Mechatronics Department / Third Level

	Type	Subject	Theoretical hours	Practical hours	Units	Pre-request	Code	Notes
(Fall semester) /Third Level								
University requirements	Compulsory	English language intermediate	2		2			
College requirements	Compulsory	Numerical analysis	2		2	Calculus I,II	ENGE320	Compulsory for depart.
Department requirements	Compulsory	Mechanism and vibration	2		2	Engineering mechanics II dynamics	MEVI300	
	Compulsory	Mechanics engineering lab.		2	1	Engineering mechanics II dynamics	MLAB301	
	Compulsory	Modelling and simulation	1	2	2	Signal and system	MODS302	
	Compulsory	Measurement and instrumentation	2	2	3	Electronic principle	MEIN303	
	Compulsory	Microprocessors and assembly language	2	2	3	Digital logic	MICA304	
	Elective	Signal processing	3		3	Signal and system	SPRO361	Student choose one
	Elective	Image processing	3		3		IMPR362	
Total hours			14	8	18			

Notes	Type	Subject	Theoretical hours	Practical hours	Units	Pre-request	Code	Notes
(Spring semester)/ Third Level								
Department requirements	Compulsory	Design of machine element	3		3	Engineering mechanics II dynamic	DMEL350	
	Compulsory	Power electronics and drives	2	2	3	Electronic principle	PELD351	
	Compulsory	Control systems	2	2	3	Modelling and simulation	2CONS35	
	Compulsory	Microcontroller system design	2	2	3	Microprocessors and assembly language	MCSD353	
	Compulsory	Theory of machine	2		2	Engineering mechanics II dynamic	THMH354	
	Compulsory	Hydraulic and pneumatic systems	2		2	Fluid mechanics	HPNS355	
	Elective	Solid modelling	3		3		SMOD363	Student choose one
		Industrial LAN	3		3		ILAN364	
		Communication engineering	3		3		COEN365	
Total hours			**16**	**6**	**19**			