## MUST Curriculum Guide for Graduate Students for Academic Year 2020-2021 Institute of Precision Mechatronics Engineering

	Year I (2020)				
	Course title	1st semester		2nd semester	
Course title		Cr.	hr.	Cr.	hr.
_	Seminar(I)(II)	1	2	1	2
	Advanced English for Science	1	2		_
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	Summation	2	4	1	2

	Year II (2021	)				
	Course title	1	l st semester		2nd semester	
	Could the	Cr.	hr.	Cr.	hr.	
С	Seminar(III)(IV)	1	2	ĵ	2	
	Thesis	3	3	3	3	
	Summation	4	5	4	5	

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	Course title	Cr.	
	Micro Machining Technology	3	3
	Laser Metrology	3	3
	Advanced Conputer-Aided Design and Manufacturing	3	3
	Computer-Aided Engineering Case Study	3	3
	Integration and Analysis of Mechanism	3	3
	Applied Electronics	3	3
	Principles of Mechatronics	3	3
	Advanced Applied Mathematics	3	3
	Surface Treatment Theory	3	3
	Introduction to Design and Analysis of Experiments	3	3
	Advanced Numerical Analysis	3	3
	Introduction to Solid Mechanics	3	3
	Elasticity	3	3
	Principles and Application of Tribology	3	3
Е	Introduction of Mechanical Properties of Materials	3	3
	Laminar Flow Theory	3	3
	System Vibration	3	3
	Six Sigma Quality Control	3	3
	Modern Control Methods	3	3
	Independent Study (I)	3	3
	Special Topics of Multi-Axis Machining Techniques	3	3
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,	Course title	Cr.	hr.
	Laser technology and Application	3	3
	Image Inspection Technology	3	3
	Introduction to Robotics	3	3
	Linear System	3	3
	Adaptive Control	3	3
	Control Optimization	3	3
	Intelligent Control	3	3
	Design of System Automation	3	3
	Rapid Molding	3	3
	Advanced Practice of Photo Mechanical Experiments	3	3
	Precision Injection Molding	3	3
	Nonlinear Mechanics	3	3
	Convection Heat Transfer	3	3
E	Mechanical Metallurgy	3	3
	Metal Forming	3	3
	Applied Techniques of Fluid Mechanics	3	3
	Finite Element Analysis	3	3
	Analysis of Reliability	3	3
	Independent Study (II)	3	3

Item	Cr.	hr.
	10	14
Compulsory general Courses	1	2
Elective Professional Courses	24	. 24
Total	35	40

C/E = Compulsory / Elective

Cr./hr. = Credit/Hour

## Remarks

- 1. In order to graduate, each graduate student must take at least two or more all-English courses amounting to at least 4 credits.
- 2. Graduate students shall take 6-15 credits each semester for the 1st academic year and 3-16 credits each semester during the 2nd academic year.
- 3.Minimum credits required for graduation are 35 credits (11 required credits and at least 24 elective credits)
- 4.No fewer than 15 professional elective credits are required with the exclusion of credits for inter-disciplinary programs.
- 5. The elective courses are subject to change if necessary.
- 6. All 6 thesis credits will be granted only after passing the oral exam.