

DEPARTMENT OF ELECTRICAL ENGINEERING

Study Plan:

Bachelor of Science in Mechatronics Engineering

FIRST YEAR (32 credit hours)			
Term	Course #	Course Title	Credit Hours
Fall	MATH 101	Calculus I	3
	ARAB 100	Arabic Language I	3
	GENG 107	Engineering Skills and Ethics	3
	ENGL 202	English Language I Post Foundation	3
	CHEM 101	General Chemistry I	3
	CHEM 103	Experimental General Chemistry I	1
Total Credit Hours in Semester			16
Spring	MATH 102	Calculus II	3
	PHYS 191	General Physics for Engineering I	3
	PHYS 192	Experimental General Physics for Engineering I	1
	GENG 106	Computer Programming	3
	GENG 111	Engineering Graphics	3
	ENGL 203	English Language II Post Foundation	3
	Total Credit Hours in Semester		

SECOND YEAR (32 credit hours)			
Term	Course #	Course Title	Credit Hours
Fall	MATH 211	Calculus III	3
	PHYS 193	General Physics for Engineering II	3
	PHYS 194	Experimental General Physics for Engineering II	1
	GENG 231	Material Science	3
	ELEC 201	Electric Circuits	3
	MECH 210	Statics & Dynamics	3
	Total Credit Hours in Semester		
Spring	MECH 223	Solid Mechanics	3
	MATH 217	Mathematics for Engineers	3
	MECE 312	Electromechanical systems & actuators	3
	ELEC 231	Fundamentals of Electronics	3
	ELEC 261	Digital Systems Design	3
	ELEC 262	Digital Systems Design Lab	1
Total Credit Hours in Semester			16

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THIRD YEAR (37 credit hours)			
Term	Course #	Course Title	Credit Hours
Fall	MECH 241	Thermofluids	3
	ELEC 366	Embedded Systems	3
	ELEC 367	Embedded Systems Laboratory	1
	ELEC 371	Sensors and Instrumentation	3
	MECE 352	Control Systems	3
	MECE 321	Mechanical Mechanisms	3
Total Credit Hours in Semester			16
Spring	GENG 200	Probability & Statistics for Engineers	3
	GENG 300	Numerical Methods	3
	MECE 361	Industrial Automation & Control	3
	MECE 325	Power Electronics & Drives	3
	MECE 350	Intelligent Manufacturing	3
	DAWA 111	Islamic Culture	3
Total Credit Hours in Semester			18
Summer	MECE 399	Practical Training	3
Total Credit Hours in Semester			3

FOURTH YEAR (30 credit hours)			
Term	Course #	Course Title	Credit
Fall		Major Elective I	3
		Major Elective II	3
	GENG 360	Engineering Economics	3
	MECE 498 OR GENG 498	Senior Design Project I OR Multidisciplinary Senior I	3
	MECE 428	Electrical Engineering Design	3
	Total Credit Hours in Semester		
Spring		Major Elective III	3
		Major Elective IV	3
	MECE 499 OR GENG 499	Senior Design Project II OR Multidisciplinary Senior Design II	3
	HIST 121	History Of Qatar	3
		Core Curriculum Elective *	3
	Total Credit Hours in Semester		

* Student must complete a minimum of 3 credit hours from Social/Behavioral Sciences package.