced Computer Architecture			3	3
	Advanced Operating Systems			3	3
	Embedded System Device Driver Programming			3	3
	Network Planning and Management			3	3
	Product Research and Management			3	3
	Power Electronic Control by FPGA			3	3
	Robust Control System Design			3	3

Item	Cr.	hr.
※Required Professional Courses	9	12
Elective Professional Courses	21	21
Total	30	33

C/E = Compulsory / Elective

Cr./hr.=Credit/Hour

Remarks:

1. Minimum credits required for graduation are 30 credits (9 required credits and at least 21 elective credits). (Including the inter-departmental elective credits.)

2. No fewer than 15 professional elective credits are required with the exclusion of credits for inter-disciplinary programs.

3. The upper limit of credits which students can take for each semester is 16 credits.(Exclude six credits of Thesis)

4. Students shall take total 6 credits of "Thesis" course. (all of the 6 credits will be counted together after passing the defense qualification of thesis)

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