Academic Study Plan for Electrical Engineering Department – 136 Plan

Level		1	2	3	4	5	6	7		Units
3rd	**Course Code**	**MURE**	**MATH 105**	**PHY 103**	**GE 101**	**GE 102**	**GE 103**			17
	Course Name	University Requirement	Differential Calculus	General Physics	Fundamentals of Engineering Technology	Fundamentals of Engineering Drawing	Engineering Mechanics (Statics)			
	Units/hours	2 (2-0-0)	3 (3-1-0)	4 (3-1-2)	2 (1-0-2)	3 (1-0-4)	3 (3-1-0)			
	Requisites	-	-	-	-	-	-			
4th	**Course Code**	**MATH 106**	**MATH 107**	**GE 108**	**GE 105**	**EE 101**	**EE 111**			18
	Course Name	Integral Calculus	Algebra and Analytical Geometry	Engineering Mechanics (Dynamics)	Chemistry	Fundamentals of Electric Circuits	Basic Electronic Devices and Circuits			
	Units/hours	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)			
	Requisites	*P-MATH 105*	-	*P-GE 103*	-	*P-MATH 107*	*P-EE101*			
5th	**Course Code**	**MURE**	**MATH 204**	**EE 205**	**EE 208**	**EE 207**	**EE 202**	**EE 206**	**EE 212**	17
	Course Name	University Requirement	Differential Equations	Electric Circuit Lab	Logic Design	Logic Design Lab	Electric Circuits Analysis	Electromagnetics 1	Basic Electronic Devices and Circuits Lab	
	Units/hours	2 (2-0-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)	1 (0-0-2)	
	Requisites	-	*P-MATH 106*	*C-EE202* *P-EE 101*		*C-EE 208*	*P-EE 101*	*P-MATH 107*	*P-EE 111*	
6th	**Course Code**	**STAT 201**	**CEN 210**	**EE 288**	**EE 234**	**EE 221**	**EE 270**	**EE 271**		18
	Course Name	Statistics and Probability	Introduction to Programming	Principles of Electric Machines	Electromagnetics 2	Signals and Systems Analysis	Fundamentals of Electrical Power systems	Principles of Electric Power and Machines Lab		
	Units/hours	3 (3-1-0)	3 (2-0-2)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	2 (2-1-0)	1 (0-0-2)		
	Requisites	-	-	*P-EE 202*	*P-EE 206*	*P-MATH 204*	*P-EE 206*			
7th	**Course Code**	**MURE**	**GE 306**	**EE 341**	**EE 307**	**EE 308**	**EE 322**	**EE 323**	**EE 360**	18
	Course Name	University Requirement	Engineering Report Writing	Automatic Control Systems	Analog and Digital Measurements	Measurement and Control Lab	Communications Principles	Communications Principles Lab	Microprocessors	
	Units/hours	2 (2-0-0)	2 (2-0-0)	3 (3-1-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	
	Requisites	-		*P-EE 221*	*P-EE 208*	*C-EE 307, C- EE 341*	*P-EE 221*	*C-EE 322*	*P-EE 208,* *P-EE 111*	

Communication and Electronics Track

8th	**Course Code**	**MURE**	**MATH 254**	**EE 361**	**EE 314**	**EE 315**	**EE 324**	**EE 325**		**16**
	Course Name	University Requirement	Numerical Methods	Microprocessors Lab	Analog and Digital Electronic Circuits	Analog and Digital Electronic Circuits Lab	Digital Signal processing	Digital Communications		
	Units/hours	2 (2-0-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)		
	Requisites	-	*P-MATH 204*	*P-EE 360*	*P-EE 111*	*C-EE 314*	*P-EE 221*	*P-EE 322*		
9th	**Course Code**	**MURE**	**GE 407**	**EE 435**	**EE 426**	**EE 427**	**EE 436**	**EE xxx**	**EE 498**	**17**
	Course Name	University Requirement	Engineering Economy	Antenna and Wave Propagation	Wireless Communications	Communication and Signal Processing Lab	Antenna and wave Propagation Lab	Elective 1	Senior Design 1	
	Units/hours	2 (2-0-0)	2 (2-1-0)	3 (3-1-0)	3 (3-1-0)	1 (0-0-2)	1 (0-0-2)	3 (3-1-0)	2 (1-0-2)	
	Requisites	-	-	*P-EE 234*	*P-EE 325*	*P-EE 234, P-EE 325*	*C-EE 435*	-		
10th	**Course Code**	**MURE**	**GE 408**	**EE 415**	**EE xxx**	**EE xxx**	**EE 499**			**15**
	Course Name	University Requirement	Engineering Project Management	VLSI	Elective 2	Elective 3	Senior Design 2			
	Units/hours	2 (2-0-0)	2 (2-1-0)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	2 (1-0-2)			
	Requisites	-		*P-EE 314*	-	-	*P-EE 498*			

Univ. Req. = 12	***College Req. = 45***	***Dept. Req. = 45***	***Track Req. = 34***	***Total = 136 units***

Control and Systems Track

8th	**Course Code**	**MURE**	**MATH 254**	**EE 343**	**EE 361**	**EE 350**	**EE 362**	**EE 363**		**16**
	Course Name	University Requirement	Numerical Methods	Automatic Control	Microprocessors Lab	Discrete Event and Hybrid Systems	Introduction to Robotics and Mechatronics	Programmable Logic controllers		
	Units/hours	2 (2-0-0)	3 (3-1-0)	3 (3-1-0)	1 (0-0-2)	2 (2-1-0)	3 (3-1-0)	2 (2-1-0)		
	Requisites	-	*P-MATH 204*	*P-EE 341, P-EE 308*	*P-EE 360*	*P-EE 221, P-EE 307*	*P-MATH 107, P-GE 108*	-		
9th	**Course Code**	**MURE**	**GE 407**	**EE 451**	**EE 442**	**EE 452**	**EE xxx**	**EE 498**		**16**
	Course Name	University Requirement	Engineering Economy	Modeling and Simulation of Dynamic Systems	Automatic Control Lab	Advanced System Engineering	Elective 1	Senior Design 1		
	Units/hours	2 (2-0-0)	2 (2-1-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)	2 (1-0-2)		
	Requisites	-	-	*P-MATH 204, P-EE 308*	*P-EE 343, P-EE 308*		-			
10th	**Course Code**	**MURE**	**GE 408**	**EE 464**	**EE xxx**	**EE xxx**	**EE 499**	**EE 453**		**16**
	Course Name	University Requirement	Engineering Project Management	Robotics and Mechatronics Lab	Elective 2	Elective 3	Senior Design 2	Introduction to Intelligent Systems		
	Units/hours	2 (2-0-0)	2 (2-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)	2 (1-0-2)	3 (3-1-0)		
	Requisites	-		*P-EE 361, P-EE362, P-EE 307, P-EE308*	-	-	*P-EE 498*			

Univ. Req. = 12	***College Req. = 45***	***Dept. Req. = 51***	***Track Req. = 28***	***Total = 136 units***

Power and Machines Track

8th	**Course Code**	**MURE**	**MATH 254**	**EE 361**	**EE 389**	**EE 372**	**EE 373**	**EE 374**		**16**
	Course Name	University Requirement	Numerical Methods	Microprocessors Lab	Electric Machines	Electric Power System Analysis	Electric Power and Machine Lab	Power Electronics		
	Units/hours	2 (2-0-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)	1 (0-0-2)	3 (3-1-0)		
	Requisites	-	*P-MATH 204*	*P-EE 360*	*P-EE 288*	*P-EE 288, P-EE 270*	*C-EE 372, C-EE 389*	*P-EE 288*		
9th	**Course Code**	**MURE**	**GE 407**	**EE 475**	**EE 476**	**EE 471**	**EE xxx**	**EE 498**		**17**
	Course Name	University Requirement	Engineering Economy	Applied Control	Power Systems Protection	High Voltage Engineering Systems	Elective 1	Senior Design 1		
	Units/hours	2 (2-0-0)	2 (2-1-0)	3 (3-1-0)	3 (3-1-0)	3 (3-1-0)	2 (2-1-0)	2 (1-0-2)		
	Requisites	-	-	*P-EE 341*	*P-EE 372*	*P-EE 270*	-	-		
10th	**Course Code**	**MURE**	**GE 408**	**EE 472**	**EE 479**	**EE xxx**	**EE xxx**	**EE 499**		**15**
	Course Name	University Requirement	Engineering Project Management	Electrical Distribution Systems Planning	Protection and High Voltage Lab	Elective 2	Elective 3	Senior Design 2		
	Units/hours	2 (2-0-0)	2 (2-1-0)	2 (2-1-0)	1 (0-0-2)	3 (3-1-0)	3 (3-1-0)	2 (1-0-2)		
	Requisites	-		*P-EE 372*		-	-	*P-EE 498*		

Univ. Req. = 12	***College Req. = 45***	***Dept. Req. = 45***	***Track Req. = 34***	***Total = 136 units***