

No	Course Code	Course Name	CH	Programme Outcomes												
				Semester	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
20	MCTA 2311	Electrical Machines	3	3	/	/			/							
21	MCTA 2231	System Dynamics	2	3	/	/			/							
22	MCTA 2332	Mechanisms and Machine Design	3	3		/	/		/							
23	MCTA 2312	Digital Systems Design and Microprocessor	3	3	/	/			/							
24	MATH 2311	Differential Equations	3	3	/	/										
25	LEED 1301	English for Academic Writing	3	3									/		/	
26	TQTD 2002	Tilawah Al-Qur'an 2	0.5	3									/		/	
27	MCTA 2102	Mechatronics Systems Lab	1	4				/	/				/	/		
28	MCTA 2313	Power Electronics and Drives	3	4		/	/									
29	MCTA 2314	Signal and System Analysis	3	4		/	/		/							
30	MCTA 2315	Instrumentation and Measurement	3	4		/	/		/							
31	MATH 2330	Computational Methods and Statistics	3	4	/	/										
32	UNGS 2290	Knowledge and Civilization in Islam	2	4						/			/		/	
33	CCUB 1062	Usrah 2	0.5	4								/		/		/
34	CCSS 1010	Skills 2	0.5	4												/
35	MCTA 3203	Mechatronics System Integration	2	5	/		/		/							
36	MCTA 3351	Control Systems 1	3	5	/	/	/		/							
37	MCTA 3331	Engineering Design and Reliability	3	5		/	/						/			
38	MCTA 3352	Industrial Automation	3	5	/	/			/							
39	MCTA 3371	Computational Intelligence	3	5	/	/	/		/			/				
40	CCUB 2163	Usrah in Action 1(SD:Community Profiling)	1	5						/	/	/	/			/
41	UNGS 2380	Ethics and Fiqh of Contemporary Issues	3	5							/	/	/			/
42	MCTA 3104	Mechatronics Control and Automation lab	1	6				/	/				/	/		

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43	MFGA 2305	Projects and Operations Management	3	6	/	/									/	
44	MCTA 3353	Control Systems 2	3	6	/	/	/		/							
45	MCTA 3300	Integrated Design Project	3	6		/	/				/		/	/		
46	MCTA 3332	Fundamentals of Robotics	3	6	/	/			/			/				
47	XXXX XXXX	Free Elective - 1	3	6												
48	CCUB 3164	Usrah in Action 2	1	6						/	/	/				/
49	MCTA 3500	Engineering Industrial Training	5	Short sem								/	/	/		
50	MCTA 4105	Mechatronics Robotics Lab	1	7	/	/	/						/			
51	MCTA 4200	Final Year Project 1	2	7	/	/		/						/		
52	MFGA 3309	Engineering Economics and Management	3	7	/	/									/	
53	GENE 4301	Engineering Ethics, Safety and Sustainability	3	7						/	/	/	/			
54	MCTA XXXX	Technical Elective-1	3	7												
55	XXXX XXXX	Free Elective - 2	3	7												
56	LQAD 2003	Arabic for <i>Ibadah</i> 2	0.5	7										/		/
57	MFGA 4210	Technology Entrepreneurship	2	8											/	
58	MCTA 4400	Final Year Project 2	4	8	/	/		/						/		/
59	MCTA XXXX	Technical Elective - 2	3	8												
60	MCTA XXXX	Technical Elective -3	3	8												
61	MCTA XXXX	Technical Elective - 4	3	8												
62	CCFM 2061	Family Management	0.5	8									/	/	/	/

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ELECTIVE COURSES															
1	MCTA 4351	Electronic Instrumentation and Design	3		/	/	/		/						
2	MCTA 4352	Industrial Instrumentation	3		/	/	/								
3	MCTA 4353	Modern Control Design	3		/	/	/		/						
4	MCTA 4354	System Modelling and Identification	3		/	/	/		/						
5	MCTA 4361	Natural Language Processing	3		/	/	/		/						
6	MCTA 4362	Machine Learning	3		/	/	/		/						
7	MCTA 4363	Deep Learning	3		/	/		/	/						
8	MCTA 4364	Machine Vision	3		/	/	/		/						
9	MCTA 4371	Autonomous Robotic Systems	3		/	/	/		/						
10	MCTA 4372	Underwater and Aerial Robots	3			/	/	/	/						
11	MCTA 4373	Manufacturing Mechatronics	3		/	/	/		/						
12	MCTA 4374	Smart Infrastructure	3		/		/	/							
13	MCTA 4380	Special topics in Mechatronics	3			/	/	/							
14	MCTA 4381	Electrical Power System	3			/	/	/							
15	MCTA 4382	Microelectronics	3		/	/	/		/						
16	MCTA 4383	Robotic Operating System	3		/	/			/						
17	MCTA 4384	Thermal and Fluid Machineries	3		/	/									
18	MCTA 4385	Biomechatronics	3		/	/	/		/	/					
19	MCTA 4386	Random and Nonlinear Vibrations	3		/	/	/		/						
20	MCTA 4387	Fluid Power Systems	3			/	/		/						
21	MCTA 4388	Remote Sensing	3		/	/	/		/						

